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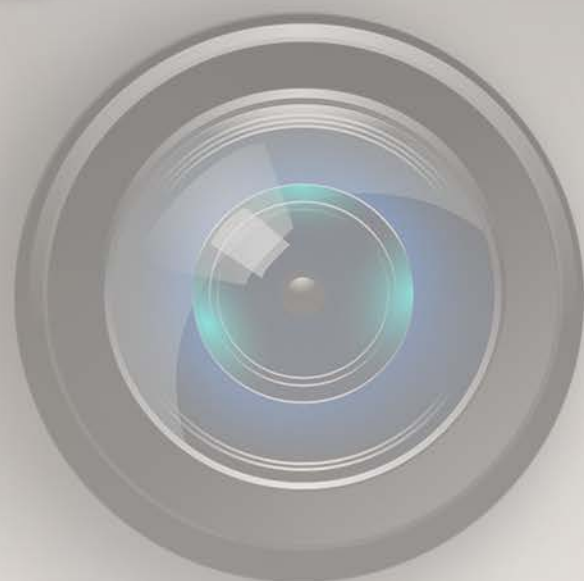
A Market Survey on

Body Worn Camera Technologies

Prepared for
The Department of Justice's
National Institute of Justice



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Prepared by
The Johns Hopkins University Applied Physics Laboratory
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The Johns Hopkins University School of Education,
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NATIONAL CRIMINAL JUSTICE TECHNOLOGY
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CONTENTS

	<u>Page</u>
1. INTRODUCTION	1-9
2. METHODOLOGY	2-9
2.1 Background Research	2-9
2.2 Request for Information	2-11
3. MARKET SURVEY DATA COMPILATION	3-12
3.1 BWC Cross Comparison	3-13
3.2 Discussion on the Market Survey Data	3-26
4. BODY WORN CAMERAS	4-27
4.1 Aventura GPC-RA	4-27
4.2 Black Mamba BMPpro Elite	4-32
4.3 BrickHouse Security HD Waterproof Police Camera	4-37
4.4 BrickHouse Security Ultra Compact HD WiFi Camera	4-41
4.5 BrickHouse Security HD WiFi Police Button Camera	4-45
4.6 Brimtek EdgeVis VB320W	4-49
4.7 Brimtek EdgeVis VB340W	4-56
4.8 COBAN Body Camera	4-63
4.9 Data911 Verus BX1 Body Camera	4-68
4.10 DEI Getac Veretos Body Worn Camera	4-72
4.11 Digital Ally FirstVu HD Body Worn Camera	4-81
4.12 Digital Ally FirstVu HD One Body Worn Camera	4-87
4.13 FlyWire Body Worn Security Cam Kit	4-93
4.14 FlyWire Glasses Worn Security Cam Kit	4-97
4.15 Global Justice Eagle NextGen	4-101
4.16 GoPro Hero4 Silver	4-106
4.17 GoPro Hero4 Session	4-112
4.18 HauteSpot Networks HauteVIEW 100	4-118
4.19 HauteSpot Networks HauteVIEW 200	4-124
4.20 HD Protech CITE M1G2	4-131
4.21 Kustom Signals Eyewitness Vantage	4-135
4.22 L-3 Mobile-Vision BodyVision XV	4-144
4.23 Law Systems Witness BWC	4-151
4.24 Marantz Professional PMD-901V	4-156
4.25 Martel Frontline Cam	4-161

4.26	Martel Vid-Shield	4-165
4.27	Motorola Si300 Video Speaker Microphone	4-169
4.28	Motorola Si500 Video Speaker Microphone	4-176
4.29	Panasonic Arbitrator	4-183
4.30	Patrol Eyes SC-DV1	4-192
4.31	Patrol Eyes SC-DV5	4-196
4.32	Patrol Eyes SC-DV6	4-200
4.33	Patrol Eyes SC-DV7	4-204
4.34	Paul Conway OnCall Camera	4-208
4.35	Pinnacle PR5 BWV Camera	4-212
4.36	Pinnacle PR6 BWV Camera	4-217
4.37	PRG 10 Defender Body Worn Camera.....	4-222
4.38	PRG 51 Defender Body Worn Camera.....	4-226
4.39	PRG 60B Defender Body Worn Camera	4-230
4.40	PRG 77LE Defender Body Worn Camera.....	4-234
4.41	Primal USA DutyEGS Evidence Gathering Sunglasses	4-238
4.42	Primal USA DutyVUE PrimeOBSERVER I.....	4-242
4.43	Primal USA DutyVUE PrimeOBSERVER II.....	4-246
4.44	Primal USA DutyVUE PrimeOBSERVER 2020	4-250
4.45	PRO-VISION BodyCam.....	4-254
4.46	Reveal Media RS2-X2L.....	4-259
4.47	Safety Innovations VidCam VX	4-265
4.48	Safety Innovations VidMic VX	4-269
4.49	Safety Vision Prima Facie	4-273
4.50	TASER Axon Body 2	4-278
4.51	TASER Axon Flex.....	4-289
4.52	Titan BWC-3HV2.....	4-301
4.53	Utility BodyWorn	4-306
4.54	VieVu LE4	4-313
4.55	VieVu LE4 Mini	4-318
4.56	VP360 Argus Gen 1 Digital BWC.....	4-323
4.57	VP360 Argus Gen 2 Digital BWC.....	4-331
4.58	WatchGuard Vista Extended Capacity	4-339
4.59	WatchGuard Vista Standard Capacity	4-348
4.60	WatchGuard Vista WiFi	4-357
4.61	WOLFCOM 3 rd Eye.....	4-366
4.62	WOLFCOM Vision	4-371
4.63	Zepcam TI.....	4-376

4.64	Zepcam TI XT.....	4-380
4.65	Zepcam TI Live.....	4-384
4.66	Zetronix HD Blue Line Police Body Camera	4-388
5.	BWC DATA MANAGEMENT/STORAGE STANDALONE SYSTEMS	5-392
5.1	IBM Intelligent Video Analytics Data Management System	5-392
5.2	MotionDSP Ikena Spotlight Video Redaction Software	5-394
5.3	Quantum BWC Storage	5-396
5.4	Visual Labs Body Camera Solution.....	5-398
6.	FUTURE CONSIDERATIONS	6-401
7.	CONCLUSION.....	7-401
8.	REFERENCES	8-1
	Appendix A. Acronyms and Abbreviations.....	A-1
	Appendix B. Request for Information	B-1

FIGURES

Figure 1. Aventura GPC-RA Body Worn Camera	4-27
Figure 2. Black Mamba BMPpro Elite	4-32
Figure 3. BrickHouse Security HD Waterproof Police Camera.....	4-37
Figure 4. BrickHouse Security Ultra Compact HD WiFi Camera	4-41
Figure 5. BrickHouse Security HD WiFi Police Button Camera	4-45
Figure 6. Brimtek EdgeVis VB320W	4-49
Figure 7. Brimtek EdgeVis VB340W	4-56
Figure 8. COBAN Body Camera.....	4-63
Figure 9. Data911 Verus BX1 Body Camera	4-68
Figure 10. DEI Getac Veretos Body Worn Camera	4-72
Figure 11. Digital Ally FirstVu HD Body Worn Camera.....	4-81
Figure 12. Digital Ally FirstVu HD One Body Worn Camera.....	4-87
Figure 13. FlyWire Body Worn Security Cam Kit.....	4-93
Figure 14. FlyWire Glasses Worn Security Cam Kit	4-97
Figure 15. Global Justice Eagle NextGen.....	4-101
Figure 16. GoPro Hero4 Silver	4-106
Figure 17. GoPro Hero4 Session	4-112
Figure 18. HauteSpot HauteVIEW 100	4-118
Figure 19. HauteSpot HauteVIEW 200	4-124
Figure 20. HD Protech CITE M1G2.....	4-131
Figure 21. Kustom Signals Eyewitness Vantage	4-135
Figure 22. L-3 Mobile-Vision BodyVision XV.....	4-144
Figure 23. Law Systems Witness BWC.....	4-151
Figure 24. Marantz Professional PMD-901V	4-156

Figure 25. Martel Frontline Cam	4-161
Figure 26. Martel Vid-Shield.....	4-165
Figure 27. Motorola Si300 Video Speaker Microphone.....	4-169
Figure 28. Motorola Si500 Video Speaker Microphone.....	4-176
Figure 29. Panasonic Arbitrator.....	4-183
Figure 30. Patrol Eyes SC-DV1.....	4-192
Figure 31. Patrol Eyes SC-DV5.....	4-196
Figure 32. Patrol Eyes SC-DV6.....	4-200
Figure 33. Patrol Eyes SC-DV7.....	4-204
Figure 34. Paul Conway OnCall Camera.....	4-208
Figure 35. Pinnacle PR5 BWV Camera.....	4-212
Figure 36. Pinnacle PR6 BWV Camera.....	4-217
Figure 37. PRG 10 Defender Body Worn Camera	4-222
Figure 38. PRG 51 Defender Body Worn Camera	4-226
Figure 39. PRG 60B Defender Body Worn Camera	4-230
Figure 40. PRG 77LE Defender Body Worn Camera	4-234
Figure 41. Primal USA DutyEGS Evidence Gathering Sunglasses	4-238
Figure 42. Primal USA DutyVUE PrimeOBSERVER I.....	4-242
Figure 43. Primal USA DutyVUE PrimeOBSERVER II.....	4-246
Figure 44. Primal USA DutyVUE PrimeOBSERVER 2020.....	4-250
Figure 45. PRO-VISION BodyCam	4-254
Figure 46. Reveal Media RS2-X2L	4-259
Figure 47. Safety Innovations VidCam VX.....	4-265
Figure 48. Safety Innovations VidMic VX.....	4-269
Figure 49. Safety Vision Prima Facie.....	4-273

Figure 50. TASER Axon Body 2.....	4-278
Figure 51. TASER Axon Flex	4-289
Figure 52. Titan BWC-3HV2	4-301
Figure 53. Utility BodyWorn.....	4-306
Figure 54. VieVu LE4	4-313
Figure 55. VieVu LE4 Mini.....	4-318
Figure 56. VP360 Argus Gen 1 Digital BWC	4-323
Figure 57. VP360 Argus Gen 2 Digital BWC	4-331
Figure 58. WatchGuard Vista Extended Capacity	4-339
Figure 59. WatchGuard Vista Standard Capacity.....	4-348
Figure 60. WatchGuard Vista WiFi.....	4-357
Figure 61. WOLFCOM 3 rd Eye	4-366
Figure 62. WOLFCOM Vision.....	4-371
Figure 63. Zepcam TI	4-376
Figure 64. Zepcam TI XT	4-380
Figure 65. Zepcam TI XT Live.....	4-384
Figure 66. Zetronix HD Blue Line Police Body Camera	4-388

TABLES

Table 1. Summary of Number of Vendor Responses	2-12
Table 2. Cross-Industry Comparison of BWCs	3-15
Table 3. Cross-Industry Comparison of BWC Data Management/Storage Standalone Systems	3-25

1. INTRODUCTION

There has been a dramatic increase in the criminal justice use of body worn cameras (BWCs) in the last few years. As a result of governmental and news media scrutiny of law enforcement interactions with the public, many think that BWCs have the potential benefit of increased legitimacy and accountability for both citizens and the law enforcement community. Since then, commercially available BWCs have flooded the market. There are now over 60 different body worn cameras produced specifically for law enforcement use.

The National Institutes of Justice (NIJ) is interested in learning about existing BWC technologies and other considerations for integrating BWC into current systems. The purpose of this document is to report the results of a BWC market survey. Commercial BWC information is aggregated and summarized to aid law enforcement officers and public safety practitioners in the planning, acquisition, and implementation of this technology. This paper provides methodology for developing the market survey and results from the market survey. For more background context for this BWC survey, including policy and legal considerations for implementing BWCs, please refer to the accompanying NIJ BWC Market Survey Primer document.

To collect market survey data on BWC products, a Request For Information (RFI) was created and posted as a Notice in the Federal Register. In addition, data was solicited directly from BWC product vendors. Most vendors responded to the RFI and our direct contact. Some vendors provided incomplete information or provided general information from which product details had to be extracted. When vendors did not respond to our attempts to contact them, we obtained as much information as we could from their websites.

This market survey presents an overview of the technologies available and information accessible at the time of data collection. This survey is not intended to evaluate or rank these products. No judgments are made concerning the quality of these products. Instead, this document is designed to provide the law enforcement and public safety community with an overview snapshot of current BWC technology for their uses. When considering an acquisition of BWC equipment, additional information should be sought from the specific vendors of interest.

2. METHODOLOGY

2.1 Background Research

To develop the market survey, it was necessary to develop a thorough understanding of BWC technology including its purpose, currently deployed concepts of operation, technical capabilities, features that were important to users, and previous research. To accomplish this, a three-pronged approach was taken: 1) conducted an extensive literature review; 2) gathered information from subject matter experts at BWC conferences; and 3) conducted a legal review. These efforts ensure this market survey is well balanced and delivers information that is pertinent to prospective BWC purchasers.

2.1.1 Literature Review

Many open-source materials, such as academic and professional journal articles, previous evaluations, a small sample of agency RFIs, vendor web sites, news articles, and NIJ-funded research were reviewed and contributed to an enhanced understanding of the BWC technology. For agencies interested in purchasing or leasing BWCs, the following resources provide useful background material.¹

- *Police Officer Body-Worn Cameras* (White, 2014). This publication is intended to be a general guide for those agencies seeking to understand the costs and benefits to the law enforcement community to use body worn camera technology.
- *Implementing a Body-Worn Camera Program* (Miller, 2014). This document includes extensive research and analysis by PERF and is intended to serve as a guide to the thoughtful, careful considerations that police departments should undertake when adopting body worn cameras.
- *A Handbook for Public Safety Officials: Developing the Policy, Technology and Operational Strategies Needed for a Future-Proof Body Camera Program* (Insight, 2015). This guide highlights key planning questions as well as insights from agencies initiating their own programs. It also includes checklists and resources to help further an agency's exploration in each planning area.

2.1.2 Information Gathering from BWC-Related Symposiums

To gain a basic understanding of current need and uses of BWCs in law enforcement, the project team attended BWC-related conferences to gain insight from end-users.

Center for Evidence-Based Crime Policy (CEBCP) Symposium, George Mason University, August 2015

Key observations included:

- Results from pilot evaluations of body worn cameras found a rise in acceptance; advantages outweigh the disadvantages.
- Design features critical to the law enforcement community include durability (despite a heavier weight), resilience of the docking station, strong mounting clip (for fear of BWCs falling off), and video retrieval.
- Primary concerns with BWCs include citizen's privacy, officer's privacy, training/policy requirements, and logistical/resource requirements (e.g., data storage and retrieval).
- Additional critical insight from end users of the law enforcement community.

The Law and Policy of Cybersecurity Symposium, University of Maryland, February 2016

Key observations included:

¹ This list represents a sample of the existing material and should not be considered complete. For in-depth information about individual products, the vendor should be engaged.

- Civil liberties
 - 1st Amendment – freedom of expression becomes particularly important when talking about controversial topics. One way to protect people’s political conduct and religious activity is to protect their ability to speak anonymously.
 - Do recorded audio and video BWC footage undermine the freedom of expression of those who want to speak anonymously? There are no case studies yet, but it is a definite possibility. If recording of audio and video BWC footage reveal too much about the individual, then that may also reveal their Internet identity (e.g., medical websites info, sexual preference, etc.)
 - There are no easy answers; courts are still grappling with these issues.
- Encryption
 - Encryption is one of the best protections against harm from hacking and cyber attacks, particularly when applied to storing video footage for BWCs.
 - Many federal agencies recommend the use of encryption: NIST, FTC, FCC, etc.

2.1.3 Legal Review

Lastly, to identify relevant statutes and case law that might impact the implementation of a BWC, basic legal research was conducted. Authors conducted legal case search and law review scholarly journal search by topic on Lexis-Nexis using the following search terms: body worn cameras, body cameras, BWC, Fourth Amendment, Freedom of Information Act, FOIA, and privacy. Results of this work can be found in the accompanying NIJ BWC Market Survey Primer document.

2.2 Request for Information

Based upon the information gathered via the process described above, an RFI was developed. The purpose of the RFI was to seek input on 66 items from BWC vendors with the types of information clustered into five broad categories:

1. Vendor Information
2. Product Information – BWC
3. Product Information – Software for Video Data Storage and Management
4. Usability/Training
5. Installation

The RFI was sent to BWC vendors and posted as a Notice of Request for Information in the Federal Register that was published on 28 April 2016 with a response expiration date of 31 May 2016 (see Appendix B for the full text). In addition, attempts were made to contact each company identified in previous market surveys.

The vendor responses were received and compiled. The outcome of the survey is presented in Section 3. First, the data are presented in an overall cross-comparison table that provides an overview of BWCs and BWC-related software across the vendor responses. Then the data are presented on a vendor-by-vendor basis in Sections 4 and 5.

In all, 31 vendors for BWC and BWC-related software responded to the RFI. In some cases, vendors expressed concern that the compilation of data in one location could provide competitors with access to their proprietary information. Another vendor noted that their technology was in prototype development and therefore they were not ready to participate in the market survey. One vendor responded that their product was no longer in production or for sale, so this information was not used in the survey. Finally, price is a sensitive item to the vendor due to competition, so the reported price should be considered relative and could vary.

Ten vendors were found through a web search to supplement the RFI. Attempts were made to contact them based upon the information in their websites. When there was no response from the vendor, we used information available from their websites. From those vendor websites with current information about BWCs, data were collected and included in the survey. Data collected via this web research rather than through vendor response to the RFI is noted.

Data are provided for 66 BWC products manufactured by 38 vendors. Additional data are provided for 4 data management/storage products manufactured by 4 vendors. See Table 1 below.

Table 1. Summary of Number of Vendor Responses

BWC Cameras	66
Total Vendors	38
- Responded to RFI	28
- Information via Internet Search	10
BWC Stand-alone Software	4
Total Vendors	4
- Responded to RFI	3
- Information via Internet Search	1

3. MARKET SURVEY DATA COMPILATION

This section will provide a snapshot of the BWC industry and the respective capabilities this technology possesses at the time of data collection. The purpose is to assist public safety and criminal justice practitioners who may be considering the acquisition, integration, and implementation of this type of technology in their community. Therefore, cross-industry information as well as vendor-by-vendor information is presented.

Readers looking to get a sense of the capabilities and features across the BWC industry can refer to Subsection 3.1 below. Data such as the physical characteristics are aggregated and presented.

In addition, the total number of vendor-offerings with specific desirable features will be presented. Readers who are looking for information about a specific vendor's offering should refer to Subsections 4.1 through 4.66 for cameras and Subsections 5.1 through 5.4 for stand-alone BWC video data management systems. For each question posed in the RFI, a response is noted for a vendor's offering.

Note that the amount of information varies, based upon survey response – some vendors did not respond to the RFI or did so with incomplete information. Some vendors did not answer each survey question or provided answers that did not address the question. Sometimes, vendors provided a general package of information from which specific product information had to be extracted if it could be located within that information. For those vendors that did not respond to our attempts at direct contact or the RFI, we used the information we found on their websites. The data collected from online marketing materials are significantly sparser than that collected as a result of the RFI. Therefore some of the information in Tables 2 and 3 may be the result of incomplete or out of date information.

No judgments should be made on the quality of a vendor's product based on this information. Anyone interested in one of these products should contact the vendor directly. The purpose of this document is not to provide an evaluation of these products, but simply to give the law enforcement and public safety community a broad overview of the technology that is currently available on the market. By examining the data in these subsections, a prospective purchaser may compare features across the industry and seek out the vendors who provide the features of most interest.

3.1 BWC Cross Comparison

Table 2 in the next section lists all 66 of the BWC products from the 38 vendors identified in this survey. Vendors who provided a response to the RFI are marked with an asterisk by the vendor name. More detailed information on each camera is provided in Section 4. Of these 38 vendors, 28 replied to the RFI, while information from the remaining 10 vendors was derived from their websites. In addition to these 38 vendors, there were four vendors that only made BWC video management software systems and not cameras (See Table 3). These four BWC video management software vendors are listed in Section 5 in further detail. Of these four vendors, three had replied to the RFI, while the information from the fourth was derived from their website.

Tables 2 and 3 are intended to provide a single overview of the BWC marketplace. These tables should be considered representative of the marketplace but not comprehensive. Please keep in mind that this is a survey and not an evaluation of vendor products; there is no intent to evaluate or judge the quality of the BWC products. The reader is encouraged to contact the vendors for the most complete and up-to-date information.

Based on the DHS SAVER recommendations (ManTech, 2012) and critical insight obtained from end users of the law enforcement community, the following subset of information is listed as columns of Tables 2 and 3:

- **Vendor name**
- **Product name and model**
- **Manufacturer's suggested retail price (MSRP)**
- **Product dimensions** – height (inches) x weight (inches) x depth (inches)
- **Product weight** – weight of the camera including batteries (ounces)
- **Camera mount options** – locations available for mounting the BWC
- **LCD display** – whether there is an LCD display on the BWC to view footage
- **Recording capacity** – amount of data storage available on the BWC
- **Video resolution** – amount of detail the BWC can capture (pixels)
- **Field of view (FOV)** – surrounding area that the BWC can monitor (degrees)
- **Lux rating** – measurement of the amount of light falling on an area weighted for human eye sensitivity
- **Night mode** – capability of the BWC to record footage in low light conditions
- **Recording speed** – number of frames or images the camera takes per second (fps)
- **Capture photos** – capability of the BWC to take still photos
- **Date/time stamp** – capability of the BWC to provide a date/time stamp on the footage
- **Pre-event recording** – capability of the BWC to capture footage for a pre-determined amount of time before an event
- **Event marking** – capability of the BWC to bookmark the footage for easier retrieval later
- **Microphone** – capability of the BWC to record audio
- **Battery life at standby** – length of time the BWC is fully charged, turned on, and ready for operation
- **Battery life recording** – length of time the BWC can run without needing to recharge the battery
- **Global positioning system (GPS) data** – whether the BWC has GPS coordinate feature
- **Warranty** – written guarantee for the BWC (months)
- **Data management** – data management features of the back end software that may include searching, categorizing, and tagging capabilities
- **Data export** – capability of the back end software to export data
- **Data redact/edit** – capability of the back end software to redact or edit the audio/video footage
- **Chain of custody support** – capability of the back end software to chronologically document the trail of the recorded audio/video footage, including custody, control, transfer, analysis, and disposition of the electronic evidence
- **Report generation capability** – capability of the back end software to generate any type of report (daily, historical, etc.)

Table 2. Cross-Industry Comparison of BWCs

#	Vendor	Product Name & Model	MSRP	Dimensions (H" x W" x D")	Weight (oz)	Mounting Options	LCD Display	Recording Capacity (GB)	Video Resolution (P)	FOV (degrees)	Lux Rating (lux)	Night Mode	Recording Speed (fps)	Photo Capture	Date/Time Stamp	Pre-Event Recording	Event Marking	Microphone	Battery Standby (hours)	Battery Life While Recording (hours)	GPS	Warranty (months)	Data Management	Export	Redacting / Editing	Chain of Custody Support	Report
1	Aventura*	GPC-RA	\$2,000	3.5 x 2.4 x 1.2	5.9	Chest, head, helmet	Y	16-128	2592x1944	120	0.1	Y	30	Y	Y	Y	Y	Y	200	12	Y	24	Search, categorize, and tag	Y	Y	Y	Y
2	Black Mamba*	BMPpro Elite	--	3.3 x 2.4 x 1.2	4.8	Chest, lapel, belt, helmet, vest, life jacket, GoPro mounts	Y	32-64	1296	140	0.0	Y	30	Y	Y	Y	Y	Y	120+	6	Y	12	Search, categorize, and tag	Y	Y	Y	Y
3	BrickHouse Security	HD Waterproof	\$349	2.8 x 2.3 x 1.2	3.5	Shoulder	Y	32	1080	170	--	--	--	Y	--	--	--	Y	--	--	--	--	--	--	--	--	--
4	BrickHouse Security	Ultra Compact HD WiFi	\$199	--	1.7	--	Y	--	1080	113	--	--	--	Y	--	--	--	Y	--	2.5	--	--	--	--	--	--	--
5	BrickHouse Security	HD WiFi Police Button	\$499	1.2 x 1.7 x 1.7	4.0	Head	Y	64	--	173	--	--	--	--	--	--	--	Y	--	--	--	--	--	--	--	--	--
6	Brimtek*	EdgeVis VB320W	\$870	3.4 x 2.5 x 1.0	3.5	Chest, head, helmet, glasses	N	16	720	150	1.0	Y	30	Y	Y	Y	Y	Y	48	8	N	12	Search, categorize, and tag	Y	Y	Y	Y
7	Brimtek*	EdgeVis VB340W	\$950	3.4 x 2.5 x 1.2	5.0	Chest, head, helmet, glasses	N	32	720	150	1.0	Y	30	Y	Y	Y	Y	Y	96	14	N	12	Search, categorize, and tag	Y	Y	Y	Y

#	Vendor	Product Name & Model	MSRP	Dimensions (H" x W" x D")	Weight (oz)	Mounting Options	LCD Display	Recording Capacity (GB)	Video Resolution (P)	FOV (degrees)	Lux Rating (lux)	Night Mode	Recording Speed (fps)	Photo Capture	Date/Time Stamp	Pre-Event Recording	Event Marking	Microphone	Battery Standby (hours)	Battery Life While Recording (hours)	GPS	Warranty (months)	Data Management	Export	Redacting / Editing	Chain of Custody Support	Report
8	COBAN*	COBAN Body Camera	\$499	3.4 x 2.7 x 1.0	4.5	Chest	N	32	1080	160	0.0	Y	30	Y	Y	Y	Y	Y	240	13	Y	12	Search, categorize, and tag	Y	Y	Y	Y
9	Data911	Verus BX1	—	—	—	—	—	—	1080	124	—	—	30	—	—	—	—	—	216	10-12	Y	—	Search, categorize, and tag	Y	—	—	—
10	DEI*	Getac Veretos	\$399	3.3 x 2.2 x 1.1	4.8	Chest, epaulet	N	32	1080	115	0.1	Y	30	Y	Y	Y	Y	Y	16	8	Y	12	Search, categorize, and tag	Y	Y	Y	Y
11	Digital Ally*	FirstVu HD	\$499- \$795	4.0 x 2.6 x 0.6	3.1	Head, chest, shoulder, glasses, helmet, belt	N	32	720	130	0.1	Y	30	N	Y	Y	Y	Y	12	4.5	N	12	Search, categorize, and tag	Y	Y	Y	Y
12	Digital Ally*	FirstVu HD One	\$499- \$795	2.6 x 4.2 x 0.8	3.9	Chest	N	32	720	133	0.1	N	30	N	Y	Y	Y	Y	12	4.5	N	12	Search, categorize, and tag	Y	Y	Y	Y
13	FlyWIRE	Body Worn Security Camera Kit	\$300	—	—	Chest, hat, windshield, K9, etc	N	micro SDHC memory card	1080	145	—	—	30	Y	—	—	—	Y	—	4	—	12	—	—	—	—	—
14	FlyWIRE	Glasses Worn Security Cam Kit	\$300	—	—	Hat, windshield, K9, etc	N	micro SDHC memory card	1080	145	—	—	30	Y	—	—	—	Y	—	4	—	12	—	—	—	—	—

#	Vendor	Product Name & Model	MSRP	Dimensions (H" x W" x D")	Weight (oz)	Mounting Options	LCD Display	Recording Capacity (GB)	Video Resolution (P)	FOV (degrees)	Lux Rating (lux)	Night Mode	Recording Speed (fps)	Photo Capture	Date/Time Stamp	Pre-Event Recording	Event Marking	Microphone	Battery Standby (hours)	Battery Life While Recording (hours)	GPS	Warranty (months)	Data Management	Export	Redacting / Editing	Chain of Custody Support	Report
15	Global Justice*	Eagle NextGen	\$350	3.2 x 2.2 x 1.0	5.2	Chest, lapel, shoulder, in-car dash	Y	16-64	1080	142	<0.1	Y	60	Y	Y	Y	Y	Y	36	14	Y	36	Search, categorize, and tag	Y	Y	Y	Y
16	GoPro*	Hero4 Silver	\$400	1.6 x 2.3 x 1.2	5.2	Chest, head, helmet, belt, in-car dash, bicycle, motorcycle	Y	64	2160	150	--	Y	120	Y	Y	N	Y	Y	--	2	N	24	Search, categorize, and tag	Y	Y	Y	Y
17	GoPro*	Hero4 Session	\$400	1.5 x 1.5 x 1.4	2.6	Chest, head, helmet, belt, in-car dash, bicycle, motorcycle	N	64	1440	170	--	Y	120	Y	Y	N	Y	Y	--	2.5	N	24	Search, categorize, and tag	Y	Y	Y	Y
18	HauteSpot*	HauteVIEW 100	\$409-\$499	3.7 x 2.4 x 1.3	5.6	Uniform, helmet, window, bicycle, belt	Y	32-64	1296	140	0.0	Y	30	Y	Y	Y	Y	Y	12	10	Y	12	Search, categorize, and tag	Y	Y	Y	Y
19	HauteSpot*	HauteVIEW 200	\$999	4.0 x 2.4 x 1.1	6.8	Belt, lapel, pocket	N	64-512	1080	135	0.0	Y	30	Y	Y	Y	Y	Y	6-8	6-8	Y	12	Search, categorize, and tag	Y	Y	Y	Y
20	HD Protech	CITE M1G2	--	4.1 x 2.4 x 1.1	6.4	Shoulder, belt	Y	32	1080	130	<0.1	Y	30	Y	--	--	--	Y	24	4	Y	--	Search, categorize, and tag	Y	--	Y	Y
21	Kustom Signals*	Eyewitness Vantage	\$858	3.3 x 2.3 x 1.0	3.7	Uniform	N	32-64	1080	120	1.0	Y	60	N	Y	Y	Y	Y	48	4.5	Y	12	Search, categorize, and tag	Y	Y	Y	Y

#	Vendor	Product Name & Model	MSRP	Dimensions (H" x W" x D")	Weight (oz)	Mounting Options	LCD Display	Recording Capacity (GB)	Video Resolution (P)	FOV (degrees)	Lux Rating (lux)	Night Mode	Recording Speed (fps)	Photo Capture	Date/Time Stamp	Pre-Event Recording	Event Marking	Microphone	Battery Standby (hours)	Battery Life While Recording (hours)	GPS	Warranty (months)	Data Management	Export	Redacting / Editing	Chain of Custody Support	Report
22	L-3 Mobile-Vision*	BodyVision XV	--	3.2 x 2.0 x 1.2	5.0	Uniform	N	32	720	130	--	N	30	Y	Y	Y	Y	Y	90	10	N	12	Search, categorize, and tag	Y	Y	Y	Y
23	Law Systems*	Witness BWC	\$299	3.0 x 2.2 x 0.9	8.0	Chest, shoulder	N	64	1296	140	N	Y	60	Y	Y	Y	Y	Y	18	10	Y	12	Search, categorize, and tag	Y	Y	Y	Y
24	Marantz Professional*	PMD-901V	\$499	2.4 x 1.2 x 3.7	6.4	Chest, shoulder, belt	Y	32-64	1296	140	1.0	Y	60	Y	Y	Y	Y	Y	15	10	Y	12	--	--	--	--	--
25	Martel	Frontline Cam	--	3.5 x 2.1 x 1.0	3.0	--	Y	--	1296	175	--	Y	30	Y	Y	Y	--	Y	--	12	Y	12	--	--	--	--	--
26	Martel	Vid-Shield	--	2.0 x 3.8 x 0.9	2.0	--	Y	SD memory card	1080	120	--	Y	60	Y	--	--	--	--	--	--	--	--	--	--	--	--	--
27	Motorola*	Si300	\$1,000	4.7 x 2.4 x 1.0	7.8	Chest, shoulder, epaulet, carry holder	N	32	1080	164	0.5	Y	30	Y	Y	Y	Y	Y	10	10+	Y	36	Search, categorize	Y	Y	Y	Y
28	Motorola*	Si500	\$1,200	4.7 x 2.4 x 1.1	7.8	Chest, shoulder, epaulet, carry holder	Y	32	1080	164	0.5	Y	30	Y	Y	Y	Y	Y	10	10+	Y	36	Search, categorize, and tag	Y	Y	Y	Y

#	Vendor	Product Name & Model	MSRP	Dimensions (H" x W" x D")	Weight (oz)	Mounting Options	LCD Display	Recording Capacity (GB)	Video Resolution (P)	FOV (degrees)	Lux Rating (lux)	Night Mode	Recording Speed (fps)	Photo Capture	Date/Time Stamp	Pre-Event Recording	Event Marking	Microphone	Battery Standby (hours)	Battery Life While Recording (hours)	GPS	Warranty (months)	Data Management	Export	Redacting / Editing	Chain of Custody Support	Report
29	Panasonic*	Arbitrator	\$1,150	3.3 x 2.4 x 0.8	4.6	Shirt sleeve, collar, pocket, belt, epaulet, helmet	N	32	720	130	0.9	Y	30	Y	Y	Y	Y	Y	12	8	Y	12	Search, categorize, and tag	Y	Y	Y	Y
30	Patrol Eyes*	SC-DV1	\$300	3.7 x 2.4 x 2.8	6.5	Suction cup, epaulet, tripod adaptor	Y	32	1080	170	--	Y	60	Y	Y	Y	Y	Y	12	8	Y	12	Search, categorize, and tag	--	--	--	--
31	Patrol Eyes*	SC-DV5	\$325	3.3 x 2.4 x 1.2	5.8	Chest, epaulet	Y	16-32	1080	140	--	Y	30	Y	Y	Y	N	Y	6	6	Y	12	Search, categorize, and tag	--	--	--	--
32	Patrol Eyes*	SC-DV6	\$450	3.3 x 2.3 x 1.3	5.5	--	Y	32-64	1080	140	--	Y	30	Y	Y	Y	Y	Y	10	6	Y	12	Search, categorize, and tag	--	--	--	--
33	Patrol Eyes	SC-DV7	\$399	3.0 x 2.2 x 1.1	4.5	--	Y	64	1080	170	--	Y	60	Y	Y	Y	Y	Y	12	6	--	12	--	--	--	--	--
34	Paul Conway	OnCall Camera	\$400	--	--	Vest, coat, or shirt	--	64	1080	150	--	Y	60	Y	Y	Y	--	Y	--	8	Y	12	--	--	--	--	--
35	Pinnacle*	PR5 BWV	--	3.6 x 2.3 x 1.2	4.3	Chest, shoulder, belt	N	16	720	120	0.4	Y	30	N	Y	N	N	Y	12	5+	N	12	Search, categorize, and tag	Y	Y	Y	Y

#	Vendor	Product Name & Model	MSRP	Dimensions (H" x W" x D")	Weight (oz)	Mounting Options	LCD Display	Recording Capacity (GB)	Video Resolution (P)	FOV (degrees)	Lux Rating (lux)	Night Mode	Recording Speed (fps)	Photo Capture	Date/Time Stamp	Pre-Event Recording	Event Marking	Microphone	Battery Standby (hours)	Battery Life While Recording (hours)	GPS	Warranty (months)	Data Management	Export	Redacting / Editing	Chain of Custody Support	Report
36	Pinnacle*	PR6 BWV	--	3.9 x 2.3 x 0.9	5.2	Chest, shoulder, belt	N	32	1080	130	0.3	Y	30	N	Y	Y	Y	Y	180	6.5	N	12	Search, categorize, and tag	Y	Y	Y	Y
37	PRG	PRG 10 Defender Body Worn Camera	--	1.3 x 1.1 x 2.0	1.7	Chest, shoulder, vehicle, bicycle	Y	32	1080	100	--	--	30	Y	--	N	--	Y	200	14	N	24	--	--	--	--	--
38	PRG	PRG 51 Defender Body Worn Camera	--	2.3 x 1.7 x 1.4	4.6	--	Y	32	1080	45	--	N	30	Y	Y	N	--	Y	300	11	N	24	--	--	--	--	--
39	PRG	PRG 60B Defender Body Worn Camera	--	3.2 x 2.3 x 1.3	6.0	--	Y	32	1080	130	--	Y	30	Y	Y	Y	--	Y	300	15	N	24	--	--	--	--	--
40	PRG	PRG 77LE Defender Body Worn Camera	--	2.8 x 2.3 x 1.2	3.8	Chest, shoulder, vehicle	Y	32	1080	135	--	Y	30	Y	Y	--	--	Y	100	15	N	24	--	--	--	--	--
41	Primal USA*	DutyEGS	\$199	--	1.3	Face	N	64	720	140	1.0	Y	60	Y	Y	N	N	Y	24	4	N	12	Search, categorize, and tag	Y	Y	Y	Y
42	Primal USA*	DutyVUE Prime OBSERVER I	\$399	3.8 x 2.3 x 1.3	5.0	Chest, epaulet, collar, holster	Y	16-128	1080	130	1.0	Y	60	Y	Y	Y	Y	Y	240	5	Y	12	Search, categorize, and tag	Y	Y	Y	Y

#	Vendor	Product Name & Model	MSRP	Dimensions (H" x W" x D")	Weight (oz)	Mounting Options	LCD Display	Recording Capacity (GB)	Video Resolution (P)	FOV (degrees)	Lux Rating (lux)	Night Mode	Recording Speed (fps)	Photo Capture	Date/Time Stamp	Pre-Event Recording	Event Marking	Microphone	Battery Standby (hours)	Battery Life While Recording (hours)	GPS	Warranty (months)	Data Management	Export	Redacting / Editing	Chain of Custody Support	Report
43	Primal USA*	DutyVUE Prime OBSERVER II	\$499	3.8 x 2.3 x 1.3	6.0	Chest, epaulet, collar, holster	Y	16-128	1080	140	1.0	Y	60	Y	Y	Y	Y	Y	240	8-12	Y	12	Search, categorize, and tag	Y	Y	Y	Y
44	Primal USA*	DutyVUE Prime OBSERVER 2020	\$199	3.8 x 2.3 x 1.3	4.0	Chest, epaulet, collar, holster	Y	64	1080	170	1.0	Y	60	Y	Y	Y	Y	Y	240	5	Y	12	Search, categorize, and tag	Y	Y	Y	Y
45	PRO-VISION*	BodyCam	\$349	3.1 x 2.0 x 1.0	5.6	Chest, shoulder, belt, helmet, vehicle dash, bicycle,	Y	32	1296	150	0.0	Y	60	Y	Y	Y	Y	Y	—	13	—	12	Search, categorize, and tag	Y	Y	Y	Y
46	Reveal Media*	RS2-X2L	--	3.9 x 2.2 x 1.0	5.2	Uniform, shoulder, epaulet, helmet, car	Y	8-32	1080	120	0.1	Y	30	N	Y	Y	Y	Y	168	8.5	—	12	Search, categorize, and tag	Y	Y	Y	Y
47	Safety Innovations	VidCam VX	—	—	—	—	—	8-64	—	92	—	Y	—	—	—	Y	—	—	—	14	—	—	Search, tag	Y	—	Y	Y
48	Safety Innovations	VidMic VX	--	--	—	Uniform, belt	—	8-64	—	92	--	Y	--	--	—	Y	--	--	—	14	—	--	Search, tag	Y	--	Y	Y
49	Safety Vision*	Prima Facie	\$579	3.7 x 2.3 x 1.7	5.3	Multiple mounting options available	Y	32	1080	120	0.0	Y	30	Y	Y	Y	N	Y	8	5	N	12	Search, categorize, and tag	Y	Y	Y	N

#	Vendor	Product Name & Model	MSRP	Dimensions (H" x W" x D")	Weight (oz)	Mounting Options	LCD Display	Recording Capacity (GB)	Video Resolution (P)	FOV (degrees)	Lux Rating (lux)	Night Mode	Recording Speed (fps)	Photo Capture	Date/Time Stamp	Pre-Event Recording	Event Marking	Microphone	Battery Standby (hours)	Battery Life While Recording (hours)	GPS	Warranty (months)	Data Management	Export	Redacting / Editing	Chain of Custody Support	Report
50	TASER*	Axon Body 2	\$399	3.4 x 2.8 x 1.0	5.0	Chest, belt, pocket	N	64	1080	142	< 0.1	Y	30	N	Y	Y	Y	Y	12+	11.3	N	12	Search, categorize, and tag	Y	Y	Y	Y
51	TASER*	Axon Flex	\$599	0.8 x 0.7 x 3.2	3.8	Glasses, head, hat, collar, epaulet	N	8	480	75	< 1	Y	30	N	Y	Y	N	Y	12+	9	N	12	Search, categorize, and tag	Y	Y	Y	Y
52	Titan*	BWC-3HV2	\$350	3.7 x 2.3 x 1.4	6.0	Chest, shoulder, eye level, collar	Y	16-64	1080	110	< 1	Y	60	Y	Y	Y	Y	Y	120	13-15	Y	24	Search, categorize, and tag	Y	Y	Y	Y
53	Utility*	BodyWorn	\$400	5.5 x 2.9 x 0.2	5.1	Chest	Y	64	4000	130	1.0	Y	30	Y	Y	Y	Y	Y	24-48	12+	Y	12	Search, categorize, and tag	Y	Y	Y	Y
54	VieVu*	LE4	--	3.3 x 2.1 x 1.1	5.5	Chest, car	N	64	1080	95	--	N	30	Y	Y	Y	Y	Y	14	12	N	3	Search, categorize, and tag	Y	Y	Y	Y
55	VieVu*	LE4 Mini	—	1.9 x 1.9 x 1.0	2.5	Chest, car	N	64	1080	95	—	N	30	Y	Y	Y	Y	Y	3	3	N	3	Search, categorize, and tag	Y	Y	Y	Y
56	VP360*	Argus Gen 1 Digital BWC	\$235	3.5 x 2.3 x 0.9	6.2	Chest, ear, button hole, shoulder tab	Y	16-64	1296	140	< 0.1	Y	30	Y	Y	Y	Y	Y	10	8	Y	24	Search, categorize, and tag	Y	Y	Y	Y

#	Vendor	Product Name & Model	MSRP	Dimensions (H" x W" x D")	Weight (oz)	Mounting Options	LCD Display	Recording Capacity (GB)	Video Resolution (P)	FOV (degrees)	Lux Rating (lux)	Night Mode	Recording Speed (fps)	Photo Capture	Date/Time Stamp	Pre-Event Recording	Event Marking	Microphone	Battery Standby (hours)	Battery Life While Recording (hours)	GPS	Warranty (months)	Data Management	Export	Redacting / Editing	Chain of Custody Support	Report
57	VP360*	Argus Gen 2 Digital BWC	\$295	3.5 x 2.3 x 1.2	5.9	Chest, ear, button hole, shoulder tab	Y	16-128	1080	170	< 0.1	Y	60	Y	Y	Y	Y	Y	18	8	Y	24	Search, categorize, and tag	Y	Y	Y	Y
58	WatchGuard*	Vista Extended Capacity	\$1,120	3.1 x 1.9 x 1.1	5.3	Chest, head	N	32	720	130	0.9	Y	30	N	Y	Y	Y	Y	19	9	N	12	Search, categorize, and tag	Y	N	Y	Y
59	WatchGuard*	Vista Standard Capacity	\$995	3.1 x 1.9 x 0.9	4.3	Chest, head	N	32	720	130	0.9	Y	30	N	Y	Y	Y	Y	12.5	6	N	12	Search, categorize, and tag	Y	N	Y	Y
60	WatchGuard*	Vista WiFi	\$1,250	3.1 x 1.9 x 1.1	5.3	Chest, head	N	32	720	130	0.9	Y	30	N	Y	Y	Y	Y	19	9	Y	12	Search, categorize, and tag	Y	N	Y	Y
61	WOLFCOM*	3rd Eye	\$475	3.8 x 2.4 x 1.3	5.5	Chest, belt	Y	32	1080	120	1.0	Y	60	Y	Y	N	Y	Y	—	6.5	Y	12	Search, categorize, and tag	Y	Y	Y	Y
62	WOLFCOM*	Vision	\$350	2.9 x 1.5 x 0.6	2.2	Chest, shoulder, head, glasses, helmet, hat, gun, belt	N	32-64	1080	120	1.0	Y	60	Y	Y	Y	N	Y	120+	2.5	Y	12	Search, categorize, and tag	Y	Y	Y	Y
63	Zeppcam	TI	—	2.4 x 1.3 x 3.8	6.2	Helmet, flat surfaces, shoulder	Y	32	576	—	0.1	Y	25	—	Y	—	—	Y	20	—	Y	—	Tag	—	—	—	—

#	Vendor	Product Name & Model	MSRP	Dimensions (H" x W" x D")	Weight (oz)	Mounting Options	LCD Display	Recording Capacity (GB)	Video Resolution (P)	FOV (degrees)	Lux Rating (lux)	Night Mode	Recording Speed (fps)	Photo Capture	Date/Time Stamp	Pre-Event Recording	Event Marking	Microphone	Battery Standby (hours)	Battery Life While Recording (hours)	GPS	Warranty (months)	Data Management	Export	Redacting / Editing	Chain of Custody Support	Report
64	Zepcam	TI XT	--	--	--	Helmet, shoulder, flat surface, straps, clothing	Y	32	576	--	0.1	--	30	--	Y	--	--	Y	--	6	Y	--	Tag	--	--	--	--
65	Zepcam	TI LIVE	--	--	--	Helmet, shoulder, flat surface, straps, clothing	Y	8-32	576	--	0.1	--	25	--	Y	--	--	Y	20	6	Y	--	Tag	--	--	--	--
66	Zetronix	HD Blue Line	\$400	2.4 x 1.3 x 3.8	6.2	Pocket, belt, lapel collar, placket, uniform	Y	32	1080	130	--	Y	60	Y	Y	Y	--	Y	120	9	--	12	Tag	--	--	--	--

Legend	
Y	Yes
N	No
--	No Info
*	Responded to RFI

Table 3. Cross-Industry Comparison of BWC Data Management/Storage Standalone Systems

#	Vendor	Product Name & Model	MSRP	Dimensions (H" x W" x D")	Weight (oz)	Mounting Options	LCD Display	Recording Capacity (GB)	Video Resolution (P)	FOV (degrees)	Lux Rating (lux)	Night Mode	Recording Speed (fps)	Photo Capture	Date/Time Stamp	Pre-Event Recording	Event Marking	Microphone	Battery Standby (hours)	Battery Life While Recording (hours)	GPS	Warranty (months)	Data Management	Export	Redacting / Editing	Chain of Custody Support	Report
1	IBM*	Intelligent Video Analytics Data Management	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Search, Categorize, and Tag	Y	Y	Y	Y
2	MotionDSP	Ikena Spotlight Video Redaction Software	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Y	Y	--	--
3	Quantum*	Quantum BWC Storage	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	No; this is a function of the VMS	No; this is a function of the VMS	No; this is a function of the VMS	No; this is a function of the VMS	No; this is a function of the VMS
4	Visual Labs*	Body Camera Solution	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Search, Categorize, and Tag	Y	Y	Y	Y

Legend	
Y	Yes
N	No
--	No Info
*	Responded to RFI

3.2 Discussion on the Market Survey Data

For many categories of information, little data was available. Several questions from the RFI have not been included due to a lack of vendor response; see data from individual vendors for specifics about their products (Sections 4 and 5 below).

Some vendors did not provide all of the above information for their products. When it was provided, the following ranges were observed. BWC weights ranged from 0.53 to 6.5 oz. The recording capacity ranged from 8 to 64 GB. The video resolution ranged from 576 pixels to 5 MP. The diagonal FOV ranged from 45 to 175 degrees. The lux rating ranged from 0 to 1. The frame rate ranged from 25 to 60 fps. Standby battery lifetimes ranged from 8 hours to 216 hours, while recording battery lifetimes ranged from 2.5 to 23 hours. Most vendors did not provide price information but, among those that did, the costs for one camera ranged from \$199 to \$2000. The next two sections describe each BWC product in more detail, including 66 BWC products and 4 BWC data management/storage stand-alone systems.

4. BODY WORN CAMERAS

4.1 Aventura GPC-RA



Figure 1. Aventura GPC-RA Body Worn Camera

RFI Q.#	Survey Question (abbreviated)	Response
Vendor Information		
0	Responded to FRN?	Yes
1.a	Name	Aventura Technologies
1.b	Address/phone number	48 Mall Drive, Commack, NY 11725
1.c	Website	www.aventuracctv.com; www.guardianbodycam.com
1.d	Years in business	16 years
1.e	Number and types of customers	U.S. based Aventura is a developer and manufacturer of hardware/software, DVRs, NVRs, video management, cameras, transmission and accessories for civilian and government with more than 5000 customers worldwide.
1.f	Manufacturing location(s)	Commack, NY

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – BWC		
2.a	General	
2.a.i	Name and model number	Aventura GPC-RA
2.a.ii	Physical dims (H" x W" x D")	3.5" H x 2.37" W x 1.18" D
2.a.iii	Weight (oz.)	5.92 oz
2.a.iv	Mounting options	Can be worn on chest, head, or head phones over a helmet
2.a.iv.1	Accessories needed for mounting	Please see http://guardianbodycam.com/accessories/ for more information for GPC-ACC-LC, GPC-ACCC-HC
2.a.v	Ability to mount on vehicle dashboard	Yes
2.a.v.1	Accessories for vehicle dashboard mount	There is an accessory to clip and cord.

2.a.vi	LCD display	2.0" HD LCD display
2.a.vii	Recording capacity	16 GB storage included, supports up to 128 GB
2.a.viii	Operating conditions or limitations	-40°F to 140°F
2.b	Video and Optics	
2.b.i	Maximum video resolution	Standard with 2 MP optional up to 5 MP (2592 x 1944) depending upon model
2.b.ii	Field of view	110° and 120° depending upon model
2.b.iii	Lux rating	0.1 lux
2.b.iv	Night mode/format	Yes
2.b.v	Recording speed	30 fps
2.b.vi	Recording format	MP4
2.b.vii	Recording time under default resolution settings	Requires user information on frame rate and bitrate – defaults are set by user. The following calculator can help provide guidance http://www.aventuracctv.com/calculator/hard_drive_calculator.asp
2.b.viii	Ability to capture still photos	Yes, up to 32 MP images
2.b.ix	Ability to embed date/time stamp on recorded video	Yes; there is a date and time stamp embedded in the video and optional GPS information
2.b.ix.1	Ability to authenticate and validate date/time stamp integrity	The information is encrypted and watermarked and requires a proprietary player. Any attempt to alter the video will fail authentication tests
2.b.x	Pre-event recording feature	Audio and video have pre-event data buffer of 30 seconds
2.b.x.1	Time buffered and whether audio is recorded	30 seconds and includes audio
2.b.xi	Event marking capability	The user interface allows the operator to mark an individual video segment for future identification
2.b.xii	Wireless capabilities for communication	Wireless is supported and can connect to any third party video management system that supports the non-proprietary ONVIF protocol
2.c	Audio	
2.c.i	Microphone feature	Yes; HD audio
2.c.ii	Microphone sensitivity	60 dB
2.c.iii	Audio format	AAC
2.c.iv	Default police radio interface for BWC	Yes, radio can be connected and record and operate via the BodyCam
2.d	Data Upload	
2.d.i	Single device vs. multiple upload docking station	Single device can be uploaded independent of a docking station using a provided cable that connects to PC; alternatively, there are several docking stations in various sizes that provide automatic uploads
2.d.ii	Data transfer method	Available are wire with provided cable attaching to PC, wireless/3G/4G, or SD memory up to 64 GB
2.d.iii	Manual vs. automatic upload	Manual or automatic are accomplished via docking station or provided cable
2.e	Battery Information	
2.e.i	Battery type; internal or removable	Aventura BWC uses a replaceable lithium battery.
2.e.ii	Recording duration	12 hours
2.e.iii	Battery standby duration	200 hours
2.e.iv	Battery charge time	5 hours
2.e.v	Battery lifetime until replacement	Rechargeable battery 1 year; permanent 5 years
2.e.vi	Battery replacement procedure	Removable battery models replace in the field; permanent battery models replace at the factory

2.e.vii	Availability of supplemental charger for emergency battery charging	External battery charger
2.f	GPS	
2.f.i	BWC possess GPS	Yes
2.f.i.1	Embedded GPS coordinates in recorded video	Yes; GPS coordinates are embedded on the video stream as permanent metadata
2.f.ii	Alternative geolocation methods	No information provided
2.g	Consumer Testing Results	
2.g.i	Sturdiness/fragility	No information provided
2.g.i.1	Drop test results	No information provided
2.g.i.2	Dust intrusion/water resistance rating	IP67
2.g.i.3	Ruggedized	No information provided
2.g.i.4	Pressure/depth	No information provided
2.g.i.5	Shock	Shock test - Section 516.4 (exceeds IEC 68-2-27)
2.g.i.6	Vibrations	Vibration test - Section 514.4 (exceeds IEC 68-2-6)
2.g.ii	Other environmental testing	Humidity test - Sections 520.1 and 507.3 (exceeds IEC 68-2-30)
2.g.ii.1	Specify tests, pass/fail results, and ratings received	No information provided
2.h	Safeguards	
2.h.i	Privacy safeguards or features	Yes
2.h.i.1	Remote viewing	Yes, based on WIFI or 3G or docking station software plugged into network.
2.h.i.2	Remote activation/deactivation	Not supported
2.h.i.3	Privacy masking	Privacy mask/blur
2.h.i.4	Redacting/editing capabilities	No information provided
2.h.ii	Safeguards for cyber security, unintentional disassembly, etc.	All transmissions are AES encrypted and storage of data is as well. Intercepted video streams may not be reconstructed.
2.i	Regulatory	
2.i.i	Regulatory and Compliance safety requirements	All tests are performed in accordance with ISO guide 25 and ANSI/NCSS Z540-1.
2.i.ii	Radiation safety standards	All tests are performed in accordance with ISO guide 25 and ANSI/NCSS Z540-1.
2.j	Warranty and Maintenance Plans	
2.j.i	Length of warranty (in months)	24 months all inclusive
2.j.ii	Optional extended warranties	Aventura offers extended warranties up to 60 months total inclusive of the standard 24 months.
2.j.ii.1	Duration and cost of extended warranties	20% of purchase price per each additional 12 month period up to a maximum of 60 months including original warranty.
2.j.iii	Availability of extended maintenance plans	20% of purchase price per each additional 12 month period up to a maximum of 60 months including original warranty.
2.j.iii.1	Duration and cost of extended maintenance plans	20% of purchase price per each additional 12 month period up to a maximum of 60 months including original warranty.
2.j.iv	Service contract costs	On site parts and labor contracts 10% of equipment and original installation cost.
2.k	Auxiliary Equipment	
2.k.i	Manufacturer suggested retail	Please contact manufacturer for price list

	price (MSRP) for each auxiliary equipment	
2.l	MSRP without optional features, accessories, or service plans	\$2000
2.m	Manufacturer's estimated lifetime of device	3-5 years depending on type of use
2.n	Other relevant information	No information provided

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – Software for Video Data Storage and Management		
3.a	Data Management	
3.a.i	Searching capabilities	Search by date, time, event
3.a.ii	Categorizing capabilities	Tag events
3.a.iii	Tagging capabilities	Yes, user can add description for the video.
3.a.iv	Archiving and file retention	64 GB on the device and infinite storage external
3.a.v	Data saved on or offsite	Yes, data can be saved in the server or cloud based (internal storage recommended as there are no recurring costs of ownership).
3.a.v.1	If saved offsite, specific data accessibility and storage costs	See MSRP prices
3.a.v.2	Video data storage capacity local vs. cloud	Yes, data can be saved in the server or cloud based (internal storage recommended as there are no recurring costs of ownership).
3.a.v.3	Capability to accommodate multiple site installations	No information provided
3.a.vi	Export capabilities	Export via docking station or direct connect from device to PC or wireless
3.a.vi.1	Traceability feature that shows which user exported the data	Yes
3.a.vii	Redacting/editing capabilities	Faces can be obscured for privacy.
3.a.vii.1	Specify whether changes are permanent	Modifications should be performed on exported data and original saved, then redact a secondary file.
3.a.viii	Support provided for chain-of-custody requirements	Event management logs provide chain of custody.
3.a.ix	Scalability for different organization size	System architecture is designed for maximum scalability from 100s to 10,000s of devices utilizing enterprise database structure.
3.a.x	User management and role-based access levels	Yes, different user with different authority preferred method via the system support of LDAP/Active Directory
3.b	Video Analytics	
3.b.i	Companion software to analyze recorded video and audio data	Yes, there is Windows-based software offline to analyze the video data.
3.b.ii	Types of reports built into software	See below
3.b.ii.1	Standard reports	Yes
3.b.ii.2	Daily reports, historical reports, etc.	Yes
3.b.ii.3	Audit reports that support chain-of-custody requirements	Yes
3.b.ii.4	Customization of reports	Yes
3.b.iii	Facial recognition capabilities	Facial recognition available through Voltus face recognition software, which is an external module.

3.b.iv	Weapons detection capabilities	Weapons detection available through external hardware, Mirtle, which is patented. Concealed Threat Detection available in portable and fixed solutions.
3.b.v	Other analytical capabilities	Intelligent Video Analytics, License Plate Recognition
3.c	Video Security and Authentication	
3.c.i	Compatibility of BWC video output with existing video management software for reviewing and recording	ONVIF compliant
3.c.ii	File integrity checks to ensure authenticity	Data security uses go/no-go technology. The file, if altered, will lose its watermark.
3.c.iii	Data protection mechanism while in transit and during storage	AES encryption
3.c.iv	Routine software updates	Quarterly updates to software, master file provided to agency and can be uploaded during the upload download stage.
3.c.v	Cost of software updates	No cost – included

RFI Q.#	Survey Question (abbreviated)	Response
Usability/Training		
4.a	Usability validation processes	Usability depends upon the particular applications, how users “wear” the device, what is a typical day, etc. Aventura has studied best practices for most environments and engage their customers to share information, so they can advise what has worked for others and what realistic expectations should be.
4.b	User community data	Interviews with end-users
4.c	User-group meetings and frequency	Annual – discussion of best practices
4.d	Typical problems reported	None reported other than additional ruggedization of devices, which was implemented 2 years back
4.d.i	Resolution to problems	Newer models being offered, which are more military grade
4.e	Hours of tech. support and location	Unlimited telephone and web-based support. On-site per GSA schedule rates
4.f	Training provided (hours)	All types of training are available, live, web-based, pre-recorded. Recommend initial sessions live, which are recorded and then archived and made available to the agency for future unlimited use. If it is necessary to augment the training sessions, Aventura will do so as well. Training should not be more than half a day to full day maximum depending upon the levels - train the trainer, device and system management, operator

RFI Q.#	Survey Question (abbreviated)	Response
Installation		
5.a	Average time to install and activate	Dependent upon the scope of installation, number of device and design architecture desired including networking, security and permissions – anywhere from 1-5 days.

4.2 Black Mamba BMPpro Elite



Figure 2. Black Mamba BMPpro Elite

RFI Q.#	Survey Question (abbreviated)	Response
Vendor Information		
0	Responded to FRN?	Yes
1.a	Name	Black Mamba Protection, LLC
1.b	Address/phone number	12301 Research Park Blvd, Building 4, Suite 200, Austin, TX 78759 (888) 444-6290
1.c	Website	www.mybmppro.com
1.d	Years in business	3 years
1.e	Number and types of customers	Municipal, private security, county, state officers, penitentiaries
1.f	Manufacturing location(s)	United States, China, North Korea

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – BWC		
2.a	General	
2.a.i	Name and model number	BMPpro Elite
2.a.ii	Physical dims (H" x W" x D")	3.3" H x 2.4" W x 1.2" D
2.a.iii	Weight (oz.)	4.8 oz
2.a.iv	Mounting options	Chest, lapel, belt clip, helmet, vest, life jacket, GoPro mounts
2.a.iv.1	Accessories needed for mounting	Lapel harness, universal GoPro adapter
2.a.v	Ability to mount on vehicle dashboard	Yes
2.a.v.1	Accessories for vehicle dashboard mount	No additional accessories to mount on in-vehicle dashboard.
2.a.vi	LCD display	2" TFT-LCD
2.a.vii	Recording capacity	32 GB up to 64 GB
2.a.viii	Operating conditions or limitations	Operating temperature: -40°F to 140°F

		Storage temperature: -20°F to 131°F
2.b	Video and Optics	
2.b.i	Maximum video resolution	2304 x 1296
2.b.ii	Field of view	140°
2.b.iii	Lux rating	0.01 lux
2.b.iv	Night mode/format	Yes; 2 automatic IR lights (manual and automatic), up to 15 meters recording range in no light condition
2.b.v	Recording speed	30 fps
2.b.vi	Recording format	MP4
2.b.vii	Recording time under default resolution settings	10 hours (720P@60 fps)
2.b.viii	Ability to capture still photos	Yes; 20 MP; JPG
2.b.ix	Ability to embed date/time stamp on recorded video	Yes
2.b.ix.1	Ability to authenticate and validate date/time stamp integrity	Yes; User ID
2.b.x	Pre-event recording feature	Yes
2.b.x.1	Time buffered and whether audio is recorded	5-30 seconds; option of audio on or off
2.b.xi	Event marking capability	Yes
2.b.xii	Wireless capabilities for communication	Yes; built in WiFi
2.c	Audio	
2.c.i	Microphone feature	Yes
2.c.ii	Microphone sensitivity	N/A
2.c.iii	Audio format	WAV
2.c.iv	Default police radio interface for BWC	Yes; 2-way radio interface
2.d	Data Upload	
2.d.i	Single device vs. multiple upload docking station	Docking station available
2.d.ii	Data transfer method	USB 2.0, Docking, and WiFi
2.d.iii	Manual vs. automatic upload	Both; manual and automatic settings
2.e	Battery Information	
2.e.i	Battery type; internal or removable	Lithium ion removable 2000mAh battery
2.e.ii	Recording duration	6 hours per battery (comes with 2 batteries for 12+ hours)
2.e.iii	Battery standby duration	120+ hours
2.e.iv	Battery charge time	100 minutes
2.e.v	Battery lifetime until replacement	5 to 7 years
2.e.vi	Battery replacement procedure	Hot-swappable battery in the field
2.e.vii	Availability of supplemental charger for emergency battery charging	Second battery included with BMPpro Elite
2.f	GPS	
2.f.i	BWC possess GPS	Yes
2.f.i.1	Embedded GPS coordinates in recorded video	Yes
2.f.ii	Alternative geolocation methods	N/A
2.g	Consumer Testing Results	
2.g.i	Sturdiness/fragility	Military standard
2.g.i.1	Drop test results	10 feet drop onto concrete
2.g.i.2	Dust intrusion/water resistance rating	Waterproof IP67

2.g.i.3	Ruggedized	Full shell
2.g.i.4	Pressure/depth	3 meter
2.g.i.5	Shock	N/A
2.g.i.6	Vibrations	N/A
2.g.ii	Other environmental testing	N/A
2.g.ii.1	Specify tests, pass/fail results, and ratings received	N/A
2.h	Safeguards	
2.h.i	Privacy safeguards or features	Full audit trail, password protection
2.h.i.1	Remote viewing	Optional
2.h.i.2	Remote activation/deactivation	N/A
2.h.i.3	Privacy masking	Redacting software option
2.h.i.4	Redacting/editing capabilities	Yes; up to full video screen
2.h.ii	Safeguards for cyber security, unintentional disassembly, etc.	Driver, password protection, internal memory
2.i	Regulatory	
2.i.i	Regulatory and Compliance safety requirements	Available on request
2.i.ii	Radiation safety standards	N/A
2.j	Warranty and Maintenance Plans	
2.j.i	Length of warranty (in months)	12 months
2.j.ii	Optional extended warranties	2 to 5 years
2.j.ii.1	Duration and cost of extended warranties	2 to 5 years and cost available on request
2.j.iii	Availability of extended maintenance plans	Replacement plan options
2.j.iii.1	Duration and cost of extended maintenance plans	2 to 5 years and cost available on request
2.j.iv	Service contract costs	2 to 5 years and cost available on request
2.k	Auxiliary Equipment	
2.k.i	Manufacturer suggested retail price (MSRP) for each auxiliary equipment	SideKick mini-HD camera, PTT 2-way radio cable, docking stations
2.l	MSRP without optional features, accessories, or service plans	Cost available on request
2.m	Manufacturer's estimated lifetime of device	60 months
2.n	Other relevant information	See additional information below

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – Software for Video Data Storage and Management		
3.a	Data Management – VeriPic	
3.a.i	Searching capabilities	Yes
3.a.ii	Categorizing capabilities	Yes
3.a.iii	Tagging capabilities	Yes; files are optionally tagged with notes and titles. Users can use a Google-like search to search for any keyword in the titles or notes, by user, by date or date range or serial number of the data item. All digital evidence is automatically tagged with a unique Serial Number which is a special feature VeriPic systems have. This is searchable and also ensures protection from possible challenges by defense

		attorneys because the serial numbers form a unique globally contagious chain.
3.a.iv	Archiving and file retention	Yes; Only the Administrator can delete files on command.
3.a.v	Data saved on or offsite	Both
3.a.v.1	If saved offsite, specific data accessibility and storage costs	Recommend MicroSoft Azure
3.a.v.2	Video data storage capacity local vs. cloud	Unlimited
3.a.v.3	Capability to accommodate multiple site installations	Yes
3.a.vi	Export capabilities	Yes
3.a.vi.1	Traceability feature that shows which user exported the data	Yes
3.a.vii	Redacting/editing capabilities	Yes
3.a.vii.1	Specify whether changes are permanent	Any file that is modified in any way is a copy to the original file.
3.a.viii	Support provided for chain-of-custody requirements	Yes
3.a.ix	Scalability for different organization size	Yes
3.a.x	User management and role-based access levels	Yes; Internally - Digital evidence can be shared by having users belong to a group designed for sharing such as a law enforcement task force. With DA, other law enforcement agencies, etc. a guest account can be created to allow them access. If electronic discovery is desired the eDiscovery Compiler is available to send a discovery packet to an attorney or another law enforcement agency. To media or private citizens the data can be exported onto any media for dissemination. For a customized or private portal Black Mamba can do custom programming and create a portal for the agency (programming charges apply) on www.VeriPicReports.com which is already currently in use by some law enforcement agencies to make some data available to the public.
3.b	Video Analytics	
3.b.i	Companion software to analyze recorded video and audio data	Software is a part of VeriPic
3.b.ii	Types of reports built into software	VeriPicReports.com provides a convenient method for private citizens, insurance companies and law firms to purchase crash and crime reports from an agency, online. There is no cost to the agency. VeriPic processes the reports and the agency retains 100% of the counter fees. Optimize revenue streams by eliminating work-flow interruptions, labor costs and financial handling fees. Set up is quick and easy, with no cost, no risk and no obligation; cancel at any time.
3.b.ii.1	Standard reports	Yes
3.b.ii.2	Daily reports, historical reports, etc.	Yes
3.b.ii.3	Audit reports that support chain-of-custody requirements	Yes
3.b.ii.4	Customization of reports	Yes
3.b.iii	Facial recognition capabilities	N/A

3.b.iv	Weapons detection capabilities	Yes
3.b.v	Other analytical capabilities	Please send inquiries to the manufacturer.
3.c	Video Security and Authentication	
3.c.i	Compatibility of BWC video output with existing video management software for reviewing and recording	Full compatibility
3.c.ii	File integrity checks to ensure authenticity	Hash mask
3.c.iii	Data protection mechanism while in transit and during storage	Strong 256 bit encryption is used at the application level. Standard collision quality tests are performed to ensure linearity and performance of routines used to generate the hash masks.
3.c.iv	Routine software updates	Releases of software are produced on a continuous basis to address bugs, security or performance problems. Software patches or updates are sent to affected customers when the fixes become available.
3.c.v	Cost of software updates	Included with yearly maintenance

RFI Q.#	Survey Question (abbreviated)	Response
Usability/Training		
4.a	Usability validation processes	Training is available a variety of ways. Live training at a customer site is available at additional cost. Standard training over the internet using GotoMeeting.com is available charged based on the number of students and the number of sessions needed. Training videos are available on the internet for free. Training manuals are provided in either printed form or PDF files. Separate training is provided for administrators and end users.
4.b	User community data	After set time ending role out of new and updated systems.
4.c	User-group meetings and frequency	Digital Evidence Conference occurs in April each year and allows customers and VeriPic staff to meet and discuss products and issues and future product development.
4.d	Typical problems reported	Large customers bigger than 2,000 users have a scheduled call weekly with us to make sure all system problems are dealt with promptly. Smaller organizations have standing calls at either 2 week or 4 week intervals.
4.d.i	Resolution to problems	Zero
4.e	Hours of tech. support and location	N/A
4.f	Training provided (hours)	N/A

RFI Q.#	Survey Question (abbreviated)	Response
Installation		
5.a	Average time to install and activate	20 days or less

4.3 BrickHouse Security HD Waterproof Police Camera



Figure 3. BrickHouse Security HD Waterproof Police Camera

RFI Q.#	Survey Question (abbreviated)	Response
Vendor Information		
0	Responded to FRN?	No
1.a	Name	BrickHouse Security
1.b	Address/phone number	980 Avenue of the Americas, 3rd Floor, New York, NY 10018 (800) 654-7966
1.c	Website	www.brickhousesecurity.com
1.d	Years in business	Information not found on website
1.e	Number and types of customers	Information not found on website
1.f	Manufacturing location(s)	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – BWC		
2.a	General	
2.a.i	Name and model number	HD Waterproof Police Camera
2.a.ii	Physical dims (H" x W" x D")	2.8" H x 2.3" W x 1.2" D
2.a.iii	Weight (oz.)	3.5 oz
2.a.iv	Mounting options	Shoulder
2.a.iv.1	Accessories needed for mounting	Rotatable shoulder clip
2.a.v	Ability to mount on vehicle dashboard	Yes
2.a.v.1	Accessories for vehicle dashboard mount	Car mount sticker
2.a.vi	LCD display	1.5" LCD
2.a.vii	Recording capacity	Up to 32 GB
2.a.viii	Operating conditions or limitations	Operating temperature: -4°F to 140°F Storage temperature: 25°F to 140°F
2.b	Video and Optics	

2.b.i	Maximum video resolution	1080P
2.b.ii	Field of view	170°
2.b.iii	Lux rating	Information not found on website
2.b.iv	Night mode/format	Information not found on website
2.b.v	Recording speed	Information not found on website
2.b.vi	Recording format	MOV
2.b.vii	Recording time under default resolution settings	Information not found on website
2.b.viii	Ability to capture still photos	Yes, JPEG
2.b.ix	Ability to embed date/time stamp on recorded video	Information not found on website
2.b.ix.1	Ability to authenticate and validate date/time stamp integrity	Information not found on website
2.b.x	Pre-event recording feature	Information not found on website
2.b.x.1	Time buffered and whether audio is recorded	Information not found on website
2.b.xi	Event marking capability	Information not found on website
2.b.xii	Wireless capabilities for communication	Information not found on website
2.c	Audio	
2.c.i	Microphone feature	Yes
2.c.ii	Microphone sensitivity	Information not found on website
2.c.iii	Audio format	WAV
2.c.iv	Default police radio interface for BWC	Information not found on website
2.d	Data Upload	
2.d.i	Single device vs. multiple upload docking station	Information not found on website
2.d.ii	Data transfer method	3G wireless transfer
2.d.iii	Manual vs. automatic upload	Information not found on website
2.e	Battery Information	
2.e.i	Battery type; internal or removable	1000mAh
2.e.ii	Recording duration	Information not found on website
2.e.iii	Battery standby duration	Information not found on website
2.e.iv	Battery charge time	Information not found on website
2.e.v	Battery lifetime until replacement	Information not found on website
2.e.vi	Battery replacement procedure	Information not found on website
2.e.vii	Availability of supplemental charger for emergency battery charging	Information not found on website
2.f	GPS	
2.f.i	BWC possess GPS	Information not found on website
2.f.i.1	Embedded GPS coordinates in recorded video	Information not found on website
2.f.ii	Alternative geolocation methods	Information not found on website
2.g	Consumer Testing Results	
2.g.i	Sturdiness/fragility	Information not found on website
2.g.i.1	Drop test results	Information not found on website
2.g.i.2	Dust intrusion/water resistance rating	IP67
2.g.i.3	Ruggedized	Information not found on website
2.g.i.4	Pressure/depth	Information not found on website
2.g.i.5	Shock	Information not found on website
2.g.i.6	Vibrations	Information not found on website

2.g.ii	Other environmental testing	Information not found on website
2.g.ii.1	Specify tests, pass/fail results, and ratings received	Information not found on website
2.h	Safeguards	
2.h.i	Privacy safeguards or features	Information not found on website
2.h.i.1	Remote viewing	Information not found on website
2.h.i.2	Remote activation/deactivation	Yes
2.h.i.3	Privacy masking	Information not found on website
2.h.i.4	Redacting/editing capabilities	Information not found on website
2.h.ii	Safeguards for cyber security, unintentional disassembly, etc.	Encrypted video
2.i	Regulatory	
2.i.i	Regulatory and Compliance safety requirements	Information not found on website
2.i.ii	Radiation safety standards	Information not found on website
2.j	Warranty and Maintenance Plans	
2.j.i	Length of warranty (in months)	Information not found on website
2.j.ii	Optional extended warranties	Information not found on website
2.j.ii.1	Duration and cost of extended warranties	Information not found on website
2.j.iii	Availability of extended maintenance plans	Information not found on website
2.j.iii.1	Duration and cost of extended maintenance plans	Information not found on website
2.j.iv	Service contract costs	Information not found on website
2.k	Auxiliary Equipment	
2.k.i	Manufacturer suggested retail price (MSRP) for each auxiliary equipment	Car mount sticker, 360 degree rotatable back clip, 180 degree rotatable shoulder clip (all included)
2.l	MSRP without optional features, accessories, or service plans	\$349
2.m	Manufacturer's estimated lifetime of device	Information not found on website
2.n	Other relevant information	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – Software for Video Data Storage and Management		
3.a	Data Management	
3.a.i	Searching capabilities	Information not found on website
3.a.ii	Categorizing capabilities	Information not found on website
3.a.iii	Tagging capabilities	Information not found on website
3.a.iv	Archiving and file retention	Information not found on website
3.a.v	Data saved on or offsite	Information not found on website
3.a.v.1	If saved offsite, specific data accessibility and storage costs	Information not found on website
3.a.v.2	Video data storage capacity local vs. cloud	Information not found on website
3.a.v.3	Capability to accommodate multiple site installations	Information not found on website
3.a.vi	Export capabilities	Information not found on website
3.a.vi.1	Traceability feature that shows which user exported the data	Information not found on website

3.a.vii	Redacting/editing capabilities	Information not found on website
3.a.vii.1	Specify whether changes are permanent	Information not found on website
3.a.viii	Support provided for chain-of-custody requirements	Information not found on website
3.a.ix	Scalability for different organization size	Information not found on website
3.a.x	User management and role-based access levels	Information not found on website
3.b	Video Analytics	
3.b.i	Companion software to analyze recorded video and audio data	Information not found on website
3.b.ii	Types of reports built into software	Information not found on website
3.b.ii.1	Standard reports	Information not found on website
3.b.ii.2	Daily reports, historical reports, etc.	Information not found on website
3.b.ii.3	Audit reports that support chain-of-custody requirements	Information not found on website
3.b.ii.4	Customization of reports	Information not found on website
3.b.iii	Facial recognition capabilities	Information not found on website
3.b.iv	Weapons detection capabilities	Information not found on website
3.b.v	Other analytical capabilities	Information not found on website
3.c	Video Security and Authentication	
3.c.i	Compatibility of BWC video output with existing video management software for reviewing and recording	Information not found on website
3.c.ii	File integrity checks to ensure authenticity	Information not found on website
3.c.iii	Data protection mechanism while in transit and during storage	Information not found on website
3.c.iv	Routine software updates	Information not found on website
3.c.v	Cost of software updates	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Usability/Training		
4.a	Usability validation processes	Information not found on website
4.b	User community data	Information not found on website
4.c	User-group meetings and frequency	Information not found on website
4.d	Typical problems reported	Information not found on website
4.d.i	Resolution to problems	Information not found on website
4.e	Hours of tech. support and location	Information not found on website
4.f	Training provided (hours)	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Installation		
5.a	Average time to install and activate	Information not found on website

4.4 BrickHouse Security Ultra Compact HD WiFi Camera



Figure 4. BrickHouse Security Ultra Compact HD WiFi Camera

RFI Q.#	Survey Question (abbreviated)	Response
Vendor Information		
0	Responded to FRN?	No
1.a	Name	BrickHouse Security
1.b	Address/phone number	980 Avenue of the Americas, 3rd Floor, New York, NY 10018 (800) 654-7966
1.c	Website	www.brickhousesecurity.com
1.d	Years in business	Information not found on website
1.e	Number and types of customers	Information not found on website
1.f	Manufacturing location(s)	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – BWC		
2.a	General	
2.a.i	Name and model number	Ultra Compact HD WiFi Camera
2.a.ii	Physical dims (H" x W" x D")	Information not found on website
2.a.iii	Weight (oz.)	1.7 oz
2.a.iv	Mounting options	Information not found on website
2.a.iv.1	Accessories needed for mounting	Clip mount
2.a.v	Ability to mount on vehicle dashboard	Information not found on website
2.a.v.1	Accessories for vehicle dashboard mount	Information not found on website
2.a.vi	LCD display	mini LCD
2.a.vii	Recording capacity	No internal storage; records to optional micro SD cards
2.a.viii	Operating conditions or limitations	Information not found on website

2.b	Video and Optics	
2.b.i	Maximum video resolution	1080P
2.b.ii	Field of view	113°
2.b.iii	Lux rating	Information not found on website
2.b.iv	Night mode/format	Information not found on website
2.b.v	Recording speed	Information not found on website
2.b.vi	Recording format	Information not found on website
2.b.vii	Recording time under default resolution settings	Information not found on website
2.b.viii	Ability to capture still photos	Yes; 8 MP
2.b.ix	Ability to embed date/time stamp on recorded video	Information not found on website
2.b.ix.1	Ability to authenticate and validate date/time stamp integrity	Information not found on website
2.b.x	Pre-event recording feature	Information not found on website
2.b.x.1	Time buffered and whether audio is recorded	Information not found on website
2.b.xi	Event marking capability	Information not found on website
2.b.xii	Wireless capabilities for communication	Yes, built-in WiFi capability allows camera control and basic editing via iOS or Android device
2.c	Audio	
2.c.i	Microphone feature	Yes
2.c.ii	Microphone sensitivity	Information not found on website
2.c.iii	Audio format	Information not found on website
2.c.iv	Default police radio interface for BWC	Information not found on website
2.d	Data Upload	
2.d.i	Single device vs. multiple upload docking station	Information not found on website
2.d.ii	Data transfer method	WiFi syncs to video to exclusive app
2.d.iii	Manual vs. automatic upload	Information not found on website
2.e	Battery Information	
2.e.i	Battery type; internal or removable	1100mAh
2.e.ii	Recording duration	2.5 hours
2.e.iii	Battery standby duration	Information not found on website
2.e.iv	Battery charge time	Information not found on website
2.e.v	Battery lifetime until replacement	Information not found on website
2.e.vi	Battery replacement procedure	Information not found on website
2.e.vii	Availability of supplemental charger for emergency battery charging	Information not found on website
2.f	GPS	
2.f.i	BWC possess GPS	Information not found on website
2.f.i.1	Embedded GPS coordinates in recorded video	Information not found on website
2.f.ii	Alternative geolocation methods	Information not found on website
2.g	Consumer Testing Results	
2.g.i	Sturdiness/fragility	Information not found on website
2.g.i.1	Drop test results	Information not found on website
2.g.i.2	Dust intrusion/water resistance rating	65 ft waterproof housing
2.g.i.3	Ruggedized	Information not found on website
2.g.i.4	Pressure/depth	Information not found on website
2.g.i.5	Shock	Information not found on website

2.g.i.6	Vibrations	Information not found on website
2.g.ii	Other environmental testing	Information not found on website
2.g.ii.1	Specify tests, pass/fail results, and ratings received	Information not found on website
2.h	Safeguards	
2.h.i	Privacy safeguards or features	Information not found on website
2.h.i.1	Remote viewing	Information not found on website
2.h.i.2	Remote activation/deactivation	Information not found on website
2.h.i.3	Privacy masking	Information not found on website
2.h.i.4	Redacting/editing capabilities	Information not found on website
2.h.ii	Safeguards for cyber security, unintentional disassembly, etc.	Information not found on website
2.i	Regulatory	
2.i.i	Regulatory and Compliance safety requirements	Information not found on website
2.i.ii	Radiation safety standards	Information not found on website
2.j	Warranty and Maintenance Plans	
2.j.i	Length of warranty (in months)	Information not found on website
2.j.ii	Optional extended warranties	Information not found on website
2.j.ii.1	Duration and cost of extended warranties	Information not found on website
2.j.iii	Availability of extended maintenance plans	Information not found on website
2.j.iii.1	Duration and cost of extended maintenance plans	Information not found on website
2.j.iv	Service contract costs	Information not found on website
2.k	Auxiliary Equipment	
2.k.i	Manufacturer suggested retail price (MSRP) for each auxiliary equipment	Waterproof case, clip mount (all included)
2.l	MSRP without optional features, accessories, or service plans	\$199
2.m	Manufacturer's estimated lifetime of device	Information not found on website
2.n	Other relevant information	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – Software for Video Data Storage and Management		
3.a	Data Management	
3.a.i	Searching capabilities	Information not found on website
3.a.ii	Categorizing capabilities	Information not found on website
3.a.iii	Tagging capabilities	Information not found on website
3.a.iv	Archiving and file retention	Information not found on website
3.a.v	Data saved on or offsite	Information not found on website
3.a.v.1	If saved offsite, specific data accessibility and storage costs	Information not found on website
3.a.v.2	Video data storage capacity local vs. cloud	Information not found on website
3.a.v.3	Capability to accommodate multiple site installations	Information not found on website
3.a.vi	Export capabilities	Information not found on website

3.a.vi.1	Traceability feature that shows which user exported the data	Information not found on website
3.a.vii	Redacting/editing capabilities	Information not found on website
3.a.vii.1	Specify whether changes are permanent	Information not found on website
3.a.viii	Support provided for chain-of-custody requirements	Information not found on website
3.a.ix	Scalability for different organization size	Information not found on website
3.a.x	User management and role-based access levels	Information not found on website
3.b	Video Analytics	
3.b.i	Companion software to analyze recorded video and audio data	Exclusive intuitive app
3.b.ii	Types of reports built into software	Information not found on website
3.b.ii.1	Standard reports	Information not found on website
3.b.ii.2	Daily reports, historical reports, etc.	Information not found on website
3.b.ii.3	Audit reports that support chain-of-custody requirements	Information not found on website
3.b.ii.4	Customization of reports	Information not found on website
3.b.iii	Facial recognition capabilities	Information not found on website
3.b.iv	Weapons detection capabilities	Information not found on website
3.b.v	Other analytical capabilities	Information not found on website
3.c	Video Security and Authentication	
3.c.i	Compatibility of BWC video output with existing video management software for reviewing and recording	Information not found on website
3.c.ii	File integrity checks to ensure authenticity	Information not found on website
3.c.iii	Data protection mechanism while in transit and during storage	Information not found on website
3.c.iv	Routine software updates	Information not found on website
3.c.v	Cost of software updates	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Usability/Training		
4.a	Usability validation processes	Information not found on website
4.b	User community data	Information not found on website
4.c	User-group meetings and frequency	Information not found on website
4.d	Typical problems reported	Information not found on website
4.d.i	Resolution to problems	Information not found on website
4.e	Hours of tech. support and location	Information not found on website
4.f	Training provided (hours)	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Installation		
5.a	Average time to install and activate	Information not found on website

4.5 BrickHouse Security HD WiFi Police Button Camera



Figure 5. BrickHouse Security HD WiFi Police Button Camera

RFI Q.#	Survey Question (abbreviated)	Response
Vendor Information		
0	Responded to FRN?	No
1.a	Name	BrickHouse Security
1.b	Address/phone number	980 Avenue of the Americas, 3rd Floor, New York, NY 10018 (800) 654-7966
1.c	Website	www.brickhousesecurity.com
1.d	Years in business	Information not found on website
1.e	Number and types of customers	Information not found on website
1.f	Manufacturing location(s)	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – BWC		
2.a	General	
2.a.i	Name and model number	HD WiFi Police Button Camera
2.a.ii	Physical dims (H" x W" x D")	1.2" H x 1.7" W x 1.7" D (Including LCD screen)
2.a.iii	Weight (oz.)	4.02 oz
2.a.iv	Mounting options	Head
2.a.iv.1	Accessories needed for mounting	Head strap mount
2.a.v	Ability to mount on vehicle dashboard	Information not found on website
2.a.v.1	Accessories for vehicle dashboard mount	Information not found on website
2.a.vi	LCD display	Yes
2.a.vii	Recording capacity	Up to 64 GB
2.a.viii	Operating conditions or limitations	Operating temperature: 50°F to 122°F Storage temperature: -4°F to 140°F

2.b	Video and Optics	
2.b.i	Maximum video resolution	Information not found on website
2.b.ii	Field of view	173°
2.b.iii	Lux rating	Information not found on website
2.b.iv	Night mode/format	Information not found on website
2.b.v	Recording speed	Information not found on website
2.b.vi	Recording format	MOV
2.b.vii	Recording time under default resolution settings	Information not found on website
2.b.viii	Ability to capture still photos	Information not found on website
2.b.ix	Ability to embed date/time stamp on recorded video	Information not found on website
2.b.ix.1	Ability to authenticate and validate date/time stamp integrity	Information not found on website
2.b.x	Pre-event recording feature	Information not found on website
2.b.x.1	Time buffered and whether audio is recorded	Information not found on website
2.b.xi	Event marking capability	Information not found on website
2.b.xii	Wireless capabilities for communication	Yes, built in WiFi capability allows camera control and basic editing via iOS or Android device up to 100 meters
2.c	Audio	
2.c.i	Microphone feature	Yes
2.c.ii	Microphone sensitivity	Information not found on website
2.c.iii	Audio format	WAV
2.c.iv	Default police radio interface for BWC	Information not found on website
2.d	Data Upload	
2.d.i	Single device vs. multiple upload docking station	Information not found on website
2.d.ii	Data transfer method	Wireless
2.d.iii	Manual vs. automatic upload	Information not found on website
2.e	Battery Information	
2.e.i	Battery type; internal or removable	1500mAh
2.e.ii	Recording duration	Information not found on website
2.e.iii	Battery standby duration	Information not found on website
2.e.iv	Battery charge time	Information not found on website
2.e.v	Battery lifetime until replacement	Information not found on website
2.e.vi	Battery replacement procedure	Information not found on website
2.e.vii	Availability of supplemental charger for emergency battery charging	Information not found on website
2.f	GPS	
2.f.i	BWC possess GPS	Information not found on website
2.f.i.1	Embedded GPS coordinates in recorded video	Information not found on website
2.f.ii	Alternative geolocation methods	Information not found on website
2.g	Consumer Testing Results	
2.g.i	Sturdiness/fragility	Information not found on website
2.g.i.1	Drop test results	Information not found on website
2.g.i.2	Dust intrusion/water resistance rating	Information not found on website
2.g.i.3	Ruggedized	Information not found on website
2.g.i.4	Pressure/depth	Information not found on website

2.g.i.5	Shock	Information not found on website
2.g.i.6	Vibrations	Information not found on website
2.g.ii	Other environmental testing	Information not found on website
2.g.ii.1	Specify tests, pass/fail results, and ratings received	Information not found on website
2.h	Safeguards	
2.h.i	Privacy safeguards or features	Information not found on website
2.h.i.1	Remote viewing	Information not found on website
2.h.i.2	Remote activation/deactivation	Information not found on website
2.h.i.3	Privacy masking	Information not found on website
2.h.i.4	Redacting/editing capabilities	Information not found on website
2.h.ii	Safeguards for cyber security, unintentional disassembly, etc.	Information not found on website
2.i	Regulatory	
2.i.i	Regulatory and Compliance safety requirements	Information not found on website
2.i.ii	Radiation safety standards	Information not found on website
2.j	Warranty and Maintenance Plans	
2.j.i	Length of warranty (in months)	Information not found on website
2.j.ii	Optional extended warranties	Information not found on website
2.j.ii.1	Duration and cost of extended warranties	Information not found on website
2.j.iii	Availability of extended maintenance plans	Information not found on website
2.j.iii.1	Duration and cost of extended maintenance plans	Information not found on website
2.j.iv	Service contract costs	Information not found on website
2.k	Auxiliary Equipment	
2.k.i	Manufacturer suggested retail price (MSRP) for each auxiliary equipment	Head strap mount, ear hook, flat fixed base, rotatable back clip, fixed buckle, back clip for host (all included)
2.l	MSRP without optional features, accessories, or service plans	\$499
2.m	Manufacturer's estimated lifetime of device	Information not found on website
2.n	Other relevant information	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – Software for Video Data Storage and Management		
3.a	Data Management	
3.a.i	Searching capabilities	Information not found on website
3.a.ii	Categorizing capabilities	Information not found on website
3.a.iii	Tagging capabilities	Information not found on website
3.a.iv	Archiving and file retention	Information not found on website
3.a.v	Data saved on or offsite	Information not found on website
3.a.v.1	If saved offsite, specific data accessibility and storage costs	Information not found on website
3.a.v.2	Video data storage capacity local vs. cloud	Information not found on website
3.a.v.3	Capability to accommodate multiple site installations	Information not found on website

3.a.vi	Export capabilities	Information not found on website
3.a.vi.1	Traceability feature that shows which user exported the data	Information not found on website
3.a.vii	Redacting/editing capabilities	Information not found on website
3.a.vii.1	Specify whether changes are permanent	Information not found on website
3.a.viii	Support provided for chain-of-custody requirements	Information not found on website
3.a.ix	Scalability for different organization size	Information not found on website
3.a.x	User management and role-based access levels	Information not found on website
3.b	Video Analytics	
3.b.i	Companion software to analyze recorded video and audio data	Information not found on website
3.b.ii	Types of reports built into software	Information not found on website
3.b.ii.1	Standard reports	Information not found on website
3.b.ii.2	Daily reports, historical reports, etc.	Information not found on website
3.b.ii.3	Audit reports that support chain-of-custody requirements	Information not found on website
3.b.ii.4	Customization of reports	Information not found on website
3.b.iii	Facial recognition capabilities	Information not found on website
3.b.iv	Weapons detection capabilities	Information not found on website
3.b.v	Other analytical capabilities	Information not found on website
3.c	Video Security and Authentication	
3.c.i	Compatibility of BWC video output with existing video management software for reviewing and recording	Information not found on website
3.c.ii	File integrity checks to ensure authenticity	Information not found on website
3.c.iii	Data protection mechanism while in transit and during storage	Information not found on website
3.c.iv	Routine software updates	Information not found on website
3.c.v	Cost of software updates	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Usability/Training		
4.a	Usability validation processes	Information not found on website
4.b	User community data	Information not found on website
4.c	User-group meetings and frequency	Information not found on website
4.d	Typical problems reported	Information not found on website
4.d.i	Resolution to problems	Information not found on website
4.e	Hours of tech. support and location	Information not found on website
4.f	Training provided (hours)	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Installation		
5.a	Average time to install and activate	Information not found on website

4.6 Brimtek EdgeVis VB320W



Figure 6. Brimtek EdgeVis VB320W

RFI Q.#	Survey Question (abbreviated)	Response
Vendor Information		
0	Responded to FRN?	Yes
1.a	Name	Digital Barrier, a Brimtek company
1.b	Address/phone number	21660 Red Rum Drive, Ashburn, VA 20147 (571) 918-4921
1.c	Website	www.digitalbarriers.com
1.d	Years in business	10 years
1.e	Number and types of customers	Brimtek serves Federal and State law enforcement agencies, including the Department of Homeland Security. The company also works with International law enforcement clients of all sizes.
1.f	Manufacturing location(s)	Virginia, USA and Scotland, United Kingdom

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – BWC		
2.a	General	
2.a.i	Name and model number	EdgeVis VB320W
2.a.ii	Physical dims (H" x W" x D")	3.36" H x 2.48" W x 0.98" D
2.a.iii	Weight (oz.)	3.5 oz
2.a.iv	Mounting options	Chest, head, helmet, and glasses available using external bullet camera option
2.a.iv.1	Accessories needed for mounting	Supplied mounting clip or any KlickFast or GoPro compatible mounting accessory
2.a.v	Ability to mount on vehicle dashboard	Yes
2.a.v.1	Accessories for vehicle dashboard mount	Supplied vehicle mount or any GoPro compatible mount
2.a.vi	LCD display	No, but can view using connected smartphone
2.a.vii	Recording capacity	16 GB
2.a.viii	Operating conditions or limitations	Operating temperature: 68°F to 104°F Non-condensing

2.b	Video and Optics	
2.b.i	Maximum video resolution	720P (1080 P available upon request)
2.b.ii	Field of view	150°
2.b.iii	Lux rating	1 lux
2.b.iv	Night mode/format	Yes; low light mode
2.b.v	Recording speed	30 fps
2.b.vi	Recording format	H.264
2.b.vii	Recording time under default resolution settings	8 hours
2.b.viii	Ability to capture still photos	Yes
2.b.ix	Ability to embed date/time stamp on recorded video	Yes
2.b.ix.1	Ability to authenticate and validate date/time stamp integrity	Yes
2.b.x	Pre-event recording feature	Yes
2.b.x.1	Time buffered and whether audio is recorded	Configurable up to 8 hours; audio is recorded
2.b.xi	Event marking capability	Yes
2.b.xii	Wireless capabilities for communication	Yes
2.c	Audio	
2.c.i	Microphone feature	Yes
2.c.ii	Microphone sensitivity	Standard audio configuration is near field capture with background noise reduction.
2.c.iii	Audio format	MP2 and G.711
2.c.iv	Default police radio interface for BWC	No
2.d	Data Upload	
2.d.i	Single device vs. multiple upload docking station	Powered docking station available for 1 or 14 devices. All docked devices can upload at once. Docking solution can scale to thousands of cameras.
2.d.ii	Data transfer method	Wired or wireless data transfer is available.
2.d.iii	Manual vs. automatic upload	Automatic
2.e	Battery Information	
2.e.i	Battery type; internal or removable	Internal non-replaceable lithium ion
2.e.ii	Recording duration	8 hours
2.e.iii	Battery standby duration	48 hours
2.e.iv	Battery charge time	Up to 4 hours
2.e.v	Battery lifetime until replacement	3 to 4 years
2.e.vi	Battery replacement procedure	Batteries are usually replaced at supplier facility; training available to allow customer replacement.
2.e.vii	Availability of supplemental charger for emergency battery charging	External USB battery charges, car USB chargers, and standard USB chargers are all available. Device can charge from any standard USB power source (but data is not accessible without secure authentication).
2.f	GPS	
2.f.i	BWC possess GPS	No
2.f.i.1	Embedded GPS coordinates in recorded video	No
2.f.ii	Alternative geolocation methods	A connected smartphone GPS can be used to provide location data.
2.g	Consumer Testing Results	
2.g.i	Sturdiness/fragility	The camera is a sealed unit with no user access to storage media or battery.

2.g.i.1	Drop test results	1.2M
2.g.i.2	Dust intrusion/water resistance rating	IP54
2.g.i.3	Ruggedized	All EdgeVis cameras are rugged and shock resistant.
2.g.i.4	Pressure/depth	No information provided
2.g.i.5	Shock	Yes
2.g.i.6	Vibrations	Yes
2.g.ii	Other environmental testing	Cameras are independently safety tested to EN60950, EMC emissions tested to EN55022:2010 and EN55024:2010, as well as certified to Specification 5 (SPEC5) for minimization of interference with emergency services communications equipment (Certificate AES5026-5).
2.g.ii.1	Specify tests, pass/fail results, and ratings received	All relevant certification is available on request.
2.h	Safeguards	
2.h.i	Privacy safeguards or features	Yes; data is encrypted at the point of capture on the on device using an organization-specific key. All data is protected by a permissions model and can only be viewed, modified or deleted by authorized users. All actions within the system (including viewing) are logged as a fully searchable audit trail.
2.h.i.1	Remote viewing	Yes; body camera footage can be accessed as a live stream by any number of remote users. Streaming is via a paired smartphone. Video is transmitted using the high-reliability TVI codec, which is used by a number of US Federal agencies in critical mobile and surveillance applications. This system can transmit video over a 2G cell phone connection as well as 3G, 4G and Wi-Fi.
2.h.i.2	Remote activation/deactivation	No; feature to be added in 2016.
2.h.i.3	Privacy masking	Redaction and privacy masking features are included with the system.
2.h.i.4	Redacting/editing capabilities	Full redaction and editing capability is included for every user at no extra charge. Access to editing features can be controlled by administrators using a permissions system
2.h.ii	Safeguards for cyber security, unintentional disassembly, etc.	Yes; The units are sealed with no access to battery or memory, but if the camera is intentionally damaged, then recordings are secured in the following way. At the start of a field trip the camera and the management station entity exchanges encryption keys using AES 256 standard encryption. The key is in 2 parts and the camera does not contain the system key to ensure that a camera cannot be analyzed to reveal the system wide secret key. When the camera is returned to base there is a key exchange between the camera and the management system. This ensures that the camera has entered a trusted domain and the footage can be sent to the system to be processed. Without this valid key exchange, the camera will not give access to the data.
2.i	Regulatory	
2.i.i	Regulatory and Compliance safety requirements	EMC, FCC, CE, IP54 and Cast Specification 5, Issue 11 (SPEC5)

2.i.ii	Radiation safety standards	No information provided
2.j	Warranty and Maintenance Plans	
2.j.i	Length of warranty (in months)	12 months
2.j.ii	Optional extended warranties	Yes
2.j.ii.1	Duration and cost of extended warranties	<ul style="list-style-type: none"> Warranty for year 1: included in price Warranty for year 2: \$199 Warranty for year 3: \$199
2.j.iii	Availability of extended maintenance plans	Yes
2.j.iii.1	Duration and cost of extended maintenance plans	<ul style="list-style-type: none"> Extended maintenance for year 3 (includes full device refresh): \$870 Extended maintenance for year 4: \$199 Extended maintenance for year 5: \$199
2.j.iv	Service contract costs	The service contract is included in the camera/support price.
2.k	Auxiliary Equipment	
2.k.i	Manufacturer suggested retail price (MSRP) for each auxiliary equipment	<ul style="list-style-type: none"> Single dock, for docking, charging and downloading a single camera = \$65 14 slot dock, for docking, charging and downloading up to 14 cameras at a time = \$870 Additional clips and mounting accessories, for mounting to a wide range of uniform styles = \$15-\$35 3 point chest harness, compatible with driving with a seatbelt = \$35 4 point chest harness, positions camera centrally on chest of wearer = \$50
2.l	MSRP without optional features, accessories, or service plans	\$870 (includes evidence management software)
2.m	Manufacturer's estimated lifetime of device	3 to 4 years
2.n	Other relevant information	A license for the VideoVault Digital Evidence Management System (DEMS) is included with purchased devices. There is no ongoing software as a service charge.

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – Software for Video Data Storage and Management		
3.a	Data Management	
3.a.i	Searching capabilities	Yes
3.a.ii	Categorizing capabilities	Yes
3.a.iii	Tagging capabilities	Yes
3.a.iv	Archiving and file retention	Yes
3.a.v	Data saved on or offsite	Both. Data can be saved on- or off-site and there is a wealth of functionality available to reduce the amount of data that moves around the network, including the ability to only transfer video market as important and schedule video transfer for quiet times of the day. All system users have visibility of all the footage that exists wherever it is located even if it hasn't been uploaded or marked as important and evidential, because the meta-data about footage is always shared

		to the center; users with the correct permissions can select or view any footage regardless of its location (e.g. by searching for a device operator or time period etc.) that is then uploaded to the datacenter on-demand
3.a.v.1	If saved offsite, specific data accessibility and storage costs	Offsite data is stored in a CJIS and FEDRAMP compliant cloud storage environment.
3.a.v.2	Video data storage capacity local vs. cloud	All video can be stored locally or in the cloud depending on the preference of the purchasing agency. There is no limit on the available storage with either option
3.a.v.3	Capability to accommodate multiple site installations	Any number of sites can be supported, including sites with low-bandwidth internet connections.
3.a.vi	Export capabilities	Yes
3.a.vi.1	Traceability feature that shows which user exported the data	Yes
3.a.vii	Redacting/editing capabilities	Yes
3.a.vii.1	Specify whether changes are permanent	The video is always stored untouched. Redaction and editing are stored as metadata and securely applied on playback before the media is streamed to the viewer.
3.a.viii	Support provided for chain-of-custody requirements	Yes; Audit trails for device actions (e.g. start/stop record, power on/off) are created on the camera and imported into software when the device is connected. This allows administrators to confirm if recording was started and stopped in line with department policy. All actions taken in the VideoVault interface are also logged to allow proof that the chain of custody has been maintained. This can be used to demonstrate who has had access to a video / case should a FOIA request be filed. Access to these logs is over a secured connection, only possible with the access key, thus making tampering with the logs difficult. The database is secured using standard operating system protection mechanisms (file permissions, firewalls, etc.). Access to the database is restricted to authenticated video manager instances within the data center. Again this can be secured at both the authentication and firewall levels. Access to the audit log from within the application is managed by Role Based Access Control (RBAC). The system is designed so that only one copy of the video exists at any time.
3.a.ix	Scalability for different organization size	Yes
3.a.x	User management and role-based access levels	Yes
3.b	Video Analytics	
3.b.i	Companion software to analyze recorded video and audio data	Yes; Digital Barrier's parent company, Brimtek, has developed wide range of state of the art analytics which can be added to the system including: <ul style="list-style-type: none"> Stabilize and contrast enhance video for operator effectiveness Search for faces in video and show only those sections of video with people present
3.b.ii	Types of reports built into software	See below

3.b.ii.1	Standard reports	Yes
3.b.ii.2	Daily reports, historical reports, etc.	Yes
3.b.ii.3	Audit reports that support chain-of-custody requirements	Yes
3.b.ii.4	Customization of reports	Yes; The system logs all audit trail and video file information into its database. The information captured in these items can be used to provide a detailed set of management information. External reporting and data analysis tools (e.g. SPLUNK) can be directed at this data (using a suitably authorization mechanism) and produce any management reports required. Sample management reports are tailored and delivered on request.
3.b.iii	Facial recognition capabilities	Yes; Brimtek can supply facial recognition system for analyzing video footage. This system can detect and recognize faces against a watch list. Performance depends on a number of factors including video quality.
3.b.iv	Weapons detection capabilities	No
3.b.v	Other analytical capabilities	No information provided
3.c	Video Security and Authentication	
3.c.i	Compatibility of BWC video output with existing video management software for reviewing and recording	Live-streaming capability is integrated with Milestone and Airship. The system can also export video in standards compliant formats for injection into a wide range of VMS.
3.c.ii	File integrity checks to ensure authenticity	Yes
3.c.iii	Data protection mechanism while in transit and during storage	Recordings are secured in the following way. At the start of a field trip the camera and the management station entity exchanges encryption keys using AES 256 standard encryption. The key is in 2 parts and the camera does not contain the system key to ensure that a camera cannot be analyzed to reveal the system wide secret key. When the camera is returned to base there is a key exchange between the camera and the management system. This ensures that the camera has entered a trusted domain and the footage can be sent to the system to be processed. Without this valid key exchange, the camera will not give access to the data.
3.c.iv	Routine software updates	Software updates released month, and depending on the storage model, can either be automatically updated or done manually.
3.c.v	Cost of software updates	Included

RFI Q.#	Survey Question (abbreviated)	Response
Usability/Training		
4.a	Usability validation processes	Brimtek solution development is performed against a systems-engineering V model to ensure that solutions are fully validated against customer requirements. Typically a solution will pass through system level requirements gathering (including interviews, observation, and task analysis) then sub-system

		requirement design (including ergonomic design and systems integration and interoperability development) followed by detailed design. At each stage of integration and test (component verification, system acceptance test, and user acceptance testing) the requirements are validated to ensure a fit-for-purpose product is delivered.
4.b	User community data	Interviews, observations, working-groups and customer feedback is gathered to influence product and solution development.
4.c	User-group meetings and frequency	Users are invited for regular individual and group feedback sessions with Brimtek to inform product and solution development.
4.d	Typical problems reported	No information provided
4.d.i	Resolution to problems	No information provided
4.e	Hours of tech. support and location	Support in Ashburn US: working hours or 24/7 by arrangement Support in UK: 1 working day Support (excluding 24 hours support) is included with the cost of the camera
4.f	Training provided (hours)	A fundamental design principle for the platform it is ensure that individual officers are able to be trained on how to use the system within 15 minutes. Typically 4-5 days of training for administrators, champions and super-users is provided.

RFI Q.#	Survey Question (abbreviated)	Response
Installation		
5.a	Average time to install and activate	The first device could be activated and installed within one hour. Average time to complete a complex deployment depends on system complexity but is typically 7-90 days.

4.7 Brimtek EdgeVis VB340W



Figure 7. Brimtek EdgeVis VB340W

RFI Q.#	Survey Question (abbreviated)	Response
Vendor Information		
0	Responded to FRN?	Yes
1.a	Name	Digital Barrier, a Brimtek company
1.b	Address/phone number	21660 Red Rum Drive, Ashburn, VA 20147 (571) 918-4921
1.c	Website	www.digitalbarriers.com
1.d	Years in business	10 years
1.e	Number and types of customers	Brimtek serves Federal and State law enforcement agencies, including the Department of Homeland Security. The company also works with International law enforcement clients of all sizes.
1.f	Manufacturing location(s)	Virginia, USA and Scotland, United Kingdom

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – BWC		
2.a	General	
2.a.i	Name and model number	EdgeVis VB340W
2.a.ii	Physical dims (H" x W" x D")	3.36" H x 2.48" W x 1.18" D
2.a.iii	Weight (oz.)	5 oz
2.a.iv	Mounting options	Chest, head, helmet, and glasses available using external bullet camera option
2.a.iv.1	Accessories needed for mounting	Supplied mounting clip or any KlickFast or GoPro compatible mounting accessory
2.a.v	Ability to mount on vehicle dashboard	Yes
2.a.v.1	Accessories for vehicle dashboard mount	Supplied vehicle mount or any GoPro compatible mount
2.a.vi	LCD display	No, but can view using connected smartphone
2.a.vii	Recording capacity	32 GB
2.a.viii	Operating conditions or limitations	Operating temperature: 68°F to 104°F Non-condensing

2.b	Video and Optics	
2.b.i	Maximum video resolution	720P (1080 P available upon request)
2.b.ii	Field of view	150°
2.b.iii	Lux rating	1 lux
2.b.iv	Night mode/format	Yes; low light mode
2.b.v	Recording speed	30 fps
2.b.vi	Recording format	H.264
2.b.vii	Recording time under default resolution settings	16 hours
2.b.viii	Ability to capture still photos	Yes
2.b.ix	Ability to embed date/time stamp on recorded video	Yes
2.b.ix.1	Ability to authenticate and validate date/time stamp integrity	Yes
2.b.x	Pre-event recording feature	Yes
2.b.x.1	Time buffered and whether audio is recorded	Configurable up to 8 hours; audio is recorded
2.b.xi	Event marking capability	Yes
2.b.xii	Wireless capabilities for communication	Yes
2.c	Audio	
2.c.i	Microphone feature	Yes
2.c.ii	Microphone sensitivity	Standard audio configuration is near field capture with background noise reduction.
2.c.iii	Audio format	MP2 and G.711
2.c.iv	Default police radio interface for BWC	No
2.d	Data Upload	
2.d.i	Single device vs. multiple upload docking station	Powered docking station available for 1 or 14 devices. All docked devices can upload at once. Docking solution can scale to thousands of cameras.
2.d.ii	Data transfer method	Wired or wireless data transfer is available.
2.d.iii	Manual vs. automatic upload	Automatic
2.e	Battery Information	
2.e.i	Battery type; internal or removable	Internal non-replaceable lithium ion
2.e.ii	Recording duration	14 hours
2.e.iii	Battery standby duration	96 hours
2.e.iv	Battery charge time	Up to 8 hours
2.e.v	Battery lifetime until replacement	3 to 4 years
2.e.vi	Battery replacement procedure	Batteries are usually replaced at supplier facility; training available to allow customer replacement.
2.e.vii	Availability of supplemental charger for emergency battery charging	External USB battery charges, car USB chargers, and standard USB chargers are all available. Device can charge from any standard USB power source (but data is not accessible without secure authentication).
2.f	GPS	
2.f.i	BWC possess GPS	No
2.f.i.1	Embedded GPS coordinates in recorded video	No
2.f.ii	Alternative geolocation methods	A connected smartphone GPS can be used to provide location data.
2.g	Consumer Testing Results	
2.g.i	Sturdiness/fragility	The camera is a sealed unit with no user access to storage media or battery.

2.g.i.1	Drop test results	1.2M
2.g.i.2	Dust intrusion/water resistance rating	IP54
2.g.i.3	Ruggedized	All EdgeVis cameras are rugged and shock resistant.
2.g.i.4	Pressure/depth	No information provided
2.g.i.5	Shock	Yes
2.g.i.6	Vibrations	Yes
2.g.ii	Other environmental testing	Cameras are independently safety tested to EN60950, EMC emissions tested to EN55022:2010 and EN55024:2010, as well as certified to Specification 5 (SPEC5) for minimization of interference with emergency services communications equipment (Certificate AES5026-5).
2.g.ii.1	Specify tests, pass/fail results, and ratings received	All relevant certification is available on request.
2.h	Safeguards	
2.h.i	Privacy safeguards or features	Yes; data is encrypted at the point of capture on the on device using an organization-specific key. All data is protected by a permissions model and can only be viewed, modified or deleted by authorized users. All actions within the system (including viewing) are logged as a fully searchable audit trail.
2.h.i.1	Remote viewing	Yes; body camera footage can be accessed as a live stream by any number of remote users. Streaming is via a paired smartphone. Video is transmitted using the high-reliability TVI codec, which is used by a number of US Federal agencies in critical mobile and surveillance applications. This system can transmit video over a 2G cell phone connection as well as 3G, 4G and Wi-Fi.
2.h.i.2	Remote activation/deactivation	No; feature to be added in 2016.
2.h.i.3	Privacy masking	Redaction and privacy masking features are included with the system.
2.h.i.4	Redacting/editing capabilities	Full redaction and editing capability is included for every user at no extra charge. Access to editing features can be controlled by administrators using a permissions system
2.h.ii	Safeguards for cyber security, unintentional disassembly, etc.	Yes; units are sealed with no access to battery or memory, but if the camera is intentionally damaged, then recordings are secured in the following way. At the start of a field trip the camera and the management station entity exchanges encryption keys using AES 256 standard encryption. The key is in 2 parts and the camera does not contain the system key to ensure that a camera cannot be analyzed to reveal the system wide secret key. When the camera is returned to base there is a key exchange between the camera and the management system. This ensures that the camera has entered a trusted domain and the footage can be sent to the system to be processed. Without this valid key exchange, the camera will not give access to the data.
2.i	Regulatory	
2.i.i	Regulatory and Compliance safety requirements	EMC, FCC, CE, IP54 and Cast Specification 5, Issue 11 (SPEC5)

2.i.ii	Radiation safety standards	No information provided
2.j	Warranty and Maintenance Plans	
2.j.i	Length of warranty (in months)	12 months
2.j.ii	Optional extended warranties	Yes
2.j.ii.1	Duration and cost of extended warranties	<ul style="list-style-type: none"> Warranty for year 1: included in price Warranty for year 2: \$199 Warranty for year 3: \$199
2.j.iii	Availability of extended maintenance plans	Yes
2.j.iii.1	Duration and cost of extended maintenance plans	<ul style="list-style-type: none"> Extended maintenance for year 3 (includes full device refresh): \$870 Extended maintenance for year 4: \$199 Extended maintenance for year 5: \$199
2.j.iv	Service contract costs	The service contract is included in the camera/support price.
2.k	Auxiliary Equipment	
2.k.i	Manufacturer suggested retail price (MSRP) for each auxiliary equipment	<ul style="list-style-type: none"> Single dock, for docking, charging and downloading a single camera = \$65 14 slot dock, for docking, charging and downloading up to 14 cameras at a time = \$870 Additional clips and mounting accessories, for mounting to a wide range of uniform styles = \$15-\$35 3 point chest harness, compatible with driving with a seatbelt = \$35 4 point chest harness, positions camera centrally on chest of wearer = \$50
2.l	MSRP without optional features, accessories, or service plans	\$950 (includes evidence management software)
2.m	Manufacturer's estimated lifetime of device	3 to 4 years
2.n	Other relevant information	A license for the VideoVault Digital Evidence Management System (DEMS) is included with purchased devices. There is no ongoing software as a service charge.

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – Software for Video Data Storage and Management		
3.a	Data Management	
3.a.i	Searching capabilities	Yes
3.a.ii	Categorizing capabilities	Yes
3.a.iii	Tagging capabilities	Yes
3.a.iv	Archiving and file retention	Yes
3.a.v	Data saved on or offsite	Both. Data can be saved on- or off-site and there is a wealth of functionality available to reduce the amount of data that moves around the network, including the ability to only transfer video market as important and schedule video transfer for quiet times of the day. All system users have visibility of all the footage that exists wherever it is located even if it hasn't been uploaded or marked as important and evidential, because the meta-data about footage is always shared

		to the center; users with the correct permissions can select or view any footage regardless of its location (e.g. by searching for a device operator or time period etc.) that is then uploaded to the datacenter on-demand
3.a.v.1	If saved offsite, specific data accessibility and storage costs	Offsite data is stored in a CJIS and FEDRAMP compliant cloud storage environment.
3.a.v.2	Video data storage capacity local vs. cloud	All video can be stored locally, or in the cloud, depending on the preference of the purchasing agency. There is no limit on the available storage with either option
3.a.v.3	Capability to accommodate multiple site installations	Any number of sites can be supported, include sites with low-bandwidth internet connections.
3.a.vi	Export capabilities	Yes
3.a.vi.1	Traceability feature that shows which user exported the data	Yes
3.a.vii	Redacting/editing capabilities	Yes
3.a.vii.1	Specify whether changes are permanent	The video is always stored untouched. Redaction and editing are stored as metadata and securely applied on playback before the media is streamed to the viewer.
3.a.viii	Support provided for chain-of-custody requirements	Yes; Audit trails for device actions (e.g. start/stop record, power on/off) are created on the camera and imported into software when the device is connected. This allows administrators to confirm if recording was started and stopped in line with department policy. All actions taken in the VideoVault interface are also logged to allow proof that the chain of custody has been maintained. This can be used to demonstrate who has had access to a video / case should a FOIA request be filed. Access to these logs is over a secured connection, only possible with the access key, thus making tampering with the logs difficult. The database is secured using standard operating system protection mechanisms (file permissions, firewalls, etc.). Access to the database is restricted to authenticated video manager instances within the datacenter. Again this can be secured at both the authentication and firewall levels. Access to the audit log from within the application is managed by Role Based Access Control (RBAC). The system is designed so that only one copy of the video exists at any time.
3.a.ix	Scalability for different organization size	Yes
3.a.x	User management and role-based access levels	Yes
3.b	Video Analytics	
3.b.i	Companion software to analyze recorded video and audio data	Yes; Digital Barrier's parent company, Brimtek, has developed wide range of state of the art analytics which can be added to the system including: <ul style="list-style-type: none"> Stabilize and contrast enhance video for operator effectiveness Search for faces in video and show only those sections of video with people present
3.b.ii	Types of reports built into software	See below

3.b.ii.1	Standard reports	Yes
3.b.ii.2	Daily reports, historical reports, etc.	Yes
3.b.ii.3	Audit reports that support chain-of-custody requirements	Yes
3.b.ii.4	Customization of reports	Yes; The system logs all audit trail and video file information into its database. The information captured in these items can be used to provide a detailed set of management information. External reporting and data analysis tools (e.g. SPLUNK) can be directed at this data (using a suitably authorization mechanism) and produce any management reports required. Brimtek delivers sample management reports and tailor such reports as required on request.
3.b.iii	Facial recognition capabilities	Yes; Brimtek can supply their facial recognition system for analyzing video footage. This system can detect and recognize faces against a watch list. Performance depends on a number of factors including video quality.
3.b.iv	Weapons detection capabilities	No
3.b.v	Other analytical capabilities	No information provided
3.c	Video Security and Authentication	
3.c.i	Compatibility of BWC video output with existing video management software for reviewing and recording	Live-streaming capability is integrated with Milestone and Airship. The system can also export video in standards compliant formats for injection into a wide range of VMS.
3.c.ii	File integrity checks to ensure authenticity	Yes
3.c.iii	Data protection mechanism while in transit and during storage	Recordings are secured in the following way. At the start of a field trip the camera and the management station entity exchanges encryption keys using AES 256 standard encryption. The key is in 2 parts and the camera does not contain the system key to ensure that a camera cannot be analyzed to reveal the system wide secret key. When the camera is returned to base there is a key exchange between the camera and the management system. This ensures that the camera has entered a trusted domain and the footage can be sent to the system to be processed. Without this valid key exchange, the camera will not give access to the data.
3.c.iv	Routine software updates	Software updates released month, and depending on the storage model, can either be automatically updated or done manually.
3.c.v	Cost of software updates	Included

RFI Q.#	Survey Question (abbreviated)	Response
Usability/Training		
4.a	Usability validation processes	Brimtek solution development is performed against a systems-engineering V model to ensure that solutions are fully validated against customer requirements. Typically a solution will pass through system level requirements gathering (including interviews, observation, and task analysis) then sub-system

		requirement design (including ergonomic design and systems integration and interoperability development) followed by detailed design. At each stage of integration and test (component verification, system acceptance test, and user acceptance testing) the requirements are validated to ensure a fit-for-purpose product is delivered.
4.b	User community data	Interviews, observations, working-groups and customer feedback is gathered to influence product and solution development.
4.c	User-group meetings and frequency	Users are invited for regular individual and group feedback sessions to inform product and solution development.
4.d	Typical problems reported	No information provided
4.d.i	Resolution to problems	No information provided
4.e	Hours of tech. support and location	Support in Ashburn US: working hours or 24/7 by arrangement Support in UK: 1 working day Support (excluding 24 hours support) is included with the cost of the camera
4.f	Training provided (hours)	A fundamental design principle for the platform it is ensure that individual officers are able to be trained on how to use the system within 15 minutes. Typically 4-5 days of training for administrators, champions and super-users is provided.

RFI Q.#	Survey Question (abbreviated)	Response
Installation		
5.a	Average time to install and activate	The first device could activated and installed within one hour. Average time to complete a complex deployment depends on system complexity but is typically 7-90 days.

4.8 COBAN Body Camera



Figure 8. COBAN Body Camera

RFI Q.#	Survey Question (abbreviated)	Response
Vendor Information		
0	Responded to FRN?	Yes
1.a	Name	COBAN Technologies, Inc.
1.b	Address/phone number	11375 West Sam Houston Pkwy South, Suite 800, Houston, TX 77031 (281) 925-0488
1.c	Website	www.cobantech.com
1.d	Years in business	14 years
1.e	Number and types of customers	400+ total customers
1.f	Manufacturing location(s)	Hardware is manufactured and assembled globally, including in the United States.

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – BWC		
2.a	General	
2.a.i	Name and model number	COBAN Body Camera
2.a.ii	Physical dims (H" x W" x D")	3.38" H x 2.68" W x 1.0" D
2.a.iii	Weight (oz.)	4.5 oz
2.a.iv	Mounting options	Main unit: Chest (mag mount)
2.a.iv.1	Accessories needed for mounting	Belt pouch
2.a.v	Ability to mount on vehicle dashboard	Yes
2.a.v.1	Accessories for vehicle dashboard mount	Front-facing visor mount plate
2.a.vi	LCD display	None

2.a.vii	Recording capacity	32 GB (about 20 hours of video using 720P resolution)
2.a.viii	Operating conditions or limitations	Operating temperature: -4°F to 122°F
2.b	Video and Optics	
2.b.i	Maximum video resolution	1080P
2.b.ii	Field of view	160°
2.b.iii	Lux rating	0 lux with IR illuminator when clip-on camera is used. Under 1 lux without IR.
2.b.iv	Night mode/format	Yes; when clip-on camera is used, low light sensor with invisible IR illuminator that can be configured based on department policy.
2.b.v	Recording speed	30 fps
2.b.vi	Recording format	MP4
2.b.vii	Recording time under default resolution settings	13 hours
2.b.viii	Ability to capture still photos	Yes
2.b.ix	Ability to embed date/time stamp on recorded video	Yes
2.b.ix.1	Ability to authenticate and validate date/time stamp integrity	Date/time are synced each time the camera is docked for video upload. Date/time stamps are embedded into the recorded video.
2.b.x	Pre-event recording feature	Yes
2.b.x.1	Time buffered and whether audio is recorded	Pre-event length is configurable up to 60 seconds. Audio in pre-event can be enabled or disabled easily by system administrator through a backend software setting change. The change will be sent to all cameras automatically when they upload videos.
2.b.xi	Event marking capability	Yes
2.b.xii	Wireless capabilities for communication	Yes
2.c	Audio	
2.c.i	Microphone feature	Yes; microphone is built-in to the main unit body. Clip-on camera also has a built-in microphone for optimal clarity.
2.c.ii	Microphone sensitivity	-26 ± 1dB
2.c.iii	Audio format	AAC
2.c.iv	Default police radio interface for BWC	No
2.d	Data Upload	
2.d.i	Single device vs. multiple upload docking station	COBAN provides single-bay, 6-bay, and 24-bay docks.
2.d.ii	Data transfer method	Wired (USB) via single or multiple bay docks. When integrated with COBAN in-car video system, videos can be uploaded wirelessly.
2.d.iii	Manual vs. automatic upload	Both manual and automatic uploading are supported.
2.e	Battery Information	
2.e.i	Battery type; internal or removable	Lithium polymer battery; internal
2.e.ii	Recording duration	13 hours
2.e.iii	Battery standby duration	240 hours
2.e.iv	Battery charge time	4 hours on multi-bay dock
2.e.v	Battery lifetime until replacement	2 years, used 10 hours daily
2.e.vi	Battery replacement procedure	User serviceable using standard tool
2.e.vii	Availability of supplemental charger for emergency battery charging	Can be charged in the vehicle using vehicle dock or USB cable, charge through in-car computer's USB port.
2.f	GPS	

2.f.i	BWC possess GPS	Yes
2.f.i.1	Embedded GPS coordinates in recorded video	Yes, configurable
2.f.ii	Alternative geolocation methods	N/A
2.g	Consumer Testing Results	
2.g.i	Sturdiness/fragility	Yes
2.g.i.1	Drop test results	6 ft on concrete
2.g.i.2	Dust intrusion/water resistance rating	IP67
2.g.i.3	Ruggedized	IP67
2.g.i.4	Pressure/depth	1 meter submersion /30 minutes
2.g.i.5	Shock	30 G shock
2.g.i.6	Vibrations	55Hz vibration
2.g.ii	Other environmental testing	Yes, manufacturer will provide complete list and document upon request
2.g.ii.1	Specify tests, pass/fail results, and ratings received	Pass, Pass (please see above line ii)
2.h	Safeguards	
2.h.i	Privacy safeguards or features	Yes
2.h.i.1	Remote viewing	No
2.h.i.2	Remote activation/deactivation	Yes
2.h.i.3	Privacy masking	Yes, through backend redaction software
2.h.i.4	Redacting/editing capabilities	Yes, through backend redaction software
2.h.ii	Safeguards for cyber security, unintentional disassembly, etc.	Accomplishes secure access through a proprietary mounting mechanism and driver, which makes the unit incompatible with any computers that do not have COBAN's software and a valid access credential.
2.i	Regulatory	
2.i.i	Regulatory and Compliance safety requirements	FCC part 15 Class B, RoHS
2.i.ii	Radiation safety standards	FCC Class B, CE/RoHS UL certified cables and wires
2.j	Warranty and Maintenance Plans	
2.j.i	Length of warranty (in months)	12 months
2.j.ii	Optional extended warranties	COBAN provides 2 nd and 3 rd year extended warranty. Please call manufacturer for pricing.
2.j.ii.1	Duration and cost of extended warranties	COBAN provides 2 nd and 3 rd year extended warranty. Please call for pricing.
2.j.iii	Availability of extended maintenance plans	COBAN provides 3 and 5 year all inclusive maintenance/camera replacement plans. Please call manufacturer for pricing.
2.j.iii.1	Duration and cost of extended maintenance plans	COBAN provides 2 nd and 3 rd year extended warranty. Please call manufacturer for pricing.
2.j.iv	Service contract costs	Please call manufacturer for details and pricing
2.k	Auxiliary Equipment	
2.k.i	Manufacturer suggested retail price (MSRP) for each auxiliary equipment	Car dock/charger and USB cable. Please call manufacturer for pricing
2.l	MSRP without optional features, accessories, or service plans	\$499
2.m	Manufacturer's estimated lifetime of device	3 years
2.n	Other relevant information	COBAN provides 3 and 5 year replacement plan and spare program to ensure hardware availability.

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – Software for Video Data Storage and Management		
3.a	Data Management	
3.a.i	Searching capabilities	Yes
3.a.ii	Categorizing capabilities	Yes
3.a.iii	Tagging capabilities	Yes
3.a.iv	Archiving and file retention	Yes; automated
3.a.v	Data saved on or offsite	Both local and cloud storage are supported.
3.a.v.1	If saved offsite, specific data accessibility and storage costs	There are multiple plans available, please call manufacturer for details and pricing.
3.a.v.2	Video data storage capacity local vs. cloud	No information provided
3.a.v.3	Capability to accommodate multiple site installations	No information provided
3.a.vi	Export capabilities	Yes
3.a.vi.1	Traceability feature that shows which user exported the data	Yes; complete audit trail
3.a.vii	Redacting/editing capabilities	Yes
3.a.vii.1	Specify whether changes are permanent	Redacted video is saved as an additional copy to the original.
3.a.viii	Support provided for chain-of-custody requirements	Yes
3.a.ix	Scalability for different organization size	Yes
3.a.x	User management and role-based access levels	Yes
3.b	Video Analytics	
3.b.i	Companion software to analyze recorded video and audio data	No
3.b.ii	Types of reports built into software	Usage statistics, by device and user
3.b.ii.1	Standard reports	Yes
3.b.ii.2	Daily reports, historical reports, etc.	Yes
3.b.ii.3	Audit reports that support chain-of-custody requirements	Yes
3.b.ii.4	Customization of reports	Yes
3.b.iii	Facial recognition capabilities	No
3.b.iv	Weapons detection capabilities	No
3.b.v	Other analytical capabilities	No
3.c	Video Security and Authentication	
3.c.i	Compatibility of BWC video output with existing video management software for reviewing and recording	Yes
3.c.ii	File integrity checks to ensure authenticity	Yes
3.c.iii	Data protection mechanism while in transit and during storage	Yes
3.c.iv	Routine software updates	Major software updates twice a year, minor patches as needed
3.c.v	Cost of software updates	Included in service plans (annual support, 3 or 5 year plan, etc.)

RFI Q.#	Survey Question (abbreviated)	Response
Usability/Training		
4.a	Usability validation processes	Pilot testing at most implementations. Focus group to develop, test, and provide feedback on new ideas and products, as well as provide suggestions and ideas for new features. Macro-metrics and data gathered historically.
4.b	User community data	Feedback from deployments and training (including surveys), focus group to evaluate new product ideas and beta test products, annual user group open to all customers.
4.c	User-group meetings and frequency	Annual user group and periodic local tech days
4.d	Typical problems reported	Hardware issue related to manufacturing defect, wear-and-tear, or usage. Software issues due to configuration or bugs.
4.d.i	Resolution to problems	Hardware placement through RMA. Software patches or configuration troubleshooting.
4.e	Hours of tech. support and location	Standard warranty includes phone and web-support during business hours. 24/7 support and on-site staffing are also available.
4.f	Training provided (hours)	Training can be customized, but typically 4 hours administrative training, 2 hours for user training. Training can be performed on-site or via web. There is also a pre-recorded video training online.

RFI Q.#	Survey Question (abbreviated)	Response
Installation		
5.a	Average time to install and activate	Under 10 minutes using the Express version of software. About 2 hours if using full version of software (a server is used.)

4.9 Data911 Verus BX1 Body Camera



Figure 9. Data911 Verus BX1 Body Camera

RFI Q.#	Survey Question (abbreviated)	Response
Vendor Information		
0	Responded to FRN?	No
1.a	Name	Data911
1.b	Address/phone number	2021 Challenger Drive, Alameda, CA 94501 (510) 865-9100
1.c	Website	www.data911.com
1.d	Years in business	Information not found on website
1.e	Number and types of customers	Information not found on website
1.f	Manufacturing location(s)	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – BWC		
2.a	General	
2.a.i	Name and model number	Verus BX1
2.a.ii	Physical dims (H" x W" x D")	Information not found on website
2.a.iii	Weight (oz.)	Information not found on website
2.a.iv	Mounting options	Information not found on website
2.a.iv.1	Accessories needed for mounting	Information not found on website
2.a.v	Ability to mount on vehicle dashboard	Yes
2.a.v.1	Accessories for vehicle dashboard mount	Information not found on website
2.a.vi	LCD display	Information not found on website
2.a.vii	Recording capacity	Information not found on website
2.a.viii	Operating conditions or limitations	Information not found on website
2.b	Video and Optics	
2.b.i	Maximum video resolution	1080P
2.b.ii	Field of view	124°

2.b.iii	Lux rating	Information not found on website
2.b.iv	Night mode/format	Information not found on website
2.b.v	Recording speed	30 fps
2.b.vi	Recording format	MP4
2.b.vii	Recording time under default resolution settings	10-12 hours
2.b.viii	Ability to capture still photos	Information not found on website
2.b.ix	Ability to embed date/time stamp on recorded video	Information not found on website
2.b.ix.1	Ability to authenticate and validate date/time stamp integrity	Information not found on website
2.b.x	Pre-event recording feature	Information not found on website
2.b.x.1	Time buffered and whether audio is recorded	Information not found on website
2.b.xi	Event marking capability	Information not found on website
2.b.xii	Wireless capabilities for communication	Yes
2.c	Audio	
2.c.i	Microphone feature	Information not found on website
2.c.ii	Microphone sensitivity	Information not found on website
2.c.iii	Audio format	Information not found on website
2.c.iv	Default police radio interface for BWC	Information not found on website
2.d	Data Upload	
2.d.i	Single device vs. multiple upload docking station	Information not found on website
2.d.ii	Data transfer method	Wireless
2.d.iii	Manual vs. automatic upload	Information not found on website
2.e	Battery Information	
2.e.i	Battery type; internal or removable	Information not found on website
2.e.ii	Recording duration	10-12 hours
2.e.iii	Battery standby duration	9 days
2.e.iv	Battery charge time	Information not found on website
2.e.v	Battery lifetime until replacement	Information not found on website
2.e.vi	Battery replacement procedure	Information not found on website
2.e.vii	Availability of supplemental charger for emergency battery charging	Information not found on website
2.f	GPS	
2.f.i	BWC possess GPS	Yes
2.f.i.1	Embedded GPS coordinates in recorded video	Information not found on website
2.f.ii	Alternative geolocation methods	Information not found on website
2.g	Consumer Testing Results	
2.g.i	Sturdiness/fragility	Information not found on website
2.g.i.1	Drop test results	Information not found on website
2.g.i.2	Dust intrusion/water resistance rating	Information not found on website
2.g.i.3	Ruggedized	Information not found on website
2.g.i.4	Pressure/depth	Information not found on website
2.g.i.5	Shock	Information not found on website
2.g.i.6	Vibrations	Information not found on website
2.g.ii	Other environmental testing	Information not found on website
2.g.ii.1	Specify tests, pass/fail results, and	Information not found on website

	ratings received	
2.h	Safeguards	
2.h.i	Privacy safeguards or features	Information not found on website
2.h.i.1	Remote viewing	Information not found on website
2.h.i.2	Remote activation/deactivation	Information not found on website
2.h.i.3	Privacy masking	Information not found on website
2.h.i.4	Redacting/editing capabilities	Information not found on website
2.h.ii	Safeguards for cyber security, unintentional disassembly, etc.	Information not found on website
2.i	Regulatory	
2.i.i	Regulatory and Compliance safety requirements	Information not found on website
2.i.ii	Radiation safety standards	Information not found on website
2.j	Warranty and Maintenance Plans	
2.j.i	Length of warranty (in months)	Information not found on website
2.j.ii	Optional extended warranties	Information not found on website
2.j.ii.1	Duration and cost of extended warranties	Information not found on website
2.j.iii	Availability of extended maintenance plans	Information not found on website
2.j.iii.1	Duration and cost of extended maintenance plans	Information not found on website
2.j.iv	Service contract costs	Information not found on website
2.k	Auxiliary Equipment	
2.k.i	Manufacturer suggested retail price (MSRP) for each auxiliary equipment	Information not found on website
2.l	MSRP without optional features, accessories, or service plans	Information not found on website
2.m	Manufacturer's estimated lifetime of device	Information not found on website
2.n	Other relevant information	Verus BX1 Body Camera is coming soon.

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – Software for Video Data Storage and Management		
3.a	Data Management	
3.a.i	Searching capabilities	Yes; can be custom tailored, saved, and shared
3.a.ii	Categorizing capabilities	Yes; allows for creating cases from related media that can be exported as a group
3.a.iii	Tagging capabilities	Yes
3.a.iv	Archiving and file retention	View, store, and organize the video/audio files generated
3.a.v	Data saved on or offsite	Information not found on website
3.a.v.1	If saved offsite, specific data accessibility and storage costs	Information not found on website
3.a.v.2	Video data storage capacity local vs. cloud	Information not found on website
3.a.v.3	Capability to accommodate multiple site installations	Information not found on website
3.a.vi	Export capabilities	Yes; export media to standard DVD-video discs for viewing on any DVD player
3.a.vi.1	Traceability feature that shows	Information not found on website

	which user exported the data	
3.a.vii	Redacting/editing capabilities	Information not found on website
3.a.vii.1	Specify whether changes are permanent	Information not found on website
3.a.viii	Support provided for chain-of-custody requirements	Information not found on website
3.a.ix	Scalability for different organization size	Information not found on website
3.a.x	User management and role-based access levels	Yes; all authorized users can view and listen to files through any network enabled workstation.
3.b	Video Analytics	
3.b.i	Companion software to analyze recorded video and audio data	Data911 Verus Server Evidence Management System is a back-end software that is browser-based and loaded on a Windows server. No special client software is needed; all user interaction is done through a standard web browser.
3.b.ii	Types of reports built into software	Information not found on website
3.b.ii.1	Standard reports	Information not found on website
3.b.ii.2	Daily reports, historical reports, etc.	Information not found on website
3.b.ii.3	Audit reports that support chain-of-custody requirements	Information not found on website
3.b.ii.4	Customization of reports	Information not found on website
3.b.iii	Facial recognition capabilities	Information not found on website
3.b.iv	Weapons detection capabilities	Information not found on website
3.b.v	Other analytical capabilities	Information not found on website
3.c	Video Security and Authentication	
3.c.i	Compatibility of BWC video output with existing video management software for reviewing and recording	Information not found on website
3.c.ii	File integrity checks to ensure authenticity	Information not found on website
3.c.iii	Data protection mechanism while in transit and during storage	Information not found on website
3.c.iv	Routine software updates	Automated rollout of software updates
3.c.v	Cost of software updates	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Usability/Training		
4.a	Usability validation processes	Information not found on website
4.b	User community data	Information not found on website
4.c	User-group meetings and frequency	Information not found on website
4.d	Typical problems reported	Information not found on website
4.d.i	Resolution to problems	Information not found on website
4.e	Hours of tech. support and location	Information not found on website
4.f	Training provided (hours)	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Installation		
5.a	Average time to install and activate	Information not found on website

4.10 DEI Getac Veretos Body Worn Camera



Figure 10. DEI Getac Veretos Body Worn Camera

RFI Q.#	Survey Question (abbreviated)	Response
Vendor Information		
0	Responded to FRN?	Yes
1.a	Name	Defense Engineering Inc. (DEI),
1.b	Address/phone number	8603 Westwood Center Drive, Suite 320, Vienna, VA 22812 (703) 888-0206
1.c	Website	www.dei.net
1.d	Years in business	11 years
1.e	Number and types of customers	DEI currently has nine different customers all within the U.S. Federal Government. Getac works with many customers within federal, state, county, and city.
1.f	Manufacturing location(s)	Getac Veretos BWC is manufactured in US, Taiwan, and China.

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – BWC		
2.a	General	
2.a.i	Name and model number	Getac Veretos Body Worn Camera BC-01
2.a.ii	Physical dims (H" x W" x D")	3.3" H x 2.2" W x 1.1" D
2.a.iii	Weight (oz.)	4.8 oz
2.a.iv	Mounting options	Chest, epaulet (both included)
2.a.iv.1	Accessories needed for mounting	Optional vehicle dock for charging and syncing with MDT
2.a.v	Ability to mount on vehicle dashboard	Yes

2.a.v.1	Accessories for vehicle dashboard mount	Vehicle dock for charging and syncing with MDT
2.a.vi	LCD display	No; but able to view upon uploading via Vehicle dock
2.a.vii	Recording capacity	32 GB
2.a.viii	Operating conditions or limitations	Operating temperature: -4°F to 122°F Storage temperature: -40°F to 160°F Humidity: 0 to 95%
2.b	Video and Optics	
2.b.i	Maximum video resolution	1080P
2.b.ii	Field of view	115°
2.b.iii	Lux rating	0.1 lux
2.b.iv	Night mode/format	Yes; Night mode via IR LEDs (configurable – enable, disable, auto)
2.b.v	Recording speed	30 fps
2.b.vi	Recording format	MOV
2.b.vii	Recording time under default resolution settings	8 hours
2.b.viii	Ability to capture still photos	Yes
2.b.ix	Ability to embed date/time stamp on recorded video	Yes
2.b.ix.1	Ability to authenticate and validate date/time stamp integrity	Yes
2.b.x	Pre-event recording feature	Yes
2.b.x.1	Time buffered and whether audio is recorded	Up to 30 seconds (longer times available with specific configurations).
2.b.xi	Event marking capability	Yes, bookmark capability
2.b.xii	Wireless capabilities for communication	Yes, in July 2016
2.c	Audio	
2.c.i	Microphone feature	Yes, in July 2016
2.c.ii	Microphone sensitivity	Omni-directional high dynamic range microphone, sensitivity is -37 to 31 dB
2.c.iii	Audio format	H.264
2.c.iv	Default police radio interface for BWC	No
2.d	Data Upload	
2.d.i	Single device vs. multiple upload docking station	Single and master docking solutions available (connect 6 bay units together to build any size array).
2.d.ii	Data transfer method	Wired, wireless available July 2016
2.d.iii	Manual vs. automatic upload	Both
2.e	Battery Information	
2.e.i	Battery type; internal or removable	Lithium ion non-removable
2.e.ii	Recording duration	8 hours
2.e.iii	Battery standby duration	16 hours
2.e.iv	Battery charge time	4+ hours
2.e.v	Battery lifetime until replacement	500 charges
2.e.vi	Battery replacement procedure	US-based Service Center will advance exchange unit/replace battery
2.e.vii	Availability of supplemental charger for emergency battery charging	Charges via mini-USB to USB type-A cable (included), vehicle dock (accessory). Can be charged by any available USB port i.e., MDT, car charger, cell phone charger, portable battery with USB cable.
2.f	GPS	
2.f.i	BWC possess GPS	Yes, available July 2016

2.f.i.1	Embedded GPS coordinates in recorded video	GPS receiver will be available as part of the device. GPS data is captured based on administrator configuration and stored as part of the metadata. This is available as part of the video or also as breadcrumbs (shows location always even if unit is not recording).
2.f.ii	Alternative geolocation methods	No
2.g	Consumer Testing Results	
2.g.i	Sturdiness/fragility	Yes
2.g.i.1	Drop test results	MIL-STD-810g, 6 ft drop on concrete and wood
2.g.i.2	Dust intrusion/water resistance rating	IP54
2.g.i.3	Ruggedized	MIL-STD-810G
2.g.i.4	Pressure/depth	IP54, not submersible
2.g.i.5	Shock	Thermal shock -40°F to 160°F
2.g.i.6	Vibrations	Vibration (Integrity): C-17 0.04 g ² /Hz at 20-1000 Hz, -6 dB/Octave at 1000-2000 Hz Vibration (Vehicle): MIL-STD-810G Fig. 514.6 C-1
2.g.ii	Other environmental testing	N/A
2.g.ii.1	Specify tests, pass/fail results, and ratings received	N/A
2.h	Safeguards	
2.h.i	Privacy safeguards or features	Security roles may be defined by the system admin with very granular permission. Generally, clients configure officers to be able to view their own content but not others. Supervisors may (or may not) view their subordinate's content. The privacy/security safeguards are policy based and can be as granular as the department sees fit.
2.h.i.1	Remote viewing	Yes, in July 2016
2.h.i.2	Remote activation/deactivation	Yes, in July 2016
2.h.i.3	Privacy masking	Redaction filters such as blur and audio are available to use
2.h.i.4	Redacting/editing capabilities	Redaction supported. The system supports master/child assets to facilitate external complex editing products.
2.h.ii	Safeguards for cyber security, unintentional disassembly, etc.	The system follows best practices for data storage and access. The cloud version operates on Microsoft Government Azure Cloud with its safeguards available. Further and self-hosted option is available to allow the customer to further secure the system in its own hosting environment with added security.
2.i	Regulatory	
2.i.i	Regulatory and Compliance safety requirements	FCC Approved. The CJIS Compliant, Microsoft Azure Government Cloud has many evolving conformities; Getac offers to respond to specific needs.
2.i.ii	Radiation safety standards	N/A
2.j	Warranty and Maintenance Plans	
2.j.i	Length of warranty (in months)	12 months
2.j.ii	Optional extended warranties	2 to 3 year options available
2.j.ii.1	Duration and cost of extended warranties	2 to 3 year options available
2.j.iii	Availability of extended maintenance plans	Getac BWC Device & Battery Extended Warranty with Swap Service - Years 1 & 2 \$129 per device MSRP. Getac BWC Device & Battery Extended Warranty with

		Swap Service - Years 1, 2, 3 \$199 per device MSRP. For cloud storage, warranty coverage will be included in the monthly cost per device.
2.j.iii.1	Duration and cost of extended maintenance plans	Getac BWC Device & Battery Extended Warranty with Swap Service - Years 1 & 2 \$129 per device MSRP. Getac BWC Device & Battery Extended Warranty with Swap Service - Years 1, 2, 3 \$199 per device MSRP. For cloud storage, warranty coverage will be included in the monthly cost per device.
2.j.iv	Service contract costs	The service is meant inclusive for repair/replacement/licensing and storage, additional fees may apply to training, consulting, and deployment and customization services.
2.k	Auxiliary Equipment	
2.k.i	Manufacturer suggested retail price (MSRP) for each auxiliary equipment	Vehicle dock \$79 per device MSRP. Multi dock \$699 per device MSRP.
2.l	MSRP without optional features, accessories, or service plans	\$399 per device
2.m	Manufacturer's estimated lifetime of device	3+ years
2.n	Other relevant information	Both the chest clip and epaulet clip are included with each BWC device at no additional cost.

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – Software for Video Data Storage and Management		
3.a	Data Management - IRSA	
3.a.i	Searching capabilities	Yes; global search, robust filtering, and data analytics
3.a.ii	Categorizing capabilities	Yes, via law enforcement officer and incident
3.a.iii	Tagging capabilities	Yes
3.a.iv	Archiving and file retention	Yes; Client generally sets their own retention policy. Most agencies carry a traffic retention of 14-90 days. Non-violent retention of 30-120 days. Arrest, complaint, use of force/violence, DUI -3-10 years. Generally speaking, most departments have 4-8 retention policies. There is no limit on the number of retention policies.
3.a.v	Data saved on or offsite	DEI DEMS offers customers the flexibility to save data in the most cost effective and efficient methods to meet their specific requirements. All back end components of the DEMS are virtual and can be implemented both locally on premise as well as hosted offsite.
3.a.v.1	If saved offsite, specific data accessibility and storage costs	There are two cost models for saving data offsite. The first is unlimited data retention and the retail cost is \$80 per device, per month. In this model, each licensed front end device can store and retain an unlimited amount data. There are no additional data access or removal costs.

		<p>The second is priced per gigabyte. In this model, the front end devices share a common storage pool. The retail cost for storing data is \$.03 per gigabyte. There is an additional retail cost of \$.05 per gigabyte to download data once stored in the cloud.</p>
3.a.v.2	Video data storage capacity local vs. cloud	<p>Front End Storage – Local The BWC for DEI's Evidence Management Solution has up to 32 GB of local flash storage allowing for over 18 hours of video evidence to be recorded or ~ 3,000 images to be taken and stored. In the event the device runs out of local storage before the data can be uploaded to the VMS, the system can be configured for one of two options: (1) Overwrite the video data on the local storage (2) Stop recording data altogether. By default, the system will be configured to stop recording to ensure an unbroken chain of custody, and non-repudiation of the video evidence captured by the BWC.</p> <p>Evidence Offload/Upload Once digital evidence is recorded by the BWC, the process and mechanisms for offloading/uploading the data is critical to maintaining chain of custody and non-repudiation of the digital evidence. By default, the BWC is configured to only offload/upload content when connected to the deployed offload/upload mechanism. The requirements of the BWC ensure there is sufficient storage space to record well past the BWCs battery capability to mitigate the possibility of filling the storage with recorded evidence before the BWC is able to offload/upload content. Data offload/upload occurs automatically and the BWC operator is not able to edit or redact the evidence until offloaded/uploaded to the VMS. There are three available mechanisms for VMS offload/upload:</p> <p>1. Camera Dock/Laptop Cable: If also equipped with a vehicle camera dock (e.g. car, motorcycle, snow mobile) mount, the BWC will offload/upload data while connected to the mount. If not equipped with a camera dock, connecting the BWC to the charging cable while connected to a configured laptop will initiate the offload/upload. In both scenarios, the digital evidence cannot be redacted or edited until uploaded/offloaded to the VMS.</p> <p>2. Mobile Data Recorder (MDR): An MDR can be mounted in an office or vehicle and has the capacity to upload/offload video from BWCs, or multiple endpoints. The MDR then transfers the digital evidence to the VMS. The data cannot be edited or redacted until transferred to the VMS.</p> <p>3. Wireless: BWCs equipped with wireless capabilities can offload/upload video directly to the MVS or MDR without the need to connect to docking cradle or USB cable. The data cannot be edited or redacted until transferred to the MVS.</p>

		<p>The default option for offloading/uploading data is the docking method; however, specific offload/upload mechanisms can be customized based on the customer's organizational and environmental requirements.</p> <p>Backend Storage – Local and/or Cloud The back end solution is designed to provide the highest degree of capability and capacity for storage; as well as, the greatest level of flexibility for deployment and expansion to include multi-site redundancy. The backend storage solution is a virtualized storage architecture providing advanced capabilities and mobility. There are two primary sub components of the storage architecture; the content management platform and capacity. DEI provides the Digital Evidence Management Solution Content Management Platform (CMP).</p>
3.a.v.3	Capability to accommodate multiple site installations	Multi-site configuration options include active/passive deployments in which the secondary site serves as a backup or recovery site; and active/active deployments where both sites are fully operational and host active data serving as both primary and secondary sites simultaneously.
3.a.vi	Export capabilities	Yes
3.a.vi.1	Traceability feature that shows which user exported the data	Full audit trail
3.a.vii	Redacting/editing capabilities	Yes
3.a.vii.1	Specify whether changes are permanent	Changes are not permanent, system stores master and child (changed edit).
3.a.viii	Support provided for chain-of-custody requirements	Yes
3.a.ix	Scalability for different organization size	Yes
3.a.x	User management and role-based access levels	Yes
3.b	Video Analytics	
3.b.i	Companion software to analyze recorded video and audio data	All hardware supported in the Veretos ecosystem uses the same software. Client may use 3rd party software to complement Veretos. Further customization may be made.
3.b.ii	Types of reports built into software	<p>Veretos has standard reports available; assets acquired, assets viewed, assets shared, assets by user, assets by unit, storage by unit, bookmarks, file upload log, unclassified assets. Custom reports are also available upon request and generally these are added as standard reports if needed at no cost to the department</p> <p>Also, the system access log, enterprise log, unit log, unit configuration changes, and live view shared logs can all be filtered using the multiple columns of information and then exported out to an excel/csv/PDF file. This offers numerous custom reports to be</p>

		generated.
3.b.ii.1	Standard reports	Yes
3.b.ii.2	Daily reports, historical reports, etc.	Yes; Veretos Dashboard shows important information at a glance including assets status (transferring, failed, queued, unclassified, trash, delete <72hrs), unit status (online, online with user logged in, capturing, live video, exceptions, offline >7 Days), unit location real time, assets captured graph over past 5 days, classifications percentage pie chart, hours of video captured, average video duration in minutes, most/least active units, most/least active units, ost active enterprise users. All dashboard information is scaled to the user's desired date range.
3.b.ii.3	Audit reports that support chain-of-custody requirements	Yes
3.b.ii.4	Customization of reports	Yes
3.b.iii	Facial recognition capabilities	Yes; A key capability of DEI DEMS solution is the ability to run data analytics against all digital evidence hosted within the solution. DEI supports multiple front-end devices and data sources (e.g. building surveillance, BWC, interrogation rooms, etc.). This makes it possible to run analytics such as facial recognition against the entire data set.
3.b.iv	Weapons detection capabilities	No
3.b.v	Other analytical capabilities	Current and historical vehicle locations, incident mapping, live unit mapping.
3.c	Video Security and Authentication	
3.c.i	Compatibility of BWC video output with existing video management software for reviewing and recording	Yes; Video format is standard H.264 (Mov wrapper). The system allows to viewing in HTML5, Flash and native video players such as VLC. The Veretos system has an API to import/export or link 3rd party systems to share or move data. The API is robust.
3.c.ii	File integrity checks to ensure authenticity	Yes
3.c.iii	Data protection mechanism while in transit and during storage	Yes
3.c.iv	Routine software updates	Updates to system are available and release notes published. Updates may be available frequently, however the client may select to update or not depending on impact. Updates are automatic, however client has control is to implement an update and when.
3.c.v	Cost of software updates	Included with maintenance program.

RFI Q.#	Survey Question (abbreviated)	Response
Usability/Training		
4.a	Usability validation processes	Train the trainer, classroom training, admin software training, supervisor software training, and end-user software training.
4.b	User community data	Yes. DEI and selected manufacturers for this solution conforms to various ISO standard and constantly measures and evaluates it manufacturing, logistics, repair and client, vendor interaction for constant

		measurable improvement.
4.c	User-group meetings and frequency	<ul style="list-style-type: none"> • Veretos takes each user suggestion, improvement, bug report, inquiry and reports it to the Veretos Project Planning Group. The reports are entered in the internal JIRA project tracking. Stakeholder, quality assurance, business analysts, and programmers prioritize the information and will naturally invent, remediate and develop. • The eco system is comprised of customer, resellers, research papers and selected customers. As part of the "Getac Advisors Council" these members belong to various government, public committees. • The engineering staff frequently visits customers on a regular basis to increase product specs and quality. • DEI has a culture of very fast R&D and issue resolution.
4.d	Typical problems reported	<ul style="list-style-type: none"> • Hardware malfunction minor (operable) - 12% • Hardware malfunction major (non-operable) - 5% • Software isolated to minor group or device, with minor impact - 12% • Software affecting major group or major impact - 5% • Wireless communication - 50% • User error - 14% <p>Per the manufacturer: "Because of the nature of technology, it is common for all customers to have been affected by these types of issues. All issues fall within the norms of industry standards."</p>
4.d.i	Resolution to problems	<p>All hardware issues are normally solved with advance exchange and done within days in report. FedEx Tech Connect will advance devices and will arrange for return to its facility of defective items where engineers will provide analysis. In larger deployment, spares will be located at client's location. In cases where an issue may be more elaborate or investigation is required, Getac will dispatch engineers on site to assist in identifying, solving and implementing a solution.</p> <p>Software issues are solved in real time where resolution or workaround may be achieved in minutes or hours depending of severity of issues. Support is provided based on client self-prioritization. Any resolutions and fixes for one client are normally included in future release/update (at no cost) to all clients after more evaluation, fine-tuning and QA process.</p>
4.e	Hours of tech. support and location	DEI does not charge for resolution of support where a warranty or support agreement exists. Additional costs are agreed in advance and may include additional training, customization, deployment services.
4.f	Training provided (hours)	Supports any and every means suitable to the client (i.e., webinars, WebEx, manuals, facility training)

RFI Q.#	Survey Question (abbreviated)	Response
Installation		
5.a	Average time to install and activate	A simple system may be configured in hours with additional BWC being added in seconds. A specific deployment plan can be created to fully respect the need for communication, security, encryption, logistics and other needs. Large more complex deployment including best practices in deployment and project management and the related time.

4.11 Digital Ally FirstVu HD Body Worn Camera



Figure 11. Digital Ally FirstVu HD Body Worn Camera

RFI Q.#	Survey Question (abbreviated)	Response
Vendor Information		
0	Responded to FRN?	Yes
1.a	Name	Digital Ally, Inc.
1.b	Address/phone number	9705 Loiret Blvd, Lenexa, KS 66219 (800) 440-4947
1.c	Website	www.digitalallyinc.com
1.d	Years in business	12 years
1.e	Number and types of customers	9000 customers (municipal, county, state, and federal law enforcement agencies, emergency service, and commercial entities)
1.f	Manufacturing location(s)	Manufactured in several countries, including United States, Republic of Korea, Philippines, Malaysia, and China. Assembly mainly occurs in the United States at the corporate office in Lenexa, KS.

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – BWC		
2.a	General	
2.a.i	Name and model number	FirstVu HD
2.a.ii	Physical dims (H" x W" x D")	Recording Module: 4" H x 2.63" W x 0.63" D Standard Camera Module: 1.5" H x 1.13" W x 1.0" D POV Camera Module: 0.71" H x 0.71" W x 2.3" D
2.a.iii	Weight (oz.)	Recording Module: 3.1 oz Standard Camera Module: 0.8 oz POV Camera Module: 0.32 oz
2.a.iv	Mounting options	Head, chest, shoulder, glasses, helmet, belt

2.a.iv.1	Accessories needed for mounting	Kit includes: Velcro™ mount, fabric clip, button mount Additional purchase: helmet mount
2.a.v	Ability to mount on vehicle dashboard	Yes
2.a.v.1	Accessories for vehicle dashboard mount	Vehicle mount kit
2.a.vi	LCD display	No; but can use VuVault™ GO secure mobile app on an Android or iOS device for playback and tagging in the field.
2.a.vii	Recording capacity	32 GB
2.a.viii	Operating conditions or limitations	Operating temperature: -4°F to 158°F IP65 rating
2.b	Video and Optics	
2.b.i	Maximum video resolution	720P
2.b.ii	Field of view	130°
2.b.iii	Lux rating	0.08 lux
2.b.iv	Night mode/format	Yes; 0.08 lux WDR recording
2.b.v	Recording speed	30 fps
2.b.vi	Recording format	AVI
2.b.vii	Recording time under default resolution settings	16 hours (Note: Has various quality and resolution settings enabling anywhere from 8-120 hours of recording)
2.b.viii	Ability to capture still photos	No; Can be accomplished through back office software.
2.b.ix	Ability to embed date/time stamp on recorded video	Yes
2.b.ix.1	Ability to authenticate and validate date/time stamp integrity	Yes; the date/time stamp are displayed as an overlay on the video recording and are recorded into the metadata of the video file.
2.b.x	Pre-event recording feature	Yes
2.b.x.1	Time buffered and whether audio is recorded	0-60 seconds pre-event recording. Audio settings during pre-event recording configured in back office software.
2.b.xi	Event marking capability	Yes
2.b.xii	Wireless capabilities for communication	No
2.c	Audio	
2.c.i	Microphone feature	Yes
2.c.ii	Microphone sensitivity	-42 dBV
2.c.iii	Audio format	AAC
2.c.iv	Default police radio interface for BWC	No
2.d	Data Upload	
2.d.i	Single device vs. multiple upload docking station	Manual upload via USB cable Single docking/charging station 12 unit docking/charging station that charges an additional 12 batteries simultaneously
2.d.ii	Data transfer method	USB cable, docking stations
2.d.iii	Manual vs. automatic upload	Manual and automatic
2.e	Battery Information	
2.e.i	Battery type; internal or removable	3.7VDC, 2,200mAh, rechargeable lithium ion polymer battery removable
2.e.ii	Recording duration	Standard battery: 4.5 hours Extended battery: 8 hours
2.e.iii	Battery standby duration	Standard battery:

		<ul style="list-style-type: none"> Up to 12 hours with pre-event disabled (4 hours record + 8 hours standby) 2 days with no activity Extended battery: <ul style="list-style-type: none"> Up to 16 hours with pre-event disabled (8 hours record + 8 hours standby) 4 days with no activity
2.e.iv	Battery charge time	Standard Battery: Approximately 4 hours Extended Battery: Approximately 6 hours
2.e.v	Battery lifetime until replacement	2.5 to 3 years
2.e.vi	Battery replacement procedure	Field; Simply remove the battery cover by pressing in on a tab, remove the cover, and replace the battery.
2.e.vii	Availability of supplemental charger for emergency battery charging	Backup battery
2.f	GPS	
2.f.i	BWC possess GPS	No; must use VuVault™ GO Android/iOS app
2.f.i.1	Embedded GPS coordinates in recorded video	Yes; If VuVault™ GO Android/iOS app is utilized
2.f.ii	Alternative geolocation methods	No; GPS data can be gathered through VuVault™ GO
2.g	Consumer Testing Results	
2.g.i	Sturdiness/fragility	Yes
2.g.i.1	Drop test results	6 ft
2.g.i.2	Dust intrusion/water resistance rating	IPX5 equivalent (has not been tested)
2.g.i.3	Ruggedized	IP65 equivalent (has not been tested)
2.g.i.4	Pressure/depth	Have not tested
2.g.i.5	Shock	Have not tested
2.g.i.6	Vibrations	Have not tested
2.g.ii	Other environmental testing	Yes
2.g.ii.1	Specify tests, pass/fail results, and ratings received	Unit has been tested and show to perform well in temperatures ranging from -4°F to 158°F.
2.h	Safeguards	
2.h.i	Privacy safeguards or features	Yes
2.h.i.1	Remote viewing	Yes; Using VuVault™ GO within WiFi range of FVHD
2.h.i.2	Remote activation/deactivation	Yes; remote activation through VuLink
2.h.i.3	Privacy masking	Not on the camera itself. Can be accomplished with redaction tools in the back office software.
2.h.i.4	Redacting/editing capabilities	Not on camera; must use back office software
2.h.ii	Safeguards for cyber security, unintentional disassembly, etc.	Yes; with “secure mode” activated
2.i	Regulatory	
2.i.i	Regulatory and Compliance safety requirements	FCC/IC/CE approved
2.i.ii	Radiation safety standards	N/A – there are no radioactive materials in the FirstVu HD
2.j	Warranty and Maintenance Plans	
2.j.i	Length of warranty (in months)	12 months
2.j.ii	Optional extended warranties	Yes
2.j.ii.1	Duration and cost of extended warranties	<ul style="list-style-type: none"> 1 year = \$199 5 year = \$399 3 or 5 year with Cloud contract - \$99 per month (price includes camera kit, VuLink, 3 or 5 year warranty, 1 docking station for every 12 camera kits purchased, 200

		GB of data per year per camera, and refresh options)
2.j.iii	Availability of extended maintenance plans	Maintenance covered under warranty plans
2.j.iii.1	Duration and cost of extended maintenance plans	Maintenance covered under warranty plans
2.j.iv	Service contract costs	Based on size of deployment
2.k	Auxiliary Equipment	
2.k.i	Manufacturer suggested retail price (MSRP) for each auxiliary equipment	VuLink™ patented auto-activation unit - \$495.00 12 unit docking and charging station - \$3,995.00 Single docks (Coming Soon) - \$195.00 Additional camera module - \$195.00 Additional standard life battery - \$25.00 Additional extended life battery - \$35.00
2.l	MSRP without optional features, accessories, or service plans	\$499-\$795 (based on quantity purchased at one time)
2.m	Manufacturer's estimated lifetime of device	Digital Ally cannot guarantee any device past 5 years from the date of purchase.
2.n	Other relevant information	VuLink auto activation unit is a patented device that allows triggers such as blue lights and sirens to activate body-camera recording. RFID capabilities – available 2017

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – Software for Video Data Storage and Management		
3.a	Data Management - VuVault™	
3.a.i	Searching capabilities	Yes
3.a.ii	Categorizing capabilities	Yes
3.a.iii	Tagging capabilities	Yes
3.a.iv	Archiving and file retention	Yes; customizable
3.a.v	Data saved on or offsite	Data can be stored either locally in VuVault™ or in the VuVault.com™ cloud application.
3.a.v.1	If saved offsite, specific data accessibility and storage costs	Data stored in the Cloud is accessible at any time of day through an up to date web-browser. Storage Tiers: Basic (50GB/user/year) - \$19.99 per month Standard (100GB/user/year) - \$29.99 per month Pro (200GB/user/year) - \$39.99 per month Administrator License - \$99.00 per year Archival/long term storage plans available. Customized plans available.
3.a.v.2	Video data storage capacity local vs. cloud	Based on amount of storage purchased. No cap to the amount available for purchase.
3.a.v.3	Capability to accommodate multiple site installations	Yes
3.a.vi	Export capabilities	Yes
3.a.vi.1	Traceability feature that shows which user exported the data	Yes
3.a.vii	Redacting/editing capabilities	Yes; currently in VuVault.com™ only. Local redaction capabilities anticipated in Q3 of 2016.
3.a.vii.1	Specify whether changes are permanent	The redacted copy will be permanently redacted once saved. However an un-editable copy of the original

		video file will always be retained.
3.a.viii	Support provided for chain-of-custody requirements	Yes
3.a.ix	Scalability for different organization size	Yes
3.a.x	User management and role-based access levels	Yes
3.b	Video Analytics	
3.b.i	Companion software to analyze recorded video and audio data	No
3.b.ii	Types of reports built into software	Chain of custody, case events, report generation, all activity associated with a video file or case.
3.b.ii.1	Standard reports	Standard reports include chain of custody reports, case events, report generation, and all activity associated with a video file or case.
3.b.ii.2	Daily reports, historical reports, etc.	Yes
3.b.ii.3	Audit reports that support chain-of-custody requirements	Yes
3.b.ii.4	Customization of reports	Yes
3.b.iii	Facial recognition capabilities	No
3.b.iv	Weapons detection capabilities	No
3.b.v	Other analytical capabilities	No
3.c	Video Security and Authentication	
3.c.i	Compatibility of BWC video output with existing video management software for reviewing and recording	Videos are recorded in AVI format. Final released copies of the video can be played on nearly any AVI compatible viewer. Video files can also be set to secure, at which point the video can only be viewed on Digital Ally's VuVault/VuVault.Com back office software.
3.c.ii	File integrity checks to ensure authenticity	Yes
3.c.iii	Data protection mechanism while in transit and during storage	Proprietary has algorithms
3.c.iv	Routine software updates	Software updates occur as needed or as new features are added. If the agency has set up an account with Digital Ally, they will be notified when updates occur. Currently updates are completed manually.
3.c.v	Cost of software updates	No charge

RFI Q.#	Survey Question (abbreviated)	Response
Usability/Training		
4.a	Usability validation processes	Extensive testing is completed on all products to ensure usability. Digital Ally is currently undergoing ISO Certification. Upon completion, data will be released to shareholders and the general public.
4.b	User community data	Digital Ally sponsors several police summits and attends over 200 tradeshow annually in order to meet with their customers and to obtain information relevant to product improvement and company and product satisfaction.
4.c	User-group meetings and frequency	Digital Ally sponsors several police summits and attends over 200 tradeshow annually in order to meet

		with their customers and obtain information relevant to product improvement and company and product satisfaction.
4.d	Typical problems reported	Digital Ally is a publicly traded company. All information relevant to problems can be found in Digital Ally's 10-K reports.
4.d.i	Resolution to problems	Once identified, problems are sent through Digital Ally's inside sales and technical support departments in order to properly resolve issues.
4.e	Hours of tech. support and location	Basic: Monday through Friday, 8am to 5pm central. Extended Support hours available for additional cost.
4.f	Training provided (hours)	Training is generally conducted on a train-the-trainer basis. Complete end user training is also available if needed. Training will generally take anywhere between 1-4 days depending upon training needs and class sizes. Training includes end user training and administrator training. Supplemental training videos available on Digital Ally's website.

RFI Q.#	Survey Question (abbreviated)	Response
Installation		
5.a	Average time to install and activate	Installation time of the FirstVu HD system, all the way up through activation to deployment, is dependent upon deployment size, equipment and peripherals chosen for purchase, and training type desired. Most deployments will generally take 2 to 7 days to complete after product delivery.

4.12 Digital Ally FirstVu HD One Body Worn Camera



Figure 12. Digital Ally FirstVu HD One Body Worn Camera

RFI Q.#	Survey Question (abbreviated)	Response
Vendor Information		
0	Responded to FRN?	Yes
1.a	Name	Digital Ally, Inc.
1.b	Address/phone number	9705 Loiret Blvd, Lenexa, KS 66219 (800) 440-4947
1.c	Website	www.digitalallyinc.com
1.d	Years in business	12 years
1.e	Number and types of customers	9000 customers (municipal, county, state, and federal law enforcement agencies, emergency service, and commercial entities)
1.f	Manufacturing location(s)	Manufactured in several countries, including United States, Republic of Korea, Philippines, Malaysia, and China. Assembly mainly occurs in the United States at the corporate office in Lenexa, KS.

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – BWC		
2.a	General	
2.a.i	Name and model number	FirstVu HD One
2.a.ii	Physical dims (H" x W" x D")	With standard battery 2.62" H x 4.15" W x 0.84" D With extended Battery 2.62" H x 4.15" W x 0.99" D
2.a.iii	Weight (oz.)	With standard Battery 3.89oz With extended Battery 5.47oz
2.a.iv	Mounting options	Chest
2.a.iv.1	Accessories needed for mounting	Large and regular fabric clips, Velcro, Klick Fast

2.a.v	Ability to mount on vehicle dashboard	No
2.a.v.1	Accessories for vehicle dashboard mount	N/A
2.a.vi	LCD display	No; must utilize VuVault GO secure mobile application
2.a.vii	Recording capacity	32 GB
2.a.viii	Operating conditions or limitations	Operating temperature: -4°F to 158°F 10 to 90% RH (non-condensing)
2.b	Video and Optics	
2.b.i	Maximum video resolution	720P
2.b.ii	Field of view	133°
2.b.iii	Lux rating	0.08 lux
2.b.iv	Night mode/format	No
2.b.v	Recording speed	30 fps
2.b.vi	Recording format	AVI
2.b.vii	Recording time under default resolution settings	16 hours
2.b.viii	Ability to capture still photos	No; Can be accomplished through back office software.
2.b.ix	Ability to embed date/time stamp on recorded video	Yes
2.b.ix.1	Ability to authenticate and validate date/time stamp integrity	Yes; date/time stamp overlay on video and recorded into metadata.
2.b.x	Pre-event recording feature	Yes
2.b.x.1	Time buffered and whether audio is recorded	Configurable up to 60 seconds. Audio recording is optional based on administrator settings.
2.b.xi	Event marking capability	Yes
2.b.xii	Wireless capabilities for communication	Yes
2.c	Audio	
2.c.i	Microphone feature	Yes
2.c.ii	Microphone sensitivity	-42 dBV
2.c.iii	Audio format	AAC
2.c.iv	Default police radio interface for BWC	No
2.d	Data Upload	
2.d.i	Single device vs. multiple upload docking station	Manual upload via USB cable Single docking/charging station 12 unit docking/charging station that charges an additional 12 batteries simultaneously
2.d.ii	Data transfer method	USB cable, docking stations
2.d.iii	Manual vs. automatic upload	Manual and automatic
2.e	Battery Information	
2.e.i	Battery type; internal or removable	3.7VDC, 2200mAh or 4400mAh, Rechargeable Lithium Polymer Battery Removable
2.e.ii	Recording duration	Standard battery: 4.5 hours Extended battery: 8 hours
2.e.iii	Battery standby duration	Standard Battery: <ul style="list-style-type: none"> Up to 12 hours with pre-event disabled (4 hours record + 8 hours standby) 2 days with no activity Extended Battery <ul style="list-style-type: none"> Up to 16 hours with pre-event disabled (8 hours record + 8 hours standby) 4 days with no activity

2.e.iv	Battery charge time	Standard Battery: Approximately 4 hours Extended Battery: Approximately 6 hours
2.e.v	Battery lifetime until replacement	2.5 to 3 years
2.e.vi	Battery replacement procedure	Field; Simply remove the battery cover by pressing in on a tab, remove the cover, and replace the battery.
2.e.vii	Availability of supplemental charger for emergency battery charging	Backup battery
2.f	GPS	
2.f.i	BWC possess GPS	No; must use VuVault™ GO Android/iOS app
2.f.i.1	Embedded GPS coordinates in recorded video	Yes; If VuVault™ GO Android/iOS app is utilized
2.f.ii	Alternative geolocation methods	No; GPS data can be gathered through VuVault™ GO
2.g	Consumer Testing Results	
2.g.i	Sturdiness/fragility	No
2.g.i.1	Drop test results	Not yet tested
2.g.i.2	Dust intrusion/water resistance rating	Not test tested
2.g.i.3	Ruggedized	Not yet tested
2.g.i.4	Pressure/depth	Not yet tested
2.g.i.5	Shock	Not yet tested
2.g.i.6	Vibrations	Not yet tested
2.g.ii	Other environmental testing	Yes
2.g.ii.1	Specify tests, pass/fail results, and ratings received	FirstVu HD One has shown to operate well under temperatures ranging from -4°F to 158°F.
2.h	Safeguards	
2.h.i	Privacy safeguards or features	Yes
2.h.i.1	Remote viewing	Yes; Using VuVault™ GO within WiFi range of FVHD
2.h.i.2	Remote activation/deactivation	Yes; remote activation through VuLink
2.h.i.3	Privacy masking	Not on the camera itself. Can be accomplished with redaction tools in the back office software.
2.h.i.4	Redacting/editing capabilities	Not on camera; must use back office software
2.h.ii	Safeguards for cyber security, unintentional disassembly, etc.	Yes; with “secure mode” activated
2.i	Regulatory	
2.i.i	Regulatory and Compliance safety requirements	Currently in testing
2.i.ii	Radiation safety standards	N/A – there are no radioactive materials in the FirstVu HD One.
2.j	Warranty and Maintenance Plans	
2.j.i	Length of warranty (in months)	12 months
2.j.ii	Optional extended warranties	Yes
2.j.ii.1	Duration and cost of extended warranties	<ul style="list-style-type: none"> 1 year = \$199 5 year = \$399 3 or 5 year with Cloud contract - \$99 per month (price includes camera kit, VuLink, 3 or 5 year warranty, 1 docking station for every 12 camera kits purchased, 200 GB of data per year per camera, and refresh options)
2.j.iii	Availability of extended maintenance plans	Maintenance covered under warranty plans
2.j.iii.1	Duration and cost of extended maintenance plans	Maintenance covered under warranty plans
2.j.iv	Service contract costs	Based on size of deployment
2.k	Auxiliary Equipment	

2.k.i	Manufacturer suggested retail price (MSRP) for each auxiliary equipment	VuLink™ patented auto-activation unit - \$495.00 12 unit docking and charging station - \$3,995.00 Single docks (Coming Soon) - \$195.00 Additional camera module - \$195.00 Additional standard life battery - \$25.00 Additional extended life battery - \$35.00
2.l	MSRP without optional features, accessories, or service plans	\$499-\$795 (based on quantity purchased at one time)
2.m	Manufacturer's estimated lifetime of device	Digital Ally cannot guarantee any device past 5 years from the date of purchase.
2.n	Other relevant information	VuLink auto activation unit is a patented device that allows triggers such as blue lights and sirens to activate body-camera recording. RFID capabilities – available 2017

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – Software for Video Data Storage and Management		
3.a	Data Management - VuVault™	
3.a.i	Searching capabilities	Yes
3.a.ii	Categorizing capabilities	Yes
3.a.iii	Tagging capabilities	Yes
3.a.iv	Archiving and file retention	Yes; customizable
3.a.v	Data saved on or offsite	Data can be stored either locally in VuVault™ or in the VuVault.com™ cloud application.
3.a.v.1	If saved offsite, specific data accessibility and storage costs	Data stored in the Cloud is accessible at any time of day through an up to date web-browser. Storage Tiers: Basic (50GB/user/year) - \$19.99 per month Standard (100GB/user/year) - \$29.99 per month Pro (200GB/user/year) - \$39.99 per month Administrator License - \$99.00 per year Archival/long term storage plans available. Customized plans available.
3.a.v.2	Video data storage capacity local vs. cloud	Based on amount of storage purchased. No cap to the amount available for purchase.
3.a.v.3	Capability to accommodate multiple site installations	Yes
3.a.vi	Export capabilities	Yes
3.a.vi.1	Traceability feature that shows which user exported the data	Yes
3.a.vii	Redacting/editing capabilities	Yes; currently in VuVault.com™ only. Local redaction capabilities anticipated in Q3 of 2016.
3.a.vii.1	Specify whether changes are permanent	The redacted copy will be permanently redacted once saved. However an un-editable copy of the original video file will always be retained.
3.a.viii	Support provided for chain-of-custody requirements	Yes
3.a.ix	Scalability for different organization size	Yes
3.a.x	User management and role-based access levels	Yes

3.b	Video Analytics	
3.b.i	Companion software to analyze recorded video and audio data	No
3.b.ii	Types of reports built into software	Chain of custody, case events, report generation, all activity associated with a video file or case.
3.b.ii.1	Standard reports	Standard reports include chain of custody reports, case events, report generation, and all activity associated with a video file or case.
3.b.ii.2	Daily reports, historical reports, etc.	Yes
3.b.ii.3	Audit reports that support chain-of-custody requirements	Yes
3.b.ii.4	Customization of reports	Yes
3.b.iii	Facial recognition capabilities	No
3.b.iv	Weapons detection capabilities	No
3.b.v	Other analytical capabilities	No
3.c	Video Security and Authentication	
3.c.i	Compatibility of BWC video output with existing video management software for reviewing and recording	Videos are recorded in AVI format. Final released copies of the video can be played on nearly any AVI compatible viewer. Video files can also be set to secure, at which point the video can only be viewed on Digital Ally's VuVault/VuVault.Com back office software.
3.c.ii	File integrity checks to ensure authenticity	Yes
3.c.iii	Data protection mechanism while in transit and during storage	Proprietary has algorithms
3.c.iv	Routine software updates	Software updates occur as needed or as new features are added. If the agency has set up an account with Digital Ally, they will be notified when updates occur. Currently updates are completed manually.
3.c.v	Cost of software updates	No charge

RFI Q.#	Survey Question (abbreviated)	Response
Usability/Training		
4.a	Usability validation processes	Extensive testing is completed on all products to ensure usability. Digital Ally is currently undergoing ISO Certification. Upon completion, data will be released to shareholders and the general public.
4.b	User community data	Digital Ally sponsors several police summits and attends over 200 tradeshow annually in order to meet with customers and obtain information relevant to product improvement and company and product satisfaction.
4.c	User-group meetings and frequency	Digital Ally sponsors several police summits and attends over 200 tradeshow annually in order to meet with customers and obtain information relevant to product improvement and company and product satisfaction.
4.d	Typical problems reported	Digital Ally is a publicly traded company. All information relevant to problems can be found in Digital Ally's 10-K reports.
4.d.i	Resolution to problems	Once identified, problems are sent through their inside

		sales and technical support departments in order to properly resolve issues.
4.e	Hours of tech. support and location	Basic: Monday through Friday, 8am to 5pm central. Extended Support hours available for additional cost.
4.f	Training provided (hours)	Training is generally conducted on a train-the-trainer basis. Complete end user training is also available if needed. Training will generally take anywhere between 1-4 days depending upon training needs and class sizes. Training includes end user training and administrator training. Supplemental training videos available on Digital Ally's website.

RFI Q.#	Survey Question (abbreviated)	Response
Installation		
5.a	Average time to install and activate	Installation time of the FirstVu HD system, all the way up through activation to deployment, is dependent upon deployment size, equipment and peripherals chosen for purchase, and training type desired. Most deployments will generally take 2 to 7 days to complete after product delivery.

4.13 FlyWire Body Worn Security Cam Kit



Figure 13. FlyWire Body Worn Security Cam Kit

RFI Q.#	Survey Question (abbreviated)	Response
Vendor Information		
0	Responded to FRN?	No
1.a	Name	FlyWire
1.b	Address/phone number	1522 Lehia St, Honolulu, HI 96818 (888) 315-7796
1.c	Website	www.flywirecameras.com
1.d	Years in business	Information not found on website
1.e	Number and types of customers	Information not found on website
1.f	Manufacturing location(s)	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – BWC		
2.a	General	
2.a.i	Name and model number	Body Worn Security Cam Kit
2.a.ii	Physical dims (H" x W" x D")	Information not found on website
2.a.iii	Weight (oz.)	Information not found on website
2.a.iv	Mounting options	Chest, Hat, Windshield, K9, etc.
2.a.iv.1	Accessories needed for mounting	FlyWire Lapel Mount
2.a.v	Ability to mount on vehicle dashboard	Information not found on website
2.a.v.1	Accessories for vehicle dashboard mount	Information not found on website
2.a.vi	LCD display	No
2.a.vii	Recording capacity	Records onto 10 micro SDHC memory card (approximately 4 hours video storage on 16 GB card)
2.a.viii	Operating conditions or limitations	-20°F to 120°F
2.b	Video and Optics	
2.b.i	Maximum video resolution	1080 P

2.b.ii	Field of view	145°
2.b.iii	Lux rating	Information not found on website
2.b.iv	Night mode/format	Information not found on website
2.b.v	Recording speed	30 fps
2.b.vi	Recording format	Information not found on website
2.b.vii	Recording time under default resolution settings	4 hours
2.b.viii	Ability to capture still photos	Yes, 5 MP
2.b.ix	Ability to embed date/time stamp on recorded video	Information not found on website
2.b.ix.1	Ability to authenticate and validate date/time stamp integrity	Information not found on website
2.b.x	Pre-event recording feature	Information not found on website
2.b.x.1	Time buffered and whether audio is recorded	Information not found on website
2.b.xi	Event marking capability	Information not found on website
2.b.xii	Wireless capabilities for communication	No
2.c	Audio	
2.c.i	Microphone feature	Yes, external microphone
2.c.ii	Microphone sensitivity	Information not found on website
2.c.iii	Audio format	Information not found on website
2.c.iv	Default police radio interface for BWC	Information not found on website
2.d	Data Upload	
2.d.i	Single device vs. multiple upload docking station	Information not found on website
2.d.ii	Data transfer method	Information not found on website
2.d.iii	Manual vs. automatic upload	Information not found on website
2.e	Battery Information	
2.e.i	Battery type; internal or removable	3x AA batteries
2.e.ii	Recording duration	4 hours
2.e.iii	Battery standby duration	Information not found on website
2.e.iv	Battery charge time	Uses standard batteries; non-rechargeable
2.e.v	Battery lifetime until replacement	Information not found on website
2.e.vi	Battery replacement procedure	Information not found on website
2.e.vii	Availability of supplemental charger for emergency battery charging	Information not found on website
2.f	GPS	
2.f.i	BWC possess GPS	Information not found on website
2.f.i.1	Embedded GPS coordinates in recorded video	Information not found on website
2.f.ii	Alternative geolocation methods	Information not found on website
2.g	Consumer Testing Results	
2.g.i	Sturdiness/fragility	Information not found on website
2.g.i.1	Drop test results	Impact resistant up to 6 ft
2.g.i.2	Dust intrusion/water resistance rating	Information not found on website
2.g.i.3	Ruggedized	Information not found on website
2.g.i.4	Pressure/depth	Information not found on website
2.g.i.5	Shock	Information not found on website
2.g.i.6	Vibrations	Information not found on website
2.g.ii	Other environmental testing	Information not found on website

2.g.ii.1	Specify tests, pass/fail results, and ratings received	Information not found on website
2.h	Safeguards	
2.h.i	Privacy safeguards or features	Information not found on website
2.h.i.1	Remote viewing	Information not found on website
2.h.i.2	Remote activation/deactivation	Information not found on website
2.h.i.3	Privacy masking	Information not found on website
2.h.i.4	Redacting/editing capabilities	Information not found on website
2.h.ii	Safeguards for cyber security, unintentional disassembly, etc.	Information not found on website
2.i	Regulatory	
2.i.i	Regulatory and Compliance safety requirements	Information not found on website
2.i.ii	Radiation safety standards	Information not found on website
2.j	Warranty and Maintenance Plans	
2.j.i	Length of warranty (in months)	12 months
2.j.ii	Optional extended warranties	Information not found on website
2.j.ii.1	Duration and cost of extended warranties	Information not found on website
2.j.iii	Availability of extended maintenance plans	Information not found on website
2.j.iii.1	Duration and cost of extended maintenance plans	Information not found on website
2.j.iv	Service contract costs	Information not found on website
2.k	Auxiliary Equipment	
2.k.i	Manufacturer suggested retail price (MSRP) for each auxiliary equipment	FlyWire XL DVR unit, standard FlyWire microphone, FlyWire starter kit, lapel mount, clip on safety case
2.l	MSRP without optional features, accessories, or service plans	\$299.99
2.m	Manufacturer's estimated lifetime of device	Information not found on website
2.n	Other relevant information	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – Software for Video Data Storage and Management		
3.a	Data Management	
3.a.i	Searching capabilities	Information not found on website
3.a.ii	Categorizing capabilities	Information not found on website
3.a.iii	Tagging capabilities	Information not found on website
3.a.iv	Archiving and file retention	Information not found on website
3.a.v	Data saved on or offsite	Information not found on website
3.a.v.1	If saved offsite, specific data accessibility and storage costs	Information not found on website
3.a.v.2	Video data storage capacity local vs. cloud	Information not found on website
3.a.v.3	Capability to accommodate multiple site installations	Information not found on website
3.a.vi	Export capabilities	Information not found on website
3.a.vi.1	Traceability feature that shows which user exported the data	Information not found on website
3.a.vii	Redacting/editing capabilities	Information not found on website

3.a.vii.1	Specify whether changes are permanent	Information not found on website
3.a.viii	Support provided for chain-of-custody requirements	Information not found on website
3.a.ix	Scalability for different organization size	Information not found on website
3.a.x	User management and role-based access levels	Information not found on website
3.b	Video Analytics	
3.b.i	Companion software to analyze recorded video and audio data	Information not found on website
3.b.ii	Types of reports built into software	Information not found on website
3.b.ii.1	Standard reports	Information not found on website
3.b.ii.2	Daily reports, historical reports, etc.	Information not found on website
3.b.ii.3	Audit reports that support chain-of-custody requirements	Information not found on website
3.b.ii.4	Customization of reports	Information not found on website
3.b.iii	Facial recognition capabilities	Information not found on website
3.b.iv	Weapons detection capabilities	Information not found on website
3.b.v	Other analytical capabilities	Information not found on website
3.c	Video Security and Authentication	
3.c.i	Compatibility of BWC video output with existing video management software for reviewing and recording	Information not found on website
3.c.ii	File integrity checks to ensure authenticity	Information not found on website
3.c.iii	Data protection mechanism while in transit and during storage	Information not found on website
3.c.iv	Routine software updates	Information not found on website
3.c.v	Cost of software updates	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Usability/Training		
4.a	Usability validation processes	Information not found on website
4.b	User community data	Information not found on website
4.c	User-group meetings and frequency	Information not found on website
4.d	Typical problems reported	Information not found on website
4.d.i	Resolution to problems	Information not found on website
4.e	Hours of tech. support and location	Information not found on website
4.f	Training provided (hours)	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Installation		
5.a	Average time to install and activate	Information not found on website

4.14 FlyWire Glasses Worn Security Cam Kit



Figure 14. FlyWire Glasses Worn Security Cam Kit

RFI Q.#	Survey Question (abbreviated)	Response
Vendor Information		
0	Responded to FRN?	No
1.a	Name	FlyWire
1.b	Address/phone number	1522 Lehia St, Honolulu, HI 96818 (888) 315-7796
1.c	Website	www.flywirecameras.com
1.d	Years in business	Information not found on website
1.e	Number and types of customers	Information not found on website
1.f	Manufacturing location(s)	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – BWC		
2.a	General	
2.a.i	Name and model number	Glasses Worn Security Cam Kit
2.a.ii	Physical dims (H" x W" x D")	Information not found on website
2.a.iii	Weight (oz.)	Information not found on website
2.a.iv	Mounting options	Glasses, hat, windshield, K9, etc.
2.a.iv.1	Accessories needed for mounting	FlyWire Lapel Mount
2.a.v	Ability to mount on vehicle dashboard	Information not found on website
2.a.v.1	Accessories for vehicle dashboard mount	Information not found on website
2.a.vi	LCD display	No
2.a.vii	Recording capacity	Records onto 10 micro SDHC memory card (approximately 4 hours video storage on 16 GB card)
2.a.viii	Operating conditions or limitations	-20°F to 120°F
2.b	Video and Optics	
2.b.i	Maximum video resolution	1080 P
2.b.ii	Field of view	145°

2.b.iii	Lux rating	Information not found on website
2.b.iv	Night mode/format	Information not found on website
2.b.v	Recording speed	30 fps
2.b.vi	Recording format	Information not found on website
2.b.vii	Recording time under default resolution settings	4 hours
2.b.viii	Ability to capture still photos	Yes, 5 MP
2.b.ix	Ability to embed date/time stamp on recorded video	Information not found on website
2.b.ix.1	Ability to authenticate and validate date/time stamp integrity	Information not found on website
2.b.x	Pre-event recording feature	Information not found on website
2.b.x.1	Time buffered and whether audio is recorded	Information not found on website
2.b.xi	Event marking capability	Information not found on website
2.b.xii	Wireless capabilities for communication	No
2.c	Audio	
2.c.i	Microphone feature	Yes, external microphone
2.c.ii	Microphone sensitivity	Information not found on website
2.c.iii	Audio format	Information not found on website
2.c.iv	Default police radio interface for BWC	Information not found on website
2.d	Data Upload	
2.d.i	Single device vs. multiple upload docking station	Information not found on website
2.d.ii	Data transfer method	Information not found on website
2.d.iii	Manual vs. automatic upload	Information not found on website
2.e	Battery Information	
2.e.i	Battery type; internal or removable	3x AA batteries
2.e.ii	Recording duration	4 hours
2.e.iii	Battery standby duration	Information not found on website
2.e.iv	Battery charge time	Uses standard batteries; non-rechargeable
2.e.v	Battery lifetime until replacement	Information not found on website
2.e.vi	Battery replacement procedure	Information not found on website
2.e.vii	Availability of supplemental charger for emergency battery charging	Information not found on website
2.f	GPS	
2.f.i	BWC possess GPS	Information not found on website
2.f.i.1	Embedded GPS coordinates in recorded video	Information not found on website
2.f.ii	Alternative geolocation methods	Information not found on website
2.g	Consumer Testing Results	
2.g.i	Sturdiness/fragility	Information not found on website
2.g.i.1	Drop test results	Impact resistant up to 6 ft
2.g.i.2	Dust intrusion/water resistance rating	Information not found on website
2.g.i.3	Ruggedized	Information not found on website
2.g.i.4	Pressure/depth	Information not found on website
2.g.i.5	Shock	Information not found on website
2.g.i.6	Vibrations	Information not found on website
2.g.ii	Other environmental testing	Information not found on website
2.g.ii.1	Specify tests, pass/fail results, and	Information not found on website

	ratings received	
2.h	Safeguards	
2.h.i	Privacy safeguards or features	Information not found on website
2.h.i.1	Remote viewing	Information not found on website
2.h.i.2	Remote activation/deactivation	Information not found on website
2.h.i.3	Privacy masking	Information not found on website
2.h.i.4	Redacting/editing capabilities	Information not found on website
2.h.ii	Safeguards for cyber security, unintentional disassembly, etc.	Information not found on website
2.i	Regulatory	
2.i.i	Regulatory and Compliance safety requirements	Information not found on website
2.i.ii	Radiation safety standards	Information not found on website
2.j	Warranty and Maintenance Plans	
2.j.i	Length of warranty (in months)	12 months
2.j.ii	Optional extended warranties	Information not found on website
2.j.ii.1	Duration and cost of extended warranties	Information not found on website
2.j.iii	Availability of extended maintenance plans	Information not found on website
2.j.iii.1	Duration and cost of extended maintenance plans	Information not found on website
2.j.iv	Service contract costs	Information not found on website
2.k	Auxiliary Equipment	
2.k.i	Manufacturer suggested retail price (MSRP) for each auxiliary equipment	FlyWire XL DVR unit, standard FlyWire microphone, FlyWire starter kit, lapel mount, clip on safety case (all included)
2.l	MSRP without optional features, accessories, or service plans	\$299.99
2.m	Manufacturer's estimated lifetime of device	Information not found on website
2.n	Other relevant information	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – Software for Video Data Storage and Management		
3.a	Data Management	
3.a.i	Searching capabilities	Information not found on website
3.a.ii	Categorizing capabilities	Information not found on website
3.a.iii	Tagging capabilities	Information not found on website
3.a.iv	Archiving and file retention	Information not found on website
3.a.v	Data saved on or offsite	Information not found on website
3.a.v.1	If saved offsite, specific data accessibility and storage costs	Information not found on website
3.a.v.2	Video data storage capacity local vs. cloud	Information not found on website
3.a.v.3	Capability to accommodate multiple site installations	Information not found on website
3.a.vi	Export capabilities	Information not found on website
3.a.vi.1	Traceability feature that shows which user exported the data	Information not found on website
3.a.vii	Redacting/editing capabilities	Information not found on website

3.a.vii.1	Specify whether changes are permanent	Information not found on website
3.a.viii	Support provided for chain-of-custody requirements	Information not found on website
3.a.ix	Scalability for different organization size	Information not found on website
3.a.x	User management and role-based access levels	Information not found on website
3.b	Video Analytics	
3.b.i	Companion software to analyze recorded video and audio data	Information not found on website
3.b.ii	Types of reports built into software	Information not found on website
3.b.ii.1	Standard reports	Information not found on website
3.b.ii.2	Daily reports, historical reports, etc.	Information not found on website
3.b.ii.3	Audit reports that support chain-of-custody requirements	Information not found on website
3.b.ii.4	Customization of reports	Information not found on website
3.b.iii	Facial recognition capabilities	Information not found on website
3.b.iv	Weapons detection capabilities	Information not found on website
3.b.v	Other analytical capabilities	Information not found on website
3.c	Video Security and Authentication	
3.c.i	Compatibility of BWC video output with existing video management software for reviewing and recording	Information not found on website
3.c.ii	File integrity checks to ensure authenticity	Information not found on website
3.c.iii	Data protection mechanism while in transit and during storage	Information not found on website
3.c.iv	Routine software updates	Information not found on website
3.c.v	Cost of software updates	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Usability/Training		
4.a	Usability validation processes	Information not found on website
4.b	User community data	Information not found on website
4.c	User-group meetings and frequency	Information not found on website
4.d	Typical problems reported	Information not found on website
4.d.i	Resolution to problems	Information not found on website
4.e	Hours of tech. support and location	Information not found on website
4.f	Training provided (hours)	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Installation		
5.a	Average time to install and activate	Information not found on website

4.15 Global Justice Eagle NextGen



Figure 15. Global Justice Eagle NextGen

RFI Q.#	Survey Question (abbreviated)	Response
Vendor Information		
0	Responded to FRN?	Yes
1.a	Name	Global Justice Solutions, LLC
1.b	Address/phone number	11710 Plaza America Drive, Suite 2000, Reston, VA 20190
1.c	Website	www.eaglebodycam.com or www.globaljusticesolutions.us
1.d	Years in business	2 years
1.e	Number and types of customers	State, local, and federal agencies – law enforcement, courts, corrections, prosecutor, and other public safety agencies
1.f	Manufacturing location(s)	Solution is designed in the USA; an OEM manufacturing location is overseas

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – BWC		
2.a	General	
2.a.i	Name and model number	Eagle NextGen™
2.a.ii	Physical dims (H" x W" x D")	3.2" H x 2.2" W x 1.0" D
2.a.iii	Weight (oz.)	5.15 oz
2.a.iv	Mounting options	Lapel/shoulder, chest, and in-car dash
2.a.iv.1	Accessories needed for mounting	Lapel clip, in-car dash mount
2.a.v	Ability to mount on vehicle dashboard	Yes
2.a.v.1	Accessories for vehicle dashboard mount	In-car dash mount
2.a.vi	LCD display	2" TFT display
2.a.vii	Recording capacity	16 GB up to 64 GB

2.a.viii	Operating conditions or limitations	Operating temperature: -5°F to 45°F IP68
2.b	Video and Optics	
2.b.i	Maximum video resolution	1080 P
2.b.ii	Field of view	142°
2.b.iii	Lux rating	< 0.1 lux
2.b.iv	Night mode/format	Yes; BWC has a night mode feature that turns on automatically on low-light conditions. It uses 2 IR lens that can be turned off, if needed.
2.b.v	Recording speed	60 fps
2.b.vi	Recording format	MP4
2.b.vii	Recording time under default resolution settings	Up to 14 hours of continuous recording at 720 P
2.b.viii	Ability to capture still photos	Yes
2.b.ix	Ability to embed date/time stamp on recorded video	Yes
2.b.ix.1	Ability to authenticate and validate date/time stamp integrity	Yes; can be validated using a software algorithm available as part of the solution.
2.b.x	Pre-event recording feature	Yes
2.b.x.1	Time buffered and whether audio is recorded	Up to 200 seconds; audio is recorded
2.b.xi	Event marking capability	Yes
2.b.xii	Wireless capabilities for communication	Wi-Fi
2.c	Audio	
2.c.i	Microphone feature	Yes
2.c.ii	Microphone sensitivity	No information provided
2.c.iii	Audio format	MP3, AAC
2.c.iv	Default police radio interface for BWC	Yes; a built-in police radio interface (P25 system) is available for the BWC.
2.d	Data Upload	
2.d.i	Single device vs. multiple upload docking station	Data can be uploaded individually or on a multi-unit docking station
2.d.ii	Data transfer method	USB wire and wireless (WiFi)
2.d.iii	Manual vs. automatic upload	Automatic data upload
2.e	Battery Information	
2.e.i	Battery type; internal or removable	Lithium 3200mAh internal battery
2.e.ii	Recording duration	Up to 14 hours of continuous recording @ 720 P
2.e.iii	Battery standby duration	Up to 36 hours
2.e.iv	Battery charge time	Max 3 hours for a fully drained battery
2.e.v	Battery lifetime until replacement	Up to 700 cycles
2.e.vi	Battery replacement procedure	N/A
2.e.vii	Availability of supplemental charger for emergency battery charging	Back-up battery external for emergency charging
2.f	GPS	
2.f.i	BWC possess GPS	Yes
2.f.i.1	Embedded GPS coordinates in recorded video	Yes
2.f.ii	Alternative geolocation methods	Yes; alternative geo-location information using smartphone is also supported.
2.g	Consumer Testing Results	
2.g.i	Sturdiness/fragility	Yes
2.g.i.1	Drop test results	Up to 7 ft

2.g.i.2	Dust intrusion/water resistance rating	IP68
2.g.i.3	Ruggedized	Yes
2.g.i.4	Pressure/depth	N/A
2.g.i.5	Shock	Shockproof IP68
2.g.i.6	Vibrations	IP68
2.g.ii	Other environmental testing	No
2.g.ii.1	Specify tests, pass/fail results, and ratings received	N/A
2.h	Safeguards	
2.h.i	Privacy safeguards or features	BWC has a built-in device level password security to prevent un-authorized access.
2.h.i.1	Remote viewing	Yes
2.h.i.2	Remote activation/deactivation	Yes
2.h.i.3	Privacy masking	Not on the BWC; available with the redaction software
2.h.i.4	Redacting/editing capabilities	Not on the BWC; available with the redaction software
2.h.ii	Safeguards for cyber security, unintentional disassembly, etc.	No information provided
2.i	Regulatory	
2.i.i	Regulatory and Compliance safety requirements	No information provided
2.i.ii	Radiation safety standards	No information provided
2.j	Warranty and Maintenance Plans	
2.j.i	Length of warranty (in months)	36 months
2.j.ii	Optional extended warranties	Yes
2.j.ii.1	Duration and cost of extended warranties	60 months extended warranty is available at 20% of BWC pricing.
2.j.iii	Availability of extended maintenance plans	Yes
2.j.iii.1	Duration and cost of extended maintenance plans	60 months extended maintenance plan is available at 20% BWC pricing.
2.j.iv	Service contract costs	N/A
2.k	Auxiliary Equipment	
2.k.i	Manufacturer suggested retail price (MSRP) for each auxiliary equipment	Individual charging dock - \$15 In-car dash mount - \$15
2.l	MSRP without optional features, accessories, or service plans	\$350
2.m	Manufacturer's estimated lifetime of device	3 to 4 years
2.n	Other relevant information	No information provided

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – Software for Video Data Storage and Management		
3.a	Data Management – Digital Evidence Management System (DEMS)	
3.a.i	Searching capabilities	Yes; Basic Search and Advanced Search capabilities are provided in the Digital Evidence Management System (DEMS) software. Authorized users can search on different meta-data (a.k.a. search criteria) and get the results displayed in chronological order.
3.a.ii	Categorizing capabilities	Yes

3.a.iii	Tagging capabilities	Yes
3.a.iv	Archiving and file retention	Yes
3.a.v	Data saved on or offsite	Both options – on-site and off-site (cloud-storage) are available as well as a hybrid storage solutions that includes an on-site and cloud storage solution.
3.a.v.1	If saved offsite, specific data accessibility and storage costs	Data can be accessed and downloaded by authorized users and external justice partners. Storage costs vary by resolution, recording speed, and amount of hours of data stored.
3.a.v.2	Video data storage capacity local vs. cloud	Storage solution provides unlimited storage capacity both locally and in the cloud.
3.a.v.3	Capability to accommodate multiple site installations	Yes
3.a.vi	Export capabilities	Yes
3.a.vi.1	Traceability feature that shows which user exported the data	Audit log functionality tracks which user exported the data.
3.a.vii	Redacting/editing capabilities	Yes; provides an advanced video and audio redaction capability.
3.a.vii.1	Specify whether changes are permanent	All redacted/edited files are stored separately and does not impact the original raw file from the BWC.
3.a.viii	Support provided for chain-of-custody requirements	Yes
3.a.ix	Scalability for different organization size	Yes
3.a.x	User management and role-based access levels	Yes
3.b	Video Analytics	
3.b.i	Companion software to analyze recorded video and audio data	Yes, the BWC solution comes with an integrated advanced video data analytics application.
3.b.ii	Types of reports built into software	Videos by officer badge #, incident type, type of media recorded, evidentiary vs. non-evidentiary, etc.
3.b.ii.1	Standard reports	Yes; comes with Ad-hoc reporting functionality that can be customized to create different type of reports. Standard report includes: number of videos and hours of recording per officer, videos by incident type and videos by case #, description, officer name, etc.
3.b.ii.2	Daily reports, historical reports, etc.	Yes; integrated data analytics dashboards provide daily and historical reports. These reports are customizable.
3.b.ii.3	Audit reports that support chain-of-custody requirements	Yes; provides extensive Audit reporting capabilities. It tracks all activity in the system which includes: when the video was viewed and by whom - login ID, IP address, time stamp; if the video was modified; if the video was deleted, etc.
3.b.ii.4	Customization of reports	Yes
3.b.iii	Facial recognition capabilities	No
3.b.iv	Weapons detection capabilities	No
3.b.v	Other analytical capabilities	None
3.c	Video Security and Authentication	
3.c.i	Compatibility of BWC video output with existing video management software for reviewing and recording	Yes; the videos are recorded in standard MPEG-4/MP4 format with H.264 compression that are compatible with standard video management software in the market for viewing and recording.
3.c.ii	File integrity checks to ensure authenticity	Yes; special software algorithms are provided to check the integrity of the data – video and audio files- to

		ensure authenticity of the data and that it is not modified in transit or in storage.
3.c.iii	Data protection mechanism while in transit and during storage	Yes; Secure Sockets Layer (SSL) protocols are used to encrypt data in transit and during storage using 256 bit AES encryption.
3.c.iv	Routine software updates	Software updates are automatically provided every 6 months.
3.c.v	Cost of software updates	Software updates and related costs are provided through jointly executed Software Maintenance Agreements with the client.

RFI Q.#	Survey Question (abbreviated)	Response
Usability/Training		
4.a	Usability validation processes	Interaction design, usability testing, interoperability, and ergonomics
4.b	User community data	Global Justice Solutions collects data through customer interviews, trade conferences, and customer on-site demos to evaluate the products.
4.c	User-group meetings and frequency	Global Justice Solutions participates in annual face-to-face meetings and technology conferences with user-group – e.g., IACP, iCeRT, IJIS Symposiums, etc.
4.d	Typical problems reported	At this time, there are no active issues that need a resolution.
4.d.i	Resolution to problems	N/A
4.e	Hours of tech. support and location	Customized support is provided based on the client needs. All options are provided – telephone, on-site, online, etc.
4.f	Training provided (hours)	On-site training and web-based training are provided to train end-users. Global Justice Solutions also provides a train-the-trainer approach, on-site.

RFI Q.#	Survey Question (abbreviated)	Response
Installation		
5.a	Average time to install and activate	Average time is 12 to 18 hours to install and configure the complete BWC system and activate the first BWC device.

4.16 GoPro Hero4 Silver



Figure 16. GoPro Hero4 Silver

RFI Q.#	Survey Question (abbreviated)	Response
Vendor Information		
0	Responded to FRN?	Yes
1.a	Name	GoPro
1.b	Address/phone number	3000 Clearview Way, San Mateo, CA 94402; Distributor is Intrensic LLC, 111 Congress Ave. Suite 400, Austin, TX 78701, phone 844-466-2568
1.c	Website	www.gopro.com and www.intrensic.com
1.d	Years in business	Intrensic is their distributor and has been in business since January 2015
1.e	Number and types of customers	Intrensic has 14 customers in municipalities at the federal, state, and local levels
1.f	Manufacturing location(s)	China

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – BWC		
2.a	General	
2.a.i	Name and model number	GoPro Hero4 Silver, Model HWBD1
2.a.ii	Physical dims (H" x W" x D")	1.6 "H x 2.25" W x 1.2" D
2.a.iii	Weight (oz.)	5.2 oz with housing
2.a.iv	Mounting options	Over 33 mounting options, including K-9, head, chest, helmet, belt. Also interchangeable as in-car dashcam. Can be mounted on bicycle/motorcycle handlebar.
2.a.iv.1	Accessories needed for mounting	Other than the respective mount, no additional accessories
2.a.v	Ability to mount on vehicle dashboard	Yes
2.a.v.1	Accessories for vehicle dashboard mount	Suction cup mount, flex jar mount, or adhesive mount. If mounted upside down, will automatically capture photos and video rightside up.
2.a.vi	LCD display	1.5" touch screen
2.a.vii	Recording capacity	64 GB SD Card, 4 hr 22 min at 30fps and 1080P

2.a.viii	Operating conditions or limitations	Waterproof to 131' (40m). The camera is made to operate in high winds by utilizing dual microphones the camera can filter out wind and noise. Humidity and precipitation do not affect operating conditions or limit the camera functionality. In hot temperatures that exceed 125 degrees Fahrenheit, the camera will automatically save the file and turn off.
2.b	Video and Optics	
2.b.i	Maximum video resolution	3840 x 2160
2.b.ii	Field of view	122.6° horizontal, 94.4° vertical, 149.2° diagonal
2.b.iii	Lux rating	No information provided
2.b.iv	Night mode/format	Professional low light capture
2.b.v	Recording speed	30 fps is default; up to 120 fps
2.b.vi	Recording format	MP4 with H.264 compression
2.b.vii	Recording time under default resolution settings	4 hours 22 min at default resolution (1080P, 30 fps)
2.b.viii	Ability to capture still photos	Yes; 12 MP
2.b.ix	Ability to embed date/time stamp on recorded video	Yes
2.b.ix.1	Ability to authenticate and validate date/time stamp integrity	Yes
2.b.x	Pre-event recording feature	No
2.b.x.1	Time buffered and whether audio is recorded	N/A
2.b.xi	Event marking capability	Yes
2.b.xii	Wireless capabilities for communication	Wi-Fi
2.c	Audio	
2.c.i	Microphone feature	Yes
2.c.ii	Microphone sensitivity	Format: 48kHz sampling rate, AAC compression. Advanced AGC (automatic gain control) with multi-band compressor. Internal Microphone. External Microphone: Stereo supported with 3.5mm microphone adapter (sold separately).
2.c.iii	Audio format	AAC
2.c.iv	Default police radio interface for BWC	No
2.d	Data Upload	
2.d.i	Single device vs. multiple upload docking station	Data is uploaded directly from the GoPro Hero4 Silver using a standard USB Cable to Intrinsic's Client Application that is included with the hardware. A docking station is not required.
2.d.ii	Data transfer method	USB cable
2.d.iii	Manual vs. automatic upload	Automatic and Manual uploading on Intrinsic's Client Application (menu driven)
2.e	Battery Information	
2.e.i	Battery type; internal or removable	Lithium ion 1160 mAh rechargeable battery
2.e.ii	Recording duration	2 hrs at 4k 15 fps; 3 hrs 5 min using battery BacPac
2.e.iii	Battery standby duration	Company does not publish this information, possibly weeks
2.e.iv	Battery charge time	Charges to 100% in approximately two hours when using GoPro's USB- compatible Wall or Auto Charger.
2.e.v	Battery lifetime until replacement	Battery replacement is covered under the 2-year (24

		month) warranty.
2.e.vi	Battery replacement procedure	Remove from camera housing in the field and replace.
2.e.vii	Availability of supplemental charger for emergency battery charging	Yes, any external battery charger with USB connector such as GO PUCK 6XR ultra lightweight charger the HERO4 Session can last up to 12 hours recording.
2.f	GPS	
2.f.i	BWC possess GPS	No
2.f.i.1	Embedded GPS coordinates in recorded video	N/A
2.f.ii	Alternative geolocation methods	N/A
2.g	Consumer Testing Results	
2.g.i	Sturdiness/fragility	No information provided
2.g.i.1	Drop test results	Ingress Protection Rating (IP Rating): Exceeded 24' to hard surface
2.g.i.2	Dust intrusion/water resistance rating	The GoPro Hero4 Silver is waterproof to 131' (40m). The IPX scale is not currently published for this camera.
2.g.i.3	Ruggedized	The GoPro Hero4 Silver has a record of ruggedness with it use in various military applications as well as extreme sport applications.
2.g.i.4	Pressure/depth	Waterproof up to 131 ft depth
2.g.i.5	Shock	Information not published by company
2.g.i.6	Vibrations	No internal vibration reduction mechanism
2.g.ii	Other environmental testing	Information not published by company
2.g.ii.1	Specify tests, pass/fail results, and ratings received	N/A
2.h	Safeguards	
2.h.i	Privacy safeguards or features	Tamper proof seal is located over removable SD card port. Regular audit of body worn camera's seal should be part of agency policy.
2.h.i.1	Remote viewing	Connect with the GoPro App to control the camera remotely via an authorized law enforcement officer's phone, tablet or computer. Wireless control through the Smart Remote lets a law enforcement agency connect to and control multiple GoPro cameras from distances of up to 600' (182m).
2.h.i.2	Remote activation/deactivation	Yes
2.h.i.3	Privacy masking	The original recorded video file cannot be edited or redacted or altered in any way. However, a copy of the original file can utilize privacy masking.
2.h.i.4	Redacting/editing capabilities	The original recorded video file cannot be edited or redacted or altered in any way. However, a copy of the original file can be redacted.
2.h.ii	Safeguards for cyber security, unintentional disassembly, etc.	There are no known cyber security risks with the Wi-Fi turned off. The GoPro Hero4 Silver is built in such a manner that unintentional disassembly is not applicable and is made to withstand drops in excess of 24 feet to hard surface.
2.i	Regulatory	
2.i.i	Regulatory and Compliance safety requirements	FCC approved, declaration of conformity available upon request
2.i.ii	Radiation safety standards	Information not published by company
2.j	Warranty and Maintenance Plans	
2.j.i	Length of warranty (in months)	24 months includes all maintenance, components, and

		mounts
2.j.ii	Optional extended warranties	Intinsic offers a 4 year program with a 2 year warranty and free camera upgrades at the end of 24 months (thus a 48 month offering with upgraded cameras at the end of 24 months)
2.j.ii.1	Duration and cost of extended warranties	Additional 24 months at \$10.00 per month per device
2.j.iii	Availability of extended maintenance plans	Maintenance plan is included at no additional cost.
2.j.iii.1	Duration and cost of extended maintenance plans	Maintenance plan is included at no additional cost.
2.j.iv	Service contract costs	No additional service contract costs
2.k	Auxiliary Equipment	
2.k.i	Manufacturer suggested retail price (MSRP) for each auxiliary equipment	The GoPro Hero4 Silver uses a standard USB cable to charge the camera. Intinsic currently offers the GO PUCK 6XR ultra lightweight charger as part of a comprehensive body worn camera solution. \$99.99 for GO PUCK 6XR.
2.l	MSRP without optional features, accessories, or service plans	\$399.99
2.m	Manufacturer's estimated lifetime of device	No information provided
2.n	Other relevant information	No information provided

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – Software for Video Data Storage and Management		
3.a	Data Management	
3.a.i	Searching capabilities	Yes, using Intinsic's "Evidence On-Cloud System"
3.a.ii	Categorizing capabilities	Yes; ID, description, title, uploaded by, recorded date, uploaded date, evidence type
3.a.iii	Tagging capabilities	Yes, several features allow users to assign case number, ID, title, tags, categories, case notes and comments.
3.a.iv	Archiving and file retention	Archiving and file retention capacity is as long as the agency requires storage of files according to their policy.
3.a.v	Data saved on or offsite	Intinsic's Cloud Storage (All data is stored within the USA). Data can be saved onsite if desired.
3.a.v.1	If saved offsite, specific data accessibility and storage costs	Data is always secured in accordance with CJIS compliance and accessible through the Intinsic Evidence on Cloud software. Unlimited storage is part of Intinsic's total Evidence on Cloud storage package at \$69 per month per user.
3.a.v.2	Video data storage capacity local vs. cloud	Capacity is unlimited on the cloud. Local storage capacity is limited by the capacity and number of servers the respective agency decides to use.
3.a.v.3	Capability to accommodate multiple site installations	Yes
3.a.vi	Export capabilities	Yes; can be shared by an authorized user, via email to other authorized users with proper log-in credentials.
3.a.vi.1	Traceability feature that shows which user exported the data	Yes, a full forensic audit log from viewing to exporting is

		traceable.
3.a.vii	Redacting/editing capabilities	Yes; the original recorded video file cannot be edited or redacted or altered in any way. However, a copy of the original file can utilize privacy masking.
3.a.vii.1	Specify whether changes are permanent	No; the original recorded video file will always remain intact.
3.a.viii	Support provided for chain-of-custody requirements	Yes; accessibility is determined by chain-of-custody policy of the respective agency and various levels of permissions can be granted in accordance with that policy. A comprehensive audit trail report exists for every piece of evidence uploaded using Intrinsic's Evidence on cloud software.
3.a.ix	Scalability for different organization size	Yes, the software is scalable to different organizations of any size.
3.a.x	User management and role-based access levels	Yes
3.b	Video Analytics	
3.b.i	Companion software to analyze recorded video and audio data	Not at this time, but with the GoPro Hero4 Silver's 4k available video provides future facial recognition interfaces.
3.b.ii	Types of reports built into software	Evidence audit trail reports
3.b.ii.1	Standard reports	Not at this time. If a law enforcement organization requires specific reporting requirements, Intrinsic may be able to provide a custom solution.
3.b.ii.2	Daily reports, historical reports, etc.	Evidence Audit Trail Reports available for any time frame.
3.b.ii.3	Audit reports that support chain-of-custody requirements	Yes, every time evidence is viewed, shared or handled electronically in any way, an entry in the audit report is documented in real time.
3.b.ii.4	Customization of reports	Available
3.b.iii	Facial recognition capabilities	Not at this time
3.b.iv	Weapons detection capabilities	Not at this time
3.b.v	Other analytical capabilities	N/A
3.c	Video Security and Authentication	
3.c.i	Compatibility of BWC video output with existing video management software for reviewing and recording	Industry standard MP4 format with H.264 encoding
3.c.ii	File integrity checks to ensure authenticity	Intrinsic's Evidence on cloud software is CJIS compliant.
3.c.iii	Data protection mechanism while in transit and during storage	Yes
3.c.iv	Routine software updates	Yes
3.c.v	Cost of software updates	No additional costs for software updates

RFI Q.#	Survey Question (abbreviated)	Response
Usability/Training		
4.a	Usability validation processes	On-site user set-up and support by Intrinsic's team
4.b	User community data	Intrinsic's performs user satisfaction surveys quarterly and product feedback surveys annually. Data typically gathered may vary.
4.c	User-group meetings and frequency	None

4.d	Typical problems reported	Not available at this time
4.d.i	Resolution to problems	N/A
4.e	Hours of tech. support and location	At no additional cost, Intrensic provides comprehensive hardware and software support 24/7
4.f	Training provided (hours)	On-site and web-based training provided at no additional cost

RFI Q.#	Survey Question (abbreviated)	Response
Installation		
5.a	Average time to install and activate	All set-up is done off site to minimize deployment time. Installation time, depending on internal systems, can be completed in less than 30 minutes.

4.17 GoPro Hero4 Session



Figure 17. GoPro Hero4 Session

RFI Q.#	Survey Question (abbreviated)	Response
Vendor Information		
0	Responded to FRN?	Yes
1.a	Name	GoPro
1.b	Address/phone number	3000 Clearview Way, San Mateo, CA 94402; Distributor is Intrinsic LLC, 111 Congress Ave. Suite 400, Austin, TX 78701, phone 844-466-2568
1.c	Website	www.gopro.com and www.intrinsic.com
1.d	Years in business	Intrinsic is their distributor and has been in business since January 2015
1.e	Number and types of customers	Intrinsic has 14 customers in municipalities at the federal, state, and local levels
1.f	Manufacturing location(s)	China

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – BWC		
2.a	General	
2.a.i	Name and model number	GoPro Hero4 Session, Model HWRP1
2.a.ii	Physical dims (H" x W" x D")	1.5" H x 1.5" W x 1.43" D
2.a.iii	Weight (oz.)	2.6 oz with housing
2.a.iv	Mounting options	Over 33 mounting options, including K-9, head, chest, helmet, belt. Also interchangeable as in-car dashcam. Can be mounted on bicycle/motorcycle handlebar.
2.a.iv.1	Accessories needed for mounting	Other than the respective mount, no additional accessories
2.a.v	Ability to mount on vehicle dashboard	Yes
2.a.v.1	Accessories for vehicle dashboard mount	Suction cup mount, flex jar mount, or adhesive mount. If mounted upside down, will automatically capture photos

		and video rightside up.
2.a.vi	LCD display	No
2.a.vii	Recording capacity	Up to 64 GB micro SD Card with at least a Class 10 or UHS-1 rating, record times vary with resolution & frame rate
2.a.viii	Operating conditions or limitations	Waterproof to 33 ft without any type housing. Humidity and precipitation do not affect operating conditions or limit the camera functionality. By utilizing dual microphones, the camera can filter out high wind conditions and noise. If temperatures exceed 125 F, the camera will automatically save the file and turn off.
2.b	Video and Optics	
2.b.i	Maximum video resolution	1920 x 1440, 1440p 30 fps
2.b.ii	Field of view	170° super wide angle both horizontally and vertically
2.b.iii	Lux rating	No information provided
2.b.iv	Night mode/format	Gets the best exposure by intelligently changing the video frame rate based on the available light. The camera produces a moderately bright video in low light situations in the default setting with an ISO Limit of 1600. There is an additional setting that produces a darker video in low light with reduced image noise at ISO Limit Setting of 400.
2.b.v	Recording speed	30 fps is default; up to 120 fps
2.b.vi	Recording format	MPEG-4 with H.264 codec
2.b.vii	Recording time under default resolution settings	2 hrs 30 min at default resolution (1080P, 30 fps)
2.b.viii	Ability to capture still photos	Yes; 8 MP at 3264 X 2448 screen resolution
2.b.ix	Ability to embed date/time stamp on recorded video	Yes
2.b.ix.1	Ability to authenticate and validate date/time stamp integrity	Yes
2.b.x	Pre-event recording feature	No
2.b.x.1	Time buffered and whether audio is recorded	N/A
2.b.xi	Event marking capability	Yes
2.b.xii	Wireless capabilities for communication	Wi-Fi
2.c	Audio	
2.c.i	Microphone feature	Yes, dual microphones
2.c.ii	Microphone sensitivity	The GoPro HERO4 Session has one mic on the front of the camera and one on the back. The mics work together to automatically sense, then filter out wind and noise and still pickup any audible noises considered detectable by the human ear.
2.c.iii	Audio format	AAC
2.c.iv	Default police radio interface for BWC	No
2.d	Data Upload	
2.d.i	Single device vs. multiple upload docking station	Data is uploaded directly from the GoPro Hero4 Session using a standard USB cable to Intrinsic's Client Application that is included with the hardware. A docking station is not required.
2.d.ii	Data transfer method	USB cable
2.d.iii	Manual vs. automatic upload	Automatic and manual uploading on Intrinsic's Client

		Application (menu driven)
2.e	Battery Information	
2.e.i	Battery type; internal or removable	Lithium ion 1000 mAh, 3.8V, 3.23 W-hr rechargeable battery integrated with camera & not removable
2.e.ii	Recording duration	2 hrs 30 min at 1080P 15 fps; If the battery reaches 0% while recording, the camera saves the file and powers off.
2.e.iii	Battery standby duration	Company does not publish this information, possibly weeks
2.e.iv	Battery charge time	Charges to 80% in approximately one hour and 100% in approximately two hours when using GoPro's USB-compatible wall or auto charger.
2.e.v	Battery lifetime until replacement	Not currently published. Battery replacement is covered under a 2-year (24 month) warranty.
2.e.vi	Battery replacement procedure	Requires manufacturer service for replacement.
2.e.vii	Availability of supplemental charger for emergency battery charging	Yes, any external battery charger with USB connector such as GO PUCK 6XR ultra lightweight charger the HERO4 Session can last up to 12 hours recording.
2.f	GPS	
2.f.i	BWC possess GPS	No
2.f.i.1	Embedded GPS coordinates in recorded video	N/A
2.f.ii	Alternative geolocation methods	N/A
2.g	Consumer Testing Results	
2.g.i	Sturdiness/fragility	No information provided
2.g.i.1	Drop test results	Ingress Protection Rating (IP Rating): Exceeded 24' to hard surface
2.g.i.2	Dust intrusion/water resistance rating	The GoPro Hero4 Session is waterproof to 30 ft. The IPX scale is not currently published for this camera.
2.g.i.3	Ruggedized	The GoPro Hero4 Session has a record of ruggedness with it use in various military applications as well as extreme sport applications.
2.g.i.4	Pressure/depth	Waterproof up to 30 ft depth
2.g.i.5	Shock	Shock proof tested in excess of 24 ft to hard surface
2.g.i.6	Vibrations	No internal vibration reduction mechanism
2.g.ii	Other environmental testing	Information not published by company
2.g.ii.1	Specify tests, pass/fail results, and ratings received	N/A
2.h	Safeguards	
2.h.i	Privacy safeguards or features	Tamper proof seal is located over removable SD card port. Regular audit of each body worn camera's seal should be part of agency policy.
2.h.i.1	Remote viewing	Connect with the GoPro App to control the camera remotely via an authorized law enforcement officer's phone, tablet or computer. Wireless control through the Smart Remote lets a law enforcement agency connect to and control multiple GoPro cameras from distances of up to 600' (182m).
2.h.i.2	Remote activation/deactivation	Yes
2.h.i.3	Privacy masking	The original recorded video file cannot be edited or redacted or altered in any way. However, a copy of the original file can utilize privacy masking.
2.h.i.4	Redacting/editing capabilities	The original recorded video file cannot be edited or

		redacted or altered in any way. However, a copy of the original file can be redacted.
2.h.ii	Safeguards for cyber security, unintentional disassembly, etc.	There are no known cyber security risks with the Wi-Fi turned off. The GoPro Hero4 Session is built in such a manner that unintentional disassembly is not applicable and is made to withstand drops in excess of 24 feet to hard surface.
2.i	Regulatory	
2.i.i	Regulatory and Compliance safety requirements	FCC approved, Declaration of Conformity available upon request
2.i.ii	Radiation safety standards	Information not published by company
2.j	Warranty and Maintenance Plans	
2.j.i	Length of warranty (in months)	24 month warranty and maintenance plan included at no additional cost if purchased from Intrinsic LLC as part of the Evidence on Cloud bundle.
2.j.ii	Optional extended warranties	Intrinsic offers a 4 year program with a 2 year warranty and free camera upgrades at the end of 24 months (thus a 48 month offering with upgraded cameras at the end of 24 months)
2.j.ii.1	Duration and cost of extended warranties	Additional 24 months at \$5.00 per month per device
2.j.iii	Availability of extended maintenance plans	Maintenance plan is included at no additional cost.
2.j.iii.1	Duration and cost of extended maintenance plans	Maintenance plan is included at no additional cost.
2.j.iv	Service contract costs	No additional service contract costs
2.k	Auxiliary Equipment	
2.k.i	Manufacturer suggested retail price (MSRP) for each auxiliary equipment	The GoPro Hero4 Silver uses a standard USB cable to charge the camera. Intrinsic currently offers the GO PUCK 6XR ultra lightweight charger as part of a comprehensive body worn camera solution. \$99.99 for GO PUCK 6XR.
2.l	MSRP without optional features, accessories, or service plans	\$399.99
2.m	Manufacturer's estimated lifetime of device	No information provided
2.n	Other relevant information	No information provided

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – Software for Video Data Storage and Management		
3.a	Data Management	
3.a.i	Searching capabilities	Yes, using Intrinsic's "Evidence On-Cloud System"
3.a.ii	Categorizing capabilities	Yes; ID, description, title, uploaded by, recorded date, uploaded date, evidence type
3.a.iii	Tagging capabilities	Yes, several features allow users to assign Case number, ID, title, tags, categories, case notes and comments.
3.a.iv	Archiving and file retention	Archiving and file retention capacity is as long as the agency requires storage of files according to their policy.
3.a.v	Data saved on or offsite	Intrinsic's Cloud Storage (all data is stored within the USA). Data can be saved onsite if

		desired.
3.a.v.1	If saved offsite, specific data accessibility and storage costs	Data is always secured in accordance with CJIS compliance and accessible through the Intrinsic Evidence on Cloud software. Unlimited storage is part of Intrinsic's total Evidence on Cloud storage package at \$69 per month per user.
3.a.v.2	Video data storage capacity local vs. cloud	Capacity is unlimited on the cloud. Local storage capacity is limited by the capacity and number of servers the respective agency decides to use.
3.a.v.3	Capability to accommodate multiple site installations	Yes
3.a.vi	Export capabilities	Yes; can be shared by an authorized user, via email to other authorized users with proper log- in credentials.
3.a.vi.1	Traceability feature that shows which user exported the data	Yes, a full forensic audit log from viewing to exporting is all traceable.
3.a.vii	Redacting/editing capabilities	Yes; the original recorded video file cannot be edited or redacted or altered in any way. However, a copy of the original file can utilize privacy masking.
3.a.vii.1	Specify whether changes are permanent	No, the original recorded video file will always remain intact.
3.a.viii	Support provided for chain-of-custody requirements	Yes, accessibility is determined by chain-of-custody policy of the respective agency and various levels of permissions can be granted in accordance with that policy. A comprehensive audit trail report exists for every piece of evidence uploaded using Intrinsic's Evidence on Cloud software.
3.a.ix	Scalability for different organization size	Yes, the software is scalable to different organizations of any size.
3.a.x	User management and role-based access levels	Yes
3.b	Video Analytics	
3.b.i	Companion software to analyze recorded video and audio data	Not at this time, but with the GoPro Hero4 Silver's 4k available video provides future facial recognition interfaces.
3.b.ii	Types of reports built into software	Evidence audit trail reports
3.b.ii.1	Standard reports	Not at this time. If a law enforcement organization requires specific reporting requirements, Intrinsic may be able to provide a custom solution.
3.b.ii.2	Daily reports, historical reports, etc.	Evidence audit trail reports available for any time frame.
3.b.ii.3	Audit reports that support chain-of-custody requirements	Yes, every time evidence is viewed, shared or handled electronically in any way, an entry in the audit report is documented in real time.
3.b.ii.4	Customization of reports	Available
3.b.iii	Facial recognition capabilities	Not at this time
3.b.iv	Weapons detection capabilities	Not at this time
3.b.v	Other analytical capabilities	N/A
3.c	Video Security and Authentication	
3.c.i	Compatibility of BWC video output with existing video management software for reviewing and recording	Industry standard MP4 format with h.264 encoding
3.c.ii	File integrity checks to ensure authenticity	Intrinsic's Evidence on Cloud software is CJIS compliant.

3.c.iii	Data protection mechanism while in transit and during storage	Yes
3.c.iv	Routine software updates	Yes
3.c.v	Cost of software updates	No additional costs for software updates

RFI Q.#	Survey Question (abbreviated)	Response
Usability/Training		
4.a	Usability validation processes	On-site user set-up and support by Intrensic's team
4.b	User community data	Intrensic's performs user satisfaction surveys quarterly and product feedback surveys annually. Data typically gathered may vary.
4.c	User-group meetings and frequency	None
4.d	Typical problems reported	Not available at this time
4.d.i	Resolution to problems	N/A
4.e	Hours of tech. support and location	At no additional cost, Intrensic provides comprehensive hardware and software support 24/7
4.f	Training provided (hours)	On-site and web-based training provided at no additional cost

RFI Q.#	Survey Question (abbreviated)	Response
Installation		
5.a	Average time to install and activate	All set-up is done off site to minimize deployment time. Installation time, depending on internal systems, can be completed in less than 30 minutes.

4.18 HauteSpot Networks HauteVIEW 100



Figure 18. HauteSpot HauteVIEW 100

RFI Q.#	Survey Question (abbreviated)	Response
Vendor Information		
0	Responded to FRN?	Yes
1.a	Name	HauteSpot Networks Corporation
1.b	Address/phone number	3485 Sacramento Drive, Suite C, San Luis Obispo, CA 93403 (800) 541-9477
1.c	Website	www.hautespot.net
1.d	Years in business	10 years
1.e	Number and types of customers	Municipal – 202 County – 97 State – 121 Federal – 57 Military – 21 International – 387 Commercial security – 675 Various fleet applications – 221
1.f	Manufacturing location(s)	Software, firmware, assembly, and testing in San Luis Obispo, CA

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – BWC		
2.a	General	
2.a.i	Name and model number	HauteVIEW 100
2.a.ii	Physical dims (H" x W" x D")	3.7" H x 2.4" W x 1.25" D
2.a.iii	Weight (oz.)	5.64 oz
2.a.iv	Mounting options	Window mount, bicycle handle mount, helmet mount, garment mounts, belt mounts

2.a.iv.1	Accessories needed for mounting	Garment mounting system
2.a.v	Ability to mount on vehicle dashboard	Yes
2.a.v.1	Accessories for vehicle dashboard mount	Single port camera dock (included when purchased)
2.a.vi	LCD display	2" TFT-LCD
2.a.vii	Recording capacity	32 GB or 64 GB
2.a.viii	Operating conditions or limitations	Operating temperature: -40°F to 140°F IP67 rated, waterproof to 1 Atmosphere MIL-STD-810 drop tested
2.b	Video and Optics	
2.b.i	Maximum video resolution	1296P
2.b.ii	Field of view	140°
2.b.iii	Lux rating	Color: 0.4 lux BW: 0.0 lux infrared operation
2.b.iv	Night mode/format	Yes; 850nm illumination with mechanical IR cut filter
2.b.v	Recording speed	30 fps
2.b.vi	Recording format	MP4
2.b.vii	Recording time under default resolution settings	10 hours
2.b.viii	Ability to capture still photos	Yes; 21 MP
2.b.ix	Ability to embed date/time stamp on recorded video	Yes
2.b.ix.1	Ability to authenticate and validate date/time stamp integrity	Yes; real time clock and GPS received date/time stamp, as well as activity log
2.b.x	Pre-event recording feature	Yes
2.b.x.1	Time buffered and whether audio is recorded	10 seconds
2.b.xi	Event marking capability	Yes
2.b.xii	Wireless capabilities for communication	No
2.c	Audio	
2.c.i	Microphone feature	Yes
2.c.ii	Microphone sensitivity	-(0dB=1v/Pa 1000Hz): -42~60dBV Range: 20~20000Hz
2.c.iii	Audio format	AAC2/MP3
2.c.iv	Default police radio interface for BWC	Yes; optional PTT cable available to utilize camera as LMR microphone replacement.
2.d	Data Upload	
2.d.i	Single device vs. multiple upload docking station	Yes; unit comes standard with single port dock. Optional 8 port docking station available (up to 3 docking stations can be daisy chained together with a single host server).
2.d.ii	Data transfer method	Wired, USB 2 connection on single port dock; USB 3 connection on 8 port docking station
2.d.iii	Manual vs. automatic upload	Manual with a single port dock; automatic utilizing 8 port dock
2.e	Battery Information	
2.e.i	Battery type; internal or removable	Lithium 2400 mAh internal battery
2.e.ii	Recording duration	10 hours
2.e.iii	Battery standby duration	12 hours
2.e.iv	Battery charge time	3 hours
2.e.v	Battery lifetime until replacement	380 charge cycles
2.e.vi	Battery replacement procedure	Factory return; covered under extended warranty program.

2.e.vii	Availability of supplemental charger for emergency battery charging	AC & DC charging methods included; unit can also be charged by any supplemental charging method using the included USB Mini-b 5 pin cable. A 120/240VAC to 5.5VDC power adapter is provided, as is a 12VDC to 5.5VDC automotive charger.
2.f	GPS	
2.f.i	BWC possess GPS	Yes
2.f.i.1	Embedded GPS coordinates in recorded video	Yes
2.f.ii	Alternative geolocation methods	No
2.g	Consumer Testing Results	
2.g.i	Sturdiness/fragility	Yes
2.g.i.1	Drop test results	MIL-STD-810 compliant
2.g.i.2	Dust intrusion/water resistance rating	IP67; waterproof
2.g.i.3	Ruggedized	Yes
2.g.i.4	Pressure/depth	1 atmosphere
2.g.i.5	Shock	MIL-STD-810 compliant
2.g.i.6	Vibrations	MIL-STD-810 compliant
2.g.ii	Other environmental testing	No
2.g.ii.1	Specify tests, pass/fail results, and ratings received	N/A
2.h	Safeguards	
2.h.i	Privacy safeguards or features	Password required to change settings, media files cannot be deleted using device.
2.h.i.1	Remote viewing	No
2.h.i.2	Remote activation/deactivation	No
2.h.i.3	Privacy masking	Not on camera, but available via Evidence Case Manager (ECM) software.
2.h.i.4	Redacting/editing capabilities	Not on camera, but available via Evidence Case Manager (ECM) software.
2.h.ii	Safeguards for cyber security, unintentional disassembly, etc.	System is not wireless, therefore jamming is not applicable. Case is sealed and gasketed, requiring micro tool screw driver to open. No removable memory. Storage is soldered onto PCB and cannot be removed. Operating system requires userid and password in order to log in.
2.i	Regulatory	
2.i.i	Regulatory and Compliance safety requirements	No
2.i.ii	Radiation safety standards	N/A
2.j	Warranty and Maintenance Plans	
2.j.i	Length of warranty (in months)	12 months
2.j.ii	Optional extended warranties	Yes
2.j.ii.1	Duration and cost of extended warranties	1 to 4 years, 5 to 20% of purchase price of specific model ordered
2.j.iii	Availability of extended maintenance plans	Yes
2.j.iii.1	Duration and cost of extended maintenance plans	2 to 5 years, \$249 to \$699
2.j.iv	Service contract costs	\$49 per incident
2.k	Auxiliary Equipment	
2.k.i	Manufacturer suggested retail price (MSRP) for each auxiliary	<ul style="list-style-type: none"> Optional wired 2nd imager PTT cable for LMR radios

	equipment	<ul style="list-style-type: none"> • Replacement docking station • Replacement automotive power cable • Complete docking and storage solution • Long term storage system <p>Mounting options: \$50-\$100 2nd Imager: \$50 PTT cable: \$25</p>
2.l	MSRP without optional features, accessories, or service plans	\$409 to \$499 depending on model
2.m	Manufacturer's estimated lifetime of device	5 to 7 years exclusive of battery
2.n	Other relevant information	Designed for use with Evidence Case Manager (ECM) transfer and storage system. When used with ECM, full chain of custody is automated and maintained with complete audit records, CRC hash, reliable transfer.

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – Software for Video Data Storage and Management		
3.a	Data Management – Evidence Case manager (ECM)	
3.a.i	Searching capabilities	Yes
3.a.ii	Categorizing capabilities	Yes
3.a.iii	Tagging capabilities	Yes
3.a.iv	Archiving and file retention	Yes
3.a.v	Data saved on or offsite	Both
3.a.v.1	If saved offsite, specific data accessibility and storage costs	Data access availability is 24 hours per day, storage cost varies depending on amount of data being stored/managed.
3.a.v.2	Video data storage capacity local vs. cloud	Unlimited on both
3.a.v.3	Capability to accommodate multiple site installations	Yes
3.a.vi	Export capabilities	Yes
3.a.vi.1	Traceability feature that shows which user exported the data	Yes; full logging of data access. CRC SHA256 hash is calculated and stored in database for later verification of files exported.
3.a.vii	Redacting/editing capabilities	Yes
3.a.vii.1	Specify whether changes are permanent	Source file remains intact as recorded, redacted/edited changes are permanent. Redacted files are CRC hashed for authenticity.
3.a.viii	Support provided for chain-of-custody requirements	Yes; system is CJIS compliant, when used with Evidence Case Manager.
3.a.ix	Scalability for different organization size	Yes
3.a.x	User management and role-based access levels	Yes
3.b	Video Analytics	
3.b.i	Companion software to analyze recorded video and audio data	Yes, Evidence Case Manager (ECM). Any 3 rd party software capable of reading AVI H.264 TS file format can work as well.
3.b.ii	Types of reports built into software	Various, customizable. Activity logging, access logging, transfer logs, download logs, error logs.

3.b.ii.1	Standard reports	Yes
3.b.ii.2	Daily reports, historical reports, etc.	Yes
3.b.ii.3	Audit reports that support chain-of-custody requirements	Yes
3.b.ii.4	Customization of reports	Yes
3.b.iii	Facial recognition capabilities	Yes; for redaction purposes. Optional analytics can be used on standard format files for people counting, facial recognition, color detection, object appear, object disappear, object dwell time, license plate recognition, automated character recognition, trip wire, zone alarm, masking.
3.b.iv	Weapons detection capabilities	No; not natively, but 3 rd party analytics can be used against standard file formats.
3.b.v	Other analytical capabilities	N/A
3.c	Video Security and Authentication	
3.c.i	Compatibility of BWC video output with existing video management software for reviewing and recording	Yes; video files are in open source formats. H.264 TS format.
3.c.ii	File integrity checks to ensure authenticity	Yes, CRC key
3.c.iii	Data protection mechanism while in transit and during storage	When files are transferred from cameras to Evidence Case Manager Dock USB 2.0 proprietary drivers are used to secure the connection. Once files are downloaded they are stored on a BitLocker encrypted file system using AES256 encryption. Connectivity between docks and storage are encrypted using a VPN tunnel at AES256 with public/private key exchange and certification provided by a private hosted certificate authority. Databases are encrypted using AES256. Users can choose to use their own encryption and VPN solution if they prefer.
3.c.iv	Routine software updates	Quarterly manual updates
3.c.v	Cost of software updates	Various depending on amount of data being managed

RFI Q.#	Survey Question (abbreviated)	Response
Usability/Training		
4.a	Usability validation processes	Various processes used such as focus groups, field testing & user surveys. HauteSpot CTO is active in ASIS as a member of the Advanced Technology Council. HauteSpot is also a member of IACP, APCO, PSIA and supports NATIA. HauteSpot has actively contributed whitepapers and presentations on designs to associations that HauteSpot is a member of. HauteSpot field tests all devices for several months prior to product release. HauteSpot engages in pilot programs with law enforcement in order to evaluate product performance.
4.b	User community data	Various data gathered, typically using various training platforms including online as well as "hands-on on-site" training sessions, user surveys and interviews. Data is collected typically within a week to a few weeks of

		deployment.
4.c	User-group meetings and frequency	HauteSpot has been actively involved in ASIS. HauteSPot has contributed to research being conducted by Don Zoufal and his peers working on body worn camera policy. HauteSpot has actively engaged with the cities of Boston, Philadelphia, Los Angeles, the Los Angeles Airport, and other agencies in defining policy.
4.d	Typical problems reported	Minor issues reported, typically related to equipment training not being utilized by end user.
4.d.i	Resolution to problems	Additional end user training options implemented.
4.e	Hours of tech. support and location	Various support options available. Support can be remotely provided (telephone or web) per incident/request or contract based. HauteSpot also offers on-site support options. Support costs vary due to type of support requested. Since HauteSpot products are sold through certified system integrators, local on site and first tier support is provided by these integrators.
4.f	Training provided (hours)	HauteSpot offers various training options, including web based, pre-recorded tutorials with PDF/power point materials as well as on-site training for all levels of users (End User, admin/2nd level user as well as IT level support of software installation for networking environments.)

RFI Q.#	Survey Question (abbreviated)	Response
Installation		
5.a	Average time to install and activate	Average installation time for a single BWC system and accompanying software typically takes approximately 1 hour. More extensive installations requiring docking stations and ECM software installation will vary based on the scale of the deployment.

4.19 HauteSpot Networks HauteVIEW 200



Figure 19. HauteSpot HauteVIEW 200

RFI Q.#	Survey Question (abbreviated)	Response
Vendor Information		
0	Responded to FRN?	Yes
1.a	Name	HauteSpot Networks Corporation
1.b	Address/phone number	3485 Sacramento Drive, Suite C, San Luis Obispo, CA 93403 (800) 541-9477
1.c	Website	www.hautespot.net
1.d	Years in business	10 years
1.e	Number and types of customers	Municipal – 202 County – 97 State – 121 Federal – 57 Military – 21 International – 387 Commercial security – 675 Various fleet applications – 221
1.f	Manufacturing location(s)	Software, firmware, assembly, and testing in San Luis Obispo, CA

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – BWC		
2.a	General	
2.a.i	Name and model number	HauteVIEW 200
2.a.ii	Physical dims (H" x W" x D")	Body: 4.0" H x 2.4" W x 1.13" D Imager: 1.75" H x 1.25" W x 1.13" D
2.a.iii	Weight (oz.)	Body: 6.8 oz Imager + Mic/Earbud: 2 oz

2.a.iv	Mounting options	Body: belt Imager: lapel, pocket
2.a.iv.1	Accessories needed for mounting	Garment mounting system
2.a.v	Ability to mount on vehicle dashboard	Yes
2.a.v.1	Accessories for vehicle dashboard mount	Dash mount
2.a.vi	LCD display	No, but can view live video via WiFi to laptop or smartphone
2.a.vii	Recording capacity	SDXC card up to 512 GB, but typically 64 GB
2.a.viii	Operating conditions or limitations	Operating temperature: -4°F to 140°F IP66 rated, water resistant to directed spray MIL-STD-810 drop tested
2.b	Video and Optics	
2.b.i	Maximum video resolution	1080 P
2.b.ii	Field of view	135°
2.b.iii	Lux rating	Color: 0.4 lux BW: 0.0 lux infrared operation
2.b.iv	Night mode/format	Yes; IR with 4 ea 950 nm LED illuminators with 30 ft range. Mechanical IR cut filter. Illuminators and cut filter remotely controllable.
2.b.v	Recording speed	30 fps
2.b.vi	Recording format	MP4
2.b.vii	Recording time under default resolution settings	24 hours
2.b.viii	Ability to capture still photos	Yes
2.b.ix	Ability to embed date/time stamp on recorded video	Yes
2.b.ix.1	Ability to authenticate and validate date/time stamp integrity	Yes
2.b.x	Pre-event recording feature	Yes
2.b.x.1	Time buffered and whether audio is recorded	Buffering can be any length of time.
2.b.xi	Event marking capability	Yes
2.b.xii	Wireless capabilities for communication	Yes; communicates via 3G/4G cellular or WiFi (802.11a/b/g/n). Live video transmitted continuously. Remote viewers can record video or still shots in addition to the video recorded on the camera itself. Cameras operate in AP, station or mesh node (repeater) mode so that they can either be tethered via WiFi to a vehicle, smart phone, WiFi access point, or another camera for relay to cellular network. Currently supports LTE and GSM/UMTS/HSPA providers. Development in is progress for CDMA carriers such as Verizon.
2.c	Audio	
2.c.i	Microphone feature	Yes
2.c.ii	Microphone sensitivity	-(0dB=1v/Pa 1000Hz): -42~60dBV Range: 20~20000Hz
2.c.iii	Audio format	G711/PCM Voice Over IP with SIP routing inbound
2.c.iv	Default police radio interface for BWC	Separate intercom/monitor capabilities
2.d	Data Upload	
2.d.i	Single device vs. multiple upload docking station	Wireless upload eliminates need for docking stations. WiFi base stations will be needed if precinct/station

		does not already have a network.
2.d.ii	Data transfer method	Wireless transfer via either 802.11 WiFi or 3G/4G cellular or removable TF/microSD cards
2.d.iii	Manual vs. automatic upload	Both; Automatic - when camera detects its home WiFi network, it will automatically off-load video. Manual – when dispatch/supervisor wants video immediately, they can download via either WiFi or 3G/4G cellular, whichever is providing the strongest connection at the time.
2.e	Battery Information	
2.e.i	Battery type; internal or removable	Internal/non-removable battery: 7.4V, 3000mAh External, optional battery pack: 5100mAh
2.e.ii	Recording duration	Internal Battery: 6-8 hours With external battery: 24 hours
2.e.iii	Battery standby duration	Internal Battery: 6-8 hours With external battery: 24 hours
2.e.iv	Battery charge time	3 hours
2.e.v	Battery lifetime until replacement	400 charge cycles
2.e.vi	Battery replacement procedure	Factory replacement needed
2.e.vii	Availability of supplemental charger for emergency battery charging	External battery pack is standard USB device, readily available
2.f	GPS	
2.f.i	BWC possess GPS	Yes
2.f.i.1	Embedded GPS coordinates in recorded video	Yes
2.f.ii	Alternative geolocation methods	No; but future models will include Bluetooth and 802.15.4 connectivity.
2.g	Consumer Testing Results	
2.g.i	Sturdiness/fragility	Yes
2.g.i.1	Drop test results	MIL-STD-810 compliant
2.g.i.2	Dust intrusion/water resistance rating	IP66 (water projected in powerful jets)
2.g.i.3	Ruggedized	MIL-STD-810 compliant
2.g.i.4	Pressure/depth	1 atmosphere
2.g.i.5	Shock	MIL-STD-810 compliant
2.g.i.6	Vibrations	MIL-STD-810 compliant
2.g.ii	Other environmental testing	N/A
2.g.ii.1	Specify tests, pass/fail results, and ratings received	N/A
2.h	Safeguards	
2.h.i	Privacy safeguards or features	Yes
2.h.i.1	Remote viewing	Yes; live video feed via central management system (CMS) software, which can be integrated into various computer-aided dispatch systems (such as Hexagon-Intergraph's I-CAD). Fully programmable and can be secured with password and permissions.
2.h.i.2	Remote activation/deactivation	Yes; via CMS software interface
2.h.i.3	Privacy masking	Not on camera, but available via Evidence Case Manager (ECM) software.
2.h.i.4	Redacting/editing capabilities	Not on camera, but available via Evidence Case Manager (ECM) software.
2.h.ii	Safeguards for cyber security, unintentional disassembly, etc.	Yes; files are written to SD Card using DMCCrypt with AES 256 encryption. Private keys and operating system

		are stored on non-volatile NAND flash. Communications between the HauteVIEW200 and the central management system server are secured using an AES256 encrypted VPN tunnel. Private keys and certificates are stored on a certificate authority that is a component of the central management system. Jamming of OFDM signals is somewhat difficult due to their frequency hopping wireless protocol. Further the cameras can use MIMO that expands the channel of operation. WiFi communications are encrypted as well using WPA2 AES encryption over which the VPN tunnel operates.
2.i	Regulatory	
2.i.i	Regulatory and Compliance safety requirements	FCC approval pending for parts 22-24, 27 and 15.
2.i.ii	Radiation safety standards	FCC approval pending for parts 22-24, 27 and 15.
2.j	Warranty and Maintenance Plans	
2.j.i	Length of warranty (in months)	12 months
2.j.ii	Optional extended warranties	Yes
2.j.ii.1	Duration and cost of extended warranties	36 Months - \$699: Covers product replacement for the first 3 years after initial purchase for all claims including Accidental Damage from Handling ("ADH") events, with a total of 3 ADH events per device per agreement. As needed battery replacement included. Does not cover complete loss, abuse, misuse, or theft. Requires return of original unit with original marking/serial number. Does not cover advanced replacement. Most cameras replaced within 1 week. For advanced replacement, additional fees apply. A per ADH event handling fee of \$199 applies.
2.j.iii	Availability of extended maintenance plans	Yes
2.j.iii.1	Duration and cost of extended maintenance plans	Yes
2.j.iv	Service contract costs	HauteSpot Network sells its products through qualified system integrators. These partners typically deliver first tier and local support under their own terms.
2.k	Auxiliary Equipment	
2.k.i	Manufacturer suggested retail price (MSRP) for each auxiliary equipment	<ul style="list-style-type: none"> • 64 GB SD card • Replacement ethernet cable • Replacement imager • Replacement battery with factory installation • Replacement power supply • Automotive charging cable • Dash mount • Various garment mounting options • External 5000mAh battery <p>Prices not yet determined</p>
2.l	MSRP without optional features, accessories, or service plans	\$999
2.m	Manufacturer's estimated lifetime of device	5 years exclusive of battery
2.n	Other relevant information	Live streaming video can be seen by

		dispatch/supervisors on desktop computer screens. Also, video can be shared with officers in the field for viewing on their Android, iOS or in-car devices.
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RFI Q.#	Survey Question (abbreviated)	Response
Product Information – Software for Video Data Storage and Management		
3.a	Data Management – Evidence Case Manager (ECM)	
3.a.i	Searching capabilities	Yes
3.a.ii	Categorizing capabilities	Yes
3.a.iii	Tagging capabilities	Yes
3.a.iv	Archiving and file retention	Yes
3.a.v	Data saved on or offsite	Both
3.a.v.1	If saved offsite, specific data accessibility and storage costs	Data access availability is 24 hours per day, storage cost varies depending on amount of data being stored/managed.
3.a.v.2	Video data storage capacity local vs. cloud	Unlimited on both
3.a.v.3	Capability to accommodate multiple site installations	Yes
3.a.vi	Export capabilities	Yes
3.a.vi.1	Traceability feature that shows which user exported the data	Yes; full logging of data access. CRC SHA256 hash is calculated and stored in database for later verification of files exported.
3.a.vii	Redacting/editing capabilities	Yes
3.a.vii.1	Specify whether changes are permanent	Source file remains intact as recorded, redacted/edited changes are permanent. Redacted files are CRC hashed for authenticity.
3.a.viii	Support provided for chain-of-custody requirements	Yes; system is CJIS compliant, when used with Evidence Case Manager.
3.a.ix	Scalability for different organization size	Yes
3.a.x	User management and role-based access levels	Yes
3.b	Video Analytics	
3.b.i	Companion software to analyze recorded video and audio data	Yes, Evidence Case Manager (ECM). Any 3 rd party software capable of reading AVI H.264 TS file format can work as well.
3.b.ii	Types of reports built into software	Various, customizable. Activity logging, access logging, transfer logs, download logs, error logs, geotracking.
3.b.ii.1	Standard reports	Yes
3.b.ii.2	Daily reports, historical reports, etc.	Yes
3.b.ii.3	Audit reports that support chain-of-custody requirements	Yes
3.b.ii.4	Customization of reports	Yes
3.b.iii	Facial recognition capabilities	Yes; for redaction purposes. Optional analytics can be used on standard format files for people counting, facial recognition, color detection, object appear, object disappear, object dwell time, license plate recognition, automated character recognition, trip wire, zone alarm, masking.
3.b.iv	Weapons detection capabilities	No; not natively, but 3 rd party analytics can be used

		against standard file formats.
3.b.v	Other analytical capabilities	N/A
3.c	Video Security and Authentication	
3.c.i	Compatibility of BWC video output with existing video management software for reviewing and recording	Yes; video files are in open source formats. H.264 TS format.
3.c.ii	File integrity checks to ensure authenticity	Yes, CRC key
3.c.iii	Data protection mechanism while in transit and during storage	When files are transferred from cameras to Evidence Case Manager Dock USB 2.0 proprietary drivers are used to secure the connection. Once files are downloaded they are stored on a BitLocker encrypted file system using AES256 encryption. Connectivity between docks and storage are encrypted using a VPN tunnel at AES256 with public/private key exchange and certification provided by a private hosted certificate authority. Databases are encrypted using AES256. Users can choose to use their own encryption and VPN solution if they prefer.
3.c.iv	Routine software updates	Quarterly manual updates
3.c.v	Cost of software updates	Various depending on amount of data being managed

RFI Q.#	Survey Question (abbreviated)	Response
Usability/Training		
4.a	Usability validation processes	Various processes used such as focus groups, field testing & user surveys. HauteSpot CTO is active in ASIS as a member of the Advanced Technology Council. HauteSpot is also a member of IACP, APCO, PSIA and supports NATIA. HauteSpot has actively contributed whitepapers and presentations on designs to associations HauteSpot is a member of. HauteSpot field test all of devices for several months prior to product release. HauteSpot engages in pilot programs with law enforcement in order to evaluate product performance.
4.b	User community data	Various data gathered, typically using various training platforms including online as well as “hands-on on-site” training sessions, user surveys and interviews. Data is collected typically within a week to a few weeks of deployment.
4.c	User-group meetings and frequency	HauteSpot has been actively involved in ASIS. HauteSpot has contributed to research being conducted by Don Zoufal and his peers working on body worn camera policy. HauteSpot has actively engaged with the cities of Boston, Philadelphia, Los Angeles, the Los Angeles Airport, and other agencies in defining policy.
4.d	Typical problems reported	Minor issues reported, typically related to equipment training not being utilized by end user.
4.d.i	Resolution to problems	Additional end user training options implemented.
4.e	Hours of tech. support and location	Various support options available. Support can be

		remotely provided (telephone or web) per incident/request or contract based. HauteSpot also offers on-site support options. Support costs vary due to type of support requested. Since products are sold through certified system integrators, local on site and first tier support is provided by these integrators.
4.f	Training provided (hours)	HauteSpot offers various training options, including web based, pre-recorded tutorials with PDF/power point materials as well as on-site training for all levels of users (end user, admin/2nd level user as well as IT level support of software installation for networking environments.)

RFI Q.#	Survey Question (abbreviated)	Response
Installation		
5.a	Average time to install and activate	Average installation time for a single BWC system and accompanying software typically takes approximately 1 hour. More extensive installations requiring docking stations and ECM software installation will vary based on the scale of the deployment.

4.20 HD Protech CITE M1G2



Figure 20. HD Protech CITE M1G2

RFI Q.#	Survey Question (abbreviated)	Response
Vendor Information		
0	Responded to FRN?	No
1.a	Name	HD Protech
1.b	Address/phone number	6100 Corporate Dr, Suite 234, Houston, TX 77036 (713) 590-4539
1.c	Website	www.hdprotech.com
1.d	Years in business	30+ years
1.e	Number and types of customers	Information not found on website
1.f	Manufacturing location(s)	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – BWC		
2.a	General	
2.a.i	Name and model number	CITE M1G2
2.a.ii	Physical dims (H" x W" x D")	4.1" H x 2.4" W x 1.1" D
2.a.iii	Weight (oz.)	6.4 oz
2.a.iv	Mounting options	Shoulder, belt
2.a.iv.1	Accessories needed for mounting	ABS clip mounts
2.a.v	Ability to mount on vehicle dashboard	Information not found on website
2.a.v.1	Accessories for vehicle dashboard mount	Information not found on website
2.a.vi	LCD display	2" LCD
2.a.vii	Recording capacity	32 GB, larger capacity available
2.a.viii	Operating conditions or limitations	Operating temperature: 14°F to 122°F Storage temperature: -4°F to 140°F Working humidity: 10-80%
2.b	Video and Optics	

2.b.i	Maximum video resolution	1080P
2.b.ii	Field of view	130°
2.b.iii	Lux rating	< 0.1
2.b.iv	Night mode/format	Yes; automatic switch day and night according to light change
2.b.v	Recording speed	30 fps
2.b.vi	Recording format	H.264
2.b.vii	Recording time under default resolution settings	4 hours
2.b.viii	Ability to capture still photos	Yes; 16 MP
2.b.ix	Ability to embed date/time stamp on recorded video	Information not found on website
2.b.ix.1	Ability to authenticate and validate date/time stamp integrity	Information not found on website
2.b.x	Pre-event recording feature	Information not found on website
2.b.x.1	Time buffered and whether audio is recorded	Information not found on website
2.b.xi	Event marking capability	Information not found on website
2.b.xii	Wireless capabilities for communication	Information not found on website
2.c	Audio	
2.c.i	Microphone feature	Yes
2.c.ii	Microphone sensitivity	High sensitivity microphone
2.c.iii	Audio format	WAV
2.c.iv	Default police radio interface for BWC	Compatible with market intercom
2.d	Data Upload	
2.d.i	Single device vs. multiple upload docking station	Docking station available
2.d.ii	Data transfer method	USB 2.0
2.d.iii	Manual vs. automatic upload	Information not found on website
2.e	Battery Information	
2.e.i	Battery type; internal or removable	Polymer Lithium 2500mAh battery
2.e.ii	Recording duration	Information not found on website
2.e.iii	Battery standby duration	24 hours
2.e.iv	Battery charge time	4 hours
2.e.v	Battery lifetime until replacement	Information not found on website
2.e.vi	Battery replacement procedure	Information not found on website
2.e.vii	Availability of supplemental charger for emergency battery charging	Information not found on website
2.f	GPS	
2.f.i	BWC possess GPS	Yes
2.f.i.1	Embedded GPS coordinates in recorded video	Information not found on website
2.f.ii	Alternative geolocation methods	Information not found on website
2.g	Consumer Testing Results	
2.g.i	Sturdiness/fragility	ABS
2.g.i.1	Drop test results	2 meter drop resistance
2.g.i.2	Dust intrusion/water resistance rating	IP66; dust proof and waterproof
2.g.i.3	Ruggedized	Information not found on website
2.g.i.4	Pressure/depth	Information not found on website
2.g.i.5	Shock	Shock proof

2.g.i.6	Vibrations	Information not found on website
2.g.ii	Other environmental testing	Information not found on website
2.g.ii.1	Specify tests, pass/fail results, and ratings received	Information not found on website
2.h	Safeguards	
2.h.i	Privacy safeguards or features	Information not found on website
2.h.i.1	Remote viewing	Information not found on website
2.h.i.2	Remote activation/deactivation	Yes; remote control included
2.h.i.3	Privacy masking	Information not found on website
2.h.i.4	Redacting/editing capabilities	Information not found on website
2.h.ii	Safeguards for cyber security, unintentional disassembly, etc.	Information not found on website
2.i	Regulatory	
2.i.i	Regulatory and Compliance safety requirements	Information not found on website
2.i.ii	Radiation safety standards	Information not found on website
2.j	Warranty and Maintenance Plans	
2.j.i	Length of warranty (in months)	Information not found on website
2.j.ii	Optional extended warranties	Information not found on website
2.j.ii.1	Duration and cost of extended warranties	Information not found on website
2.j.iii	Availability of extended maintenance plans	Information not found on website
2.j.iii.1	Duration and cost of extended maintenance plans	Information not found on website
2.j.iv	Service contract costs	Information not found on website
2.k	Auxiliary Equipment	
2.k.i	Manufacturer suggested retail price (MSRP) for each auxiliary equipment	Information not found on website
2.l	MSRP without optional features, accessories, or service plans	Information not found on website
2.m	Manufacturer's estimated lifetime of device	Information not found on website
2.n	Other relevant information	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – Software for Video Data Storage and Management		
3.a	Data Management	
3.a.i	Searching capabilities	Yes
3.a.ii	Categorizing capabilities	Yes
3.a.iii	Tagging capabilities	Yes
3.a.iv	Archiving and file retention	Yes
3.a.v	Data saved on or offsite	Information not found on website
3.a.v.1	If saved offsite, specific data accessibility and storage costs	Information not found on website
3.a.v.2	Video data storage capacity local vs. cloud	Information not found on website
3.a.v.3	Capability to accommodate multiple site installations	Information not found on website
3.a.vi	Export capabilities	Yes; Can burn to DVD

3.a.vi.1	Traceability feature that shows which user exported the data	Yes
3.a.vii	Redacting/editing capabilities	Information not found on website
3.a.vii.1	Specify whether changes are permanent	Information not found on website
3.a.viii	Support provided for chain-of-custody requirements	Yes; see who accesses what/which information base on date/time, machine ID, access ID, etc. Every access and change is logged.
3.a.ix	Scalability for different organization size	Information not found on website
3.a.x	User management and role-based access levels	Yes; account privilege restrictions
3.b	Video Analytics	
3.b.i	Companion software to analyze recorded video and audio data	C3 Sentinel BWC Management System
3.b.ii	Types of reports built into software	See below
3.b.ii.1	Standard reports	Yes
3.b.ii.2	Daily reports, historical reports, etc.	Information not found on website
3.b.ii.3	Audit reports that support chain-of-custody requirements	Yes
3.b.ii.4	Customization of reports	Information not found on website
3.b.iii	Facial recognition capabilities	Information not found on website
3.b.iv	Weapons detection capabilities	Information not found on website
3.b.v	Other analytical capabilities	Information not found on website
3.c	Video Security and Authentication	
3.c.i	Compatibility of BWC video output with existing video management software for reviewing and recording	Information not found on website
3.c.ii	File integrity checks to ensure authenticity	Information not found on website
3.c.iii	Data protection mechanism while in transit and during storage	Information not found on website
3.c.iv	Routine software updates	Information not found on website
3.c.v	Cost of software updates	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Usability/Training		
4.a	Usability validation processes	Information not found on website
4.b	User community data	Information not found on website
4.c	User-group meetings and frequency	Information not found on website
4.d	Typical problems reported	Information not found on website
4.d.i	Resolution to problems	Information not found on website
4.e	Hours of tech. support and location	Information not found on website
4.f	Training provided (hours)	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Installation		
5.a	Average time to install and activate	Information not found on website

4.21 Kustom Signals Eyewitness Vantage



Figure 21. Kustom Signals Eyewitness Vantage

RFI Q.#	Survey Question (abbreviated)	Response
Vendor Information		
0	Responded to FRN?	Yes
1.a	Name	Kustom Signals, Inc.
1.b	Address/phone number	9652 Loiret Blvd, Lenexa, KS 66219 (800) 458-7866
1.c	Website	www.kustomsignals.com
1.d	Years in business	51 years
1.e	Number and types of customers	17,000+ (law enforcement industry, including municipalities, counties and state agencies)
1.f	Manufacturing location(s)	Chanute, KS

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – BWC		
2.a	General	
2.a.i	Name and model number	Eyewitness Vantage
2.a.ii	Physical dims (H" x W" x D")	3.25" H x 2.25" W x 1" D
2.a.iii	Weight (oz.)	3.7 oz
2.a.iv	Mounting options	The camera ships with a spring clip designed to withstand law enforcement work environments. The clip rotates 360 degrees allowing for flexible uniform mounting locations. An optional magnetic mount is available that allows the camera to be mounted anywhere on the uniform shirt. In addition, a Klickfast mount is also under development.
2.a.iv.1	Accessories needed for mounting	Optional magnetic and Klickfast mounts are sold separately.

2.a.v	Ability to mount on vehicle dashboard	Yes
2.a.v.1	Accessories for vehicle dashboard mount	Vehicle mount. An optional 12 volt DC power kit is also recommended, but not required for in-vehicle use.
2.a.vi	LCD display	No; the design is focused on simplicity to minimize the number of buttons, making it easier for officers to learn and use. If interfaced with Kustom Signals' Eyewitness HD in-car video system, files can be transferred to the in-car video system and reviewed on the monitor in the vehicle.
2.a.vii	Recording capacity	32 GB up to optional 64 GB
2.a.viii	Operating conditions or limitations	Operating temperature: -4°F to 122°F Storage temperature: -22°F to 167°F The Vantage complies with the IP64 standard for dust and water (it is dust tight and can withstand water splashing from any angle). Additionally, the body camera has been designed to comply with MIL STD 810G for vibration and shock/impact, and with ASTM B117 for resistance to salt corrosion and with the Qualmark guidelines for HALT testing.
2.b	Video and Optics	
2.b.i	Maximum video resolution	1080P
2.b.ii	Field of view	120°
2.b.iii	Lux rating	1 lux minimum
2.b.iv	Night mode/format	Yes; available day/night mode for low light performance. There are IR LEDs for capturing video in total darkness (also agency configurable).
2.b.v	Recording speed	60 fps
2.b.vi	Recording format	MP4
2.b.vii	Recording time under default resolution settings	7 hours
2.b.viii	Ability to capture still photos	Not on camera; can be done using file management software
2.b.ix	Ability to embed date/time stamp on recorded video	Yes
2.b.ix.1	Ability to authenticate and validate date/time stamp integrity	Yes
2.b.x	Pre-event recording feature	Yes
2.b.x.1	Time buffered and whether audio is recorded	Up to 30 seconds; sound can be turned on or off
2.b.xi	Event marking capability	Yes
2.b.xii	Wireless capabilities for communication	Yes; WiFi
2.c	Audio	
2.c.i	Microphone feature	Yes
2.c.ii	Microphone sensitivity	-45dB +/- 3dB
2.c.iii	Audio format	AAC
2.c.iv	Default police radio interface for BWC	No
2.d	Data Upload	
2.d.i	Single device vs. multiple upload docking station	Single unit docking/charging station.
2.d.ii	Data transfer method	If transferring directly from the Vantage camera to the

		EDV server, transfers occur automatically by placing the camera in a docking station or multi-dock. If paired with a Kustom Signals Eyewitness HD in-car video system, the Vantage will transfer files into the Eyewitness HD DVR wirelessly or by docking the Vantage into an in-car docking station. Once the cruiser returns to the station, in-car camera and body worn camera files can both be wirelessly transferred to the EDV server for storage and management.
2.d.iii	Manual vs. automatic upload	Both
2.e	Battery Information	
2.e.i	Battery type; internal or removable	Lithium ion polymer rechargeable battery
2.e.ii	Recording duration	4.5 hours 9 hours (extended battery)
2.e.iii	Battery standby duration	48 hours 96 hours (extended battery)
2.e.iv	Battery charge time	3.5 hours 4.5 hours (extended battery)
2.e.v	Battery lifetime until replacement	24 months depending on usage
2.e.vi	Battery replacement procedure	To maintain the camera's IP rating and warranty, Vantage batteries must be handled by Kustom Signals' Technicians at the Factory Service Center in Chanute, Kansas. Optional extended warranty coverage covers the cost of battery replacement.
2.e.vii	Availability of supplemental charger for emergency battery charging	A car charging kit is available for charging the camera during a shift when not in use. Officers patrolling without a vehicle also have the option to use the camera in standby/sleep mode. This mode offers up to 48 hours of operation for the standard battery and up to 96 hours with the extended battery option.
2.f	GPS	
2.f.i	BWC possess GPS	Yes
2.f.i.1	Embedded GPS coordinates in recorded video	Yes
2.f.ii	Alternative geolocation methods	No
2.g	Consumer Testing Results	
2.g.i	Sturdiness/fragility	Yes
2.g.i.1	Drop test results	6 ft on concrete
2.g.i.2	Dust intrusion/water resistance rating	IP64; Protection from dust and water
2.g.i.3	Ruggedized	Qualmark guidelines for HALT testing
2.g.i.4	Pressure/depth	Not submergible
2.g.i.5	Shock	MIL-STD-810G
2.g.i.6	Vibrations	MIL-STD-810G
2.g.ii	Other environmental testing	Yes
2.g.ii.1	Specify tests, pass/fail results, and ratings received	Complies with ASTM B117 for resistance to salt and corrosion.
2.h	Safeguards	
2.h.i	Privacy safeguards or features	Yes
2.h.i.1	Remote viewing	No
2.h.i.2	Remote activation/deactivation	If the Vantage body camera is interfaced with Kustom Signals' Eyewitness HD in-car video system, the Vantage will be triggered to record by the Eyewitness

		HD system whenever it starts recording. This can be from a lightbar or siren activation, from a GPS speed threshold activation, from a crash detection activation or even just the officer pressing the Eyewitness HD's record button. Likewise, if the Vantage camera starts to record first, it will trigger the Eyewitness HD system to record.
2.h.i.3	Privacy masking	Not on camera, but available on management software.
2.h.i.4	Redacting/editing capabilities	Not on camera, but available on management software.
2.h.ii	Safeguards for cyber security, unintentional disassembly, etc.	Vantage uses WPA2 AES encryption for Wi-Fi connection. Its fasteners are recessed and covered by rubber seals, making unintentional disassembly difficult. It's wireless (Wi-Fi and Bluetooth) features are not critical to core functionality, and therefore, impact of intentional jamming or exposure to RF noise is very low. Vantage has a rugged design and is resistant to damage.
2.i	Regulatory	
2.i.i	Regulatory and Compliance safety requirements	Complies with FCC and DOC requirements.
2.i.ii	Radiation safety standards	N/A
2.j	Warranty and Maintenance Plans	
2.j.i	Length of warranty (in months)	12 months
2.j.ii	Optional extended warranties	Yes
2.j.ii.1	Duration and cost of extended warranties	<ul style="list-style-type: none"> Year 2 = \$200 per unit Year 3 = \$250 per unit Year 4 = \$300 per unit
2.j.iii	Availability of extended maintenance plans	No
2.j.iii.1	Duration and cost of extended maintenance plans	N/A
2.j.iv	Service contract costs	Pricing determined with manufacturer after a discussion about expectations
2.k	Auxiliary Equipment	
2.k.i	Manufacturer suggested retail price (MSRP) for each auxiliary equipment	<ul style="list-style-type: none"> Extended battery option \$99 Magnetic mount option \$75 6 port multi dock \$1280 In car charging kit \$99 In car wireless file transfer kit \$500
2.l	MSRP without optional features, accessories, or service plans	<ul style="list-style-type: none"> Vantage BWC with standard battery \$858 Vantage BWC with extended battery \$957 Eyewitness Data Vault (EDV) primary software license \$5310 Eyewitness data vault (EDV) remote download site software license \$1180 EDV Lite (customer-installable) file management \$495 Professional services daily rate \$2623
2.m	Manufacturer's estimated lifetime of device	4 years
2.n	Other relevant information	Vantage is a one-piece body worn camera that provides one-handed, glove friendly start and stop record functionality. The large start/stop slider is centrally located and is spring loaded to provide tactile feedback

		<p>so the officer has confidence that the camera is in or out of record mode.</p> <p>Notification LED's provide status of battery capacity, internal media capacity, file transfers, low media, record, audio mute, and GPS reception. These LED's can be blacked out for officer safety.</p>
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RFI Q.#	Survey Question (abbreviated)	Response
Product Information – Software for Video Data Storage and Management		
3.a	Data Management – Eyewitness Data Vault	
3.a.i	Searching capabilities	Yes
3.a.ii	Categorizing capabilities	Yes
3.a.iii	Tagging capabilities	Yes
3.a.iv	Archiving and file retention	View, store, and organize the video/audio files generated. Multiple file retention times.
3.a.v	Data saved on or offsite	Both
3.a.v.1	If saved offsite, specific data accessibility and storage costs	Kustom Signals expects to offer a cloud storage option in late 2016. Whether stored locally or on the cloud, data is accessible to authorized users only, via a user name and password. User rights and roles and user groups may be established to permit and/or limit access to features and files to any user. Cloud storage costs will be determined once that service is available.
3.a.v.2	Video data storage capacity local vs. cloud	For most agencies, local capacity can be as easily established as capacity on the cloud. Cloud storage allows agencies to forgo the up-front cost of the storage and no personnel are needed to maintain any hardware. An agency also only pays for the storage needed, but recurring (usually) monthly payments for the storage are involved. Local storage requires storage to be purchased up front, but it then avoids recurring payments to a cloud provider. There are pros and cons to both options, but over time, cloud storage will often exceed the cost of local storage.
3.a.v.3	Capability to accommodate multiple site installations	Yes
3.a.vi	Export capabilities	Yes
3.a.vi.1	Traceability feature that shows which user exported the data	Yes; the chain-of-custody and evidence integrity is maintained by assigning usernames, passwords, and access levels to authorized users. This not only restricts who has access to the database, but also creates an audit trail to track who accessed each file and what, if anything, they did with the file. The audit reports will show everything that happened to an individual file, including who viewed it, added any comments or classifications, and any exporting.
3.a.vii	Redacting/editing capabilities	Yes; EDV offers limited redaction capabilities, and files can be exported for redaction using a preferred 3rd party program. The original file is never altered for redaction or editing. The player module generates a duplicate original that is played and if desired,

		redacted, clipped or transcoded without impacting the original.
3.a.vii.1	Specify whether changes are permanent	No; original file is never altered for redaction or editing.
3.a.viii	Support provided for chain-of-custody requirements	Yes; please refer to section 3.a.vi.1. above. Additionally, EDV monitors everything that happens to each file and every action that each user performs. The system administrator can generate an audit report at any time to show the complete history of a given file, including when it was ingested, each time it was played, any changes to its status (retention), and comments or bookmarks added, and any copies of the file burned or exported. This report includes which user performed these actions on the file. Another audit report allows an administrator to select a time frame for a particular user, and show everything that user did while logged on to the software.
3.a.ix	Scalability for different organization size	Yes
3.a.x	User management and role-based access levels	Yes
3.b	Video Analytics	
3.b.i	Companion software to analyze recorded video and audio data	No; video analytics are incorporated into the EDV software. Duplicate original files can easily be exported for processing/analysis by a preferred video analytics program.
3.b.ii	Types of reports built into software	See below
3.b.ii.1	Standard reports	Yes
3.b.ii.2	Daily reports, historical reports, etc.	Yes
3.b.ii.3	Audit reports that support chain-of-custody requirements	Yes
3.b.ii.4	Customization of reports	Yes
3.b.iii	Facial recognition capabilities	No
3.b.iv	Weapons detection capabilities	No
3.b.v	Other analytical capabilities	No information provided
3.c	Video Security and Authentication	
3.c.i	Compatibility of BWC video output with existing video management software for reviewing and recording	Vantage records to h.264 files with embedded time stamps and GPS coordinates. An extensive metadata file accompanies each video file. All this information is easily read by the EDV software and parsed into searchable fields for the user. EDV provides this information to allow the user to find and then play a copy of the desired file.
3.c.ii	File integrity checks to ensure authenticity	Yes; Vantage generates an MD5 hash values on the files before anything is transferred from the cameras to the database. These original MD5 calculations become part of the file's permanent record. After the files are transferred to EDV, another MD5 is performed and compared to the original. If they match, the file is ingested and the file on the camera is purged. Once in the database, an MD5 can be calculated at any time and compared against the original to validate that it is a duplicate copy of the file recorded by the camera.
3.c.iii	Data protection mechanism while in	No; EDV does not currently support data encryption.

	transit and during storage	Files are encrypted during wireless transfer, but not once they are ingested into the database. The cloud solution planned for late 2016 includes options for data encryption. In addition, please refer above in regards to the MD5 calculations performed on recorded video files.
3.c.iv	Routine software updates	New versions available every 12 to 18 months via remote session.
3.c.v	Cost of software updates	Software updates are free for life of the product.

RFI Q.#	Survey Question (abbreviated)	Response
Usability/Training		
4.a	Usability validation processes	Kustom Signals has been serving law enforcement for over 50 years. Kustom Signals has a reputation of listening to customers. The market research methods include focus groups, surveys, personal interviews, and monitoring and understanding the latest technology. Kustom Signals employ specialists in design to help ensure the product performs as intended. Prior to launching, products are field tested by officers to uncover any issues that are not found in more controlled testing. Finally, Kustom Signals conduct HALT testing to identify and weaknesses in the design that would impact its ability to operate over time.
4.b	User community data	Kustom Signals uses a direct sales force that is speaking to law enforcement every day. Kustom Signals gather massive amounts of information from these never-ending interviews/conversations. Sales and technical staff conducts most of the training for equipment and through observation and the discussions that occur, more information is generated. The marketing and service organizations conduct periodic surveys to solicit input on features and on how the organization is performing as a whole.
4.c	User-group meetings and frequency	Kustom Signals participated in the IACP/DOJ Committee to create Minimum Performance Specifications for In-Car Video. Kustom Signals is a long-standing member of the IACP's ETATS committee.
4.d	Typical problems reported	Vantage is a new product; this information is not available.
4.d.i	Resolution to problems	Vantage is a new product; this information is not available.
4.e	Hours of tech. support and location	<p>Kustom Signals' Factory Service Center repairs every product manufactured by Kustom Signals and does not "outsource" customer service and maintenance; all service is provided by Kustom Signals employees.</p> <p>After initial implementation is complete, product support (in warranty as well as out of warranty) is structured so the Agency will receive the necessary assistance through a three-tiered service process:</p> <ul style="list-style-type: none"> • Tier One issues are handled by TSS staff at the

		<p>factory. Through telephone and Internet support, most issues are resolved the same day of the customer's call. TSS is accessible at the factory through toll-free telephone number, (800) 835-0156, between 7:00 a.m. and 6:00 p.m. Central Time, Monday through Friday. Or, feel free to contact a Video Support Specialists at: videotss@kustomsignals.com.</p> <ul style="list-style-type: none"> • Tier Two handles those situations that the TSS team is unable to quickly resolve. These issues are upgraded to the Field Application Engineers (FAE) or Field Service Technicians (FST) and as applicable Kustom Signals may decide to respond on-site to address the issue. • Tier Three issues are situations that cannot be resolved by the FAE/FST. These issues are escalated to Kustom Signals' Engineering Team for an in-depth, comprehensive issue analysis and problem resolution. <p>Kustom Signals average turnaround time for warranty repairs is 7-10 business days from the date of receipt. During the Limited/Standard Warranty period, Kustom Signals offers advanced replacement (known as advance warranty replacement) once Technical Support Services (TSS) technician troubleshoots over the phone and determines a replacement is needed and the customer agrees to the return process. The replacement is sent out 24 hours from the request.</p> <p>In regards to additional service contracts that are above and beyond regular customer service program and the warranty coverages, Kustom Signals would need to discuss expectations with the agency to come up with a service coverage plan that is mutually acceptable. Based on those expectations, pricing would be determined thereafter.</p>
4.f	Training provided (hours)	<p>BWC: Training is provided with the purchase of body cameras. The number of sessions is determined after the sale. The hands-on training provides train-the-trainer instruction and will include a PowerPoint and quick start guide for future use.</p> <p>Back Office Training: EDV back office file management training is also included with the purchase of the file management solution. The number of sessions can be determined after the sale. The hands-on user training provides instruction in a train-the-trainer format and will include a PowerPoint and quick start guide for future use.</p> <p>It is recommended that the class sizes are no larger than 10 individuals to ensure each person gets hands-on experience.</p>

RFI Q.#	Survey Question (abbreviated)	Response
Installation		
5.a	Average time to install and activate	Vantage cameras can be used with all the standard settings from the factory, or can be custom-configured by the agency. A “tech-input” program is provided for custom-configuring. This program allows an administrator to establish a global set of custom features that can be quickly applied to all cameras. If the agency elects to assign each officer his/her own camera, the input program allows each officer’s information to be applied to a single camera. If officer data is included, each camera will require approximately 5 minutes to configure. Once configured, and assuming the officers have received training, the cameras can be used immediately. The installation of the EDV software and optional hardware can be accomplished in as little as a day, subject to the number of ingestion locations and the physical distance between them.

4.22 L-3 Mobile-Vision BodyVision XV



Figure 22. L-3 Mobile-Vision BodyVision XV

RFI Q.#	Survey Question (abbreviated)	Response
Vendor Information		
0	Responded to FRN?	Yes
1.a	Name	L-3 Mobile-Vision, Inc.
1.b	Address/phone number	400 Commons Way, Rockaway, NJ 07866 (800) 336-8475
1.c	Website	www.mobile-vision.com
1.d	Years in business	29 years
1.e	Number and types of customers	4000 customers including municipal, county and state law enforcements
1.f	Manufacturing location(s)	Rockaway, NJ; Maitland, FL; Dallas, TX; and Taiwan

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – BWC		
2.a	General	
2.a.i	Name and model number	BodyVision XV
2.a.ii	Physical dims (H" x W" x D")	3.2" H x 1.95" W x 1.18" D
2.a.iii	Weight (oz.)	5 oz
2.a.iv	Mounting options	Three different mounting options that will securely attach to the uniform: steel belt clip, alligator clip, magnetic clip
2.a.iv.1	Accessories needed for mounting	N/A
2.a.v	Ability to mount on vehicle dashboard	No
2.a.v.1	Accessories for vehicle dashboard mount	N/A
2.a.vi	LCD display	No
2.a.vii	Recording capacity	32 GB
2.a.viii	Operating conditions or limitations	Operating temperature: -4°F to 122°F Meets IP54 rating for dust and liquids ingress and MIL-STD-810F certified for shock resistance.

2.b	Video and Optics	
2.b.i	Maximum video resolution	720P
2.b.ii	Field of view	130°
2.b.iii	Lux rating	N/A
2.b.iv	Night mode/format	N/A; the BodyVision XV camera is built to mimic the human eye.
2.b.v	Recording speed	30 fps
2.b.vi	Recording format	MP4
2.b.vii	Recording time under default resolution settings	10 hours @ 720 P
2.b.viii	Ability to capture still photos	Yes
2.b.ix	Ability to embed date/time stamp on recorded video	Yes
2.b.ix.1	Ability to authenticate and validate date/time stamp integrity	Yes; via L-3 Mobile-Vision's digital evidence management system on-premise or cloud solution L3capture.com
2.b.x	Pre-event recording feature	Yes
2.b.x.1	Time buffered and whether audio is recorded	Up to 90 seconds without audio
2.b.xi	Event marking capability	Yes
2.b.xii	Wireless capabilities for communication	N/A
2.c	Audio	
2.c.i	Microphone feature	Yes
2.c.ii	Microphone sensitivity	-42dB
2.c.iii	Audio format	MP3
2.c.iv	Default police radio interface for BWC	N/A
2.d	Data Upload	
2.d.i	Single device vs. multiple upload docking station	The <i>BodyVISION</i> XV cameras will allow for the uploading and charging of an unlimited amount of cameras simultaneously at one location. Each camera will come with a docking/charging cradle that can be physically attached to form a larger multi-unit device. The cameras can be configured in any amount depending on space and computer/network bandwidth.
2.d.ii	Data transfer method	Data transfer is achieved via the docking/charging cradle that is wired to the department's server infrastructure.
2.d.iii	Manual vs. automatic upload	To upload from the <i>BodyVISION</i> XV camera to a storage solution, all the user has to do is place the unit in the docking station where the video is automatically uploaded. Video can be uploaded to the L-3 Mobile-Vision Digital Evidence which is an on-premise solution or L3Capture.com which is a cloud-based solution.
2.e	Battery Information	
2.e.i	Battery type; internal or removable	Lithium polymer rechargeable internal battery
2.e.ii	Recording duration	10 hours
2.e.iii	Battery standby duration	90 hours
2.e.iv	Battery charge time	5 hours
2.e.v	Battery lifetime until replacement	18 months
2.e.vi	Battery replacement procedure	Both on field by qualified personnel or by returning the battery to L-3 Mobile-Vision's headquarters in NJ for replacement.

2.e.vii	Availability of supplemental charger for emergency battery charging	Supplemental USB connection for charging on any standard USB port.
2.f	GPS	
2.f.i	BWC possess GPS	N/A
2.f.i.1	Embedded GPS coordinates in recorded video	N/A
2.f.ii	Alternative geolocation methods	N/A
2.g	Consumer Testing Results	
2.g.i	Sturdiness/fragility	Yes
2.g.i.1	Drop test results	MIL-STD-810G 6ft drop rating
2.g.i.2	Dust intrusion/water resistance rating	IP54 water resistance rating
2.g.i.3	Ruggedized	Yes
2.g.i.4	Pressure/depth	N/A
2.g.i.5	Shock	MIL-STD-810G 6 ft drop rating
2.g.i.6	Vibrations	N/A
2.g.ii	Other environmental testing	Yes
2.g.ii.1	Specify tests, pass/fail results, and ratings received	The <i>BodyVISION</i> XV camera has the following environmental testing ratings: FCC Class B, CE, IEC 61000-4-2 level 4.
2.h	Safeguards	
2.h.i	Privacy safeguards or features	Yes
2.h.i.1	Remote viewing	Remote viewing can be achieved when the <i>BodyVISION</i> XV unit is connected to the L3Capture.com cloud solution.
2.h.i.2	Remote activation/deactivation	N/A
2.h.i.3	Privacy masking	Not on the camera, but available via L-3 Mobile-Vision's Digital Evidence Management solution
2.h.i.4	Redacting/editing capabilities	Not on the camera, but available via L-3 Mobile-Vision's back office software.
2.h.ii	Safeguards for cyber security, unintentional disassembly, etc.	Tamper resistant controls are in place to prevent data from being retrieved by unauthorized individuals.
2.i	Regulatory	
2.i.i	Regulatory and Compliance safety requirements	FCC Class B, CE, IEC 61000-4-2 level 4
2.i.ii	Radiation safety standards	N/A
2.j	Warranty and Maintenance Plans	
2.j.i	Length of warranty (in months)	12 months
2.j.ii	Optional extended warranties	Yes
2.j.ii.1	Duration and cost of extended warranties	<ul style="list-style-type: none"> Years 1 to 2 is \$89.95 Years 2 to 3 is \$179.95 (please note this price can change)
2.j.iii	Availability of extended maintenance plans	N/A
2.j.iii.1	Duration and cost of extended maintenance plans	N/A
2.j.iv	Service contract costs	N/A
2.k	Auxiliary Equipment	
2.k.i	Manufacturer suggested retail price (MSRP) for each auxiliary equipment	Camera, docking station, power supply, spring clip, alligator clip, USB charging cable, 6-unit charging system, and magnetic clip Pricing available upon request to manufacturer
2.l	MSRP without optional features,	\$599

	accessories, or service plans	
2.m	Manufacturer's estimated lifetime of device	N/A
2.n	Other relevant information	Factors for any department seeking body worn cameras should include policy, retention settings, storage and workflow after the video has been uploaded. Heavy consideration should be focused on the whole solution and how that solution may or may not fit a Department's demanding workflow. Once the Department deploys cameras, the amount of disclosure requests for those videos goes up dramatically. The ability to respond to these requests and provide access to recorded video in a secure environment is paramount and a feature L-3 Mobile-Vision's has provided law enforcement for over 29 many years. The BodyVISION XV camera interoperates with L-3 Mobile-Vision's Flashback in-car video system via the DES back office system.

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – Software for Video Data Storage and Management		
3.a	Data Management	
3.a.i	Searching capabilities	Yes
3.a.ii	Categorizing capabilities	Yes
3.a.iii	Tagging capabilities	Yes
3.a.iv	Archiving and file retention	Yes
3.a.v	Data saved on or offsite	Local (including DVD) and L3Capture.com Cloud Service
3.a.v.1	If saved offsite, specific data accessibility and storage costs	<i>On-premise:</i> With the DES system, all data is stored either locally or on the hard drive of the server. The data can also be stored as backup on DVD or Blu-ray. <i>Cloud:</i> L-3 MVI provides cloud storage via L3Capture.com. L3Capture.com can be accessed from anywhere within the United States. A subscription to the cloud solution costs \$25 per unit, per month. The subscription includes 200 GB of data per unit, per month. To minimize overage costs, shared data pooling is allowed. Additional storage can be purchased for \$0.09 per GB monthly.L3Capture.com provides the capability to accommodate multiple site installations.
3.a.v.2	Video data storage capacity local vs. cloud	Cloud up to 200 GB
3.a.v.3	Capability to accommodate multiple site installations	Yes
3.a.vi	Export capabilities	Yes
3.a.vi.1	Traceability feature that shows which user exported the data	Yes
3.a.vii	Redacting/editing capabilities	<i>On-premise:</i> The DES system provides basic redaction capabilities for FIOA requests. <i>Cloud:</i> L3Capture.com does not provide redaction capability at this time. Data is exported in standard

		formats and other tools can be used to redact if desired.
3.a.vii.1	Specify whether changes are permanent	Original video is not altered.
3.a.viii	Support provided for chain-of-custody requirements	Yes
3.a.ix	Scalability for different organization size	<i>On-premise:</i> The DES solutions are available for small, medium and large scale deployments that include single and multiple locations. <i>Cloud:</i> L3Capture.com is targeted primarily towards small deployments at this time.
3.a.x	User management and role-based access levels	Yes
3.b	Video Analytics	
3.b.i	Companion software to analyze recorded video and audio data	No
3.b.ii	Types of reports built into software	See below
3.b.ii.1	Standard reports	Yes
3.b.ii.2	Daily reports, historical reports, etc.	Yes
3.b.ii.3	Audit reports that support chain-of-custody requirements	Yes
3.b.ii.4	Customization of reports	Yes
3.b.iii	Facial recognition capabilities	N/A
3.b.iv	Weapons detection capabilities	N/A
3.b.v	Other analytical capabilities	N/A
3.c	Video Security and Authentication	
3.c.i	Compatibility of BWC video output with existing video management software for reviewing and recording	The BodyVISION XV video is compatible with L-3 Mobile-Vision's DES, DEV and Basic Viewer back office software along with the L3Capture.com cloud solution.
3.c.ii	File integrity checks to ensure authenticity	L-3 Mobile-Vision uses hash validation to ensure authenticity. The hash is generated on the BodyVISION XV unit itself and then added to the XML metadata once the recording is stopped. Validation occurs upon ingestion to the L-3 Mobile-Vision DES system.
3.c.iii	Data protection mechanism while in transit and during storage	<i>On-premise:</i> N/A – Data is protected via L-3's proprietary methods. <i>Cloud:</i> L3capture.com is stored on a government cloud solution which offers an extra layer protection than standard cloud solutions.
3.c.iv	Routine software updates	<i>On-premise:</i> For the DES back office solution, an auto-update server is used that will only notify the user of an updated. The agency will have to manually assign the firmware to their units after downloading the update. <i>Cloud:</i> Firmware updates in the L3Capture.com solution are done automatically once a firmware has been assigned to a Department. Once assigned, the firmware will be updated as soon as the device is docked.
3.c.v	Cost of software updates	\$70 per device per year

RFI Q.#	Survey Question (abbreviated)	Response
Usability/Training		
4.a	Usability validation processes	L-3 Mobile-Vision typically works with customers to test pre-production samples and gain first-hand user feedback from these test periods.
4.b	User community data	L-3 Mobile-Vision gathers data via hands-on training, regular customer interaction and interviews. Satisfaction surveys are also collected via the L-3 Mobile-Vision website and support portal.
4.c	User-group meetings and frequency	User groups are organized as needed. L-3 Mobile-Vision also provides periodic Tech Days regionally that offer opportunities for customers to interact and learn modes of operations from each other. Live training and recorded webinars are also offered on the <i>BodyVISION</i> XV camera and back office solutions.
4.d	Typical problems reported	L-3 Mobile-Vision has categorized the following comments received by customers: <ul style="list-style-type: none"> • Configuration • Web Application Questions
4.d.i	Resolution to problems	Some common resolutions to the above mentioned questions include: <ul style="list-style-type: none"> • Identify and reconfiguring applications • Service Department assists the user with training questions by taking the time to answer their questions and train them on how to use the self-help tools that are offered through the Helpdesk Portal
4.e	Hours of tech. support and location	<ul style="list-style-type: none"> • L-3 Mobile-Vision has always placed great emphasis on customer support which includes extensive customer training, toll free technical support, and a service organization tailored to provide expeditious yet economical product support. • The Service Department Hours of Operation are from 8:00am – 8:00pm Eastern Time, Monday through Friday. • After-hours emergency support is available 24/7 • L-3 Mobile-Vision provides customers with three means of contacting support phone, web portal, and email. In an effort to provide the best service L-3 categorizes the issue based on severity and therefore have varying levels of response times. • Support locations include Rockaway, NJ – Maitland, FL – and Dallas, TX • The <i>BodyVISION</i> XV camera comes with a standard one year warranty and an additional two years can be purchased at the time of sale. • L-3 Mobile-Vision prices its server side components per agency. The video management application is web based and charged on a site license. Extended maintenance & support programs area available for all server side and user side components. Extended maintenance

		packages can be purchased upfront or annually.
4.f	Training provided (hours)	<p>Body Worn Camera Training</p> <ul style="list-style-type: none"> • Unit administrative training – 30 to 45 minutes • Unit user training – 30 to 45 minutes <p>Application Training</p> <ul style="list-style-type: none"> • Application user training – 30 to 45 minutes • Application export training – 25 to 30 minutes • Application administrator training – 90 to 120 minutes

RFI Q.#	Survey Question (abbreviated)	Response
Installation		
5.a	Average time to install and activate	10 minutes per unit

4.23 Law Systems Witness BWC



Figure 23. Law Systems Witness BWC

RFI Q.#	Survey Question (abbreviated)	Response
Vendor Information		
0	Responded to FRN?	Yes
1.a	Name	Law Systems Inc.
1.b	Address/phone number	6 Colony Drive, North Caldwell, NJ 07006
1.c	Website	www.e-copro.com
1.d	Years in business	3 years
1.e	Number and types of customers	Municipal, county, and state
1.f	Manufacturing location(s)	Hardware assembled in China. Software assembled in house.

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – BWC		
2.a	General	
2.a.i	Name and model number	Witness BWC
2.a.ii	Physical dims (H" x W" x D")	3.03" H x 2.20 W x 0.86" D
2.a.iii	Weight (oz.)	8 oz
2.a.iv	Mounting options	Main body camera: chest and shoulder Mini camera: can be mounted anywhere practical
2.a.iv.1	Accessories needed for mounting	No information provided
2.a.v	Ability to mount on vehicle dashboard	N/A
2.a.v.1	Accessories for vehicle dashboard mount	No information provided
2.a.vi	LCD display	No; can be viewed through mobile app
2.a.vii	Recording capacity	Up to 64 GB

2.a.viii	Operating conditions or limitations	Operating temperature: -40°F to 140°F Storage temperature: -4°F to 131°F Waterproof level IP67
2.b	Video and Optics	
2.b.i	Maximum video resolution	1296P
2.b.ii	Field of view	140° wide angle
2.b.iii	Lux rating	No lux needed
2.b.iv	Night mode/format	Yes; night vision with IR LEDs and automatic IR function (software controlled)
2.b.v	Recording speed	60 fps
2.b.vi	Recording format	MP4
2.b.vii	Recording time under default resolution settings	10 hours
2.b.viii	Ability to capture still photos	Yes; JPG; 32 MP
2.b.ix	Ability to embed date/time stamp on recorded video	Yes
2.b.ix.1	Ability to authenticate and validate date/time stamp integrity	The embedded date/time/officer-ID stamp is recorded in a chain of evidence log, from start of recording to stop recording to storage and retrieval anytime the file is handled.
2.b.x	Pre-event recording feature	Yes
2.b.x.1	Time buffered and whether audio is recorded	Up to 30 seconds; software controlled
2.b.xi	Event marking capability	Yes
2.b.xii	Wireless capabilities for communication	Yes; Bluetooth, WiFi
2.c	Audio	
2.c.i	Microphone feature	Yes
2.c.ii	Microphone sensitivity	N/A
2.c.iii	Audio format	WAV
2.c.iv	Default police radio interface for BWC	N/A
2.d	Data Upload	
2.d.i	Single device vs. multiple upload docking station	Single and multiple docking station supplied
2.d.ii	Data transfer method	USB cable from docking station to server
2.d.iii	Manual vs. automatic upload	Automatic file upload once inserted into docking station
2.e	Battery Information	
2.e.i	Battery type; internal or removable	Internal
2.e.ii	Recording duration	10 hours
2.e.iii	Battery standby duration	18 hours
2.e.iv	Battery charge time	3 hours
2.e.v	Battery lifetime until replacement	N/A
2.e.vi	Battery replacement procedure	No information provided
2.e.vii	Availability of supplemental charger for emergency battery charging	Supplied standard USB cable from camera to vehicle/wall charger.
2.f	GPS	
2.f.i	BWC possess GPS	Yes
2.f.i.1	Embedded GPS coordinates in recorded video	Yes
2.f.ii	Alternative geolocation methods	N/A
2.g	Consumer Testing Results	

2.g.i	Sturdiness/fragility	Yes
2.g.i.1	Drop test results	2 meter drop test
2.g.i.2	Dust intrusion/water resistance rating	IP-67
2.g.i.3	Ruggedized	No information provided
2.g.i.4	Pressure/depth	No information provided
2.g.i.5	Shock	No information provided
2.g.i.6	Vibrations	No information provided
2.g.ii	Other environmental testing	N/A
2.g.ii.1	Specify tests, pass/fail results, and ratings received	N/A
2.h	Safeguards	
2.h.i	Privacy safeguards or features	Yes
2.h.i.1	Remote viewing	Software configurable
2.h.i.2	Remote activation/deactivation	Software configurable
2.h.i.3	Privacy masking	Not on camera, but built into storage/retrieval software
2.h.i.4	Redacting/editing capabilities	Not on camera, but built into storage/retrieval software
2.h.ii	Safeguards for cyber security, unintentional disassembly, etc.	Files encrypted and not transferable out of the camera unless docked into an authorized docking station.
2.i	Regulatory	
2.i.i	Regulatory and Compliance safety requirements	Compliant with all applicable state and federal safety regulations and standards.
2.i.ii	Radiation safety standards	Compliant with all applicable state and federal safety regulations and standards.
2.j	Warranty and Maintenance Plans	
2.j.i	Length of warranty (in months)	12 Months
2.j.ii	Optional extended warranties	Yes
2.j.ii.1	Duration and cost of extended warranties	All inclusive hardware replacement policy. \$100 per incident.
2.j.iii	Availability of extended maintenance plans	Yes
2.j.iii.1	Duration and cost of extended maintenance plans	Duration of extended warranties extent to plan terms.
2.j.iv	Service contract costs	No service contract costs
2.k	Auxiliary Equipment	
2.k.i	Manufacturer suggested retail price (MSRP) for each auxiliary equipment	No cost
2.l	MSRP without optional features, accessories, or service plans	\$299
2.m	Manufacturer's estimated lifetime of device	5 years
2.n	Other relevant information	No information provided

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – Software for Video Data Storage and Management		
3.a	Data Management	
3.a.i	Searching capabilities	Yes
3.a.ii	Categorizing capabilities	Yes
3.a.iii	Tagging capabilities	Yes
3.a.iv	Archiving and file retention	Yes

3.a.v	Data saved on or offsite	Both
3.a.v.1	If saved offsite, specific data accessibility and storage costs	FBI CJIS compliant servers and cloud systems based on \$50 per month per user for unlimited storage with no restrictions.
3.a.v.2	Video data storage capacity local vs. cloud	12 Terabytes on the local users' premises and unlimited cloud/servers
3.a.v.3	Capability to accommodate multiple site installations	Yes
3.a.vi	Export capabilities	Yes
3.a.vi.1	Traceability feature that shows which user exported the data	Any use of the data triggers a chain of evidence log.
3.a.vii	Redacting/editing capabilities	Yes
3.a.vii.1	Specify whether changes are permanent	Redacting/editing functions are performed on a copy, the original is always untouched.
3.a.viii	Support provided for chain-of-custody requirements	Yes
3.a.ix	Scalability for different organization size	Yes
3.a.x	User management and role-based access levels	Yes
3.b	Video Analytics	
3.b.i	Companion software to analyze recorded video and audio data	Add on functions to be added at no costs to the user.
3.b.ii	Types of reports built into software	All standard and customizable reports based on searchable criteria and usage.
3.b.ii.1	Standard reports	All standard and customizable reports based on searchable criteria and usage.
3.b.ii.2	Daily reports, historical reports, etc.	All standard and customizable reports based on searchable criteria and usage.
3.b.ii.3	Audit reports that support chain-of-custody requirements	All standard and customizable reports based on searchable criteria and usage.
3.b.ii.4	Customization of reports	All standard and customizable reports based on searchable criteria and usage.
3.b.iii	Facial recognition capabilities	No; future capable at no cost to user
3.b.iv	Weapons detection capabilities	No; future capable at no cost to user
3.b.v	Other analytical capabilities	No; future capable at no cost to user
3.c	Video Security and Authentication	
3.c.i	Compatibility of BWC video output with existing video management software for reviewing and recording	Yes
3.c.ii	File integrity checks to ensure authenticity	Yes
3.c.iii	Data protection mechanism while in transit and during storage	Encryption and password protection
3.c.iv	Routine software updates	Any software updates are transparent to the user and will appear on the next login and at no cost to the user
3.c.v	Cost of software updates	No charge; included in the price of the contract

RFI Q.#	Survey Question (abbreviated)	Response
Usability/Training		
4.a	Usability validation processes	Requirements gathering, observation, task analysis,

		interaction design, usability testing, ergonomics, interoperability
4.b	User community data	All data is gathered in real time at the Montclair State University Police Department as well as the surrounding police municipalities
4.c	User-group meetings and frequency	N/A
4.d	Typical problems reported	No information provided
4.d.i	Resolution to problems	No information provided
4.e	Hours of tech. support and location	Free
4.f	Training provided (hours)	On site, web based, pre-recorded unlimited

RFI Q.#	Survey Question (abbreviated)	Response
Installation		
5.a	Average time to install and activate	Within 48 hours of physically receiving units

4.24 Marantz Professional PMD-901V



Figure 24. Marantz Professional PMD-901V

RFI Q.#	Survey Question (abbreviated)	Response
Vendor Information		
0	Responded to FRN?	Yes
1.a	Name	InMusic Brands, Denon Pro
1.b	Address/phone number	200 Scenic View Dr. Cumberland RI 02864
1.c	Website	www.denonpro.com
1.d	Years in business	24 years
1.e	Number and types of customers	InMusic distributes a number of professional quality audio recording, transmission and playback devices. While InMusic does not have a sales group specifically focused on this market, the products are designed for use in a wide variety of situations and venues, including courtrooms and conference rooms for litigation support.
1.f	Manufacturing location(s)	Manufactured in China and refurbished in Reno NV.

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – BWC		
2.a	General	
2.a.i	Name and model number	PMD-901V
2.a.ii	Physical dims (H" x W" x D")	2.36" H x 1.22" W x 3.70" D
2.a.iii	Weight (oz.)	6.4 oz
2.a.iv	Mounting options	Chest, shoulder, belt
2.a.iv.1	Accessories needed for mounting	Bike mount, body strap
2.a.v	Ability to mount on vehicle dashboard	Yes
2.a.v.1	Accessories for vehicle dashboard	Accessory included

	mount	
2.a.vi	LCD display	Yes, 2" TFT-LCD HD clear color screen
2.a.vii	Recording capacity	32 GB, 62 GB option available
2.a.viii	Operating conditions or limitations	-4°F to 149°F
2.b	Video and Optics	
2.b.i	Maximum video resolution	2304 x 1296 (at fps, 16:9)
2.b.ii	Field of view	140° wide angle
2.b.iii	Lux rating	Minimum 1 lux needed if the camera IR is not turned on. Under 1 lux condition PMD-901V will turn on IR light automatically, if the camera IR is in automatic mode. The minimum lux for IR mode is 0.001 Lux.
2.b.iv	Night mode/format	Yes; Night vision captures facial detail at 10 meter distance through 4 IR sensors. Unit also has a flashlight and laser.
2.b.v	Recording speed	30 fps or 60 fps depending on resolution
2.b.vi	Recording format	MP4
2.b.vii	Recording time under default resolution settings	9 hours
2.b.viii	Ability to capture still photos	Yes
2.b.ix	Ability to embed date/time stamp on recorded video	Yes
2.b.ix.1	Ability to authenticate and validate date/time stamp integrity	No
2.b.x	Pre-event recording feature	Yes, 30 seconds
2.b.x.1	Time buffered and whether audio is recorded	Yes
2.b.xi	Event marking capability	Yes
2.b.xii	Wireless capabilities for communication	No
2.c	Audio	
2.c.i	Microphone feature	Yes
2.c.ii	Microphone sensitivity	85 dB
2.c.iii	Audio format	WAV
2.c.iv	Default police radio interface for BWC	Yes with limited use
2.d	Data Upload	
2.d.i	Single device vs. multiple upload docking station	At this time single device, 8 unit docking station will be available soon
2.d.ii	Data transfer method	Wired
2.d.iii	Manual vs. automatic upload	Manual
2.e	Battery Information	
2.e.i	Battery type; internal or removable	Internal lithium ion battery
2.e.ii	Recording duration	10 hours
2.e.iii	Battery standby duration	15 hours
2.e.iv	Battery charge time	4 hours
2.e.v	Battery lifetime until replacement	5 years
2.e.vi	Battery replacement procedure	Factory
2.e.vii	Availability of supplemental charger for emergency battery charging	External battery charger with USB (car or wall)
2.f	GPS	
2.f.i	BWC possess GPS	Yes
2.f.i.1	Embedded GPS coordinates in	Yes

	recorded video	
2.f.ii	Alternative geolocation methods	No
2.g	Consumer Testing Results	
2.g.i	Sturdiness/fragility	Yes
2.g.i.1	Drop test results	Test passed
2.g.i.2	Dust intrusion/water resistance rating	IP-67 (submersible up to 30 min. at 3.3 ft. / 1 m)
2.g.i.3	Ruggedized	Yes
2.g.i.4	Pressure/depth	Submersible up to 30 min. at 3.3 ft. / 1 m
2.g.i.5	Shock	N/A
2.g.i.6	Vibrations	Pass
2.g.ii	Other environmental testing	Yes
2.g.ii.1	Specify tests, pass/fail results, and ratings received	<ul style="list-style-type: none"> • High temperature- pass • Low temperature- pass • High/Low temperature operational test- pass • Adhesion test (For painted/coated metal/plastic parts)- pass • Adhesion test (for sticker/label)- pass • RCA test- pass • Salt spray test- pass • Unit drop/vibration- pass • Four corner test- pass • Shipment carton free fall drop test- pass • Static compression- pass
2.h	Safeguards	
2.h.i	Privacy safeguards or features	No
2.h.i.1	Remote viewing	No
2.h.i.2	Remote activation/deactivation	No
2.h.i.3	Privacy masking	No
2.h.i.4	Redacting/editing capabilities	No information provided
2.h.ii	Safeguards for cyber security, unintentional disassembly, etc.	No; Stand-alone unit that does not connect to network
2.i	Regulatory	
2.i.i	Regulatory and Compliance safety requirements	Approved Compliances: VCCI, ROHS, LVD, Lithium CE EN 62133, FCC, CE, EMF, CE EMC
2.i.ii	Radiation safety standards	N/A
2.j	Warranty and Maintenance Plans	
2.j.i	Length of warranty (in months)	12 Months
2.j.ii	Optional extended warranties	N/A
2.j.ii.1	Duration and cost of extended warranties	N/A
2.j.iii	Availability of extended maintenance plans	No information provided
2.j.iii.1	Duration and cost of extended maintenance plans	No information provided
2.j.iv	Service contract costs	No information provided
2.k	Auxiliary Equipment	
2.k.i	Manufacturer suggested retail price (MSRP) for each auxiliary equipment	Car charger, shoulder mount, chest clip, USB cable, USB adaptor, external camera, docking station all included
2.l	MSRP without optional features, accessories, or service plans	\$499
2.m	Manufacturer's estimated lifetime of	10 years or longer

	device	
2.n	Other relevant information	Developed for professional use

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – Software for Video Data Storage and Management		
3.a	Data Management	
3.a.i	Searching capabilities	No information provided
3.a.ii	Categorizing capabilities	No information provided
3.a.iii	Tagging capabilities	No information provided
3.a.iv	Archiving and file retention	No information provided
3.a.v	Data saved on or offsite	No information provided
3.a.v.1	If saved offsite, specific data accessibility and storage costs	No information provided
3.a.v.2	Video data storage capacity local vs. cloud	No information provided
3.a.v.3	Capability to accommodate multiple site installations	No information provided
3.a.vi	Export capabilities	No information provided
3.a.vi.1	Traceability feature that shows which user exported the data	No information provided
3.a.vii	Redacting/editing capabilities	No information provided
3.a.vii.1	Specify whether changes are permanent	No information provided
3.a.viii	Support provided for chain-of-custody requirements	No information provided
3.a.ix	Scalability for different organization size	No information provided
3.a.x	User management and role-based access levels	No information provided
3.b	Video Analytics	
3.b.i	Companion software to analyze recorded video and audio data	No information provided
3.b.ii	Types of reports built into software	No information provided
3.b.ii.1	Standard reports	No information provided
3.b.ii.2	Daily reports, historical reports, etc.	No information provided
3.b.ii.3	Audit reports that support chain-of-custody requirements	No information provided
3.b.ii.4	Customization of reports	No information provided
3.b.iii	Facial recognition capabilities	No information provided
3.b.iv	Weapons detection capabilities	No information provided
3.b.v	Other analytical capabilities	No information provided
3.c	Video Security and Authentication	
3.c.i	Compatibility of BWC video output with existing video management software for reviewing and recording	No information provided
3.c.ii	File integrity checks to ensure authenticity	No information provided
3.c.iii	Data protection mechanism while in transit and during storage	No information provided
3.c.iv	Routine software updates	No information provided
3.c.v	Cost of software updates	No information provided

RFI Q.#	Survey Question (abbreviated)	Response
Usability/Training		
4.a	Usability validation processes	No information provided
4.b	User community data	No information provided
4.c	User-group meetings and frequency	No information provided
4.d	Typical problems reported	No information provided
4.d.i	Resolution to problems	No information provided
4.e	Hours of tech. support and location	No information provided
4.f	Training provided (hours)	No information provided

RFI Q.#	Survey Question (abbreviated)	Response
Installation		
5.a	Average time to install and activate	No information provided

4.25 Martel Frontline Cam



Figure 25. Martel Frontline Cam

RFI Q.#	Survey Question (abbreviated)	Response
Vendor Information		
0	Responded to FRN?	No
1.a	Name	Martel Electronics
1.b	Address/phone number	23221 La Palma Ave, Yorba Linda, CA 92887 (800) 553-5536
1.c	Website	www.marteldigital.com
1.d	Years in business	Information not found on website
1.e	Number and types of customers	Information not found on website
1.f	Manufacturing location(s)	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – BWC		
2.a	General	
2.a.i	Name and model number	Frontline Cam
2.a.ii	Physical dims (H" x W" x D")	3.5" H x 2.1" W x 1" D
2.a.iii	Weight (oz.)	3 oz
2.a.iv	Mounting options	Information not found on website
2.a.iv.1	Accessories needed for mounting	Information not found on website
2.a.v	Ability to mount on vehicle dashboard	Information not found on website
2.a.v.1	Accessories for vehicle dashboard mount	Information not found on website
2.a.vi	LCD display	2" backlit, high-resolution color display
2.a.vii	Recording capacity	Information not found on website
2.a.viii	Operating conditions or limitations	Operating temperature: -40°F to 140°F Humidity: 5-95% (non-condensing)
2.b	Video and Optics	

2.b.i	Maximum video resolution	1296P
2.b.ii	Field of view	175°
2.b.iii	Lux rating	Information not found on website
2.b.iv	Night mode/format	Yes; auto switching between color and night vision; captures facial detail up to 10m away in darkness
2.b.v	Recording speed	30 fps
2.b.vi	Recording format	Information not found on website
2.b.vii	Recording time under default resolution settings	12 hours
2.b.viii	Ability to capture still photos	Yes
2.b.ix	Ability to embed date/time stamp on recorded video	Yes
2.b.ix.1	Ability to authenticate and validate date/time stamp integrity	Information not found on website
2.b.x	Pre-event recording feature	Yes
2.b.x.1	Time buffered and whether audio is recorded	1 minute
2.b.xi	Event marking capability	Information not found on website
2.b.xii	Wireless capabilities for communication	Information not found on website
2.c	Audio	
2.c.i	Microphone feature	Yes
2.c.ii	Microphone sensitivity	Information not found on website
2.c.iii	Audio format	Information not found on website
2.c.iv	Default police radio interface for BWC	Information not found on website
2.d	Data Upload	
2.d.i	Single device vs. multiple upload docking station	Single device docking station
2.d.ii	Data transfer method	Auto download video files and recharge the F1 simultaneously by connecting to a computer workstation.
2.d.iii	Manual vs. automatic upload	Automatic
2.e	Battery Information	
2.e.i	Battery type; internal or removable	Information not found on website
2.e.ii	Recording duration	12 hours
2.e.iii	Battery standby duration	Information not found on website
2.e.iv	Battery charge time	Information not found on website
2.e.v	Battery lifetime until replacement	Information not found on website
2.e.vi	Battery replacement procedure	Information not found on website
2.e.vii	Availability of supplemental charger for emergency battery charging	Information not found on website
2.f	GPS	
2.f.i	BWC possess GPS	Yes
2.f.i.1	Embedded GPS coordinates in recorded video	Information not found on website
2.f.ii	Alternative geolocation methods	Information not found on website
2.g	Consumer Testing Results	
2.g.i	Sturdiness/fragility	Yes
2.g.i.1	Drop test results	Drop resistant (26 drops from 1.82m/6ft)
2.g.i.2	Dust intrusion/water resistance rating	IP-68 waterproof down to 12 feet
2.g.i.3	Ruggedized	Yes

2.g.i.4	Pressure/depth	Information not found on website
2.g.i.5	Shock	Information not found on website
2.g.i.6	Vibrations	Yes
2.g.ii	Other environmental testing	Yes
2.g.ii.1	Specify tests, pass/fail results, and ratings received	Tumble resistant (1000 cycles; 0.5m/1.6 ft)
2.h	Safeguards	
2.h.i	Privacy safeguards or features	Information not found on website
2.h.i.1	Remote viewing	Information not found on website
2.h.i.2	Remote activation/deactivation	Information not found on website
2.h.i.3	Privacy masking	Information not found on website
2.h.i.4	Redacting/editing capabilities	Information not found on website
2.h.ii	Safeguards for cyber security, unintentional disassembly, etc.	Information not found on website
2.i	Regulatory	
2.i.i	Regulatory and Compliance safety requirements	MIL-STD-810G and IP68 certified
2.i.ii	Radiation safety standards	Information not found on website
2.j	Warranty and Maintenance Plans	
2.j.i	Length of warranty (in months)	12 months
2.j.ii	Optional extended warranties	Information not found on website
2.j.ii.1	Duration and cost of extended warranties	Information not found on website
2.j.iii	Availability of extended maintenance plans	Information not found on website
2.j.iii.1	Duration and cost of extended maintenance plans	Information not found on website
2.j.iv	Service contract costs	Information not found on website
2.k	Auxiliary Equipment	
2.k.i	Manufacturer suggested retail price (MSRP) for each auxiliary equipment	Information not found on website
2.l	MSRP without optional features, accessories, or service plans	Information not found on website
2.m	Manufacturer's estimated lifetime of device	Information not found on website
2.n	Other relevant information	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – Software for Video Data Storage and Management		
3.a	Data Management	
3.a.i	Searching capabilities	Information not found on website
3.a.ii	Categorizing capabilities	Information not found on website
3.a.iii	Tagging capabilities	Information not found on website
3.a.iv	Archiving and file retention	Information not found on website
3.a.v	Data saved on or offsite	Information not found on website
3.a.v.1	If saved offsite, specific data accessibility and storage costs	Information not found on website
3.a.v.2	Video data storage capacity local vs. cloud	Information not found on website
3.a.v.3	Capability to accommodate multiple	Information not found on website

	site installations	
3.a.vi	Export capabilities	Information not found on website
3.a.vi.1	Traceability feature that shows which user exported the data	Information not found on website
3.a.vii	Redacting/editing capabilities	Information not found on website
3.a.vii.1	Specify whether changes are permanent	Information not found on website
3.a.viii	Support provided for chain-of-custody requirements	Information not found on website
3.a.ix	Scalability for different organization size	Information not found on website
3.a.x	User management and role-based access levels	Information not found on website
3.b	Video Analytics	
3.b.i	Companion software to analyze recorded video and audio data	Information not found on website
3.b.ii	Types of reports built into software	Information not found on website
3.b.ii.1	Standard reports	Information not found on website
3.b.ii.2	Daily reports, historical reports, etc.	Information not found on website
3.b.ii.3	Audit reports that support chain-of-custody requirements	Information not found on website
3.b.ii.4	Customization of reports	Information not found on website
3.b.iii	Facial recognition capabilities	Information not found on website
3.b.iv	Weapons detection capabilities	Information not found on website
3.b.v	Other analytical capabilities	Information not found on website
3.c	Video Security and Authentication	
3.c.i	Compatibility of BWC video output with existing video management software for reviewing and recording	Information not found on website
3.c.ii	File integrity checks to ensure authenticity	Information not found on website
3.c.iii	Data protection mechanism while in transit and during storage	Information not found on website
3.c.iv	Routine software updates	Information not found on website
3.c.v	Cost of software updates	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Usability/Training		
4.a	Usability validation processes	Information not found on website
4.b	User community data	Information not found on website
4.c	User-group meetings and frequency	Information not found on website
4.d	Typical problems reported	Information not found on website
4.d.i	Resolution to problems	Information not found on website
4.e	Hours of tech. support and location	Information not found on website
4.f	Training provided (hours)	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Installation		
5.a	Average time to install and activate	Information not found on website

4.26 Martel Vid-Shield



Figure 26. Martel Vid-Shield

RFI Q.#	Survey Question (abbreviated)	Response
Vendor Information		
0	Responded to FRN?	No
1.a	Name	Martel Electronics
1.b	Address/phone number	23221 La Palma Ave, Yorba Linda, CA 92887 (800) 553-5536
1.c	Website	www.marteldigital.com
1.d	Years in business	Information not found on website
1.e	Number and types of customers	Information not found on website
1.f	Manufacturing location(s)	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – BWC		
2.a	General	
2.a.i	Name and model number	Vid-Shield
2.a.ii	Physical dims (H" x W" x D")	2.0" H x 3.8" W x 0.9" D
2.a.iii	Weight (oz.)	2 oz
2.a.iv	Mounting options	Information not found on website
2.a.iv.1	Accessories needed for mounting	Information not found on website
2.a.v	Ability to mount on vehicle dashboard	Information not found on website
2.a.v.1	Accessories for vehicle dashboard mount	Information not found on website
2.a.vi	LCD display	Yes
2.a.vii	Recording capacity	Records to SD cards
2.a.viii	Operating conditions or limitations	Can withstand rain and humidity
2.b	Video and Optics	
2.b.i	Maximum video resolution	1080P
2.b.ii	Field of view	120°

2.b.iii	Lux rating	Information not found on website
2.b.iv	Night mode/format	Yes
2.b.v	Recording speed	60 fps
2.b.vi	Recording format	MP4
2.b.vii	Recording time under default resolution settings	Information not found on website
2.b.viii	Ability to capture still photos	Yes; 12 MP
2.b.ix	Ability to embed date/time stamp on recorded video	Information not found on website
2.b.ix.1	Ability to authenticate and validate date/time stamp integrity	Information not found on website
2.b.x	Pre-event recording feature	Information not found on website
2.b.x.1	Time buffered and whether audio is recorded	Information not found on website
2.b.xi	Event marking capability	Information not found on website
2.b.xii	Wireless capabilities for communication	Information not found on website
2.c	Audio	
2.c.i	Microphone feature	Information not found on website
2.c.ii	Microphone sensitivity	Information not found on website
2.c.iii	Audio format	Information not found on website
2.c.iv	Default police radio interface for BWC	Information not found on website
2.d	Data Upload	
2.d.i	Single device vs. multiple upload docking station	Information not found on website
2.d.ii	Data transfer method	Information not found on website
2.d.iii	Manual vs. automatic upload	Information not found on website
2.e	Battery Information	
2.e.i	Battery type; internal or removable	Information not found on website
2.e.ii	Recording duration	Information not found on website
2.e.iii	Battery standby duration	Information not found on website
2.e.iv	Battery charge time	Information not found on website
2.e.v	Battery lifetime until replacement	Information not found on website
2.e.vi	Battery replacement procedure	Information not found on website
2.e.vii	Availability of supplemental charger for emergency battery charging	Information not found on website
2.f	GPS	
2.f.i	BWC possess GPS	Information not found on website
2.f.i.1	Embedded GPS coordinates in recorded video	Information not found on website
2.f.ii	Alternative geolocation methods	Information not found on website
2.g	Consumer Testing Results	
2.g.i	Sturdiness/fragility	Information not found on website
2.g.i.1	Drop test results	Information not found on website
2.g.i.2	Dust intrusion/water resistance rating	Information not found on website
2.g.i.3	Ruggedized	Information not found on website
2.g.i.4	Pressure/depth	Information not found on website
2.g.i.5	Shock	Information not found on website
2.g.i.6	Vibrations	Information not found on website
2.g.ii	Other environmental testing	Information not found on website
2.g.ii.1	Specify tests, pass/fail results, and	Information not found on website

	ratings received	
2.h	Safeguards	
2.h.i	Privacy safeguards or features	Information not found on website
2.h.i.1	Remote viewing	Information not found on website
2.h.i.2	Remote activation/deactivation	Information not found on website
2.h.i.3	Privacy masking	Information not found on website
2.h.i.4	Redacting/editing capabilities	Information not found on website
2.h.ii	Safeguards for cyber security, unintentional disassembly, etc.	Password protected
2.i	Regulatory	
2.i.i	Regulatory and Compliance safety requirements	Information not found on website
2.i.ii	Radiation safety standards	Information not found on website
2.j	Warranty and Maintenance Plans	
2.j.i	Length of warranty (in months)	Information not found on website
2.j.ii	Optional extended warranties	Information not found on website
2.j.ii.1	Duration and cost of extended warranties	Information not found on website
2.j.iii	Availability of extended maintenance plans	Information not found on website
2.j.iii.1	Duration and cost of extended maintenance plans	Information not found on website
2.j.iv	Service contract costs	Information not found on website
2.k	Auxiliary Equipment	
2.k.i	Manufacturer suggested retail price (MSRP) for each auxiliary equipment	Information not found on website
2.l	MSRP without optional features, accessories, or service plans	Information not found on website
2.m	Manufacturer's estimated lifetime of device	Information not found on website
2.n	Other relevant information	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – Software for Video Data Storage and Management		
3.a	Data Management	
3.a.i	Searching capabilities	Information not found on website
3.a.ii	Categorizing capabilities	Information not found on website
3.a.iii	Tagging capabilities	Information not found on website
3.a.iv	Archiving and file retention	Information not found on website
3.a.v	Data saved on or offsite	Information not found on website
3.a.v.1	If saved offsite, specific data accessibility and storage costs	Information not found on website
3.a.v.2	Video data storage capacity local vs. cloud	Information not found on website
3.a.v.3	Capability to accommodate multiple site installations	Information not found on website
3.a.vi	Export capabilities	Information not found on website
3.a.vi.1	Traceability feature that shows which user exported the data	Information not found on website
3.a.vii	Redacting/editing capabilities	Information not found on website

3.a.vii.1	Specify whether changes are permanent	Information not found on website
3.a.viii	Support provided for chain-of-custody requirements	Information not found on website
3.a.ix	Scalability for different organization size	Information not found on website
3.a.x	User management and role-based access levels	Information not found on website
3.b	Video Analytics	
3.b.i	Companion software to analyze recorded video and audio data	Information not found on website
3.b.ii	Types of reports built into software	Information not found on website
3.b.ii.1	Standard reports	Information not found on website
3.b.ii.2	Daily reports, historical reports, etc.	Information not found on website
3.b.ii.3	Audit reports that support chain-of-custody requirements	Information not found on website
3.b.ii.4	Customization of reports	Information not found on website
3.b.iii	Facial recognition capabilities	Information not found on website
3.b.iv	Weapons detection capabilities	Information not found on website
3.b.v	Other analytical capabilities	Information not found on website
3.c	Video Security and Authentication	
3.c.i	Compatibility of BWC video output with existing video management software for reviewing and recording	Information not found on website
3.c.ii	File integrity checks to ensure authenticity	Information not found on website
3.c.iii	Data protection mechanism while in transit and during storage	Encrypted USB downloading supervisor controlled
3.c.iv	Routine software updates	Information not found on website
3.c.v	Cost of software updates	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Usability/Training		
4.a	Usability validation processes	Information not found on website
4.b	User community data	Information not found on website
4.c	User-group meetings and frequency	Information not found on website
4.d	Typical problems reported	Information not found on website
4.d.i	Resolution to problems	Information not found on website
4.e	Hours of tech. support and location	Information not found on website
4.f	Training provided (hours)	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Installation		
5.a	Average time to install and activate	Information not found on website

4.27 Motorola Si300 Video Speaker Microphone



Figure 27. Motorola Si300 Video Speaker Microphone

RFI Q.#	Survey Question (abbreviated)	Response
Vendor Information		
0	Responded to FRN?	Yes
1.a	Name	Motorola Solutions Inc.
1.b	Address/phone number	809 Pinnacle Drive, Suite G, Linthicum Heights, MD 21090-2535
1.c	Website	www.motorolasolutions.com/en_us.html
1.d	Years in business	85 years
1.e	Number and types of customers	S&P 500 public corporation; no other information provided
1.f	Manufacturing location(s)	Pulau Pinang, Malaysia

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – BWC		
2.a	General	
2.a.i	Name and model number	Si300 Video Speaker Microphone (without touch display)
2.a.ii	Physical dims (H" x W" x D")	4.7" H x 2.44" W x 1.0" D
2.a.iii	Weight (oz.)	7.8 oz with standard battery 8.8 oz with high capacity battery
2.a.iv	Mounting options	Chest, shoulder epaulet, carry holder with rotating clip
2.a.iv.1	Accessories needed for mounting	Shoulder epaulet strap
2.a.v	Ability to mount on vehicle dashboard	No
2.a.v.1	Accessories for vehicle dashboard mount	No
2.a.vi	LCD display	No
2.a.vii	Recording capacity	32 GB internal

2.a.viii	Operating conditions or limitations	Operating temperature: -4° F to 140° F Storage temperature: -67° F to 185° F
2.b	Video and Optics	
2.b.i	Maximum video resolution	1080P
2.b.ii	Field of view	164° diagonal; 128° horizontal, 68° vertical
2.b.iii	Lux rating	0.5
2.b.iv	Night mode/format	Yes, switches to monochrome mode below 3 lux
2.b.v	Recording speed	30 fps
2.b.vi	Recording format	MP4 Format, H.264 video encoding
2.b.vii	Recording time under default resolution settings	Video Rate GB/Hr Record time 720p high speed motion 6.13 Mbps 2.76 11.6 hrs 720p full motion 4.13 Mbps 1.86 17.0 hrs 720p med motion 3.13 Mbps 1.41 22.7 hrs 720p average motion 2.13 Mbps 0.96 33.3 hrs 720p low motion 1.63 Mbps 0.73 43.9 hrs
2.b.viii	Ability to capture still photos	Yes
2.b.ix	Ability to embed date/time stamp on recorded video	Yes
2.b.ix.1	Ability to authenticate and validate date/time stamp integrity	Each recorded multimedia file is digitally signed and hashed, with mutual authentication to ensure secure chain of custody from capture on the device to the storage service.
2.b.x	Pre-event recording feature	Yes
2.b.x.1	Time buffered and whether audio is recorded	<ul style="list-style-type: none"> 30-120 sec pre-event buffer supported and selected by system admin Audio recording during pre-event is selectable (on/off) by system admin
2.b.xi	Event marking capability	<ul style="list-style-type: none"> Markers can be triggered by pressing photo button when video is being recorded. This adds an actual photograph of the marked instance to reference once evidence is uploaded. Video is also automatically tagged with GPS coordinates
2.b.xii	Wireless capabilities for communication	WLAN (Wi-Fi®) 802.11 b/g/n/ac
2.c	Audio	
2.c.i	Microphone feature	<ul style="list-style-type: none"> 5 integrated microphones with adaptive audio functionality Equalization, noise suppression, and wind-porting allows for best recorded audio in changing environments
2.c.ii	Microphone sensitivity	N/A because sensitivity varies
2.c.iii	Audio format	AAC
2.c.iv	Default police radio interface for BWC	Yes. Motorola Solutions line of APX 1000/4000/6000/7000/8000 LMR portable radios
2.d	Data Upload	
2.d.i	Single device vs. multiple upload docking station	Initiated by individual device or when inserted into multi-unit charger
2.d.ii	Data transfer method	WLAN (Wi-Fi) 802.11 b/g/n/X
2.d.iii	Manual vs. automatic upload	Both supported
2.e	Battery Information	
2.e.i	Battery type; internal or removable	Two smart lithium battery types that are completely removable and replicable by the user: – High Capacity 2925 mAh

		– Standard Capacity 1950 mAh
2.e.ii	Recording duration	<ul style="list-style-type: none"> • High Capacity 2925 mAh ~6+hrs of operation with video buffer turned on • High Capacity 2925 mAh ~18+hrs of operation with video buffer turned off • Standard Capacity 1950 mAh ~10+hrs of operation with video buffer turned off
2.e.iii	Battery standby duration	<ul style="list-style-type: none"> • ~18 hr standby rating with 2925mAh battery • ~10hr standby rating with 1950mAh battery
2.e.iv	Battery charge time	Device charge time if the battery has been depleted by 75 percent. – Standard Battery: ~ 2.25 Hours. – High Capacity Battery: ~ 3 hours
2.e.v	Battery lifetime until replacement	500 charging cycles before the unit is incapable of achieving a 100% complete charge (500 cycles at 25 deg C).
2.e.vi	Battery replacement procedure	Removable battery replaced in the field
2.e.vii	Availability of supplemental charger for emergency battery charging	Supports COTS micro-USB chargers
2.f	GPS	
2.f.i	BWC possess GPS	Yes
2.f.i.1	Embedded GPS coordinates in recorded video	GPS coordinates are embedded on the video stream as permanent metadata.
2.f.ii	Alternative geolocation methods	GPS coordinates are gathered from paired LMR radio and embedded into video
2.g	Consumer Testing Results	
2.g.i	Sturdiness/fragility	See below
2.g.i.1	Drop test results	MIL-STD 810G
2.g.i.2	Dust intrusion/water resistance rating	IP67
2.g.i.3	Ruggedized	MIL-STD 810G
2.g.i.4	Pressure/depth	1 meter water immersion for 30 minutes
2.g.i.5	Shock	MIL-STD 810G
2.g.i.6	Vibrations	MIL-STD 810G
2.g.ii	Other environmental testing	No information provided
2.g.ii.1	Specify tests, pass/fail results, and ratings received	No information provided
2.h	Safeguards	
2.h.i	Privacy safeguards or features	See below
2.h.i.1	Remote viewing	No
2.h.i.2	Remote activation/deactivation	Not supported until 2017
2.h.i.3	Privacy masking	Yes, as part of evidence management, CommandCentral Vault
2.h.i.4	Redacting/editing capabilities	Full object tracking redaction
2.h.ii	Safeguards for cyber security, unintentional disassembly, etc.	<ul style="list-style-type: none"> • Sealed device, memory contained internal, and not physically accessible • Device is authenticated to upload to CommandCentral Vault using an X.509 certificate. The certificate is paired with a Motorola Solutions private key. SSL-terminating load balancers are FIPS 140-2-compliant to meet FIPS cryptographic requirements. The storage instance uses block ciphers available—256-bit Advanced Encryption Standard (AES-256).

2.i	Regulatory	
2.i.i	Regulatory and Compliance safety requirements	Yes, FCC type approval
2.i.ii	Radiation safety standards	N/A
2.j	Warranty and Maintenance Plans	
2.j.i	Length of warranty (in months)	Service from the Start Comprehensive (complete damage protection) – 36 months, is included for the all devices for warranty support. Provides all component level service including shipping costs, parts and labor costs and the repair or replacement for parts with manufacturing defects for the duration of the service contact.
2.j.ii	Optional extended warranties	Service from the Start Comprehensive
2.j.ii.1	Duration and cost of extended warranties	– 3-year Service from the Start Comprehensive Warranty, Si300, \$100
2.j.iii	Availability of extended maintenance plans	Service from Start Comprehensive standard duration is a three-year maintenance support plan. Includes warranty (year 1).
2.j.iii.1	Duration and cost of extended maintenance plans	No information provided
2.j.iv	Service contract costs	No information provided
2.k	Auxiliary Equipment	
2.k.i	Manufacturer suggested retail price (MSRP) for each auxiliary equipment	<ul style="list-style-type: none"> • Multi-Unit charger—charges up to 6 devices or 6 spare batteries simultaneously \$250 • Si Series 2925 mAh High Capacity Battery (battery door not included) \$75 • Spare battery door for SI Series 2925 mAh High Capacity Battery \$12 • Vehicular power charger \$65 • Travel charger US/NA 7.5W, 100V-240V micro USB \$25 • Shoulder epaulet, left shoulder \$35 • Shoulder, right shoulder \$35 • Shoulder strap buttons, pack of 10 \$5.58 • 3.5mm receive-only earpiece with translucent tube and rubber eartip \$64
2.l	MSRP without optional features, accessories, or service plans	Si300 Kit—Si300 non-display, Si series to APX GCAI Cable, micro USB charger, carry holder, quick start guide: \$1,000
2.m	Manufacturer's estimated lifetime of device	2.5 to 3.5 years
2.n	Other relevant information	All pricing is MSRP. Pricing will be subjective to nationally available discounts for state & local government. Discounts are allotted at state, county, and, in some cases, by city, as well as federal government discounts. To understand allotted discount level for all equipment and software, contact Motorola Solutions sales representative.

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – Software for Video Data Storage and Management		
3.a	Data Management	

3.a.i	Searching capabilities	Complete searching capability across all evidence metadata
3.a.ii	Categorizing capabilities	<ul style="list-style-type: none"> • Both Si300 & Si500 will interleave GPS location into video file in a breadcrumb fashion. Video files cannot be remotely tagged. Both the Si300 & Si500 will interleave GPS location into video file in a breadcrumb fashion. • CommandCentral Vault allows customizable categories to be tagged to a video. The list of categories is provisioned in CommandCentral Vault and automatically synced to the Si300/Si500. • The video can be manually tagged when the video is reviewed on the Si300/Si500 or after the video is uploaded to CommandCentral Vault. • CommandCentral Vault also allows provisioning of automatic tags. <p>CommandCentral Vault can connect to any CAD or RMS system to automatically apply incident, dispatch or case numbers to a video.</p>
3.a.iii	Tagging capabilities	No
3.a.iv	Archiving and file retention	<ul style="list-style-type: none"> • CommandCentral Vault has direct archiving management built into the application and can be exported externally to the Vault application. The Si300/Si500 records video in the MP4 format. Video encoding uses H264 and audio encoding uses AAC (Advanced Audio Coding). • CommandCentral Vault will automatically archive content based on the last time it was viewed. Content will be considered for archiving after a minimum of 30 days of no activity. This automated process eliminates administrative overhead associated with having to manage content and archival.
3.a.v	Data saved on or offsite	Offsite
3.a.v.1	If saved offsite, specific data accessibility and storage costs	No information provided
3.a.v.2	Video data storage capacity local vs. cloud	<ul style="list-style-type: none"> – 1st year 150GB per camera – 2nd year +50 GB per camera – 3rd year +50 GB per camera (total for 3 year term 250GB) – 4th year +50 GB per camera – 5th year +50GB per camera (total for 5 year term 350GB)
3.a.v.3	Capability to accommodate multiple site installations	No information provided
3.a.vi	Export capabilities	Yes
3.a.vi.1	Traceability feature that shows which user exported the data	<ul style="list-style-type: none"> – Export of data is possible. When such an export is executed, the transaction is recorded as part of the chain of custody controls built into the application. – CommandCentral Vault has the ability to export to other standards if necessary such as: mp4, mov, avi or mpeg4. – Each recorded multimedia file is digitally signed and hashed, with mutual authentication to ensure secure chain of custody from capture on the device to the storage on CommandCentral Vault. All this information can then be presented in report form if needed.
3.a.vii	Redacting/editing capabilities	Yes

3.a.vii.1	Specify whether changes are permanent	<ul style="list-style-type: none"> - Redaction does not modify the original evidence. - The original evidence can never be modified. - Redacted version will only reference the original
3.a.viii	Support provided for chain-of-custody requirements	CommandCentral Vault ensures that multimedia is unaltered from the time of capture to the time it is removed from the system. Content is digitally signed at creation to ensure verification of authenticity. All transfer is done under a SSL uniquely encrypted channel to protect privacy of data over the internet connection. Content stored in physically secured datacenters that are CJIS compliant.
3.a.ix	Scalability for different organization size	Yes
3.a.x	User management and role-based access levels	<ul style="list-style-type: none"> • The CommandCentral Vault content repository is built on Adobe AEM which has received Federal Risk and Authorization Management Program (FedRAMP) Certification. • All access to data objects is mediated by the CommandCentral Vault repository and therefore restricted by role based access control.
3.b	Video Analytics	
3.b.i	Companion software to analyze recorded video and audio data	No
3.b.ii	Types of reports built into software	See below
3.b.ii.1	Standard reports	Yes
3.b.ii.2	Daily reports, historical reports, etc.	Yes
3.b.ii.3	Audit reports that support chain-of-custody requirements	Yes
3.b.ii.4	Customization of reports	Yes
3.b.iii	Facial recognition capabilities	No
3.b.iv	Weapons detection capabilities	No
3.b.v	Other analytical capabilities	N/A
3.c	Video Security and Authentication	
3.c.i	Compatibility of BWC video output with existing video management software for reviewing and recording	CommandCentral Vault has the ability to export to several standards if necessary such as: mp4, mov, avi or mpeg4 for simple viewing of video with the use of standard viewers such as VLC or Windows media player.
3.c.ii	File integrity checks to ensure authenticity	Yes
3.c.iii	Data protection mechanism while in transit and during storage	Yes
3.c.iv	Routine software updates	Yes
3.c.v	Cost of software updates	No cost – included in multi-year agreement

RFI Q.#	Survey Question (abbreviated)	Response
Usability/Training		
4.a	Usability validation processes	Voice of customer sessions using appearance models, UI software demos, visual assets
4.b	User community data	Voice of customer interviews, observations during training, surveys

4.c	User-group meetings and frequency	Use forums held throughout the year
4.d	Typical problems reported	N/A because product recently launched
4.d.i	Resolution to problems	N/A because product recently launched
4.e	Hours of tech. support and location	Live telephone support 24/7/365, toll-free number, also web-based and email
4.f	Training provided (hours)	Instructor-led, user training/train-the-trainer, self-paced online. System administrators 2 days, two 6-hr classes

RFI Q.#	Survey Question (abbreviated)	Response
Installation		
5.a	Average time to install and activate	No information provided

4.28 Motorola Si500 Video Speaker Microphone



Figure 28. Motorola Si500 Video Speaker Microphone

RFI Q.#	Survey Question (abbreviated)	Response
Vendor Information		
0	Responded to FRN?	Yes
1.a	Name	Motorola Solutions Inc
1.b	Address/phone number	809 Pinnacle Drive, Suite G, Linthicum Heights, MD 21090-2535
1.c	Website	www.motorolasolutions.com/en_us.html
1.d	Years in business	85 years
1.e	Number and types of customers	S&P 500 public corporation; no other information provided
1.f	Manufacturing location(s)	Pulau Pinang, Malaysia

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – BWC		
2.a	General	
2.a.i	Name and model number	Si500 Video Speaker Microphone (with touch display)
2.a.ii	Physical dims (H" x W" x D")	4.7" H x 2.44" W x 1.1" D
2.a.iii	Weight (oz.)	7.8 oz with standard battery 8.8 oz with high capacity battery
2.a.iv	Mounting options	Chest, shoulder epaulet, carry holder with rotating clip
2.a.iv.1	Accessories needed for mounting	Shoulder epaulet strap
2.a.v	Ability to mount on vehicle dashboard	No
2.a.v.1	Accessories for vehicle dashboard mount	No
2.a.vi	LCD display	3.2 inch transfective display with Gorilla Glass impact protection and wet finger/light glove optimized

2.a.vii	Recording capacity	Internal 32 GB
2.a.viii	Operating conditions or limitations	Operating Temperature: -4° F to 140° F Storage Temperature: -67° F to 185° F
2.b	Video and Optics	
2.b.i	Maximum video resolution	1080P
2.b.ii	Field of view	164° diagonal; 128° horizontal, 68° vertical
2.b.iii	Lux rating	0.5
2.b.iv	Night mode/format	Yes, switches to monochrome mode below 3 lux
2.b.v	Recording speed	30 fps
2.b.vi	Recording format	MP4 Format, H.264 video encoding
2.b.vii	Recording time under default resolution settings	Video Rate GB/Hr Record time 720p high speed motion 6.13 Mbps 2.76 11.6 hrs 720p full motion 4.13 Mbps 1.86 17.0 hrs 720p med motion 3.13 Mbps 1.41 22.7 hrs 720p average motion 2.13 Mbps 0.96 33.3 hrs 720p low motion 1.63 Mbps 0.73 43.9 hrs
2.b.viii	Ability to capture still photos	Yes
2.b.ix	Ability to embed date/time stamp on recorded video	Yes
2.b.ix.1	Ability to authenticate and validate date/time stamp integrity	Yes; each recorded multimedia file is digitally signed and hashed, with mutual authentication to ensure secure chain of custody from capture on the device to the storage service.
2.b.x	Pre-event recording feature	Yes
2.b.x.1	Time buffered and whether audio is recorded	<ul style="list-style-type: none"> 30-120 sec pre-event buffer supported and selected by system admin Audio recording during pre-event is selectable (on/off) by system admin
2.b.xi	Event marking capability	<ul style="list-style-type: none"> Markers can be triggered by pressing photo button when video is being recorded. This adds an actual photograph of the marked instance to reference once evidence is uploaded. Video is also automatically tagged with GPS coordinates
2.b.xii	Wireless capabilities for communication	WLAN (Wi-Fi®) 802.11 b/g/n/ac
2.c	Audio	
2.c.i	Microphone feature	<ul style="list-style-type: none"> 5 integrated microphones with Adaptive Audio functionality Equalization, noise suppression, and wind-porting allows for best recorded audio in changing environments
2.c.ii	Microphone sensitivity	N/A because sensitivity varies
2.c.iii	Audio format	AAC
2.c.iv	Default police radio interface for BWC	Yes. Motorola Solutions line of APX 1000/4000/6000/7000/8000 LMR portable radios
2.d	Data Upload	
2.d.i	Single device vs. multiple upload docking station	Initiated by individual device or when inserted into multi-unit charger
2.d.ii	Data transfer method	WLAN (Wi-Fi) 802.11 b/g/n/X
2.d.iii	Manual vs. automatic upload	Both supported
2.e	Battery Information	
2.e.i	Battery type; internal or removable	Two smart lithium battery types that are completely removable and replicable by the user:

		<ul style="list-style-type: none"> High Capacity 2925 mAh Standard Capacity 1950 mAh
2.e.ii	Recording duration	<ul style="list-style-type: none"> High Capacity 2925 mAh ~6+hrs of operation with video buffer turned on High Capacity 2925 mAh ~18+hrs of operation with video buffer turned off Standard Capacity 1950 mAh ~10+hrs of operation with video buffer turned off
2.e.iii	Battery standby duration	<ul style="list-style-type: none"> 18 hr standby rating with 2925mAh battery 10hr standby rating with 1950mAh battery
2.e.iv	Battery charge time	Device charge time if the battery has been depleted by 75 percent. <ul style="list-style-type: none"> Standard battery: ~ 2.25 hours High capacity battery: ~ 3 hours
2.e.v	Battery lifetime until replacement	500 charging cycles before the unit is incapable of achieving a 100% complete charge (500 cycles at 25 deg C).
2.e.vi	Battery replacement procedure	Removable battery replaced in the field
2.e.vii	Availability of supplemental charger for emergency battery charging	Supports COTS micro-USB chargers
2.f	GPS	
2.f.i	BWC possess GPS	Yes
2.f.i.1	Embedded GPS coordinates in recorded video	GPS coordinates are embedded on the video stream as permanent metadata.
2.f.ii	Alternative geolocation methods	GPS coordinates are gathered from paired LMR radio and embedded into video
2.g	Consumer Testing Results	
2.g.i	Sturdiness/fragility	See below
2.g.i.1	Drop test results	MIL-STD 810G
2.g.i.2	Dust intrusion/water resistance rating	IP67
2.g.i.3	Ruggedized	MIL-STD 810G
2.g.i.4	Pressure/depth	1 meter water immersion for 30 minutes
2.g.i.5	Shock	MIL-STD 810G
2.g.i.6	Vibrations	MIL-STD 810G
2.g.ii	Other environmental testing	No information provided
2.g.ii.1	Specify tests, pass/fail results, and ratings received	No information provided
2.h	Safeguards	
2.h.i	Privacy safeguards or features	See below
2.h.i.1	Remote viewing	No
2.h.i.2	Remote activation/deactivation	Not supported until 2017
2.h.i.3	Privacy masking	Yes, as part of evidence management, CommandCentral Vault
2.h.i.4	Redacting/editing capabilities	Full object tracking redaction
2.h.ii	Safeguards for cyber security, unintentional disassembly, etc.	<ul style="list-style-type: none"> Sealed device, memory contained internal, and not physically accessible Device is authenticated to upload to CommandCentral Vault using an X.509 certificate. The certificate is paired with a Motorola Solutions private key. SSL-terminating load balancers are FIPS 140-2-compliant to meet FIPS

		cryptographic requirements. The storage instance uses block ciphers available—256-bit Advanced Encryption Standard (AES-256).
2.i	Regulatory	
2.i.i	Regulatory and Compliance safety requirements	Yes, FCC type approval
2.i.ii	Radiation safety standards	N/A
2.j	Warranty and Maintenance Plans	
2.j.i	Length of warranty (in months)	Service from the Start Comprehensive (complete damage protection) – 36 months, is included for the all devices for warranty support. Provides all component level service including shipping costs, parts and labor costs and the repair or replacement for parts with manufacturing defects for the duration of the service contact.
2.j.ii	Optional extended warranties	Service from the Start Comprehensive
2.j.ii.1	Duration and cost of extended warranties	3-year Service from the Start Comprehensive Warranty, Si500, \$120
2.j.iii	Availability of extended maintenance plans	Service from Start Comprehensive standard duration is a three-year maintenance support plan. Includes warranty (year 1).
2.j.iii.1	Duration and cost of extended maintenance plans	No information provided
2.j.iv	Service contract costs	No information provided
2.k	Auxiliary Equipment	
2.k.i	Manufacturer suggested retail price (MSRP) for each auxiliary equipment	<ul style="list-style-type: none"> • Multi-Unit Charger—charges up to 6 devices or 6 spare batteries simultaneously \$250 • Si Series 2925 mAh High Capacity Battery (battery door not included) \$75 • Spare battery door for SI series 2925 mAh High Capacity Battery \$12 • Vehicular power charger, \$65 • Travel charger US/NA 7.5W, 100V-240V micro USB \$25 • Shoulder epaulet, left shoulder \$35 • Shoulder, right shoulder, \$35 • Shoulder strap buttons, pack of 10 \$5.58 • 3.5mm Receive-only earpiece with translucent tube and rubber eartip \$64
2.l	MSRP without optional features, accessories, or service plans	Si500 Kit—Si500 with display, micro USB charger, carry holder, quick start guide: \$1,200
2.m	Manufacturer's estimated lifetime of device	2.5 to 3.5 years
2.n	Other relevant information	All pricing is MSRP. Pricing will be subjective to nationally available discounts for state & local government. Discounts are allotted at state, county, and, in some cases, by city, as well as federal government discounts. To understand allotted discount level for all equipment and software, contact your Motorola Solutions sales representative.

RFI	Survey Question	Response
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Q.#	(abbreviated)	
Product Information – Software for Video Data Storage and Management		
3.a	Data Management	
3.a.i	Searching capabilities	Complete searching capability across all evidence metadata
3.a.ii	Categorizing capabilities	<ul style="list-style-type: none"> • Si500 VSM has its own touch screen to tag and classify video. Both Si300 & Si500 will interleave GPS location into video file in a breadcrumb fashion. Video files cannot be remotely tagged. Both the Si300 & Si500 will interleave GPS location into video file in a breadcrumb fashion. • CommandCentral Vault allows customizable categories to be tagged to a video. The list of categories is provisioned in CommandCentral Vault and automatically synced to the Si300/Si500. • The video can be manually tagged when the video is reviewed on the Si3000/Si500 or after the video is uploaded to CommandCentral Vault. • CommandCentral Vault also allows provisioning of automatic tags. • CommandCentral Vault can connect to any CAD or RMS system to automatically apply incident, dispatch or case numbers to a video.
3.a.iii	Tagging capabilities	Si500 VSM has its own touch screen that a user can use to manually tag and classify video, photographs, and audio recordings, as the device has a full alphanumeric touch keypad to enter a free-form text field.
3.a.iv	Archiving and file retention	<ul style="list-style-type: none"> • CommandCentral Vault has direct archiving management built into the application and can be exported externally to the Vault application. The Si300/Si500 records video in the MP4 format. Video encoding uses H264 and audio encoding uses AAC. • CommandCentral Vault will automatically archive content based on the last time it was viewed. Content will be considered for archiving after a minimum of 30 days of no activity. This automated process eliminates administrative overhead associated with having to manage content and archival.
3.a.v	Data saved on or offsite	Offsite
3.a.v.1	If saved offsite, specific data accessibility and storage costs	No information provided
3.a.v.2	Video data storage capacity local vs. cloud	<ul style="list-style-type: none"> • 1st year 150GB per camera • 2nd year +50 GB per camera • 3rd year +50 GB per camera (total for 3 year term 250GB) • 4th year +50 GB per camera • 5th year +50GB per camera (total for 5 year term 350GB)
3.a.v.3	Capability to accommodate multiple site installations	No information provided
3.a.vi	Export capabilities	Yes
3.a.vi.1	Traceability feature that shows	<ul style="list-style-type: none"> • Export of data is possible. When such an export is

	which user exported the data	<p>executed, the transaction is recorded as part of the chain of custody controls built into the application.</p> <ul style="list-style-type: none"> • CommandCentral Vault has the ability to export to other standards if necessary such as: mp4, mov, avi or mpeg4. • Each recorded multimedia file is digitally signed and hashed, with mutual authentication to ensure secure chain of custody from capture on the device to the storage on CommandCentral Vault. All this information can then be presented in report form if needed.
3.a.vii	Redacting/editing capabilities	Yes
3.a.vii.1	Specify whether changes are permanent	<ul style="list-style-type: none"> • Redaction does not modify the original evidence. • The original evidence can never be modified. • Redacted version will only reference the original
3.a.viii	Support provided for chain-of-custody requirements	CommandCentral Vault ensures that multimedia is unaltered from the time of capture to the time it is removed from the system. Content is digitally signed at creation to ensure verification of authenticity. All transfer is done under a SSL uniquely encrypted channel to protect privacy of data over the internet connection. Content stored in physically secured datacenters that are CJIS compliant.
3.a.ix	Scalability for different organization size	Yes
3.a.x	User management and role-based access levels	<ul style="list-style-type: none"> • The CommandCentral Vault content repository is built on Adobe AEM, which has received Federal Risk and Authorization Management Program (FedRAMPSM) Certification. • All access to data objects is mediated by the CommandCentral Vault repository and therefore restricted by role based access control.
3.b	Video Analytics	
3.b.i	Companion software to analyze recorded video and audio data	No
3.b.ii	Types of reports built into software	See below
3.b.ii.1	Standard reports	Yes
3.b.ii.2	Daily reports, historical reports, etc.	Yes
3.b.ii.3	Audit reports that support chain-of-custody requirements	Yes
3.b.ii.4	Customization of reports	Yes
3.b.iii	Facial recognition capabilities	No
3.b.iv	Weapons detection capabilities	No
3.b.v	Other analytical capabilities	N/A
3.c	Video Security and Authentication	
3.c.i	Compatibility of BWC video output with existing video management software for reviewing and recording	CommandCentral Vault has the ability to export to several standards if necessary such as: mp4, mov, avi or mpeg4 for simple viewing of video with the use of standard viewers such as VLC or Windows media player.
3.c.ii	File integrity checks to ensure authenticity	Yes
3.c.iii	Data protection mechanism while	Yes

	in transit and during storage	
3.c.iv	Routine software updates	Yes
3.c.v	Cost of software updates	No cost – included in multi-year agreement

RFI Q.#	Survey Question (abbreviated)	Response
Usability/Training		
4.a	Usability validation processes	Voice of customer sessions using appearance models, UI software demos, visual assets
4.b	User community data	Voice of customer interviews, observations during training, surveys
4.c	User-group meetings and frequency	Use forums held throughout the year
4.d	Typical problems reported	N/A because product recently launched
4.d.i	Resolution to problems	N/A because product recently launched
4.e	Hours of tech. support and location	Live telephone support 24/7/365, toll-free number, also web-based and email
4.f	Training provided (hours)	Instructor-led, user training/train-the-trainer, self-paced online. System administrators 2 days, two 6-hr classes

RFI Q.#	Survey Question (abbreviated)	Response
Installation		
5.a	Average time to install and activate	The average time to implement a Si500 device as part of a Digital Evidence Management Solution, including the set-up and configuration of the back-end or storage solution, is four to six hours—assuming all equipment is on-site, the customer supplied Wi-Fi is and Internet connections are working properly and meet the Motorola’s network requirements and specifications. The average time of the configuration and set-up of a Si500 VSM device only takes approximately 15 minutes. Dependent upon the scope of installation, number of device and design architecture desired including networking, security and permissions – anywhere from 1-5 days.

4.29 Panasonic Arbitrator



Figure 29. Panasonic Arbitrator

RFI Q.#	Survey Question (abbreviated)	Response
Vendor Information		
0	Responded to FRN?	Yes
1.a	Name	Panasonic System Communications Company of North America
1.b	Address/phone number	Two Riverfront Plaza, 6 th Floor, Newark, NJ 07102 (855) 323-8787
1.c	Website	www.business.panasonic.com
1.d	Years in business	57 years
1.e	Number and types of customers	5000+ (law enforcement, fire, EMS, and military organizations)
1.f	Manufacturing location(s)	Final kitting assembly takes place in the United States

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – BWC		
2.a	General	
2.a.i	Name and model number	Arbitrator BWC (mk2)
2.a.ii	Physical dims (H" x W" x D")	3.3" H x 2.41" W x 0.81" D
2.a.iii	Weight (oz.)	4.6 oz
2.a.iv	Mounting options	Shirt sleeve, collar, pocket, belt, epaulet, or helmet
2.a.iv.1	Accessories needed for mounting	Main plate and various clip options
2.a.v	Ability to mount on vehicle dashboard	Yes
2.a.v.1	Accessories for vehicle dashboard mount	Mounting kit
2.a.vi	LCD display	No
2.a.vii	Recording capacity	32 GB

2.a.viii	Operating conditions or limitations	The Panasonic Arbitrator BWC is designed to meet MIL-STD-810G standards for resistance to shock, vibration, extreme temperatures, dust and moisture resistance and other harsh conditions.
2.b	Video and Optics	
2.b.i	Maximum video resolution	720P
2.b.ii	Field of view	130°
2.b.iii	Lux rating	Color: 1.2 lux BW: 0.9 lux
2.b.iv	Night mode/format	Yes; low light technology for superior color and BW images in the dark.
2.b.v	Recording speed	30 fps
2.b.vi	Recording format	H.264
2.b.vii	Recording time under default resolution settings	16 hours @720 P
2.b.viii	Ability to capture still photos	Yes
2.b.ix	Ability to embed date/time stamp on recorded video	Yes
2.b.ix.1	Ability to authenticate and validate date/time stamp integrity	Yes
2.b.x	Pre-event recording feature	Yes
2.b.x.1	Time buffered and whether audio is recorded	Up to 30 seconds
2.b.xi	Event marking capability	Yes
2.b.xii	Wireless capabilities for communication	Yes; Arbitrator BWC features built-in 802.11n wireless communication with Arbitrator 360 HD in-car videos systems that enables automated bi-directional activation/triggering.
2.c	Audio	
2.c.i	Microphone feature	Yes
2.c.ii	Microphone sensitivity	The Arbitrator BWC is capable of capturing clear and crisp conversation speech without excessive wind or background noise.
2.c.iii	Audio format	AAC
2.c.iv	Default police radio interface for BWC	No
2.d	Data Upload	
2.d.i	Single device vs. multiple upload docking station	Upload as a single device via USB cable or via built-in 802.11n WI-FI connection and via a 10 bay charging/upload dock for multiple BWC uploads.
2.d.ii	Data transfer method	Arbitrator BWC provides flexible video file offload options including direct offload via Wi-Fi, USB or multi-bay docking stations as well as standard Micro-USB through a workstation or other connected device.
2.d.iii	Manual vs. automatic upload	Both
2.e	Battery Information	
2.e.i	Battery type; internal or removable	Internal removable 3.7v Lithium polymer battery
2.e.ii	Recording duration	8 hours
2.e.iii	Battery standby duration	12 hours
2.e.iv	Battery charge time	3 hours
2.e.v	Battery lifetime until replacement	Arbitrator BWC battery replacement 1 year warranty
2.e.vi	Battery replacement procedure	Field; physical access to replace battery requires a special lock tool.
2.e.vii	Availability of supplemental charger	Unique in-care quick release magnetic charging cable

	for emergency battery charging	or external extended battery
2.f	GPS	
2.f.i	BWC possess GPS	Yes
2.f.i.1	Embedded GPS coordinates in recorded video	Yes
2.f.ii	Alternative geolocation methods	No
2.g	Consumer Testing Results	
2.g.i	Sturdiness/fragility	MIL-STD-810G
2.g.i.1	Drop test results	6 ft
2.g.i.2	Dust intrusion/water resistance rating	IP65
2.g.i.3	Ruggedized	MIL-STD-810G
2.g.i.4	Pressure/depth	No information provided
2.g.i.5	Shock	MIL-STD-810G
2.g.i.6	Vibrations	MIL-STD-810G
2.g.ii	Other environmental testing	Ongoing 3 rd party laboratory testing
2.g.ii.1	Specify tests, pass/fail results, and ratings received	Ongoing 3 rd party laboratory testing
2.h	Safeguards	
2.h.i	Privacy safeguards or features	Features a tamper-proof recording design
2.h.i.1	Remote viewing	Yes; live stream capable
2.h.i.2	Remote activation/deactivation	No
2.h.i.3	Privacy masking	Not on camera, but the Arbitrator SafeServ/UEMS platform currently supports privacy masking of evidence using 3rd party editing software of the agencies choice. Future developments will support enhanced redaction capability within the SafeServ/UEMS software targeted for release in Q4 2016.
2.h.i.4	Redacting/editing capabilities	Not on camera, but Panasonic Arbitrator SafeServ/UEMS software will have redaction capability targeted for release in Q4 2016.
2.h.ii	Safeguards for cyber security, unintentional disassembly, etc.	Original video files and Metadata are encrypted by the Panasonic .AV3 container that locks native video files and the Arbitrator SafeServ/UEMS client is required for playback of native files. The Arbitrator proprietary .AV3 container ensures tamper proof and public trust controls that prevents BWC recordings from being accessed, altered, erased and locks the BWC data from unauthorized access should the device ever be lost or stolen.
2.i	Regulatory	
2.i.i	Regulatory and Compliance safety requirements	Yes
2.i.ii	Radiation safety standards	The Arbitrator BWC complies with FCC RF radiation exposure limits set forth for an uncontrolled environment and complies with the limits for a class B digital device, pursuant to part 15 of the FCC Rules.
2.j	Warranty and Maintenance Plans	
2.j.i	Length of warranty (in months)	BWC camera and POV camera: 36 months Battery: 12 months
2.j.ii	Optional extended warranties	Yes
2.j.ii.1	Duration and cost of extended warranties	Panasonic Arbitrator BWC Extended Warranties and Protection Plus Warranties are available for up to 5 years. Panasonic is a manufacturer and does not sell

		hardware or accessories direct rather through a distribution channel with authorized resellers. Costs of extended warranties can be obtained directly from an authorized Panasonic reseller.
2.j.iii	Availability of extended maintenance plans	Panasonic Arbitrator SafeServ/UEMS software licensing is provided under annual renewal based on a per-server cost and tiered BWC license bundle. Panasonic is a manufacturer and does not sell software licensing direct, rather through a distribution channel with authorized resellers. Costs of Panasonic Arbitrator SafeServ/UEMS software licensing can be obtained directly from an authorized Panasonic reseller.
2.j.iii.1	Duration and cost of extended maintenance plans	Panasonic offers flexible and scalable annual software licensing plans for any size organization.
2.j.iv	Service contract costs	Panasonic offers flexible and scalable annual software licensing plans for any size organization.
2.k	Auxiliary Equipment	
2.k.i	Manufacturer suggested retail price (MSRP) for each auxiliary equipment	<p>Arbitrator BWC Accessories include:</p> <ul style="list-style-type: none"> • Body worn camera external battery pack kit Includes cable • 3.7V Li-Polymer replacement battery • Shoulder mount for 2nd camera with rounded epaulet clip • Collar mount for 2nd camera with collar backing • 2nd Camera epaulet mounting clip • 2nd Camera mounting sleeve (Vertical) • 2nd Camera mounting sleeve (Side Mount) • Main body worn control unit shirt mounting clip • Body worn camera main controller mounting plate • Main body worn control unit uniform pen slot mounting clip • Body worn camera privacy mask attachment • ER(easy removable) cable for charging in vehicle (cigar jack) • USB 3.0 A-B Male/Male molded cable for 10-bay charger • Body worn camera 10-Bay USB offload and charge device • USB cigar jack charger, 2 USB, 2.2VDC x 2 <p>Costs of the above listed accessories can be obtained directly from an authorized Panasonic reseller.</p>
2.l	MSRP without optional features, accessories, or service plans	The Arbitrator BWC body worn camera kit includes, mounting plate, battery, charge cable, storage card, mounting clip for shirt (Does not include 2nd camera). MSRP is \$1,150 without optional features, accessories or service plans.
2.m	Manufacturer's estimated lifetime of device	5 years
2.n	Other relevant information	No information provided

RFI Q.#	Survey Question (abbreviated)	Response
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Product Information – Software for Video Data Storage and Management		
3.a	Data Management – Arbitrator SafeServ/Unified Evidence Management System (UEMS)	
3.a.i	Searching capabilities	Arbitrator BWC is compatible with the Arbitrator SafeServ/Unified Evidence Management System (UEMS) software platform.
3.a.ii	Categorizing capabilities	Yes
3.a.iii	Tagging capabilities	Yes
3.a.iv	Archiving and file retention	Yes; the Arbitrator SafeServ/UEMS system provides an evidence rule that is a function to determine access permissions, retention period, and storage locations of files (called Effect) by predefined conditions (called Criteria) when the files are registered in the database. These rules that have been established in advance by the agency. These rules will also be able to manage retention time and file accessibility and scheduled for automated deletion of files.
3.a.v	Data saved on or offsite	Compatible with on-premises, cloud, hybrid and other archival systems for video storage, the SafeServ/UEMS software is a flexible and comprehensive option for law enforcement agencies to take advantage of video evidence, while maintaining security, chain of custody, and compliance requirements. This gives agencies the option to utilize the storage option that is most cost-effective for them, and to store all their video evidence in a uniform manner.
3.a.v.1	If saved offsite, specific data accessibility and storage costs	For hybrid deployments, Panasonic offers a secure certified Microsoft Azure API Interface to Azure CJIS Cloud Storage solution.
3.a.v.2	Video data storage capacity local vs. cloud	For professional full-time public safety agency deployments, a local server based storage is a common method for video evidence storage to sustain 24/7 mission-critical continuity of operations do not rely upon broadband internet connectivity. A local storage design ensures BWC evidence preservation during internet outages caused by unplanned events or natural disasters. While cloud storage requires less up-front investment, there is a perpetual ongoing monthly cost per officer for data storage and cloud storage is highly dependent on broadband internet connectivity/speed to sustain 24/7 continuity of operations. Unexpected internet outages or slowdown will adversely impact a cloud storage design. The costs of local storage server versus cloud storage should be compared over a 5 year period for true TCO value comparison. To assist agencies, Panasonic has published a Whitepaper called “The Dollars and Sense of Video Evidence Management - 5 Things You Need to Know for Cost-Effectively Integrating and Deploying BWC Solutions at ftp://ftp.panasonic.com/videosurveillance/whitepaper/video-evidence-management_whitepaper.pdf
3.a.v.3	Capability to accommodate multiple site installations	Yes, the Panasonic Arbitrator SafeServ/UEMS platform supports multi-server design for multiple site installations.
3.a.vi	Export capabilities	Yes
3.a.vi.1	Traceability feature that shows	Yes

	which user exported the data	
3.a.vii	Redacting/editing capabilities	Yes; the Arbitrator SafeServ/UEMS platform currently supports clipping a copy of the original file and redaction using 3rd party redaction software of the agency's. However, future developments will support enhanced redaction capability within the SafeServ/UEMS software targeted for release in Q4 2016.
3.a.vii.1	Specify whether changes are permanent	The future SafeServ/UEMS release enhanced capability will provide additional dissemination tracking, evidence publishing options, post-analytics and complete chain of custody for any redacted files as well.
3.a.viii	Support provided for chain-of-custody requirements	Yes, Panasonic's team of video evidence solution experts will provide support as required.
3.a.ix	Scalability for different organization size	Yes
3.a.x	User management and role-based access levels	Yes
3.b	Video Analytics	
3.b.i	Companion software to analyze recorded video and audio data	The Arbitrator SafeServ/UEMS Backend System (BES) allows for exporting of copies audio/video recordings for use of 3rd party forensic software applications.
3.b.ii	Types of reports built into software	The Arbitrator SafeServ/UEMS Backend System (BES) utilizes a Windows SQL Server Database and is compatible with Crystal Reports.
3.b.ii.1	Standard reports	Yes; audit logs and officer activity
3.b.ii.2	Daily reports, historical reports, etc.	Yes
3.b.ii.3	Audit reports that support chain-of-custody requirements	Yes; Anytime an operation is performed by a specific user, or by the system itself, and entry is made detailing the event as it took place, who took it, and when it took place. These entries are saved to the audit logs and can be pulled up as needed, be it a specific file, the system as a whole, or any combination of user, file, or function.
3.b.ii.4	Customization of reports	Yes
3.b.iii	Facial recognition capabilities	No; future development
3.b.iv	Weapons detection capabilities	No; future development
3.b.v	Other analytical capabilities	No information provided
3.c	Video Security and Authentication	
3.c.i	Compatibility of BWC video output with existing video management software for reviewing and recording	Panasonic Arbitrator/UEMS software platform is able to securely manage and retrieve all digital video evidence from Arbitrator 360° in-car systems, Arbitrator body worn cameras, Panasonic fixed surveillance video, photos and other types of video evidence data through a single platform.
3.c.ii	File integrity checks to ensure authenticity	Yes; video data encryption date/time stamps recordings that are created based on a hash file algorithm that preserves video integrity and authenticity. Arbitrator BWC is designed for video evidence security throughout its lifecycle using SHA256 and RSA 1024.
3.c.iii	Data protection mechanism while in transit and during storage	The Arbitrator BWC camera utilizes secure channel communication when communicating between the SafeServ/UEMS backend server via a secured 802.11

		wireless network router. Arbitrator BWC video data is scrambled, transferred using wireless data encryption on the air. Every Arbitrator SafeServ/UEMS authorized user has a unique identified (Logon ID) which is added to the video data, Authentication Logon using this ID is necessary to access the video data. The SafeServ/UEMS platform also allows integration with Microsoft Active Directory to provide enterprise wide user authentication and seamless login. Arbitrator's SafeServ/UEMS software is also compatible with 3rd Party Mobile VPN applications, such as NetMotion VPN solutions, to ensure CJIS compliance. With Panasonic's hybrid solution, the Arbitrator SafeServ/UEMS Azure BES API data transmission meets the Federal Information Processing Standard - FIPS 140-2.
3.c.iv	Routine software updates	Pushed out automatically
3.c.v	Cost of software updates	No charge under annual software licensing and maintenance agreements.

RFI Q.#	Survey Question (abbreviated)	Response
Usability/Training		
4.a	Usability validation processes	Panasonic's pre-deployment planning includes the architecture development and requirements gathering for system configurations, required to properly configure ARB video evidence retention settings, user permissions, data flow, BWC programming, and other related configuration considerations including wireless networking analysis.
4.b	User community data	Panasonic Arbitrator Sales, Product Management and Engineering team routinely meet with customers. Panasonic has made a significant reinvestment to modernize BWC technology due to customer requests. Panasonic takes great pride in gathering data during onsite assessments and observing officers during hands-on training. Officer feedback is routinely collected and shared with Panasonic engineering to constantly improve features and functionality.
4.c	User-group meetings and frequency	Panasonic holds at least two user group sessions in which feedback is gathered from Arbitrator use agencies for roadmap development and enhancement of video evidence products. Panasonic has been able to achieve success by working with industry experts, customers and partners in conjunction with its commitment to ongoing research and development investment. Panasonic representatives are current members of the UL 3802 Standards Committee and the SIA Body Worn Camera Working Group.
4.d	Typical problems reported	<ul style="list-style-type: none"> • Local area network (LAN/WAN) congestion or instability • Unplanned network/internet outages • Broadband Internet Speed • High demand continuous Downloading/Uploading

		<ul style="list-style-type: none"> • Business continuity during peak hours of operations • 3rd party software incompatibility
4.d.i	Resolution to problems	Panasonic Arbitrator SafeServ/UEMS platform offers a multi-server system design architecture that provides load balancing with redundancy. When considering the critical mass factors of sustaining simultaneous BWC offloading, Panasonic's multi-server design will provide the optimum performance and continuity of operations to efficiently manage thousands of BWC devices.
4.e	Hours of tech. support and location	<p>Panasonic takes great pride in providing US-based, 24x7 customer service, certified Arbitrator technicians (not outsourced). The Panasonic Arbitrator 360 HD and Arbitrator BWC system is supported both directly and through premier authorized Panasonic Partners who are factory certified to provide first level support and service to Panasonic customers. There are more than 10 in-house certified Panasonic analysts that are dedicated to support Arbitrator hardware and software. Customer service is specifically designed to meet the high demands of public safety organizations including:</p> <ul style="list-style-type: none"> • 24x7 Toll Free Help Desk Support Hotline with a 16 sec average wait time • Live Technical Support chat • Experienced analyst answering the first line calls • Priority Exchange Program with overnight delivery • Numerous US-based Panasonic field support staff to expedite response times
4.f	Training provided (hours)	<p>Panasonic offers a variety of implementation, training and support options. Panasonic expects the following roles will average the corresponding refresh training hours for the Introduction, Comprehensive User Course, Advanced User Course, and the System Administration Course:</p> <ul style="list-style-type: none"> • Officers (may include Train-the-Trainer option) Introduction – 30 minutes Standard – 2 hours Comprehensive User (including policy review) – average 2 hours • Police Department Administration Introduction – 30 minutes Standard – 2 hours Advanced User (including policy review) – average 2 hours • Evidence Technicians Introduction to SafeServ/Unified Evidence Management System – 2 hours Standard – 4 hours Advanced User & System Administration (including policy review) • IT Management (Installations Overview) - 8 hours, one day to certification • General Overview for Others as deemed appropriate and/or suggested by the agency. Other trained members include FOIA staff, training coordinators, and prosecutors or other key staff. General overview provides the basic training in two hours and light users become proficient in 4-8 hours of training by an authorized staff member

RFI Q.#	Survey Question (abbreviated)	Response
Installation		
5.a	Average time to install and activate	The initial Arbitrator SafeServ/UEMS Backend Server software configuration is typically 2-4 hours or more depending on the complexity of agency-defined criteria, rules and retention policy. From that point, it takes less than 5 minutes to activate the first BWC device for an officer.

4.30 Patrol Eyes SC-DV1



Figure 30. Patrol Eyes SC-DV1

RFI Q.#	Survey Question (abbreviated)	Response
Vendor Information		
0	Responded to FRN?	Yes
1.a	Name	Patrol Eyes
1.b	Address/phone number	4539 Hidden Canyon Ct, Ada, Michigan, 49301 (616) 258-6315
1.c	Website	www.stuntcams.com
1.d	Years in business	9 years
1.e	Number and types of customers	No information provided
1.f	Manufacturing location(s)	Manufactured in China; designed in the United States

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – BWC		
2.a	General	
2.a.i	Name and model number	SC-DV1
2.a.ii	Physical dims (H" x W" x D")	3.7" H x 2.4" W x 2.8" D
2.a.iii	Weight (oz.)	6.5 oz
2.a.iv	Mounting options	Optional suction cup mount, epaulet mount, tripod adaptor
2.a.iv.1	Accessories needed for mounting	Metal body clip with 360° rotation
2.a.v	Ability to mount on vehicle dashboard	Suction cup available
2.a.v.1	Accessories for vehicle dashboard mount	Suction cup available
2.a.vi	LCD display	2 inch TFT-LCD high resolution color display
2.a.vii	Recording capacity	32 GB
2.a.viii	Operating conditions or limitations	Operating temperature: -40-60°C (-40-140°F)
2.b	Video and Optics	
2.b.i	Maximum video resolution	1080P (30 fps)
2.b.ii	Field of view	170° on 480P; 140° on 1080P

2.b.iii	Lux rating	No information provided
2.b.iv	Night mode/format	2 high intensity 850NM LEDs; up to 30 ft with visible face detection
2.b.v	Recording speed	30 fps (60 fps at 848 X 480P)
2.b.vi	Recording format	MOV
2.b.vii	Recording time under default resolution settings	8 hours (848 X 480P)
2.b.viii	Ability to capture still photos	Yes; 16 MP; JPEG
2.b.ix	Ability to embed date/time stamp on recorded video	Yes
2.b.ix.1	Ability to authenticate and validate date/time stamp integrity	Includes officer ID
2.b.x	Pre-event recording feature	Yes
2.b.x.1	Time buffered and whether audio is recorded	Up to 25 seconds video (depends on video resolution)
2.b.xi	Event marking capability	Yes
2.b.xii	Wireless capabilities for communication	No
2.c	Audio	
2.c.i	Microphone feature	Yes
2.c.ii	Microphone sensitivity	No information provided
2.c.iii	Audio format	MP3
2.c.iv	Default police radio interface for BWC	Yes, PTT walkie talkie function
2.d	Data Upload	
2.d.i	Single device vs. multiple upload docking station	Docking station available
2.d.ii	Data transfer method	USB 2.0
2.d.iii	Manual vs. automatic upload	No information provided
2.e	Battery Information	
2.e.i	Battery type; internal or removable	Removable 2800mAh lithium battery
2.e.ii	Recording duration	7 hrs (1920X1080P, 1440X1080P), 7.5 hrs (1280X720P), 8 hrs (848X480P)
2.e.iii	Battery standby duration	12 hrs
2.e.iv	Battery charge time	2 hrs
2.e.v	Battery lifetime until replacement	1000 cycles
2.e.vi	Battery replacement procedure	Sent for replacement or done in house if have a small phillips and a flathead screwdriver. Unscrew 4 screws outside and 4 screws inside.
2.e.vii	Availability of supplemental charger for emergency battery charging	Standard USB battery packs are compatible
2.f	GPS	
2.f.i	BWC possess GPS	Yes
2.f.i.1	Embedded GPS coordinates in recorded video	Yes
2.f.ii	Alternative geolocation methods	No information provided
2.g	Consumer Testing Results	
2.g.i	Sturdiness/fragility	No information provided
2.g.i.1	Drop test results	Up to 3 m (10 ft)
2.g.i.2	Dust intrusion/water resistance rating	Weather resistant IP57
2.g.i.3	Ruggedized	No information provided
2.g.i.4	Pressure/depth	No information provided

2.g.i.5	Shock	No information provided
2.g.i.6	Vibrations	No information provided
2.g.ii	Other environmental testing	No information provided
2.g.ii.1	Specify tests, pass/fail results, and ratings received	No information provided
2.h	Safeguards	
2.h.i	Privacy safeguards or features	No information provided
2.h.i.1	Remote viewing	No information provided
2.h.i.2	Remote activation/deactivation	No information provided
2.h.i.3	Privacy masking	No information provided
2.h.i.4	Redacting/editing capabilities	No information provided
2.h.ii	Safeguards for cyber security, unintentional disassembly, etc.	Password protection
2.i	Regulatory	
2.i.i	Regulatory and Compliance safety requirements	No information provided
2.i.ii	Radiation safety standards	No information provided
2.j	Warranty and Maintenance Plans	
2.j.i	Length of warranty (in months)	12 months
2.j.ii	Optional extended warranties	PatrolEyes Protection Plus
2.j.ii.1	Duration and cost of extended warranties	1 yr \$40, 2 yrs \$60, 3 yrs \$80
2.j.iii	Availability of extended maintenance plans	No information provided
2.j.iii.1	Duration and cost of extended maintenance plans	No information provided
2.j.iv	Service contract costs	No information provided
2.k	Auxiliary Equipment	
2.k.i	Manufacturer suggested retail price (MSRP) for each auxiliary equipment	USB cable, car charger, wall charger, universal metal clip
2.l	MSRP without optional features, accessories, or service plans	\$299.95
2.m	Manufacturer's estimated lifetime of device	No information provided
2.n	Other relevant information	No information provided

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – Software for Video Data Storage and Management		
3.a	Data Management	
3.a.i	Searching capabilities	Yes; by date, device ID, and user-added tags
3.a.ii	Categorizing capabilities	Yes; file type, date, and tags
3.a.iii	Tagging capabilities	Yes
3.a.iv	Archiving and file retention	No information provided
3.a.v	Data saved on or offsite	Onsite
3.a.v.1	If saved offsite, specific data accessibility and storage costs	No information provided
3.a.v.2	Video data storage capacity local vs. cloud	No information provided
3.a.v.3	Capability to accommodate multiple site installations	No information provided

3.a.vi	Export capabilities	No information provided
3.a.vi.1	Traceability feature that shows which user exported the data	No information provided
3.a.vii	Redacting/editing capabilities	No information provided
3.a.vii.1	Specify whether changes are permanent	No information provided
3.a.viii	Support provided for chain-of-custody requirements	No information provided
3.a.ix	Scalability for different organization size	No information provided
3.a.x	User management and role-based access levels	No information provided
3.b	Video Analytics	
3.b.i	Companion software to analyze recorded video and audio data	No information provided
3.b.ii	Types of reports built into software	No information provided
3.b.ii.1	Standard reports	No information provided
3.b.ii.2	Daily reports, historical reports, etc.	No information provided
3.b.ii.3	Audit reports that support chain-of-custody requirements	No information provided
3.b.ii.4	Customization of reports	No information provided
3.b.iii	Facial recognition capabilities	No information provided
3.b.iv	Weapons detection capabilities	No information provided
3.b.v	Other analytical capabilities	No information provided
3.c	Video Security and Authentication	
3.c.i	Compatibility of BWC video output with existing video management software for reviewing and recording	No information provided
3.c.ii	File integrity checks to ensure authenticity	No information provided
3.c.iii	Data protection mechanism while in transit and during storage	No information provided
3.c.iv	Routine software updates	No information provided
3.c.v	Cost of software updates	No information provided

RFI Q.#	Survey Question (abbreviated)	Response
Usability/Training		
4.a	Usability validation processes	No information provided
4.b	User community data	No information provided
4.c	User-group meetings and frequency	No information provided
4.d	Typical problems reported	No information provided
4.d.i	Resolution to problems	No information provided
4.e	Hours of tech. support and location	No information provided
4.f	Training provided (hours)	No information provided

RFI Q.#	Survey Question (abbreviated)	Response
Installation		
5.a	Average time to install and activate	No information provided

4.31 Patrol Eyes SC-DV5



Figure 31. Patrol Eyes SC-DV5

RFI Q.#	Survey Question (abbreviated)	Response
Vendor Information		
0	Responded to FRN?	Yes
1.a	Name	Patrol Eyes
1.b	Address/phone number	4539 Hidden Canyon Ct, Ada, Michigan, 49301 (616) 258-6315
1.c	Website	www.stuntcams.com
1.d	Years in business	9 years
1.e	Number and types of customers	No information provided
1.f	Manufacturing location(s)	Manufactured in China; designed in the United States

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – BWC		
2.a	General	
2.a.i	Name and model number	SC-DV5
2.a.ii	Physical dims (H" x W" x D")	3.3" H x 2.4" W x 1.2" D
2.a.iii	Weight (oz.)	5.8 oz
2.a.iv	Mounting options	Chest and epaulet
2.a.iv.1	Accessories needed for mounting	Epaulet mount
2.a.v	Ability to mount on vehicle dashboard	Yes
2.a.v.1	Accessories for vehicle dashboard mount	Suction cup mount
2.a.vi	LCD display	2" TFT-LCD high resolution color display
2.a.vii	Recording capacity	16 GB or 32 GB
2.a.viii	Operating conditions or limitations	Operating temperature: -40°F to 140°F Humidity: 40-80%
2.b	Video and Optics	
2.b.i	Maximum video resolution	1080P
2.b.ii	Field of view	170° on 480P, 140° on 1080P

2.b.iii	Lux rating	No information provided
2.b.iv	Night mode/format	2 high intensity 850NM LEDs; up to 30 ft with visible face detection
2.b.v	Recording speed	30 fps
2.b.vi	Recording format	MOV
2.b.vii	Recording time under default resolution settings	5.6 hours
2.b.viii	Ability to capture still photos	Yes; 16MP; JPEG
2.b.ix	Ability to embed date/time stamp on recorded video	Yes
2.b.ix.1	Ability to authenticate and validate date/time stamp integrity	Includes officer ID
2.b.x	Pre-event recording feature	Yes
2.b.x.1	Time buffered and whether audio is recorded	Up to 30 seconds
2.b.xi	Event marking capability	No
2.b.xii	Wireless capabilities for communication	No information provided
2.c	Audio	
2.c.i	Microphone feature	Yes; there is also a “only audio” function on the camera
2.c.ii	Microphone sensitivity	No information provided
2.c.iii	Audio format	MP3
2.c.iv	Default police radio interface for BWC	Yes, Kenwood and various Motorola models
2.d	Data Upload	
2.d.i	Single device vs. multiple upload docking station	Docking station available
2.d.ii	Data transfer method	USB 2.0
2.d.iii	Manual vs. automatic upload	Automatic; Software and docking station can auto upload.
2.e	Battery Information	
2.e.i	Battery type; internal or removable	Removable 1950 mAh lithium battery
2.e.ii	Recording duration	5.6 hours
2.e.iii	Battery standby duration	6 hours
2.e.iv	Battery charge time	2 hours
2.e.v	Battery lifetime until replacement	1000 cycles
2.e.vi	Battery replacement procedure	Send for replacement or can be done in-house with screw drivers
2.e.vii	Availability of supplemental charger for emergency battery charging	Standard USB battery packs are compatible
2.f	GPS	
2.f.i	BWC possess GPS	Yes
2.f.i.1	Embedded GPS coordinates in recorded video	Yes
2.f.ii	Alternative geolocation methods	No information provided
2.g	Consumer Testing Results	
2.g.i	Sturdiness/fragility	No information provided
2.g.i.1	Drop test results	Up to 3 m (10 ft)
2.g.i.2	Dust intrusion/water resistance rating	IP57
2.g.i.3	Ruggedized	No information provided
2.g.i.4	Pressure/depth	No information provided
2.g.i.5	Shock	No information provided

2.g.i.6	Vibrations	No information provided
2.g.ii	Other environmental testing	No information provided
2.g.ii.1	Specify tests, pass/fail results, and ratings received	No information provided
2.h	Safeguards	
2.h.i	Privacy safeguards or features	No
2.h.i.1	Remote viewing	No
2.h.i.2	Remote activation/deactivation	No
2.h.i.3	Privacy masking	No
2.h.i.4	Redacting/editing capabilities	No
2.h.ii	Safeguards for cyber security, unintentional disassembly, etc.	Password protection
2.i	Regulatory	
2.i.i	Regulatory and Compliance safety requirements	No information provided
2.i.ii	Radiation safety standards	No information provided
2.j	Warranty and Maintenance Plans	
2.j.i	Length of warranty (in months)	12 months
2.j.ii	Optional extended warranties	1 yr at \$40, 2 yr at \$60, 3 yr at \$80
2.j.ii.1	Duration and cost of extended warranties	No information provided
2.j.iii	Availability of extended maintenance plans	No information provided
2.j.iii.1	Duration and cost of extended maintenance plans	No information provided
2.j.iv	Service contract costs	No information provided
2.k	Auxiliary Equipment	
2.k.i	Manufacturer suggested retail price (MSRP) for each auxiliary equipment	No information provided
2.l	MSRP without optional features, accessories, or service plans	\$324.95
2.m	Manufacturer's estimated lifetime of device	No information provided
2.n	Other relevant information	No information provided

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – Software for Video Data Storage and Management		
3.a	Data Management	
3.a.i	Searching capabilities	Yes; by date, device ID, and user-added tags
3.a.ii	Categorizing capabilities	Yes; file type, date, and tags
3.a.iii	Tagging capabilities	Yes
3.a.iv	Archiving and file retention	No information provided
3.a.v	Data saved on or offsite	Onsite
3.a.v.1	If saved offsite, specific data accessibility and storage costs	No information provided
3.a.v.2	Video data storage capacity local vs. cloud	No information provided
3.a.v.3	Capability to accommodate multiple site installations	No information provided
3.a.vi	Export capabilities	No information provided

3.a.vi.1	Traceability feature that shows which user exported the data	No information provided
3.a.vii	Redacting/editing capabilities	No information provided
3.a.vii.1	Specify whether changes are permanent	No information provided
3.a.viii	Support provided for chain-of-custody requirements	No information provided
3.a.ix	Scalability for different organization size	No information provided
3.a.x	User management and role-based access levels	No information provided
3.b	Video Analytics	
3.b.i	Companion software to analyze recorded video and audio data	No information provided
3.b.ii	Types of reports built into software	No information provided
3.b.ii.1	Standard reports	No information provided
3.b.ii.2	Daily reports, historical reports, etc.	No information provided
3.b.ii.3	Audit reports that support chain-of-custody requirements	No information provided
3.b.ii.4	Customization of reports	No information provided
3.b.iii	Facial recognition capabilities	No information provided
3.b.iv	Weapons detection capabilities	No information provided
3.b.v	Other analytical capabilities	No information provided
3.c	Video Security and Authentication	
3.c.i	Compatibility of BWC video output with existing video management software for reviewing and recording	No information provided
3.c.ii	File integrity checks to ensure authenticity	No information provided
3.c.iii	Data protection mechanism while in transit and during storage	No information provided
3.c.iv	Routine software updates	No information provided
3.c.v	Cost of software updates	None

RFI Q.#	Survey Question (abbreviated)	Response
Usability/Training		
4.a	Usability validation processes	No information provided
4.b	User community data	No information provided
4.c	User-group meetings and frequency	No information provided
4.d	Typical problems reported	No information provided
4.d.i	Resolution to problems	No information provided
4.e	Hours of tech. support and location	No information provided
4.f	Training provided (hours)	No information provided

RFI Q.#	Survey Question (abbreviated)	Response
Installation		
5.a	Average time to install and activate	No information provided

4.32 Patrol Eyes SC-DV6



Figure 32. Patrol Eyes SC-DV6

RFI Q.#	Survey Question (abbreviated)	Response
Vendor Information		
0	Responded to FRN?	Yes
1.a	Name	Patrol Eyes
1.b	Address/phone number	4539 Hidden Canyon Ct, Ada, Michigan, 49301 (616) 258-6315
1.c	Website	www.stuntcams.com
1.d	Years in business	9 years
1.e	Number and types of customers	No information provided
1.f	Manufacturing location(s)	Manufactured in China; designed in the United States

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – BWC		
2.a	General	
2.a.i	Name and model number	SC-DV6
2.a.ii	Physical dims (H" x W" x D")	3.25" H x 2.25" W x 1.25" D
2.a.iii	Weight (oz.)	5.5 oz
2.a.iv	Mounting options	No information provided
2.a.iv.1	Accessories needed for mounting	Metal body clip
2.a.v	Ability to mount on vehicle dashboard	Suction cup available
2.a.v.1	Accessories for vehicle dashboard mount	Suction cup available
2.a.vi	LCD display	2" TFT-LCD high resolution color display
2.a.vii	Recording capacity	32 GB, up to 64 GB
2.a.viii	Operating conditions or limitations	Operating temperature: -40°F to 140°F
2.b	Video and Optics	
2.b.i	Maximum video resolution	1080P
2.b.ii	Field of view	170° on 480P; 140° on 1080P
2.b.iii	Lux rating	No information provided

2.b.iv	Night mode/format	2 high intensity 850NM LEDs; up to 30 ft with visible face detection
2.b.v	Recording speed	30 fps
2.b.vi	Recording format	MOV
2.b.vii	Recording time under default resolution settings	6 hours
2.b.viii	Ability to capture still photos	Yes; 23 MP; JPEG
2.b.ix	Ability to embed date/time stamp on recorded video	Yes
2.b.ix.1	Ability to authenticate and validate date/time stamp integrity	Includes officer ID
2.b.x	Pre-event recording feature	Yes
2.b.x.1	Time buffered and whether audio is recorded	30 seconds in 1080P
2.b.xi	Event marking capability	Yes
2.b.xii	Wireless capabilities for communication	No information provided
2.c	Audio	
2.c.i	Microphone feature	Yes
2.c.ii	Microphone sensitivity	No information provided
2.c.iii	Audio format	MP3
2.c.iv	Default police radio interface for BWC	No information provided
2.d	Data Upload	
2.d.i	Single device vs. multiple upload docking station	Docking station available
2.d.ii	Data transfer method	USB 2.0
2.d.iii	Manual vs. automatic upload	No information provided
2.e	Battery Information	
2.e.i	Battery type; internal or removable	Removable 2000mAh lithium battery
2.e.ii	Recording duration	6 hrs
2.e.iii	Battery standby duration	10 hrs
2.e.iv	Battery charge time	2 hrs
2.e.v	Battery lifetime until replacement	1000 cycles
2.e.vi	Battery replacement procedure	Send for replacement or can be done in house with screwdrivers
2.e.vii	Availability of supplemental charger for emergency battery charging	Standard USB battery packs are compatible
2.f	GPS	
2.f.i	BWC possess GPS	Yes
2.f.i.1	Embedded GPS coordinates in recorded video	Yes
2.f.ii	Alternative geolocation methods	No information provided
2.g	Consumer Testing Results	
2.g.i	Sturdiness/fragility	No information provided
2.g.i.1	Drop test results	Up to 10 ft
2.g.i.2	Dust intrusion/water resistance rating	IP57, Waterproof up to 32ft
2.g.i.3	Ruggedized	No information provided
2.g.i.4	Pressure/depth	No information provided
2.g.i.5	Shock	No information provided
2.g.i.6	Vibrations	No information provided
2.g.ii	Other environmental testing	No information provided
2.g.ii.1	Specify tests, pass/fail results, and	No information provided

	ratings received	
2.h	Safeguards	
2.h.i	Privacy safeguards or features	No information provided
2.h.i.1	Remote viewing	No information provided
2.h.i.2	Remote activation/deactivation	No information provided
2.h.i.3	Privacy masking	No information provided
2.h.i.4	Redacting/editing capabilities	No information provided
2.h.ii	Safeguards for cyber security, unintentional disassembly, etc.	Password protection
2.i	Regulatory	
2.i.i	Regulatory and Compliance safety requirements	No information provided
2.i.ii	Radiation safety standards	No information provided
2.j	Warranty and Maintenance Plans	
2.j.i	Length of warranty (in months)	12 months
2.j.ii	Optional extended warranties	PatrolEyes Protection Plus
2.j.ii.1	Duration and cost of extended warranties	1 yr at \$40, 2 yrs at \$60, 3 yrs at \$80
2.j.iii	Availability of extended maintenance plans	No information provided
2.j.iii.1	Duration and cost of extended maintenance plans	No information provided
2.j.iv	Service contract costs	No information provided
2.k	Auxiliary Equipment	
2.k.i	Manufacturer suggested retail price (MSRP) for each auxiliary equipment	No information provided
2.l	MSRP without optional features, accessories, or service plans	\$449.95
2.m	Manufacturer's estimated lifetime of device	No information provided
2.n	Other relevant information	No information provided

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – Software for Video Data Storage and Management		
3.a	Data Management	
3.a.i	Searching capabilities	Yes; by date, device ID, and user-added tags
3.a.ii	Categorizing capabilities	Yes; file type, date, and tags
3.a.iii	Tagging capabilities	Yes
3.a.iv	Archiving and file retention	No information provided
3.a.v	Data saved on or offsite	Onsite
3.a.v.1	If saved offsite, specific data accessibility and storage costs	No information provided
3.a.v.2	Video data storage capacity local vs. cloud	No information provided
3.a.v.3	Capability to accommodate multiple site installations	No information provided
3.a.vi	Export capabilities	No information provided
3.a.vi.1	Traceability feature that shows which user exported the data	No information provided
3.a.vii	Redacting/editing capabilities	No information provided
3.a.vii.1	Specify whether changes are	No information provided

	permanent	
3.a.viii	Support provided for chain-of-custody requirements	No information provided
3.a.ix	Scalability for different organization size	No information provided
3.a.x	User management and role-based access levels	No information provided
3.b	Video Analytics	
3.b.i	Companion software to analyze recorded video and audio data	No information provided
3.b.ii	Types of reports built into software	No information provided
3.b.ii.1	Standard reports	No information provided
3.b.ii.2	Daily reports, historical reports, etc.	No information provided
3.b.ii.3	Audit reports that support chain-of-custody requirements	No information provided
3.b.ii.4	Customization of reports	No information provided
3.b.iii	Facial recognition capabilities	No information provided
3.b.iv	Weapons detection capabilities	No information provided
3.b.v	Other analytical capabilities	No information provided
3.c	Video Security and Authentication	
3.c.i	Compatibility of BWC video output with existing video management software for reviewing and recording	No information provided
3.c.ii	File integrity checks to ensure authenticity	No information provided
3.c.iii	Data protection mechanism while in transit and during storage	No information provided
3.c.iv	Routine software updates	No information provided
3.c.v	Cost of software updates	None

RFI Q.#	Survey Question (abbreviated)	Response
Usability/Training		
4.a	Usability validation processes	No information provided
4.b	User community data	No information provided
4.c	User-group meetings and frequency	No information provided
4.d	Typical problems reported	No information provided
4.d.i	Resolution to problems	No information provided
4.e	Hours of tech. support and location	No information provided
4.f	Training provided (hours)	No information provided

RFI Q.#	Survey Question (abbreviated)	Response
Installation		
5.a	Average time to install and activate	No information provided

4.33 Patrol Eyes SC-DV7



Figure 33. Patrol Eyes SC-DV7

RFI Q.#	Survey Question (abbreviated)	Response
Vendor Information		
0	Responded to FRN?	No
1.a	Name	Patrol Eyes
1.b	Address/phone number	4539 Hidden Canyon Ct, Ada, Michigan, 49301 (616) 258-6315
1.c	Website	www.stuntcams.com
1.d	Years in business	9 years
1.e	Number and types of customers	No information provided
1.f	Manufacturing location(s)	Manufactured in China; designed in the United States

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – BWC		
2.a	General	
2.a.i	Name and model number	SC-DV7
2.a.ii	Physical dims (H" x W" x D")	3.0" H x 2.2" W x 1.1" D
2.a.iii	Weight (oz.)	4.5 oz
2.a.iv	Mounting options	Information not found on website
2.a.iv.1	Accessories needed for mounting	Metal body clip
2.a.v	Ability to mount on vehicle dashboard	Information not found on website
2.a.v.1	Accessories for vehicle dashboard mount	Information not found on website
2.a.vi	LCD display	2" TFT-LCD
2.a.vii	Recording capacity	64 GB
2.a.viii	Operating conditions or limitations	Operating temperature: -40°F to 140°F

2.b	Video and Optics	
2.b.i	Maximum video resolution	1080P (30 fps)
2.b.ii	Field of view	170°
2.b.iii	Lux rating	Information not found on website
2.b.iv	Night mode/format	Manual infrared extends visibility up to 98 ft
2.b.v	Recording speed	30 fps, 45 fps, and 60 fps options
2.b.vi	Recording format	H.264 MPEG-4 (.mp4)
2.b.vii	Recording time under default resolution settings	6.5 hrs (1080P); 7.25 hrs (720P); 8 hrs (480P)
2.b.viii	Ability to capture still photos	Yes; 4 to 32 MP depending on resolution; JPEG
2.b.ix	Ability to embed date/time stamp on recorded video	Yes
2.b.ix.1	Ability to authenticate and validate date/time stamp integrity	Includes user ID
2.b.x	Pre-event recording feature	Yes
2.b.x.1	Time buffered and whether audio is recorded	Up to 1 minute; audio is recorded
2.b.xi	Event marking capability	Yes
2.b.xii	Wireless capabilities for communication	Wireless for remote control only
2.c	Audio	
2.c.i	Microphone feature	Yes
2.c.ii	Microphone sensitivity	Information not found on website
2.c.iii	Audio format	WAV
2.c.iv	Default police radio interface for BWC	Yes, PTT walkie talkie function
2.d	Data Upload	
2.d.i	Single device vs. multiple upload docking station	Docking station available
2.d.ii	Data transfer method	USB 2.0
2.d.iii	Manual vs. automatic upload	Information not found on website
2.e	Battery Information	
2.e.i	Battery type; internal or removable	Removable 2000mAh battery
2.e.ii	Recording duration	6 hrs
2.e.iii	Battery standby duration	12 hrs
2.e.iv	Battery charge time	3 hrs
2.e.v	Battery lifetime until replacement	Information not found on website
2.e.vi	Battery replacement procedure	Information not found on website
2.e.vii	Availability of supplemental charger for emergency battery charging	Information not found on website
2.f	GPS	
2.f.i	BWC possess GPS	Information not found on website
2.f.i.1	Embedded GPS coordinates in recorded video	Information not found on website
2.f.ii	Alternative geolocation methods	Information not found on website
2.g	Consumer Testing Results	
2.g.i	Sturdiness/fragility	Information not found on website
2.g.i.1	Drop test results	Up to 6 ft
2.g.i.2	Dust intrusion/water resistance rating	Waterproof IP68
2.g.i.3	Ruggedized	Information not found on website
2.g.i.4	Pressure/depth	Information not found on website
2.g.i.5	Shock	Information not found on website
2.g.i.6	Vibrations	Information not found on website

2.g.ii	Other environmental testing	Information not found on website
2.g.ii.1	Specify tests, pass/fail results, and ratings received	Information not found on website
2.h	Safeguards	
2.h.i	Privacy safeguards or features	Information not found on website
2.h.i.1	Remote viewing	Information not found on website
2.h.i.2	Remote activation/deactivation	Information not found on website
2.h.i.3	Privacy masking	Information not found on website
2.h.i.4	Redacting/editing capabilities	Information not found on website
2.h.ii	Safeguards for cyber security, unintentional disassembly, etc.	Password protection
2.i	Regulatory	
2.i.i	Regulatory and Compliance safety requirements	Information not found on website
2.i.ii	Radiation safety standards	Information not found on website
2.j	Warranty and Maintenance Plans	
2.j.i	Length of warranty (in months)	12 months
2.j.ii	Optional extended warranties	PatrolEyes Protection Plus
2.j.ii.1	Duration and cost of extended warranties	1-3 yrs, with first yr at \$40, then \$20/yr for years 2 & 3
2.j.iii	Availability of extended maintenance plans	Information not found on website
2.j.iii.1	Duration and cost of extended maintenance plans	Information not found on website
2.j.iv	Service contract costs	Information not found on website
2.k	Auxiliary Equipment	
2.k.i	Manufacturer suggested retail price (MSRP) for each auxiliary equipment	Information not found on website
2.l	MSRP without optional features, accessories, or service plans	\$399
2.m	Manufacturer's estimated lifetime of device	Information not found on website
2.n	Other relevant information	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – Software for Video Data Storage and Management		
3.a	Data Management	
3.a.i	Searching capabilities	Information not found on website
3.a.ii	Categorizing capabilities	Information not found on website
3.a.iii	Tagging capabilities	Information not found on website
3.a.iv	Archiving and file retention	Information not found on website
3.a.v	Data saved on or offsite	Information not found on website
3.a.v.1	If saved offsite, specific data accessibility and storage costs	Information not found on website
3.a.v.2	Video data storage capacity local vs. cloud	Information not found on website
3.a.v.3	Capability to accommodate multiple site installations	Information not found on website
3.a.vi	Export capabilities	Information not found on website
3.a.vi.1	Traceability feature that shows which user exported the data	Information not found on website

3.a.vii	Redacting/editing capabilities	Information not found on website
3.a.vii.1	Specify whether changes are permanent	Information not found on website
3.a.viii	Support provided for chain-of-custody requirements	Information not found on website
3.a.ix	Scalability for different organization size	Information not found on website
3.a.x	User management and role-based access levels	Information not found on website
3.b	Video Analytics	
3.b.i	Companion software to analyze recorded video and audio data	Information not found on website
3.b.ii	Types of reports built into software	Information not found on website
3.b.ii.1	Standard reports	Information not found on website
3.b.ii.2	Daily reports, historical reports, etc.	Information not found on website
3.b.ii.3	Audit reports that support chain-of-custody requirements	Information not found on website
3.b.ii.4	Customization of reports	Information not found on website
3.b.iii	Facial recognition capabilities	Information not found on website
3.b.iv	Weapons detection capabilities	Information not found on website
3.b.v	Other analytical capabilities	Information not found on website
3.c	Video Security and Authentication	
3.c.i	Compatibility of BWC video output with existing video management software for reviewing and recording	Information not found on website
3.c.ii	File integrity checks to ensure authenticity	Information not found on website
3.c.iii	Data protection mechanism while in transit and during storage	Information not found on website
3.c.iv	Routine software updates	Information not found on website
3.c.v	Cost of software updates	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Usability/Training		
4.a	Usability validation processes	Information not found on website
4.b	User community data	Information not found on website
4.c	User-group meetings and frequency	Information not found on website
4.d	Typical problems reported	Information not found on website
4.d.i	Resolution to problems	Information not found on website
4.e	Hours of tech. support and location	Information not found on website
4.f	Training provided (hours)	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Installation		
5.a	Average time to install and activate	Information not found on website

4.34 Paul Conway OnCall Camera



Figure 34. Paul Conway OnCall Camera

RFI Q.#	Survey Question (abbreviated)	Response
Vendor Information		
0	Responded to FRN?	No
1.a	Name	Paul Conway LE
1.b	Address/phone number	14100 W Cleveland Ave, New Berlin, WI, 53151 (800) 955-8489
1.c	Website	www.le.paulconwayshields.com
1.d	Years in business	Information not found on website
1.e	Number and types of customers	Information not found on website
1.f	Manufacturing location(s)	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – BWC		
2.a	General	
2.a.i	Name and model number	OnCall Camera
2.a.ii	Physical dims (H" x W" x D")	Information not found on website
2.a.iii	Weight (oz.)	Information not found on website
2.a.iv	Mounting options	Vest, coat or shirt
2.a.iv.1	Accessories needed for mounting	Information not found on website
2.a.v	Ability to mount on vehicle dashboard	Information not found on website
2.a.v.1	Accessories for vehicle dashboard mount	Information not found on website
2.a.vi	LCD display	Information not found on website
2.a.vii	Recording capacity	64 GB
2.a.viii	Operating conditions or limitations	Information not found on website

2.b	Video and Optics	
2.b.i	Maximum video resolution	1080P
2.b.ii	Field of view	150°
2.b.iii	Lux rating	Information not found on website
2.b.iv	Night mode/format	Yes; infrared night vision with high powered LED lights for optimal lighting in the dark
2.b.v	Recording speed	60 fps
2.b.vi	Recording format	Information not found on website
2.b.vii	Recording time under default resolution settings	8 hours
2.b.viii	Ability to capture still photos	Yes
2.b.ix	Ability to embed date/time stamp on recorded video	Yes
2.b.ix.1	Ability to authenticate and validate date/time stamp integrity	Information not found on website
2.b.x	Pre-event recording feature	Yes
2.b.x.1	Time buffered and whether audio is recorded	Information not found on website
2.b.xi	Event marking capability	Information not found on website
2.b.xii	Wireless capabilities for communication	WiFi tether to a smartphone to stream live video and audio to the OnCall server.
2.c	Audio	
2.c.i	Microphone feature	Yes
2.c.ii	Microphone sensitivity	Information not found on website
2.c.iii	Audio format	Information not found on website
2.c.iv	Default police radio interface for BWC	Information not found on website
2.d	Data Upload	
2.d.i	Single device vs. multiple upload docking station	Information not found on website
2.d.ii	Data transfer method	WiFi tether to a smartphone to stream live video and audio to the OnCall server.
2.d.iii	Manual vs. automatic upload	Information not found on website
2.e	Battery Information	
2.e.i	Battery type; internal or removable	Removable long-life rechargeable batteries
2.e.ii	Recording duration	8 hours
2.e.iii	Battery standby duration	Information not found on website
2.e.iv	Battery charge time	Information not found on website
2.e.v	Battery lifetime until replacement	Information not found on website
2.e.vi	Battery replacement procedure	Information not found on website
2.e.vii	Availability of supplemental charger for emergency battery charging	Information not found on website
2.f	GPS	
2.f.i	BWC possess GPS	Yes
2.f.i.1	Embedded GPS coordinates in recorded video	Information not found on website
2.f.ii	Alternative geolocation methods	Information not found on website
2.g	Consumer Testing Results	
2.g.i	Sturdiness/fragility	Information not found on website
2.g.i.1	Drop test results	Information not found on website
2.g.i.2	Dust intrusion/water resistance rating	Waterproof
2.g.i.3	Ruggedized	Information not found on website

2.g.i.4	Pressure/depth	Information not found on website
2.g.i.5	Shock	Information not found on website
2.g.i.6	Vibrations	As per drop test
2.g.ii	Other environmental testing	Information not found on website
2.g.ii.1	Specify tests, pass/fail results, and ratings received	Information not found on website
2.h	Safeguards	
2.h.i	Privacy safeguards or features	Information not found on website
2.h.i.1	Remote viewing	Information not found on website
2.h.i.2	Remote activation/deactivation	Information not found on website
2.h.i.3	Privacy masking	Information not found on website
2.h.i.4	Redacting/editing capabilities	Information not found on website
2.h.ii	Safeguards for cyber security, unintentional disassembly, etc.	Password protection
2.i	Regulatory	
2.i.i	Regulatory and Compliance safety requirements	Information not found on website
2.i.ii	Radiation safety standards	Information not found on website
2.j	Warranty and Maintenance Plans	
2.j.i	Length of warranty (in months)	12 months
2.j.ii	Optional extended warranties	Information not found on website
2.j.ii.1	Duration and cost of extended warranties	Information not found on website
2.j.iii	Availability of extended maintenance plans	Information not found on website
2.j.iii.1	Duration and cost of extended maintenance plans	Information not found on website
2.j.iv	Service contract costs	Information not found on website
2.k	Auxiliary Equipment	
2.k.i	Manufacturer suggested retail price (MSRP) for each auxiliary equipment	Information not found on website
2.l	MSRP without optional features, accessories, or service plans	\$399.99
2.m	Manufacturer's estimated lifetime of device	Information not found on website
2.n	Other relevant information	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – Software for Video Data Storage and Management		
3.a	Data Management	
3.a.i	Searching capabilities	Information not found on website
3.a.ii	Categorizing capabilities	Information not found on website
3.a.iii	Tagging capabilities	Information not found on website
3.a.iv	Archiving and file retention	Information not found on website
3.a.v	Data saved on or offsite	Information not found on website
3.a.v.1	If saved offsite, specific data accessibility and storage costs	Information not found on website
3.a.v.2	Video data storage capacity local vs. cloud	Information not found on website
3.a.v.3	Capability to accommodate multiple	Information not found on website

	site installations	
3.a.vi	Export capabilities	Information not found on website
3.a.vi.1	Traceability feature that shows which user exported the data	Information not found on website
3.a.vii	Redacting/editing capabilities	Information not found on website
3.a.vii.1	Specify whether changes are permanent	Information not found on website
3.a.viii	Support provided for chain-of-custody requirements	Information not found on website
3.a.ix	Scalability for different organization size	Information not found on website
3.a.x	User management and role-based access levels	Information not found on website
3.b	Video Analytics	
3.b.i	Companion software to analyze recorded video and audio data	Information not found on website
3.b.ii	Types of reports built into software	Information not found on website
3.b.ii.1	Standard reports	Information not found on website
3.b.ii.2	Daily reports, historical reports, etc.	Information not found on website
3.b.ii.3	Audit reports that support chain-of-custody requirements	Information not found on website
3.b.ii.4	Customization of reports	Information not found on website
3.b.iii	Facial recognition capabilities	Information not found on website
3.b.iv	Weapons detection capabilities	Information not found on website
3.b.v	Other analytical capabilities	Information not found on website
3.c	Video Security and Authentication	
3.c.i	Compatibility of BWC video output with existing video management software for reviewing and recording	Information not found on website
3.c.ii	File integrity checks to ensure authenticity	Information not found on website
3.c.iii	Data protection mechanism while in transit and during storage	Information not found on website
3.c.iv	Routine software updates	Information not found on website
3.c.v	Cost of software updates	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Usability/Training		
4.a	Usability validation processes	Information not found on website
4.b	User community data	Information not found on website
4.c	User-group meetings and frequency	Information not found on website
4.d	Typical problems reported	Information not found on website
4.d.i	Resolution to problems	Information not found on website
4.e	Hours of tech. support and location	Information not found on website
4.f	Training provided (hours)	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Installation		
5.a	Average time to install and activate	Information not found on website

4.35 Pinnacle PR5 BWV Camera



Figure 35. Pinnacle PR5 BWV Camera

RFI Q.#	Survey Question (abbreviated)	Response
Vendor Information		
0	Responded to FRN?	Yes
1.a	Name	Pinnacle Response Limited
1.b	Address/phone number	Unit 13 Harbour Court, Heron Rd, Belfast BT3 9HD, Northern Ireland, UK +44 (0) 28 9532 0222
1.c	Website	www.pinnacleresponse.com
1.d	Years in business	9 years
1.e	Number and types of customers	All policing and adjacent civil enforcement and security agencies, public and private sectors.
1.f	Manufacturing location(s)	Head office Belfast, Northern Ireland (UK). Primary manufacture Asia.

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – BWC		
2.a	General	
2.a.i	Name and model number	PR5 BWV Camera
2.a.ii	Physical dims (H" x W" x D")	3.6" H x 2.3" W x 1.2" D
2.a.iii	Weight (oz.)	4.3 oz
2.a.iv	Mounting options	Chest harness, shoulder harness, belt, motorcycle/bicycle handlebars, temporary car dash mounts
2.a.iv.1	Accessories needed for mounting	Includes 3 integrated 'police dock' attachments (rotating

		& fixed) plus optional chest and shoulder harnesses. There are also 2 spring clips that come with the camera to allow them to be attached to any piece of clothing.
2.a.v	Ability to mount on vehicle dashboard	Yes
2.a.v.1	Accessories for vehicle dashboard mount	Dash cam mount
2.a.vi	LCD display	No
2.a.vii	Recording capacity	16 GB (> 5 hours)
2.a.viii	Operating conditions or limitations	Operating temperature: -4°F to 122°F Humidity: < 85% relative humidity
2.b	Video and Optics	
2.b.i	Maximum video resolution	720P
2.b.ii	Field of view	120°
2.b.iii	Lux rating	Image visible at 0.35 lux
2.b.iv	Night mode/format	Enhanced low-light performance
2.b.v	Recording speed	30 fps
2.b.vi	Recording format	AVI
2.b.vii	Recording time under default resolution settings	16 GB (> 5 hours)
2.b.viii	Ability to capture still photos	No
2.b.ix	Ability to embed date/time stamp on recorded video	Yes
2.b.ix.1	Ability to authenticate and validate date/time stamp integrity	Embedded (Cannot be edited after factory setup)
2.b.x	Pre-event recording feature	No
2.b.x.1	Time buffered and whether audio is recorded	No information provided
2.b.xi	Event marking capability	No
2.b.xii	Wireless capabilities for communication	No
2.c	Audio	
2.c.i	Microphone feature	Yes
2.c.ii	Microphone sensitivity	-48dB at frequency 1kHz
2.c.iii	Audio format	MS ADPCM 44100Hz mono
2.c.iv	Default police radio interface for BWC	No
2.d	Data Upload	
2.d.i	Single device vs. multiple upload docking station	USB 2 upload
2.d.ii	Data transfer method	USB 2 upload
2.d.iii	Manual vs. automatic upload	Manual
2.e	Battery Information	
2.e.i	Battery type; internal or removable	Lithium-Ion (Non-Removable)
2.e.ii	Recording duration	> 5 hours
2.e.iii	Battery standby duration	12 hours
2.e.iv	Battery charge time	< 2.5 Hours
2.e.v	Battery lifetime until replacement	500 cycles > 80% capacity (> 30,000 hours)
2.e.vi	Battery replacement procedure	N/A
2.e.vii	Availability of supplemental charger for emergency battery charging	Any third party USB charger
2.f	GPS	
2.f.i	BWC possess GPS	No

2.f.i.1	Embedded GPS coordinates in recorded video	N/A
2.f.ii	Alternative geolocation methods	N/A
2.g	Consumer Testing Results	
2.g.i	Sturdiness/fragility	Yes
2.g.i.1	Drop test results	10' drop test
2.g.i.2	Dust intrusion/water resistance rating	IP45
2.g.i.3	Ruggedized	Yes
2.g.i.4	Pressure/depth	N/A
2.g.i.5	Shock	As per drop test
2.g.i.6	Vibrations	As per drop test
2.g.ii	Other environmental testing	No information provided
2.g.ii.1	Specify tests, pass/fail results, and ratings received	No information provided
2.h	Safeguards	
2.h.i	Privacy safeguards or features	N/A
2.h.i.1	Remote viewing	No
2.h.i.2	Remote activation/deactivation	No
2.h.i.3	Privacy masking	Editing in software
2.h.i.4	Redacting/editing capabilities	Editing in software
2.h.ii	Safeguards for cyber security, unintentional disassembly, etc.	Non-removable battery/card with tamperproof seal
2.i	Regulatory	
2.i.i	Regulatory and Compliance safety requirements	FCC Class B
2.i.ii	Radiation safety standards	N/A
2.j	Warranty and Maintenance Plans	
2.j.i	Length of warranty (in months)	12 months
2.j.ii	Optional extended warranties	On application
2.j.ii.1	Duration and cost of extended warranties	On application
2.j.iii	Availability of extended maintenance plans	On application
2.j.iii.1	Duration and cost of extended maintenance plans	On application
2.j.iv	Service contract costs	On application
2.k	Auxiliary Equipment	
2.k.i	Manufacturer suggested retail price (MSRP) for each auxiliary equipment	On application
2.l	MSRP without optional features, accessories, or service plans	On application
2.m	Manufacturer's estimated lifetime of device	>30,000 hours
2.n	Other relevant information	Key features are simplicity, quality of build, ease of use and quality of footage.

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – Software for Video Data Storage and Management		
3.a	Data Management	

3.a.i	Searching capabilities	Yes
3.a.ii	Categorizing capabilities	Yes
3.a.iii	Tagging capabilities	Yes
3.a.iv	Archiving and file retention	Yes
3.a.v	Data saved on or offsite	Data stored locally or cloud options available
3.a.v.1	If saved offsite, specific data accessibility and storage costs	Cloud options on application
3.a.v.2	Video data storage capacity local vs. cloud	No information provided
3.a.v.3	Capability to accommodate multiple site installations	No information provided
3.a.vi	Export capabilities	Yes
3.a.vi.1	Traceability feature that shows which user exported the data	Yes, full audit trail
3.a.vii	Redacting/editing capabilities	Editing capabilities
3.a.vii.1	Specify whether changes are permanent	N/A
3.a.viii	Support provided for chain-of-custody requirements	Yes
3.a.ix	Scalability for different organization size	Yes
3.a.x	User management and role-based access levels	Yes
3.b	Video Analytics	
3.b.i	Companion software to analyze recorded video and audio data	Yes
3.b.ii	Types of reports built into software	See below
3.b.ii.1	Standard reports	Yes
3.b.ii.2	Daily reports, historical reports, etc.	Yes
3.b.ii.3	Audit reports that support chain-of-custody requirements	Yes
3.b.ii.4	Customization of reports	Yes
3.b.iii	Facial recognition capabilities	No
3.b.iv	Weapons detection capabilities	No
3.b.v	Other analytical capabilities	Configurable attributes
3.c	Video Security and Authentication	
3.c.i	Compatibility of BWC video output with existing video management software for reviewing and recording	Yes
3.c.ii	File integrity checks to ensure authenticity	No information provided
3.c.iii	Data protection mechanism while in transit and during storage	Files encrypted on SD card
3.c.iv	Routine software updates	Automatic updates as required
3.c.v	Cost of software updates	Nil

RFI Q.#	Survey Question (abbreviated)	Response
Usability/Training		
4.a	Usability validation processes	Regular repeat customer evaluation and feedback. Industry compliance requirements gathering, usability testing.

4.b	User community data	Regular interviews, testimonials & surveys. Post sales analysis and maintenance of client relationships.
4.c	User-group meetings and frequency	Customer relationships ongoing.
4.d	Typical problems reported	Minimal. <0.1% hardware sales
4.d.i	Resolution to problems	Replacement hardware
4.e	Hours of tech. support and location	(Hardware) Full tech support at no extra charge. (Software) Packages on application.
4.f	Training provided (hours)	(Hardware) As required, no fee remote support. (Software) On application remotely or on site.

RFI Q.#	Survey Question (abbreviated)	Response
Installation		
5.a	Average time to install and activate	Camera ready out of the box. Software installation & training 1 day remotely or on site.

4.36 Pinnacle PR6 BWV Camera



Figure 36. Pinnacle PR6 BWV Camera

RFI Q.#	Survey Question (abbreviated)	Response
Vendor Information		
0	Responded to FRN?	Yes
1.a	Name	Pinnacle Response Limited
1.b	Address/phone number	Unit 13 Harbour Court, Heron Road, Belfast BT3 9HD, Northern Ireland, UK +44 (0) 28 9532 0222
1.c	Website	www.pinnacleresponse.com
1.d	Years in business	9 years
1.e	Number and types of customers	All policing and adjacent civil enforcement and security agencies, public and private sectors.
1.f	Manufacturing location(s)	Head office Belfast, Northern Ireland (UK). Primary manufacture Asia.

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – BWC		
2.a	General	
2.a.i	Name and model number	PR6 BWV Camera
2.a.ii	Physical dims (H" x W" x D")	3.9" H x 2.3" W x 0.9" D
2.a.iii	Weight (oz.)	5.2 oz
2.a.iv	Mounting options	Chest harness, shoulder harness, belt, motorcycle/bicycle handlebars, temporary car dash mounts
2.a.iv.1	Accessories needed for mounting	Includes 3 integrated 'police dock' attachments (rotating & fixed) plus optional chest and shoulder harnesses. There are also 2 spring clips that come with the camera

		to allow them to be attached to any piece of clothing.
2.a.v	Ability to mount on vehicle dashboard	Yes
2.a.v.1	Accessories for vehicle dashboard mount	Dash cam mount
2.a.vi	LCD display	No
2.a.vii	Recording capacity	32GB / 6 hours 20 minutes at full 1080p HD. Significant increase at lower resolution.
2.a.viii	Operating conditions or limitations	Operating temperature: -4°F to 122°F Humidity: < 85% relative humidity
2.b	Video and Optics	
2.b.i	Maximum video resolution	1080P
2.b.ii	Field of view	130°
2.b.iii	Lux rating	Image visible at 0.3 lux
2.b.iv	Night mode/format	Enhanced low-light performance
2.b.v	Recording speed	30 fps
2.b.vi	Recording format	MTS or MP4 (configurable)
2.b.vii	Recording time under default resolution settings	6 hours 20 minutes at full 1080p HD. Significant increase at lower resolution.
2.b.viii	Ability to capture still photos	Optimized photo quality screen shots from video
2.b.ix	Ability to embed date/time stamp on recorded video	Yes
2.b.ix.1	Ability to authenticate and validate date/time stamp integrity	Embedded (cannot be edited after factory setup)
2.b.x	Pre-event recording feature	Yes
2.b.x.1	Time buffered and whether audio is recorded	20 seconds of video only but can be configured to record video and audio if required by Police Forces.
2.b.xi	Event marking capability	Yes
2.b.xii	Wireless capabilities for communication	Yes
2.c	Audio	
2.c.i	Microphone feature	Yes
2.c.ii	Microphone sensitivity	-48 dB at frequency 1kHz
2.c.iii	Audio format	MP2
2.c.iv	Default police radio interface for BWC	No
2.d	Data Upload	
2.d.i	Single device vs. multiple upload docking station	USB 3 upload (secure protocol) / Single wireless dock / Multi wireless dock (6 units)
2.d.ii	Data transfer method	Wireless or USB3
2.d.iii	Manual vs. automatic upload	Manual or fully automatic
2.e	Battery Information	
2.e.i	Battery type; internal or removable	SG-S5 Lithium-Ion (Non-Removable)
2.e.ii	Recording duration	6 hours 20 minutes at full 1080p HD. Significant increase at lower resolution.
2.e.iii	Battery standby duration	About 180 hours
2.e.iv	Battery charge time	< 2.5 hours
2.e.v	Battery lifetime until replacement	500 cycles > 80% capacity (> 30,000 hours)
2.e.vi	Battery replacement procedure	Replacement by authorized vendor
2.e.vii	Availability of supplemental charger for emergency battery charging	Any third party USB charger
2.f	GPS	
2.f.i	BWC possess GPS	No

2.f.i.1	Embedded GPS coordinates in recorded video	N/A
2.f.ii	Alternative geolocation methods	N/A
2.g	Consumer Testing Results	
2.g.i	Sturdiness/fragility	Yes
2.g.i.1	Drop test results	10' drop test
2.g.i.2	Dust intrusion/water resistance rating	IP66
2.g.i.3	Ruggedized	Yes
2.g.i.4	Pressure/depth	N/A
2.g.i.5	Shock	As per drop test
2.g.i.6	Vibrations	As per drop test
2.g.ii	Other environmental testing	No information provided
2.g.ii.1	Specify tests, pass/fail results, and ratings received	No information provided
2.h	Safeguards	
2.h.i	Privacy safeguards or features	Files encrypted on SD card along with a secure USB transfer protocol when using USB and WPA2-SFTP transfer when using WiFi.
2.h.i.1	Remote viewing	No
2.h.i.2	Remote activation/deactivation	No
2.h.i.3	Privacy masking	Files encrypted on SD card. Editing in software. Secure transfer so only the intended user can transfer the footage.
2.h.i.4	Redacting/editing capabilities	Editing in software
2.h.ii	Safeguards for cyber security, unintentional disassembly, etc.	Files encrypted on SD card. Non-removable battery/card with tamperproof seal.
2.i	Regulatory	
2.i.i	Regulatory and Compliance safety requirements	FCC Class B
2.i.ii	Radiation safety standards	N/A
2.j	Warranty and Maintenance Plans	
2.j.i	Length of warranty (in months)	12 months
2.j.ii	Optional extended warranties	On application
2.j.ii.1	Duration and cost of extended warranties	On application
2.j.iii	Availability of extended maintenance plans	On application
2.j.iii.1	Duration and cost of extended maintenance plans	On application
2.j.iv	Service contract costs	On application
2.k	Auxiliary Equipment	
2.k.i	Manufacturer suggested retail price (MSRP) for each auxiliary equipment	On application
2.l	MSRP without optional features, accessories, or service plans	On application
2.m	Manufacturer's estimated lifetime of device	>30,000 hours
2.n	Other relevant information	Primary USP; a number of key attributes are initially configurable at source from footage quality, file encryption, secure transfer and type of transfer.

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – Software for Video Data Storage and Management		
3.a	Data Management	
3.a.i	Searching capabilities	Yes
3.a.ii	Categorizing capabilities	Yes
3.a.iii	Tagging capabilities	Yes
3.a.iv	Archiving and file retention	Yes
3.a.v	Data saved on or offsite	Data stored locally or cloud options available
3.a.v.1	If saved offsite, specific data accessibility and storage costs	Cloud options on application
3.a.v.2	Video data storage capacity local vs. cloud	No information provided
3.a.v.3	Capability to accommodate multiple site installations	No information provided
3.a.vi	Export capabilities	Yes
3.a.vi.1	Traceability feature that shows which user exported the data	Full audit trail
3.a.vii	Redacting/editing capabilities	Editing capabilities
3.a.vii.1	Specify whether changes are permanent	N/A
3.a.viii	Support provided for chain-of-custody requirements	Yes
3.a.ix	Scalability for different organization size	Yes
3.a.x	User management and role-based access levels	Yes
3.b	Video Analytics	
3.b.i	Companion software to analyze recorded video and audio data	Yes
3.b.ii	Types of reports built into software	See below
3.b.ii.1	Standard reports	Yes
3.b.ii.2	Daily reports, historical reports, etc.	Yes
3.b.ii.3	Audit reports that support chain-of-custody requirements	Yes
3.b.ii.4	Customization of reports	Yes
3.b.iii	Facial recognition capabilities	No
3.b.iv	Weapons detection capabilities	No
3.b.v	Other analytical capabilities	Configurable attributes
3.c	Video Security and Authentication	
3.c.i	Compatibility of BWC video output with existing video management software for reviewing and recording	Yes
3.c.ii	File integrity checks to ensure authenticity	No information provided
3.c.iii	Data protection mechanism while in transit and during storage	Files encrypted on SD card
3.c.iv	Routine software updates	Automatic updates as required
3.c.v	Cost of software updates	Nil

RFI	Survey Question	Response
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Q.#	(abbreviated)	
Usability/Training		
4.a	Usability validation processes	Regular repeat customer evaluation and feedback. Industry compliance requirements gathering, usability testing.
4.b	User community data	Regular interviews, testimonials & surveys. Post sales analysis and maintenance of client relationships.
4.c	User-group meetings and frequency	Customer relationships ongoing.
4.d	Typical problems reported	Minimal. <0.1% hardware sales.
4.d.i	Resolution to problems	Replacement hardware.
4.e	Hours of tech. support and location	(Hardware) Full tech support at no extra charge. (Software) Packages on application.
4.f	Training provided (hours)	(Hardware) As required, no fee remote support. (Software) On application remotely or on site.

RFI Q.#	Survey Question (abbreviated)	Response
Installation		
5.a	Average time to install and activate	Camera ready out of the box. Software installation & training 1 day remotely or on site.

4.37 PRG 10 Defender Body Worn Camera



Figure 37. PRG 10 Defender Body Worn Camera

RFI Q.#	Survey Question (abbreviated)	Response
Vendor Information		
0	Responded to FRN?	No
1.a	Name	Potomac River Group (PRG) Defense
1.b	Address/phone number	VA (703) 771-3003
1.c	Website	www.defenderbwc.com
1.d	Years in business	Information not found on website
1.e	Number and types of customers	Information not found on website
1.f	Manufacturing location(s)	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – BWC		
2.a	General	
2.a.i	Name and model number	PRG 10 Defender Body Worn Camera
2.a.ii	Physical dims (H" x W" x D")	1.3" H x 1.1" W x 2" D
2.a.iii	Weight (oz.)	1.72 oz
2.a.iv	Mounting options	Chest, shoulder, vehicle, bike
2.a.iv.1	Accessories needed for mounting	Information not found on website
2.a.v	Ability to mount on vehicle dashboard	Yes
2.a.v.1	Accessories for vehicle dashboard mount	Information not found on website
2.a.vi	LCD display	Yes
2.a.vii	Recording capacity	32 GB
2.a.viii	Operating conditions or limitations	Operating temperature: 14°F to 122°F Storage temperature: -4°F to 140°F
2.b	Video and Optics	
2.b.i	Maximum video resolution	1080P

2.b.ii	Field of view	100°
2.b.iii	Lux rating	Information not found on website
2.b.iv	Night mode/format	Information not found on website
2.b.v	Recording speed	30 fps
2.b.vi	Recording format	MP4
2.b.vii	Recording time under default resolution settings	14 hours
2.b.viii	Ability to capture still photos	Yes; 8 MP
2.b.ix	Ability to embed date/time stamp on recorded video	Information not found on website
2.b.ix.1	Ability to authenticate and validate date/time stamp integrity	Information not found on website
2.b.x	Pre-event recording feature	No
2.b.x.1	Time buffered and whether audio is recorded	Information not found on website
2.b.xi	Event marking capability	Information not found on website
2.b.xii	Wireless capabilities for communication	WiFi up to 330 ft
2.c	Audio	
2.c.i	Microphone feature	Yes
2.c.ii	Microphone sensitivity	Information not found on website
2.c.iii	Audio format	WAV
2.c.iv	Default police radio interface for BWC	No
2.d	Data Upload	
2.d.i	Single device vs. multiple upload docking station	Information not found on website
2.d.ii	Data transfer method	Information not found on website
2.d.iii	Manual vs. automatic upload	Information not found on website
2.e	Battery Information	
2.e.i	Battery type; internal or removable	Lithium ion 1250mAh battery
2.e.ii	Recording duration	14 hours
2.e.iii	Battery standby duration	200 hours
2.e.iv	Battery charge time	Information not found on website
2.e.v	Battery lifetime until replacement	Information not found on website
2.e.vi	Battery replacement procedure	Information not found on website
2.e.vii	Availability of supplemental charger for emergency battery charging	Information not found on website
2.f	GPS	
2.f.i	BWC possess GPS	No
2.f.i.1	Embedded GPS coordinates in recorded video	Information not found on website
2.f.ii	Alternative geolocation methods	Information not found on website
2.g	Consumer Testing Results	
2.g.i	Sturdiness/fragility	Information not found on website
2.g.i.1	Drop test results	Information not found on website
2.g.i.2	Dust intrusion/water resistance rating	Waterproof
2.g.i.3	Ruggedized	Information not found on website
2.g.i.4	Pressure/depth	Information not found on website
2.g.i.5	Shock	Information not found on website
2.g.i.6	Vibrations	Information not found on website
2.g.ii	Other environmental testing	Information not found on website

2.g.ii.1	Specify tests, pass/fail results, and ratings received	Information not found on website
2.h	Safeguards	
2.h.i	Privacy safeguards or features	No
2.h.i.1	Remote viewing	Information not found on website
2.h.i.2	Remote activation/deactivation	Yes
2.h.i.3	Privacy masking	Information not found on website
2.h.i.4	Redacting/editing capabilities	Information not found on website
2.h.ii	Safeguards for cyber security, unintentional disassembly, etc.	Information not found on website
2.i	Regulatory	
2.i.i	Regulatory and Compliance safety requirements	IP40 – Basic IP68 – Advanced
2.i.ii	Radiation safety standards	Information not found on website
2.j	Warranty and Maintenance Plans	
2.j.i	Length of warranty (in months)	24 months
2.j.ii	Optional extended warranties	Information not found on website
2.j.ii.1	Duration and cost of extended warranties	Information not found on website
2.j.iii	Availability of extended maintenance plans	Information not found on website
2.j.iii.1	Duration and cost of extended maintenance plans	Information not found on website
2.j.iv	Service contract costs	Information not found on website
2.k	Auxiliary Equipment	
2.k.i	Manufacturer suggested retail price (MSRP) for each auxiliary equipment	Information not found on website
2.l	MSRP without optional features, accessories, or service plans	Information not found on website
2.m	Manufacturer's estimated lifetime of device	Information not found on website
2.n	Other relevant information	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – Software for Video Data Storage and Management		
3.a	Data Management	
3.a.i	Searching capabilities	Information not found on website
3.a.ii	Categorizing capabilities	Information not found on website
3.a.iii	Tagging capabilities	Information not found on website
3.a.iv	Archiving and file retention	Information not found on website
3.a.v	Data saved on or offsite	Information not found on website
3.a.v.1	If saved offsite, specific data accessibility and storage costs	Information not found on website
3.a.v.2	Video data storage capacity local vs. cloud	Information not found on website
3.a.v.3	Capability to accommodate multiple site installations	Information not found on website
3.a.vi	Export capabilities	Information not found on website
3.a.vi.1	Traceability feature that shows which user exported the data	Information not found on website
3.a.vii	Redacting/editing capabilities	Information not found on website

3.a.vii.1	Specify whether changes are permanent	Information not found on website
3.a.viii	Support provided for chain-of-custody requirements	Information not found on website
3.a.ix	Scalability for different organization size	Information not found on website
3.a.x	User management and role-based access levels	Information not found on website
3.b	Video Analytics	
3.b.i	Companion software to analyze recorded video and audio data	Yes
3.b.ii	Types of reports built into software	Information not found on website
3.b.ii.1	Standard reports	Information not found on website
3.b.ii.2	Daily reports, historical reports, etc.	Information not found on website
3.b.ii.3	Audit reports that support chain-of-custody requirements	Information not found on website
3.b.ii.4	Customization of reports	Information not found on website
3.b.iii	Facial recognition capabilities	Information not found on website
3.b.iv	Weapons detection capabilities	Information not found on website
3.b.v	Other analytical capabilities	Information not found on website
3.c	Video Security and Authentication	
3.c.i	Compatibility of BWC video output with existing video management software for reviewing and recording	Information not found on website
3.c.ii	File integrity checks to ensure authenticity	Information not found on website
3.c.iii	Data protection mechanism while in transit and during storage	Information not found on website
3.c.iv	Routine software updates	Information not found on website
3.c.v	Cost of software updates	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Usability/Training		
4.a	Usability validation processes	Information not found on website
4.b	User community data	Information not found on website
4.c	User-group meetings and frequency	Information not found on website
4.d	Typical problems reported	Information not found on website
4.d.i	Resolution to problems	Information not found on website
4.e	Hours of tech. support and location	Information not found on website
4.f	Training provided (hours)	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Installation		
5.a	Average time to install and activate	Information not found on website

4.38 PRG 51 Defender Body Worn Camera



Figure 38. PRG 51 Defender Body Worn Camera

RFI Q.#	Survey Question (abbreviated)	Response
Vendor Information		
0	Responded to FRN?	No
1.a	Name	Potomac River Group (PRG) Defense
1.b	Address/phone number	VA (703) 771-3003
1.c	Website	www.defenderbwc.com
1.d	Years in business	Information not found on website
1.e	Number and types of customers	Information not found on website
1.f	Manufacturing location(s)	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – BWC		
2.a	General	
2.a.i	Name and model number	PRG 51 Defender Body Worn Camera
2.a.ii	Physical dims (H" x W" x D")	2.3" H x 1.7" W x 1.4" D
2.a.iii	Weight (oz.)	4.6 oz
2.a.iv	Mounting options	Information not found on website
2.a.iv.1	Accessories needed for mounting	Lens back clip
2.a.v	Ability to mount on vehicle dashboard	Information not found on website
2.a.v.1	Accessories for vehicle dashboard mount	No
2.a.vi	LCD display	Yes
2.a.vii	Recording capacity	32 GB SD
2.a.viii	Operating conditions or limitations	Operating temperature: 14°F to 122°F Storage temperature: -4°F to 140°F
2.b	Video and Optics	
2.b.i	Maximum video resolution	1080P

2.b.ii	Field of view	45°
2.b.iii	Lux rating	Information not found on website
2.b.iv	Night mode/format	No
2.b.v	Recording speed	30 fps
2.b.vi	Recording format	MOV
2.b.vii	Recording time under default resolution settings	11 hours
2.b.viii	Ability to capture still photos	Yes; 8 MP
2.b.ix	Ability to embed date/time stamp on recorded video	Yes
2.b.ix.1	Ability to authenticate and validate date/time stamp integrity	Information not found on website
2.b.x	Pre-event recording feature	No
2.b.x.1	Time buffered and whether audio is recorded	Information not found on website
2.b.xi	Event marking capability	Information not found on website
2.b.xii	Wireless capabilities for communication	WiFi up to 330 ft
2.c	Audio	
2.c.i	Microphone feature	Yes
2.c.ii	Microphone sensitivity	Information not found on website
2.c.iii	Audio format	WAV
2.c.iv	Default police radio interface for BWC	No
2.d	Data Upload	
2.d.i	Single device vs. multiple upload docking station	Information not found on website
2.d.ii	Data transfer method	Information not found on website
2.d.iii	Manual vs. automatic upload	Information not found on website
2.e	Battery Information	
2.e.i	Battery type; internal or removable	Lithium ion 1500mAh battery
2.e.ii	Recording duration	11 hours
2.e.iii	Battery standby duration	300 hours
2.e.iv	Battery charge time	Information not found on website
2.e.v	Battery lifetime until replacement	Information not found on website
2.e.vi	Battery replacement procedure	Information not found on website
2.e.vii	Availability of supplemental charger for emergency battery charging	Information not found on website
2.f	GPS	
2.f.i	BWC possess GPS	No
2.f.i.1	Embedded GPS coordinates in recorded video	Information not found on website
2.f.ii	Alternative geolocation methods	Information not found on website
2.g	Consumer Testing Results	
2.g.i	Sturdiness/fragility	Information not found on website
2.g.i.1	Drop test results	Information not found on website
2.g.i.2	Dust intrusion/water resistance rating	Information not found on website
2.g.i.3	Ruggedized	Information not found on website
2.g.i.4	Pressure/depth	Information not found on website
2.g.i.5	Shock	Information not found on website
2.g.i.6	Vibrations	Information not found on website
2.g.ii	Other environmental testing	Information not found on website

2.g.ii.1	Specify tests, pass/fail results, and ratings received	Information not found on website
2.h	Safeguards	
2.h.i	Privacy safeguards or features	No
2.h.i.1	Remote viewing	Information not found on website
2.h.i.2	Remote activation/deactivation	Yes
2.h.i.3	Privacy masking	Information not found on website
2.h.i.4	Redacting/editing capabilities	Information not found on website
2.h.ii	Safeguards for cyber security, unintentional disassembly, etc.	Information not found on website
2.i	Regulatory	
2.i.i	Regulatory and Compliance safety requirements	IP40
2.i.ii	Radiation safety standards	Information not found on website
2.j	Warranty and Maintenance Plans	
2.j.i	Length of warranty (in months)	24 months
2.j.ii	Optional extended warranties	Information not found on website
2.j.ii.1	Duration and cost of extended warranties	Information not found on website
2.j.iii	Availability of extended maintenance plans	Information not found on website
2.j.iii.1	Duration and cost of extended maintenance plans	Information not found on website
2.j.iv	Service contract costs	Information not found on website
2.k	Auxiliary Equipment	
2.k.i	Manufacturer suggested retail price (MSRP) for each auxiliary equipment	Information not found on website
2.l	MSRP without optional features, accessories, or service plans	Information not found on website
2.m	Manufacturer's estimated lifetime of device	Information not found on website
2.n	Other relevant information	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – Software for Video Data Storage and Management		
3.a	Data Management	
3.a.i	Searching capabilities	Information not found on website
3.a.ii	Categorizing capabilities	Information not found on website
3.a.iii	Tagging capabilities	Information not found on website
3.a.iv	Archiving and file retention	Information not found on website
3.a.v	Data saved on or offsite	Information not found on website
3.a.v.1	If saved offsite, specific data accessibility and storage costs	Information not found on website
3.a.v.2	Video data storage capacity local vs. cloud	Information not found on website
3.a.v.3	Capability to accommodate multiple site installations	Information not found on website
3.a.vi	Export capabilities	Information not found on website
3.a.vi.1	Traceability feature that shows which user exported the data	Information not found on website
3.a.vii	Redacting/editing capabilities	Information not found on website

3.a.vii.1	Specify whether changes are permanent	Information not found on website
3.a.viii	Support provided for chain-of-custody requirements	Information not found on website
3.a.ix	Scalability for different organization size	Information not found on website
3.a.x	User management and role-based access levels	Information not found on website
3.b	Video Analytics	
3.b.i	Companion software to analyze recorded video and audio data	Yes
3.b.ii	Types of reports built into software	Information not found on website
3.b.ii.1	Standard reports	Information not found on website
3.b.ii.2	Daily reports, historical reports, etc.	Information not found on website
3.b.ii.3	Audit reports that support chain-of-custody requirements	Information not found on website
3.b.ii.4	Customization of reports	Information not found on website
3.b.iii	Facial recognition capabilities	Information not found on website
3.b.iv	Weapons detection capabilities	Information not found on website
3.b.v	Other analytical capabilities	Information not found on website
3.c	Video Security and Authentication	
3.c.i	Compatibility of BWC video output with existing video management software for reviewing and recording	Information not found on website
3.c.ii	File integrity checks to ensure authenticity	Information not found on website
3.c.iii	Data protection mechanism while in transit and during storage	Information not found on website
3.c.iv	Routine software updates	Information not found on website
3.c.v	Cost of software updates	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Usability/Training		
4.a	Usability validation processes	Information not found on website
4.b	User community data	Information not found on website
4.c	User-group meetings and frequency	Information not found on website
4.d	Typical problems reported	Information not found on website
4.d.i	Resolution to problems	Information not found on website
4.e	Hours of tech. support and location	Information not found on website
4.f	Training provided (hours)	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Installation		
5.a	Average time to install and activate	Information not found on website

4.39 PRG 60B Defender Body Worn Camera



Figure 39. PRG 60B Defender Body Worn Camera

RFI Q.#	Survey Question (abbreviated)	Response
Vendor Information		
0	Responded to FRN?	No
1.a	Name	Potomac River Group (PRG) Defense
1.b	Address/phone number	VA (703) 771-3003
1.c	Website	www.defenderbwc.com
1.d	Years in business	Information not found on website
1.e	Number and types of customers	Information not found on website
1.f	Manufacturing location(s)	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – BWC		
2.a	General	
2.a.i	Name and model number	PRG 60B Defender Body Worn Camera
2.a.ii	Physical dims (H" x W" x D")	3.2" H x 2.3" W x 1.3" D
2.a.iii	Weight (oz.)	6 oz
2.a.iv	Mounting options	Information not found on website
2.a.iv.1	Accessories needed for mounting	Lens back clip
2.a.v	Ability to mount on vehicle dashboard	Information not found on website
2.a.v.1	Accessories for vehicle dashboard mount	No
2.a.vi	LCD display	Yes
2.a.vii	Recording capacity	32 GB embedded SD
2.a.viii	Operating conditions or limitations	Operating temperature: 14°F to 122°F

		Storage temperature: -4°F to 140°F
2.b	Video and Optics	
2.b.i	Maximum video resolution	1080P
2.b.ii	Field of view	130°
2.b.iii	Lux rating	Information not found on website
2.b.iv	Night mode/format	Low light, Infrared
2.b.v	Recording speed	30 fps
2.b.vi	Recording format	MOV
2.b.vii	Recording time under default resolution settings	15 hours
2.b.viii	Ability to capture still photos	Yes; 22 MP
2.b.ix	Ability to embed date/time stamp on recorded video	Yes
2.b.ix.1	Ability to authenticate and validate date/time stamp integrity	Information not found on website
2.b.x	Pre-event recording feature	Yes
2.b.x.1	Time buffered and whether audio is recorded	5 seconds
2.b.xi	Event marking capability	Information not found on website
2.b.xii	Wireless capabilities for communication	WiFi
2.c	Audio	
2.c.i	Microphone feature	Yes
2.c.ii	Microphone sensitivity	Information not found on website
2.c.iii	Audio format	WAV
2.c.iv	Default police radio interface for BWC	Yes
2.d	Data Upload	
2.d.i	Single device vs. multiple upload docking station	Information not found on website
2.d.ii	Data transfer method	Information not found on website
2.d.iii	Manual vs. automatic upload	Information not found on website
2.e	Battery Information	
2.e.i	Battery type; internal or removable	Lithium ion 3300mAh battery
2.e.ii	Recording duration	15 hours
2.e.iii	Battery standby duration	300 hours
2.e.iv	Battery charge time	Information not found on website
2.e.v	Battery lifetime until replacement	Information not found on website
2.e.vi	Battery replacement procedure	Information not found on website
2.e.vii	Availability of supplemental charger for emergency battery charging	Information not found on website
2.f	GPS	
2.f.i	BWC possess GPS	No
2.f.i.1	Embedded GPS coordinates in recorded video	Information not found on website
2.f.ii	Alternative geolocation methods	Information not found on website
2.g	Consumer Testing Results	
2.g.i	Sturdiness/fragility	Information not found on website
2.g.i.1	Drop test results	Information not found on website
2.g.i.2	Dust intrusion/water resistance rating	Information not found on website
2.g.i.3	Ruggedized	Information not found on website
2.g.i.4	Pressure/depth	Information not found on website

2.g.i.5	Shock	Information not found on website
2.g.i.6	Vibrations	Information not found on website
2.g.ii	Other environmental testing	Information not found on website
2.g.ii.1	Specify tests, pass/fail results, and ratings received	Information not found on website
2.h	Safeguards	
2.h.i	Privacy safeguards or features	Yes
2.h.i.1	Remote viewing	Information not found on website
2.h.i.2	Remote activation/deactivation	Yes
2.h.i.3	Privacy masking	Information not found on website
2.h.i.4	Redacting/editing capabilities	Information not found on website
2.h.ii	Safeguards for cyber security, unintentional disassembly, etc.	Information not found on website
2.i	Regulatory	
2.i.i	Regulatory and Compliance safety requirements	IP67
2.i.ii	Radiation safety standards	Information not found on website
2.j	Warranty and Maintenance Plans	
2.j.i	Length of warranty (in months)	24 months
2.j.ii	Optional extended warranties	Information not found on website
2.j.ii.1	Duration and cost of extended warranties	Information not found on website
2.j.iii	Availability of extended maintenance plans	Information not found on website
2.j.iii.1	Duration and cost of extended maintenance plans	Information not found on website
2.j.iv	Service contract costs	Information not found on website
2.k	Auxiliary Equipment	
2.k.i	Manufacturer suggested retail price (MSRP) for each auxiliary equipment	Information not found on website
2.l	MSRP without optional features, accessories, or service plans	Information not found on website
2.m	Manufacturer's estimated lifetime of device	Information not found on website
2.n	Other relevant information	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – Software for Video Data Storage and Management		
3.a	Data Management	
3.a.i	Searching capabilities	Information not found on website
3.a.ii	Categorizing capabilities	Information not found on website
3.a.iii	Tagging capabilities	Information not found on website
3.a.iv	Archiving and file retention	Information not found on website
3.a.v	Data saved on or offsite	Information not found on website
3.a.v.1	If saved offsite, specific data accessibility and storage costs	Information not found on website
3.a.v.2	Video data storage capacity local vs. cloud	Information not found on website
3.a.v.3	Capability to accommodate multiple site installations	Information not found on website

3.a.vi	Export capabilities	Information not found on website
3.a.vi.1	Traceability feature that shows which user exported the data	Information not found on website
3.a.vii	Redacting/editing capabilities	Information not found on website
3.a.vii.1	Specify whether changes are permanent	Information not found on website
3.a.viii	Support provided for chain-of-custody requirements	Information not found on website
3.a.ix	Scalability for different organization size	Information not found on website
3.a.x	User management and role-based access levels	Information not found on website
3.b	Video Analytics	
3.b.i	Companion software to analyze recorded video and audio data	Yes
3.b.ii	Types of reports built into software	Information not found on website
3.b.ii.1	Standard reports	Information not found on website
3.b.ii.2	Daily reports, historical reports, etc.	Information not found on website
3.b.ii.3	Audit reports that support chain-of-custody requirements	Information not found on website
3.b.ii.4	Customization of reports	Information not found on website
3.b.iii	Facial recognition capabilities	Information not found on website
3.b.iv	Weapons detection capabilities	Information not found on website
3.b.v	Other analytical capabilities	Information not found on website
3.c	Video Security and Authentication	
3.c.i	Compatibility of BWC video output with existing video management software for reviewing and recording	Information not found on website
3.c.ii	File integrity checks to ensure authenticity	Information not found on website
3.c.iii	Data protection mechanism while in transit and during storage	Information not found on website
3.c.iv	Routine software updates	Information not found on website
3.c.v	Cost of software updates	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Usability/Training		
4.a	Usability validation processes	Information not found on website
4.b	User community data	Information not found on website
4.c	User-group meetings and frequency	Information not found on website
4.d	Typical problems reported	Information not found on website
4.d.i	Resolution to problems	Information not found on website
4.e	Hours of tech. support and location	Information not found on website
4.f	Training provided (hours)	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Installation		
5.a	Average time to install and activate	Information not found on website

4.40 PRG 77LE Defender Body Worn Camera



Figure 40. PRG 77LE Defender Body Worn Camera

RFI Q.#	Survey Question (abbreviated)	Response
Vendor Information		
0	Responded to FRN?	No
1.a	Name	Potomac River Group (PRG) Defense
1.b	Address/phone number	VA (703) 771-3003
1.c	Website	www.defenderbwc.com
1.d	Years in business	Information not found on website
1.e	Number and types of customers	Information not found on website
1.f	Manufacturing location(s)	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – BWC		
2.a	General	
2.a.i	Name and model number	PRG 77LE Defender Body Worn Camera
2.a.ii	Physical dims (H" x W" x D")	2.8" H x 2.3" W x 1.2" D
2.a.iii	Weight (oz.)	3.8 oz
2.a.iv	Mounting options	Chest, shoulder, vehicle
2.a.iv.1	Accessories needed for mounting	Information not found on website
2.a.v	Ability to mount on vehicle dashboard	Yes
2.a.v.1	Accessories for vehicle dashboard mount	Yes
2.a.vi	LCD display	Yes
2.a.vii	Recording capacity	32 GB Embedded SD
2.a.viii	Operating conditions or limitations	Operating temperature: 14°F to 122°F Storage temperature: -4°F to 140°F

2.b	Video and Optics	
2.b.i	Maximum video resolution	1080P
2.b.ii	Field of view	135°
2.b.iii	Lux rating	Information not found on website
2.b.iv	Night mode/format	Low light, Infrared
2.b.v	Recording speed	30 fps
2.b.vi	Recording format	MOV
2.b.vii	Recording time under default resolution settings	15 hours
2.b.viii	Ability to capture still photos	Yes; 8 MP
2.b.ix	Ability to embed date/time stamp on recorded video	Yes
2.b.ix.1	Ability to authenticate and validate date/time stamp integrity	Information not found on website
2.b.x	Pre-event recording feature	Information not found on website
2.b.x.1	Time buffered and whether audio is recorded	Information not found on website
2.b.xi	Event marking capability	Information not found on website
2.b.xii	Wireless capabilities for communication	No
2.c	Audio	
2.c.i	Microphone feature	Yes
2.c.ii	Microphone sensitivity	Information not found on website
2.c.iii	Audio format	WAV
2.c.iv	Default police radio interface for BWC	No
2.d	Data Upload	
2.d.i	Single device vs. multiple upload docking station	Information not found on website
2.d.ii	Data transfer method	Information not found on website
2.d.iii	Manual vs. automatic upload	Information not found on website
2.e	Battery Information	
2.e.i	Battery type; internal or removable	Lithium ion 1000mAh battery
2.e.ii	Recording duration	15 hours
2.e.iii	Battery standby duration	100 hours
2.e.iv	Battery charge time	Information not found on website
2.e.v	Battery lifetime until replacement	Information not found on website
2.e.vi	Battery replacement procedure	Information not found on website
2.e.vii	Availability of supplemental charger for emergency battery charging	Information not found on website
2.f	GPS	
2.f.i	BWC possess GPS	No
2.f.i.1	Embedded GPS coordinates in recorded video	Information not found on website
2.f.ii	Alternative geolocation methods	Information not found on website
2.g	Consumer Testing Results	
2.g.i	Sturdiness/fragility	Information not found on website
2.g.i.1	Drop test results	Information not found on website
2.g.i.2	Dust intrusion/water resistance rating	Information not found on website
2.g.i.3	Ruggedized	Information not found on website
2.g.i.4	Pressure/depth	Information not found on website
2.g.i.5	Shock	Information not found on website

2.g.i.6	Vibrations	Information not found on website
2.g.ii	Other environmental testing	Information not found on website
2.g.ii.1	Specify tests, pass/fail results, and ratings received	Information not found on website
2.h	Safeguards	
2.h.i	Privacy safeguards or features	Yes
2.h.i.1	Remote viewing	Information not found on website
2.h.i.2	Remote activation/deactivation	Yes
2.h.i.3	Privacy masking	Information not found on website
2.h.i.4	Redacting/editing capabilities	Information not found on website
2.h.ii	Safeguards for cyber security, unintentional disassembly, etc.	Information not found on website
2.i	Regulatory	
2.i.i	Regulatory and Compliance safety requirements	IP54
2.i.ii	Radiation safety standards	Information not found on website
2.j	Warranty and Maintenance Plans	
2.j.i	Length of warranty (in months)	24 months
2.j.ii	Optional extended warranties	Information not found on website
2.j.ii.1	Duration and cost of extended warranties	Information not found on website
2.j.iii	Availability of extended maintenance plans	Information not found on website
2.j.iii.1	Duration and cost of extended maintenance plans	Information not found on website
2.j.iv	Service contract costs	Information not found on website
2.k	Auxiliary Equipment	
2.k.i	Manufacturer suggested retail price (MSRP) for each auxiliary equipment	Information not found on website
2.l	MSRP without optional features, accessories, or service plans	Information not found on website
2.m	Manufacturer's estimated lifetime of device	Information not found on website
2.n	Other relevant information	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – Software for Video Data Storage and Management		
3.a	Data Management	
3.a.i	Searching capabilities	Information not found on website
3.a.ii	Categorizing capabilities	Information not found on website
3.a.iii	Tagging capabilities	Information not found on website
3.a.iv	Archiving and file retention	Information not found on website
3.a.v	Data saved on or offsite	Information not found on website
3.a.v.1	If saved offsite, specific data accessibility and storage costs	Information not found on website
3.a.v.2	Video data storage capacity local vs. cloud	Information not found on website
3.a.v.3	Capability to accommodate multiple site installations	Information not found on website
3.a.vi	Export capabilities	Information not found on website

3.a.vi.1	Traceability feature that shows which user exported the data	Information not found on website
3.a.vii	Redacting/editing capabilities	Information not found on website
3.a.vii.1	Specify whether changes are permanent	Information not found on website
3.a.viii	Support provided for chain-of-custody requirements	Information not found on website
3.a.ix	Scalability for different organization size	Information not found on website
3.a.x	User management and role-based access levels	Information not found on website
3.b	Video Analytics	
3.b.i	Companion software to analyze recorded video and audio data	Yes
3.b.ii	Types of reports built into software	Information not found on website
3.b.ii.1	Standard reports	Information not found on website
3.b.ii.2	Daily reports, historical reports, etc.	Information not found on website
3.b.ii.3	Audit reports that support chain-of-custody requirements	Information not found on website
3.b.ii.4	Customization of reports	Information not found on website
3.b.iii	Facial recognition capabilities	Information not found on website
3.b.iv	Weapons detection capabilities	Information not found on website
3.b.v	Other analytical capabilities	Information not found on website
3.c	Video Security and Authentication	
3.c.i	Compatibility of BWC video output with existing video management software for reviewing and recording	Information not found on website
3.c.ii	File integrity checks to ensure authenticity	Information not found on website
3.c.iii	Data protection mechanism while in transit and during storage	Information not found on website
3.c.iv	Routine software updates	Information not found on website
3.c.v	Cost of software updates	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Usability/Training		
4.a	Usability validation processes	Information not found on website
4.b	User community data	Information not found on website
4.c	User-group meetings and frequency	Information not found on website
4.d	Typical problems reported	Information not found on website
4.d.i	Resolution to problems	Information not found on website
4.e	Hours of tech. support and location	Information not found on website
4.f	Training provided (hours)	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Installation		
5.a	Average time to install and activate	Information not found on website

4.41 Primal USA DutyEGS Evidence Gathering Sunglasses



Figure 41. Primal USA DutyEGS Evidence Gathering Sunglasses

RFI Q.#	Survey Question (abbreviated)	Response
Vendor Information		
0	Responded to FRN?	Yes
1.a	Name	Primal USA, LLC dba DutyVUE
1.b	Address/phone number	300 Colonial Center Parkway, Suite 100, Roswell, GA 30076 (678) 353-3301
1.c	Website	www.primalusa.com or www.dutyvue.com
1.d	Years in business	10 years
1.e	Number and types of customers	500+
1.f	Manufacturing location(s)	Marietta, GA

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – BWC		
2.a	General	
2.a.i	Name and model number	DutyEGS 720-200 POV PrimeOBSERVER EGS Body Camera
2.a.ii	Physical dims (H" x W" x D")	No information provided
2.a.iii	Weight (oz.)	1.34 oz
2.a.iv	Mounting options	Face
2.a.iv.1	Accessories needed for mounting	None
2.a.v	Ability to mount on vehicle dashboard	No
2.a.v.1	Accessories for vehicle dashboard mount	No
2.a.vi	LCD display	No
2.a.vii	Recording capacity	Choice of 16, 32 or 64GB.
2.a.viii	Operating conditions or limitations	No information provided
2.b	Video and Optics	
2.b.i	Maximum video resolution	720 P
2.b.ii	Field of view	140°
2.b.iii	Lux rating	1 lux with IR emitters
2.b.iv	Night mode/format	Yes; Low – Med – High sensitivity selectable

2.b.v	Recording speed	60 fps
2.b.vi	Recording format	MOV / AVI
2.b.vii	Recording time under default resolution settings	Adjustable – standard 30 fps
2.b.viii	Ability to capture still photos	Yes
2.b.ix	Ability to embed date/time stamp on recorded video	Yes; device ID, officer or agency name
2.b.ix.1	Ability to authenticate and validate date/time stamp integrity	Yes
2.b.x	Pre-event recording feature	No
2.b.x.1	Time buffered and whether audio is recorded	No
2.b.xi	Event marking capability	No
2.b.xii	Wireless capabilities for communication	Yes; Wi Fi & bluetooth options
2.c	Audio	
2.c.i	Microphone feature	Yes
2.c.ii	Microphone sensitivity	Adjustable Volume
2.c.iii	Audio format	WAV
2.c.iv	Default police radio interface for BWC	Yes
2.d	Data Upload	
2.d.i	Single device vs. multiple upload docking station	Yes; desk charger or kiosk
2.d.ii	Data transfer method	Wi Fi / bluetooth / wired
2.d.iii	Manual vs. automatic upload	Manual standard & auto terminal file transfer
2.e	Battery Information	
2.e.i	Battery type; internal or removable	Internal
2.e.ii	Recording duration	4 hours
2.e.iii	Battery standby duration	24 hours
2.e.iv	Battery charge time	2 hours
2.e.v	Battery lifetime until replacement	500 to 600 cycles
2.e.vi	Battery replacement procedure	Service depot
2.e.vii	Availability of supplemental charger for emergency battery charging	Yes
2.f	GPS	
2.f.i	BWC possess GPS	No
2.f.i.1	Embedded GPS coordinates in recorded video	No
2.f.ii	Alternative geolocation methods	No
2.g	Consumer Testing Results	
2.g.i	Sturdiness/fragility	IP65
2.g.i.1	Drop test results	5 ft
2.g.i.2	Dust intrusion/water resistance rating	IP65
2.g.i.3	Ruggedized	IP65
2.g.i.4	Pressure/depth	IP65
2.g.i.5	Shock	IP65
2.g.i.6	Vibrations	IP65
2.g.ii	Other environmental testing	IP65
2.g.ii.1	Specify tests, pass/fail results, and ratings received	IP65
2.h	Safeguards	

2.h.i	Privacy safeguards or features	No
2.h.i.1	Remote viewing	No
2.h.i.2	Remote activation/deactivation	No
2.h.i.3	Privacy masking	No
2.h.i.4	Redacting/editing capabilities	No
2.h.ii	Safeguards for cyber security, unintentional disassembly, etc.	No
2.i	Regulatory	
2.i.i	Regulatory and Compliance safety requirements	AS/NZS 1067, EN 1836 and ANSI Z80.3 standards.
2.i.ii	Radiation safety standards	AS/NZS 1067, EN 1836 and ANSI Z80.3 standards.
2.j	Warranty and Maintenance Plans	
2.j.i	Length of warranty (in months)	12 months
2.j.ii	Optional extended warranties	12 to 36 months
2.j.ii.1	Duration and cost of extended warranties	\$120 per year
2.j.iii	Availability of extended maintenance plans	Yes
2.j.iii.1	Duration and cost of extended maintenance plans	12 to 36 months
2.j.iv	Service contract costs	Contact manufacturer for quote
2.k	Auxiliary Equipment	
2.k.i	Manufacturer suggested retail price (MSRP) for each auxiliary equipment	<ul style="list-style-type: none"> • 16GB = \$199 • 32GB = \$249 • 64GB = \$299
2.l	MSRP without optional features, accessories, or service plans	\$199
2.m	Manufacturer's estimated lifetime of device	5 years
2.n	Other relevant information	No information provided

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – Software for Video Data Storage and Management		
3.a	Data Management	
3.a.i	Searching capabilities	Yes; server Cloud based – within agency or external cloud
3.a.ii	Categorizing capabilities	Yes; server cloud based – within agency or external cloud
3.a.iii	Tagging capabilities	Yes
3.a.iv	Archiving and file retention	Yes
3.a.v	Data saved on or offsite	Both
3.a.v.1	If saved offsite, specific data accessibility and storage costs	Contact manufacturer
3.a.v.2	Video data storage capacity local vs. cloud	Yes
3.a.v.3	Capability to accommodate multiple site installations	Yes
3.a.vi	Export capabilities	Yes
3.a.vi.1	Traceability feature that shows which user exported the data	Yes
3.a.vii	Redacting/editing capabilities	Optional

3.a.vii.1	Specify whether changes are permanent	Yes
3.a.viii	Support provided for chain-of-custody requirements	Yes
3.a.ix	Scalability for different organization size	Up to 10,000 users
3.a.x	User management and role-based access levels	Yes; admin defined
3.b	Video Analytics	
3.b.i	Companion software to analyze recorded video and audio data	Optional
3.b.ii	Types of reports built into software	Custom
3.b.ii.1	Standard reports	Yes
3.b.ii.2	Daily reports, historical reports, etc.	Yes; optional
3.b.ii.3	Audit reports that support chain-of-custody requirements	Yes
3.b.ii.4	Customization of reports	Optional
3.b.iii	Facial recognition capabilities	Optional
3.b.iv	Weapons detection capabilities	No
3.b.v	Other analytical capabilities	Under development
3.c	Video Security and Authentication	
3.c.i	Compatibility of BWC video output with existing video management software for reviewing and recording	Yes, HDMI
3.c.ii	File integrity checks to ensure authenticity	Yes
3.c.iii	Data protection mechanism while in transit and during storage	Yes
3.c.iv	Routine software updates	Annual
3.c.v	Cost of software updates	3 levels program

RFI Q.#	Survey Question (abbreviated)	Response
Usability/Training		
4.a	Usability validation processes	No information provided
4.b	User community data	No information provided
4.c	User-group meetings and frequency	Yes, web based
4.d	Typical problems reported	Web based support ticket
4.d.i	Resolution to problems	Phone & web
4.e	Hours of tech. support and location	USA based Tech Support
4.f	Training provided (hours)	Web & on site options

RFI Q.#	Survey Question (abbreviated)	Response
Installation		
5.a	Average time to install and activate	1 hour

4.42 Primal USA DutyVUE PrimeOBSERVER I



Figure 42. Primal USA DutyVUE PrimeOBSERVER I

RFI Q.#	Survey Question (abbreviated)	Response
Vendor Information		
0	Responded to FRN?	Yes
1.a	Name	Primal USA, LLC dba DutyVUE
1.b	Address/phone number	300 Colonial Center Parkway, Suite 100, Roswell, GA 30076 (678) 353-3301
1.c	Website	www.primalusa.com or www.dutyvue.com
1.d	Years in business	10 years
1.e	Number and types of customers	500+
1.f	Manufacturing location(s)	Marietta, GA

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – BWC		
2.a	General	
2.a.i	Name and model number	DVPO-1 DutyVUE PrimeOBSERVER Body Camera
2.a.ii	Physical dims (H" x W" x D")	3.75" H x 2.25" W x 1.25" D
2.a.iii	Weight (oz.)	5 oz
2.a.iv	Mounting options	Epaulet, chest, collar, and holster
2.a.iv.1	Accessories needed for mounting	Replaceable Clips
2.a.v	Ability to mount on vehicle dashboard	Yes, optional
2.a.v.1	Accessories for vehicle dashboard mount	Yes, optional
2.a.vi	LCD display	Color LCD standard
2.a.vii	Recording capacity	Choice of 16, 32 or 64GB. 128 special order
2.a.viii	Operating conditions or limitations	No information provided
2.b	Video and Optics	
2.b.i	Maximum video resolution	1080 P
2.b.ii	Field of view	130°
2.b.iii	Lux rating	1 lux with IR emitters
2.b.iv	Night mode/format	Yes; Low – Med – High sensitivity selectable

2.b.v	Recording speed	60 fps
2.b.vi	Recording format	AVI
2.b.vii	Recording time under default resolution settings	Adjustable – standard 30 fps
2.b.viii	Ability to capture still photos	Yes – multiple resolutions
2.b.ix	Ability to embed date/time stamp on recorded video	Yes; device ID, officer or agency name
2.b.ix.1	Ability to authenticate and validate date/time stamp integrity	Yes
2.b.x	Pre-event recording feature	Yes; adjustable pre & post event
2.b.x.1	Time buffered and whether audio is recorded	Yes
2.b.xi	Event marking capability	Yes
2.b.xii	Wireless capabilities for communication	Yes; WiFi
2.c	Audio	
2.c.i	Microphone feature	Yes
2.c.ii	Microphone sensitivity	Adjustable volume
2.c.iii	Audio format	WAV
2.c.iv	Default police radio interface for BWC	Yes
2.d	Data Upload	
2.d.i	Single device vs. multiple upload docking station	Yes; desk charger or kiosk
2.d.ii	Data transfer method	Both WiFi and Wired
2.d.iii	Manual vs. automatic upload	Both; manual standard & optional auto
2.e	Battery Information	
2.e.i	Battery type; internal or removable	Removable
2.e.ii	Recording duration	5 hours Per Battery (2 batteries included)
2.e.iii	Battery standby duration	240 hours
2.e.iv	Battery charge time	4 hours
2.e.v	Battery lifetime until replacement	500 to 600 cycles
2.e.vi	Battery replacement procedure	By User
2.e.vii	Availability of supplemental charger for emergency battery charging	Yes
2.f	GPS	
2.f.i	BWC possess GPS	Yes
2.f.i.1	Embedded GPS coordinates in recorded video	Yes
2.f.ii	Alternative geolocation methods	Yes; optional module
2.g	Consumer Testing Results	
2.g.i	Sturdiness/fragility	IP65
2.g.i.1	Drop test results	5 feet
2.g.i.2	Dust intrusion/water resistance rating	IP65
2.g.i.3	Ruggedized	IP65
2.g.i.4	Pressure/depth	IP65
2.g.i.5	Shock	IP65
2.g.i.6	Vibrations	IP65
2.g.ii	Other environmental testing	IP65
2.g.ii.1	Specify tests, pass/fail results, and ratings received	IP65
2.h	Safeguards	

2.h.i	Privacy safeguards or features	Device internal password
2.h.i.1	Remote viewing	Via optional key remote controller
2.h.i.2	Remote activation/deactivation	Wireless remote controller option
2.h.i.3	Privacy masking	No
2.h.i.4	Redacting/editing capabilities	No
2.h.ii	Safeguards for cyber security, unintentional disassembly, etc.	Tamper seals
2.i	Regulatory	
2.i.i	Regulatory and Compliance safety requirements	FCC
2.i.ii	Radiation safety standards	FCC
2.j	Warranty and Maintenance Plans	
2.j.i	Length of warranty (in months)	12
2.j.ii	Optional extended warranties	12 to 36 months
2.j.ii.1	Duration and cost of extended warranties	\$120 per year
2.j.iii	Availability of extended maintenance plans	Yes
2.j.iii.1	Duration and cost of extended maintenance plans	12 to 36 months
2.j.iv	Service contract costs	Contact vendor for quote
2.k	Auxiliary Equipment	
2.k.i	Manufacturer suggested retail price (MSRP) for each auxiliary equipment	<ul style="list-style-type: none"> • 16GB = \$399 • 32GB = \$499 • 64GB = \$599
2.l	MSRP without optional features, accessories, or service plans	\$399
2.m	Manufacturer's estimated lifetime of device	7 years
2.n	Other relevant information	No information provided

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – Software for Video Data Storage and Management		
3.a	Data Management	
3.a.i	Searching capabilities	Yes; server cloud based – within agency or external cloud
3.a.ii	Categorizing capabilities	Yes; server cloud based – within agency or external cloud
3.a.iii	Tagging capabilities	Yes
3.a.iv	Archiving and file retention	Yes
3.a.v	Data saved on or offsite	Both
3.a.v.1	If saved offsite, specific data accessibility and storage costs	Contact manufacturer
3.a.v.2	Video data storage capacity local vs. cloud	Yes
3.a.v.3	Capability to accommodate multiple site installations	Yes
3.a.vi	Export capabilities	Yes
3.a.vi.1	Traceability feature that shows which user exported the data	Yes

3.a.vii	Redacting/editing capabilities	Optional
3.a.vii.1	Specify whether changes are permanent	Yes
3.a.viii	Support provided for chain-of-custody requirements	Yes
3.a.ix	Scalability for different organization size	Up to 10,000 users
3.a.x	User management and role-based access levels	Yes, admin defined
3.b	Video Analytics	
3.b.i	Companion software to analyze recorded video and audio data	Optional
3.b.ii	Types of reports built into software	Custom
3.b.ii.1	Standard reports	Yes
3.b.ii.2	Daily reports, historical reports, etc.	Yes, optional
3.b.ii.3	Audit reports that support chain-of-custody requirements	Yes
3.b.ii.4	Customization of reports	Optional
3.b.iii	Facial recognition capabilities	Optional
3.b.iv	Weapons detection capabilities	No
3.b.v	Other analytical capabilities	Under development
3.c	Video Security and Authentication	
3.c.i	Compatibility of BWC video output with existing video management software for reviewing and recording	Yes, HDMI
3.c.ii	File integrity checks to ensure authenticity	Yes
3.c.iii	Data protection mechanism while in transit and during storage	Yes
3.c.iv	Routine software updates	Annual
3.c.v	Cost of software updates	3 levels program

RFI Q.#	Survey Question (abbreviated)	Response
Usability/Training		
4.a	Usability validation processes	Online
4.b	User community data	Online
4.c	User-group meetings and frequency	Yes, web based
4.d	Typical problems reported	Web based support ticket
4.d.i	Resolution to problems	Phone & web
4.e	Hours of tech. support and location	USA based tech support
4.f	Training provided (hours)	Web & on site options

RFI Q.#	Survey Question (abbreviated)	Response
Installation		
5.a	Average time to install and activate	1 hour

4.43 Primal USA DutyVUE PrimeOBSERVER II



Figure 43. Primal USA DutyVUE PrimeOBSERVER II

RFI Q.#	Survey Question (abbreviated)	Response
Vendor Information		
0	Responded to FRN?	Yes
1.a	Name	Primal USA, LLC dba DutyVUE
1.b	Address/phone number	300 Colonial Center Parkway, Suite 100, Roswell, GA 30076 (678) 353-3301
1.c	Website	www.primalusa.com or www.dutyvue.com
1.d	Years in business	10 years
1.e	Number and types of customers	500+
1.f	Manufacturing location(s)	Marietta, GA

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – BWC		
2.a	General	
2.a.i	Name and model number	DVPO-2 PrimeOBSERVER Body Camera
2.a.ii	Physical dims (H" x W" x D")	3.75" H x 2.25" W x 1.25" D
2.a.iii	Weight (oz.)	6 oz
2.a.iv	Mounting options	Epaulet, chest, collar, holster
2.a.iv.1	Accessories needed for mounting	Replaceable clips
2.a.v	Ability to mount on vehicle dashboard	Yes, optional
2.a.v.1	Accessories for vehicle dashboard mount	Yes, optional
2.a.vi	LCD display	Color LCD standard
2.a.vii	Recording capacity	Choice of 16, 32 or 64GB. 128 special order
2.a.viii	Operating conditions or limitations	No information provided

2.b	Video and Optics	
2.b.i	Maximum video resolution	1080 P
2.b.ii	Field of view	140°
2.b.iii	Lux rating	1 lux with IR emitters
2.b.iv	Night mode/format	Yes; Low – Med – High sensitivity selectable
2.b.v	Recording speed	60 fps
2.b.vi	Recording format	MOV / AVI
2.b.vii	Recording time under default resolution settings	Adjustable – Standard 30 FPS
2.b.viii	Ability to capture still photos	Yes – multiple resolutions
2.b.ix	Ability to embed date/time stamp on recorded video	Yes; device ID, officer or agency name
2.b.ix.1	Ability to authenticate and validate date/time stamp integrity	Yes
2.b.x	Pre-event recording feature	Yes – Adjustable 30 sec to 30 minutes pre & post event
2.b.x.1	Time buffered and whether audio is recorded	Yes
2.b.xi	Event marking capability	Yes
2.b.xii	Wireless capabilities for communication	Yes; WiFi & bluetooth options
2.c	Audio	
2.c.i	Microphone feature	Yes
2.c.ii	Microphone sensitivity	Adjustable volume
2.c.iii	Audio format	WAV
2.c.iv	Default police radio interface for BWC	Yes
2.d	Data Upload	
2.d.i	Single device vs. multiple upload docking station	Yes; desk charger or kiosk
2.d.ii	Data transfer method	Wi Fi / bluetooth / wired
2.d.iii	Manual vs. automatic upload	Both; manual & automatic
2.e	Battery Information	
2.e.i	Battery type; internal or removable	Internal
2.e.ii	Recording duration	8 to 12 hours
2.e.iii	Battery standby duration	240 hours
2.e.iv	Battery charge time	4 hours
2.e.v	Battery lifetime until replacement	500 to 600 cycles
2.e.vi	Battery replacement procedure	Service depot
2.e.vii	Availability of supplemental charger for emergency battery charging	Yes
2.f	GPS	
2.f.i	BWC possess GPS	Yes
2.f.i.1	Embedded GPS coordinates in recorded video	Yes
2.f.ii	Alternative geolocation methods	Yes; optional module
2.g	Consumer Testing Results	
2.g.i	Sturdiness/fragility	IP65
2.g.i.1	Drop test results	5 ft
2.g.i.2	Dust intrusion/water resistance rating	IP65
2.g.i.3	Ruggedized	IP65
2.g.i.4	Pressure/depth	IP65
2.g.i.5	Shock	IP65

2.g.i.6	Vibrations	IP65
2.g.ii	Other environmental testing	IP65
2.g.ii.1	Specify tests, pass/fail results, and ratings received	IP65
2.h	Safeguards	
2.h.i	Privacy safeguards or features	Yes; device internal password
2.h.i.1	Remote viewing	Yes; via optional key remote controller
2.h.i.2	Remote activation/deactivation	Yes; wireless remote vontroller option
2.h.i.3	Privacy masking	No
2.h.i.4	Redacting/editing capabilities	No
2.h.ii	Safeguards for cyber security, unintentional disassembly, etc.	Tamper seals
2.i	Regulatory	
2.i.i	Regulatory and Compliance safety requirements	FCC
2.i.ii	Radiation safety standards	FCC
2.j	Warranty and Maintenance Plans	
2.j.i	Length of warranty (in months)	12
2.j.ii	Optional extended warranties	12 to 36 months
2.j.ii.1	Duration and cost of extended warranties	\$120 per year
2.j.iii	Availability of extended maintenance plans	Yes
2.j.iii.1	Duration and cost of extended maintenance plans	12 to 36 months
2.j.iv	Service contract costs	Contact manufacturer for quote
2.k	Auxiliary Equipment	
2.k.i	Manufacturer suggested retail price (MSRP) for each auxiliary equipment	<ul style="list-style-type: none"> • 16GB = \$499 • 32GB = \$599 • 64GB = \$699
2.l	MSRP without optional features, accessories, or service plans	\$499
2.m	Manufacturer's estimated lifetime of device	7 years
2.n	Other relevant information	No information provided

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – Software for Video Data Storage and Management		
3.a	Data Management	
3.a.i	Searching capabilities	Yes; server cloud based – within agency or external cloud
3.a.ii	Categorizing capabilities	Yes; server Cloud based – within agency or external cloud
3.a.iii	Tagging capabilities	Yes
3.a.iv	Archiving and file retention	Yes
3.a.v	Data saved on or offsite	Both
3.a.v.1	If saved offsite, specific data accessibility and storage costs	Contact manufacturer
3.a.v.2	Video data storage capacity local vs. cloud	Yes
3.a.v.3	Capability to accommodate multiple	Yes

	site installations	
3.a.vi	Export capabilities	Yes
3.a.vi.1	Traceability feature that shows which user exported the data	Yes
3.a.vii	Redacting/editing capabilities	Optional
3.a.vii.1	Specify whether changes are permanent	Yes
3.a.viii	Support provided for chain-of-custody requirements	Yes
3.a.ix	Scalability for different organization size	Up to 10,000 users
3.a.x	User management and role-based access levels	Yes, admin defined
3.b	Video Analytics	
3.b.i	Companion software to analyze recorded video and audio data	Optional
3.b.ii	Types of reports built into software	Custom
3.b.ii.1	Standard reports	Yes
3.b.ii.2	Daily reports, historical reports, etc.	Yes, optional
3.b.ii.3	Audit reports that support chain-of-custody requirements	Yes
3.b.ii.4	Customization of reports	Optional
3.b.iii	Facial recognition capabilities	Optional
3.b.iv	Weapons detection capabilities	No
3.b.v	Other analytical capabilities	Under development
3.c	Video Security and Authentication	
3.c.i	Compatibility of BWC video output with existing video management software for reviewing and recording	Yes, HDMI
3.c.ii	File integrity checks to ensure authenticity	Yes
3.c.iii	Data protection mechanism while in transit and during storage	Yes
3.c.iv	Routine software updates	Annual
3.c.v	Cost of software updates	3 levels program

RFI Q.#	Survey Question (abbreviated)	Response
Usability/Training		
4.a	Usability validation processes	No information provided
4.b	User community data	No information provided
4.c	User-group meetings and frequency	Yes; web based
4.d	Typical problems reported	Support ticket, web based
4.d.i	Resolution to problems	Phone & web
4.e	Hours of tech. support and location	USA based Tech Support
4.f	Training provided (hours)	Web & on site options

RFI Q.#	Survey Question (abbreviated)	Response
Installation		
5.a	Average time to install and activate	1 hour

4.44 Primal USA DutyVUE PrimeOBSERVER 2020



Figure 44. Primal USA DutyVUE PrimeOBSERVER 2020

RFI Q.#	Survey Question (abbreviated)	Response
Vendor Information		
0	Responded to FRN?	Yes
1.a	Name	Primal USA, LLC dba DutyVUE
1.b	Address/phone number	300 Colonial Center Parkway, Suite 100, Roswell, GA 30076 (678) 353-3301
1.c	Website	www.primalusa.com or www.dutyvue.com
1.d	Years in business	10 years
1.e	Number and types of customers	500+
1.f	Manufacturing location(s)	Marietta, GA

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – BWC		
2.a	General	
2.a.i	Name and model number	DVPO-2020 DutyVUE PrimeOBSERVER Body Camera
2.a.ii	Physical dims (H" x W" x D")	3.75" H x 2.25" W x 1.25" D
2.a.iii	Weight (oz.)	4 oz
2.a.iv	Mounting options	Epaulet, chest, collar, holster
2.a.iv.1	Accessories needed for mounting	Replaceable clips
2.a.v	Ability to mount on vehicle dashboard	Yes, optional
2.a.v.1	Accessories for vehicle dashboard mount	Yes, optional
2.a.vi	LCD display	Color LCD standard
2.a.vii	Recording capacity	Choice of 16, 32 or 64GB
2.a.viii	Operating conditions or limitations	No information provided

2.b	Video and Optics	
2.b.i	Maximum video resolution	1080 P
2.b.ii	Field of view	170°
2.b.iii	Lux rating	1 lux with IR emitters
2.b.iv	Night mode/format	Yes; Low – Med – High sensitivity selectable
2.b.v	Recording speed	60 fps
2.b.vi	Recording format	AVI
2.b.vii	Recording time under default resolution settings	Adjustable – standard 30 fps
2.b.viii	Ability to capture still photos	Yes – multiple resolutions
2.b.ix	Ability to embed date/time stamp on recorded video	Yes; device ID, officer or agency name
2.b.ix.1	Ability to authenticate and validate date/time stamp integrity	Yes
2.b.x	Pre-event recording feature	Yes; adjustable pre & post event
2.b.x.1	Time buffered and whether audio is recorded	Yes
2.b.xi	Event marking capability	Yes
2.b.xii	Wireless capabilities for communication	No
2.c	Audio	
2.c.i	Microphone feature	Yes
2.c.ii	Microphone sensitivity	Adjustable volume
2.c.iii	Audio format	WAV
2.c.iv	Default police radio interface for BWC	Yes
2.d	Data Upload	
2.d.i	Single device vs. multiple upload docking station	Yes; desk charger or kiosk
2.d.ii	Data transfer method	USB wired
2.d.iii	Manual vs. automatic upload	Manual standard & optional auto
2.e	Battery Information	
2.e.i	Battery type; internal or removable	Internal
2.e.ii	Recording duration	5 hours
2.e.iii	Battery standby duration	240 hours
2.e.iv	Battery charge time	4 hours
2.e.v	Battery lifetime until replacement	500 to 600 cycles
2.e.vi	Battery replacement procedure	Service depot
2.e.vii	Availability of supplemental charger for emergency battery charging	Yes
2.f	GPS	
2.f.i	BWC possess GPS	Yes
2.f.i.1	Embedded GPS coordinates in recorded video	Yes
2.f.ii	Alternative geolocation methods	Yes; optional module
2.g	Consumer Testing Results	
2.g.i	Sturdiness/fragility	IP54
2.g.i.1	Drop test results	5 ft
2.g.i.2	Dust intrusion/water resistance rating	IP54
2.g.i.3	Ruggedized	IP54
2.g.i.4	Pressure/depth	IP65
2.g.i.5	Shock	IP65

2.g.i.6	Vibrations	IP65
2.g.ii	Other environmental testing	IP65
2.g.ii.1	Specify tests, pass/fail results, and ratings received	IP65
2.h	Safeguards	
2.h.i	Privacy safeguards or features	Yes; device internal password
2.h.i.1	Remote viewing	Yes; via optional key remote controller
2.h.i.2	Remote activation/deactivation	Yes; wireless remote controller option
2.h.i.3	Privacy masking	No
2.h.i.4	Redacting/editing capabilities	No
2.h.ii	Safeguards for cyber security, unintentional disassembly, etc.	Tamper seals
2.i	Regulatory	
2.i.i	Regulatory and Compliance safety requirements	FCC
2.i.ii	Radiation safety standards	FCC
2.j	Warranty and Maintenance Plans	
2.j.i	Length of warranty (in months)	12 months
2.j.ii	Optional extended warranties	12 to 36 months
2.j.ii.1	Duration and cost of extended warranties	\$ 80 per year
2.j.iii	Availability of extended maintenance plans	Yes
2.j.iii.1	Duration and cost of extended maintenance plans	24 months
2.j.iv	Service contract costs	Contact manufacturer for quote
2.k	Auxiliary Equipment	
2.k.i	Manufacturer suggested retail price (MSRP) for each auxiliary equipment	<ul style="list-style-type: none"> • 16GB = \$199 • 32GB = \$299 • 64GB = \$399
2.l	MSRP without optional features, accessories, or service plans	\$199
2.m	Manufacturer's estimated lifetime of device	5 years
2.n	Other relevant information	No information provided

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – Software for Video Data Storage and Management		
3.a	Data Management	
3.a.i	Searching capabilities	Yes; server cloud based – within agency or external cloud
3.a.ii	Categorizing capabilities	Yes; server cloud based – within agency or external cloud
3.a.iii	Tagging capabilities	Yes
3.a.iv	Archiving and file retention	Yes
3.a.v	Data saved on or offsite	Both
3.a.v.1	If saved offsite, specific data accessibility and storage costs	Contact manufacturer
3.a.v.2	Video data storage capacity local vs. cloud	Yes
3.a.v.3	Capability to accommodate multiple	Yes

	site installations	
3.a.vi	Export capabilities	Yes
3.a.vi.1	Traceability feature that shows which user exported the data	Yes
3.a.vii	Redacting/editing capabilities	Optional
3.a.vii.1	Specify whether changes are permanent	Yes
3.a.viii	Support provided for chain-of-custody requirements	Yes
3.a.ix	Scalability for different organization size	Up to 10,000 users
3.a.x	User management and role-based access levels	Yes; admin defined
3.b	Video Analytics	
3.b.i	Companion software to analyze recorded video and audio data	Optional
3.b.ii	Types of reports built into software	Custom
3.b.ii.1	Standard reports	Yes
3.b.ii.2	Daily reports, historical reports, etc.	Yes; optional
3.b.ii.3	Audit reports that support chain-of-custody requirements	Yes
3.b.ii.4	Customization of reports	Optional
3.b.iii	Facial recognition capabilities	Optional
3.b.iv	Weapons detection capabilities	No
3.b.v	Other analytical capabilities	Under development
3.c	Video Security and Authentication	
3.c.i	Compatibility of BWC video output with existing video management software for reviewing and recording	Yes, HDMI
3.c.ii	File integrity checks to ensure authenticity	Yes
3.c.iii	Data protection mechanism while in transit and during storage	Yes
3.c.iv	Routine software updates	Annual
3.c.v	Cost of software updates	3 levels program

RFI Q.#	Survey Question (abbreviated)	Response
Usability/Training		
4.a	Usability validation processes	Online
4.b	User community data	Online
4.c	User-group meetings and frequency	Yes; web based
4.d	Typical problems reported	Support ticket, web based
4.d.i	Resolution to problems	Phone & web
4.e	Hours of tech. support and location	USA based tech support
4.f	Training provided (hours)	Web & on site options

RFI Q.#	Survey Question (abbreviated)	Response
Installation		
5.a	Average time to install and activate	1 hour

4.45 PRO-VISION BodyCam



Figure 45. PRO-VISION BodyCam

RFI Q.#	Survey Question (abbreviated)	Response
Vendor Information		
0	Responded to FRN?	Yes
1.a	Name	PRO-VISION
1.b	Address/phone number	8625-B Byron Commerce Drive, Byron Center, MI 49315 (800) 576-1126
1.c	Website	www.provisionusa.com and www.bodycameras.com
1.d	Years in business	13 years
1.e	Number and types of customers	Commercial businesses; municipal, county, state, federal, and international law enforcement agencies
1.f	Manufacturing location(s)	United States

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – BWC		
2.a	General	
2.a.i	Name and model number	BodyCam Body Worn Camera
2.a.ii	Physical dims (H" x W" x D")	3.1" H x 2.0" W x 1.0" D
2.a.iii	Weight (oz.)	5.6 oz
2.a.iv	Mounting options	Helmet, chest, shoulder, belt, vehicle dash, bicycle, motorcycle
2.a.iv.1	Accessories needed for mounting	<ul style="list-style-type: none"> Vehicle – needs optional vehicle mounting kit Helmet – needs optional helmet mounting kit Bicycle/ATV/Motorcycle – needs optional handlebar mounting kit Chest, shoulder, belt mounts are covered by mounting clips included in the base kit.
2.a.v	Ability to mount on vehicle dashboard	Yes
2.a.v.1	Accessories for vehicle dashboard mount	Vehicle mounting kit

2.a.vi	LCD display	Yes; departmental administrators have the option to enable/disable the ability to use the screen to be able to review video clips.
2.a.vii	Recording capacity	32 GB
2.a.viii	Operating conditions or limitations	Operating temperature: -9°F to 127°F
2.b	Video and Optics	
2.b.i	Maximum video resolution	1296 P
2.b.ii	Field of view	150°
2.b.iii	Lux rating	0 lux (night vision mode)
2.b.iv	Night mode/format	Yes; great low light performance when IR is off. Selectable Auto Night Vision – can turn on and off on the camera. When on, a sensor will determine when to activate the night vision infrared illuminators.
2.b.v	Recording speed	60 fps
2.b.vi	Recording format	MP4
2.b.vii	Recording time under default resolution settings	Up to 18 hours
2.b.viii	Ability to capture still photos	Yes
2.b.ix	Ability to embed date/time stamp on recorded video	Yes; optional/configurable by administrators
2.b.ix.1	Ability to authenticate and validate date/time stamp integrity	Yes; syncs with internet time server when docked
2.b.x	Pre-event recording feature	Yes
2.b.x.1	Time buffered and whether audio is recorded	35 seconds and audio is configurable
2.b.xi	Event marking capability	Yes
2.b.xii	Wireless capabilities for communication	Yes
2.c	Audio	
2.c.i	Microphone feature	Yes
2.c.ii	Microphone sensitivity	No information provided
2.c.iii	Audio format	AAC
2.c.iv	Default police radio interface for BWC	No information provided
2.d	Data Upload	
2.d.i	Single device vs. multiple upload docking station	Both single device and docking station upload options are available.
2.d.ii	Data transfer method	Wired or dock is the primary method, while capable of wireless
2.d.iii	Manual vs. automatic upload	Automatic
2.e	Battery Information	
2.e.i	Battery type; internal or removable	High capacity, lithium ion internal battery
2.e.ii	Recording duration	13 hours
2.e.iii	Battery standby duration	No information provided
2.e.iv	Battery charge time	3 hours
2.e.v	Battery lifetime until replacement	Depends on environmental conditions, user charging habits, and other variables
2.e.vi	Battery replacement procedure	Factory battery replacement
2.e.vii	Availability of supplemental charger for emergency battery charging	USB cable with vehicle adapter and optional portable power pack/charger.
2.f	GPS	
2.f.i	BWC possess GPS	No information provided
2.f.i.1	Embedded GPS coordinates in recorded video	No information provided

2.f.ii	Alternative geolocation methods	No information provided
2.g	Consumer Testing Results	
2.g.i	Sturdiness/fragility	Yes
2.g.i.1	Drop test results	10 ft
2.g.i.2	Dust intrusion/water resistance rating	IP68
2.g.i.3	Ruggedized	Meet or exceeds MIL-STD-810G
2.g.i.4	Pressure/depth	IP68 (continuous immersion in water at a depth greater than 1 meter)
2.g.i.5	Shock	Meet or exceeds MIL-STD-810G
2.g.i.6	Vibrations	Meet or exceeds MIL-STD-810G
2.g.ii	Other environmental testing	No information provided
2.g.ii.1	Specify tests, pass/fail results, and ratings received	No information provided
2.h	Safeguards	
2.h.i	Privacy safeguards or features	Yes
2.h.i.1	Remote viewing	Yes; via WiFi
2.h.i.2	Remote activation/deactivation	Yes; via WiFi
2.h.i.3	Privacy masking	Not on BWC; capable with software
2.h.i.4	Redacting/editing capabilities	Not on BWC; capable with software
2.h.ii	Safeguards for cyber security, unintentional disassembly, etc.	Hardware is not vulnerable to jamming or cyber security. Access to files is protected so they are only capable of download at their assigned docking/download stations.
2.i	Regulatory	
2.i.i	Regulatory and Compliance safety requirements	IP68, FCC, CE, ROHS
2.i.ii	Radiation safety standards	No information provided
2.j	Warranty and Maintenance Plans	
2.j.i	Length of warranty (in months)	12 months
2.j.ii	Optional extended warranties	Optional hardware protection plan (up to 5 years) includes unlimited replacement of damaged camera units
2.j.ii.1	Duration and cost of extended warranties	No information provided
2.j.iii	Availability of extended maintenance plans	No information provided
2.j.iii.1	Duration and cost of extended maintenance plans	No information provided
2.j.iv	Service contract costs	No information provided
2.k	Auxiliary Equipment	
2.k.i	Manufacturer suggested retail price (MSRP) for each auxiliary equipment	Contact vendor or visit bodycameras.com for the latest list of options and pricing
2.l	MSRP without optional features, accessories, or service plans	\$349
2.m	Manufacturer's estimated lifetime of device	Varies based on user behavior
2.n	Other relevant information	Built-in flashlight with toggle switch for hands-free lighting. Example usage: reviewing a driver's license and registration while keeping a hand free in the officer needs to use force to protect themselves from someone in the pulled over vehicle.

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – Software for Video Data Storage and Management		
3.a	Data Management	
3.a.i	Searching capabilities	Yes
3.a.ii	Categorizing capabilities	Yes
3.a.iii	Tagging capabilities	Yes
3.a.iv	Archiving and file retention	Unlimited capacity; customizable by administrators and attributable to categories and tags with Retention Assurance. Retention Assurance - Safeguarding critical files that contain multiple tags with varying retention timelines, Retention Assurance™ ensures the longest retention length will become the default, guaranteeing no crucial files are lost.
3.a.v	Data saved on or offsite	Both on and offsite options available
3.a.v.1	If saved offsite, specific data accessibility and storage costs	On and off-site (CJIS Cloud Storage) options available. See SecuraMax.com for more information. \$45 / month for Cloud Storage and Data Management Service.
3.a.v.2	Video data storage capacity local vs. cloud	No limit to capacity
3.a.v.3	Capability to accommodate multiple site installations	Yes
3.a.vi	Export capabilities	Yes
3.a.vi.1	Traceability feature that shows which user exported the data	Yes; also shows up in audit reports
3.a.vii	Redacting/editing capabilities	Yes; with software
3.a.vii.1	Specify whether changes are permanent	Changes will not impact original file, but will be a permanently changed separate file.
3.a.viii	Support provided for chain-of-custody requirements	Yes
3.a.ix	Scalability for different organization size	Yes
3.a.x	User management and role-based access levels	Yes
3.b	Video Analytics	
3.b.i	Companion software to analyze recorded video and audio data	Yes
3.b.ii	Types of reports built into software	See below
3.b.ii.1	Standard reports	Yes; distribution of data used/stored per officer in a given period, retention report, tag/categorization report, additional customizable reports.
3.b.ii.2	Daily reports, historical reports, etc.	Yes; daily and historical reports
3.b.ii.3	Audit reports that support chain-of-custody requirements	Yes
3.b.ii.4	Customization of reports	Yes
3.b.iii	Facial recognition capabilities	No information provided
3.b.iv	Weapons detection capabilities	No
3.b.v	Other analytical capabilities	No information provided
3.c	Video Security and Authentication	
3.c.i	Compatibility of BWC video output with existing video management software for reviewing and recording	Yes, this is supported, but it is dependent on the management software.

3.c.ii	File integrity checks to ensure authenticity	Yes; integrity is verified on upload and cryptographic hash is stored in order to ensure file integrity.
3.c.iii	Data protection mechanism while in transit and during storage	Data encryption during transfer using SSL RSA 2048-bit key, 256- or 128-bit ciphers (depending on client browser). Data encryption during storage using 256-bit Advanced Encryption Standard (AES-256). CJIS compliant password policies.
3.c.iv	Routine software updates	Currently, software updates are thoroughly tested and automatically updated once approved. Automatic updates are used to ensure any security related updates are implemented as quickly as possible. Frequency varies based on complexity of new features or improvements provided in the update.
3.c.v	Cost of software updates	No cost / free

RFI Q.#	Survey Question (abbreviated)	Response
Usability/Training		
4.a	Usability validation processes	Requirements gathering, user experience layout wire-framing, process mapping, usability testing, interoperability, load testing, ergonomics, quantitative user behavior data analytics, integration testing, beta testing with law enforcement agencies, user qualitative feedback.
4.b	User community data	Regular interviews with test customers, observation during hands-on training, data analytics reviewed and collected monthly.
4.c	User-group meetings and frequency	PRO-VISION has a method for users to submit feedback immediately upon encountering something in which they have a suggested improvement or alternate method. PRO-VISION frequently meets with test customers to review product usage and make adjustments based on insight gained.
4.d	Typical problems reported	PRO-VISION estimates that at least 25% of their customers reported that they had difficulty crafting policies regarding camera usage in their agencies.
4.d.i	Resolution to problems	PRO-VISION put together a solution in which a model policy was provided to requesting customers to provide a basis for their policies. Customers would then take the model and customize it to fit their specific requirements. This severely reduced implementation time of their body-worn camera programs.
4.e	Hours of tech. support and location	Unlimited phone support with remote computer session capability. US-based support team.
4.f	Training provided (hours)	Web and phone-based remote deployment / training with one of the deployment specialists is included. On-site deployment assistance is optional.

RFI Q.#	Survey Question (abbreviated)	Response
Installation		
5.a	Average time to install and activate	This depends on several factors. In most cases, this would be a matter of minutes.

4.46 Reveal Media RS2-X2L



Figure 46. Reveal Media RS2-X2L

RFI Q.#	Survey Question (abbreviated)	Response
Vendor Information		
0	Responded to FRN?	Yes
1.a	Name	Reveal Media
1.b	Address/phone number	13420 Reese Blvd. West, Suite 13, Huntersville, NC 28078 (888) 269-9924, Ext. 101
1.c	Website	www.revealmedia.com/us
1.d	Years in business	13
1.e	Number and types of customers	Law enforcement, security, transportation
1.f	Manufacturing location(s)	United Kingdom

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – BWC		
2.a	General	
2.a.i	Name and model number	RS2-X2L
2.a.ii	Physical dims (H" x W" x D")	3.9" H x 2.2" W x 1.2" D
2.a.iii	Weight (oz.)	5.2 oz
2.a.iv	Mounting options	Uniform clip, shoulder mount, epaulet mount, tactical & helmet mounts, magnetic, shoulder and chest harness, vehicle dash mount
2.a.iv.1	Accessories needed for mounting	Selected mounting options for RS2-X2L utilize the Klickfast accessory
2.a.v	Ability to mount on vehicle dashboard	Yes

2.a.v.1	Accessories for vehicle dashboard mount	Vehicle dash mount
2.a.vi	LCD display	Yes, 2" Color LCD display
2.a.vii	Recording capacity	8 GB or 32 GB
2.a.viii	Operating conditions or limitations	Sealed unit, single action slide on/off slide switch.
2.b	Video and Optics	
2.b.i	Maximum video resolution	1080 P
2.b.ii	Field of view	Articulating field of view of: 260° horizontal, 60° vertical Wide field of view of: 120° horizontal, 60° vertical
2.b.iii	Lux rating	0.1 lux
2.b.iv	Night mode/format	Yes; RS2-X2L functions in low light environments and will utilize available lighting sources to support decisions made by law enforcement encountered in those environments.
2.b.v	Recording speed	30 fps
2.b.vi	Recording format	MOV or MP4
2.b.vii	Recording time under default resolution settings	8.5 hours
2.b.viii	Ability to capture still photos	No; but is available with Reveal's DEMS (Digital Evidence Management Solution) evidence software
2.b.ix	Ability to embed date/time stamp on recorded video	Yes
2.b.ix.1	Ability to authenticate and validate date/time stamp integrity	Yes
2.b.x	Pre-event recording feature	Yes
2.b.x.1	Time buffered and whether audio is recorded	30 second pre-event, optional audio inclusion available
2.b.xi	Event marking capability	Yes
2.b.xii	Wireless capabilities for communication	N/A
2.c	Audio	
2.c.i	Microphone feature	Yes
2.c.ii	Microphone sensitivity	Auto adjusting
2.c.iii	Audio format	AAC
2.c.iv	Default police radio interface for BWC	N/A
2.d	Data Upload	
2.d.i	Single device vs. multiple upload docking station	Both single and multiple six (6) port docking and/or eighteen (18) port network docking
2.d.ii	Data transfer method	USB
2.d.iii	Manual vs. automatic upload	Automatic without user intervention
2.e	Battery Information	
2.e.i	Battery type; internal or removable	Internal sealed
2.e.ii	Recording duration	8.5 hours
2.e.iii	Battery standby duration	One week
2.e.iv	Battery charge time	8 hours
2.e.v	Battery lifetime until replacement	Estimated 3 years, depending upon use
2.e.vi	Battery replacement procedure	Return to manufacturer
2.e.vii	Availability of supplemental charger for emergency battery charging	RS2-X2L can be recharged by docking or USB cable connected to convenience plug and/or PC with USB port.
2.f	GPS	
2.f.i	BWC possess GPS	N/A

2.f.i.1	Embedded GPS coordinates in recorded video	N/A
2.f.ii	Alternative geolocation methods	N/A
2.g	Consumer Testing Results	
2.g.i	Sturdiness/fragility	Very sturdy and designed for law enforcement use
2.g.i.1	Drop test results	6.5 ft
2.g.i.2	Dust intrusion/water resistance rating	Yes
2.g.i.3	Ruggedized	Yes
2.g.i.4	Pressure/depth	N/A
2.g.i.5	Shock	Designed for law enforcement use
2.g.i.6	Vibrations	Designed for law enforcement use
2.g.ii	Other environmental testing	IP54, FCC, & CE
2.g.ii.1	Specify tests, pass/fail results, and ratings received	IP54, FCC, & CE
2.h	Safeguards	
2.h.i	Privacy safeguards or features	Sealed unit with no onboard camera editing, deletion, or distribution capabilities and: <ul style="list-style-type: none"> • 256 bit AES encryption • Unique SHA electronic signature • System generated officer PIN number to access • Active directory use • Recordings are hidden from view on the camera • Encrypted access and usage log maintained on camera • Complete audit trail maintained for each recording
2.h.i.1	Remote viewing	N/A
2.h.i.2	Remote activation/deactivation	N/A
2.h.i.3	Privacy masking	Yes
2.h.i.4	Redacting/editing capabilities	No, but is available after uploading to evidence software
2.h.ii	Safeguards for cyber security, unintentional disassembly, etc.	See information above
2.i	Regulatory	
2.i.i	Regulatory and Compliance safety requirements	FCC, CE, and IP54
2.i.ii	Radiation safety standards	See 2.1.1 response
2.j	Warranty and Maintenance Plans	
2.j.i	Length of warranty (in months)	12 months to manufactory warranty
2.j.ii	Optional extended warranties	Yes
2.j.ii.1	Duration and cost of extended warranties	Annually renewable at current published pricing
2.j.iii	Availability of extended maintenance plans	Extended hardware service programs available
2.j.iii.1	Duration and cost of extended maintenance plans	Annually renewable at current published pricing
2.j.iv	Service contract costs	Based upon system configuration
2.k	Auxiliary Equipment	
2.k.i	Manufacturer suggested retail price (MSRP) for each auxiliary equipment	\$349 for six (6) port Docking Station
2.l	MSRP without optional features, accessories, or service plans	MSRP pricing varies for optional accessories

2.m	Manufacturer's estimated lifetime of device	Dependent upon use, estimated 4-5 years
2.n	Other relevant information	No information provided

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – Software for Video Data Storage and Management		
3.a	Data Management	
3.a.i	Searching capabilities	Yes
3.a.ii	Categorizing capabilities	Yes
3.a.iii	Tagging capabilities	Yes
3.a.iv	Archiving and file retention	Yes
3.a.v	Data saved on or offsite	Yes
3.a.v.1	If saved offsite, specific data accessibility and storage costs	Provided by end user
3.a.v.2	Video data storage capacity local vs. cloud	Unlimited, choice of deployment (local, server, cloud, or hybrid) and storage provided by end user
3.a.v.3	Capability to accommodate multiple site installations	Yes
3.a.vi	Export capabilities	Yes
3.a.vi.1	Traceability feature that shows which user exported the data	Yes
3.a.vii	Redacting/editing capabilities	Yes
3.a.vii.1	Specify whether changes are permanent	Original video recording remains intact and unaltered. Changes are maintained in user created copy.
3.a.viii	Support provided for chain-of-custody requirements	Yes
3.a.ix	Scalability for different organization size	Yes
3.a.x	User management and role-based access levels	Both user management, role, and team based available
3.b	Video Analytics	
3.b.i	Companion software to analyze recorded video and audio data	<p>Once uploaded, the recordings are available for:</p> <ul style="list-style-type: none"> • searching by multiple user selected criteria • tagging by evidential/non-evidential • assignment of retention policy • reporting and statistical reporting • creation of snapshots or clips • export of copy • DVD creation of copy • sharing to authorized internal or external users • cloaking of videos from access without permission
3.b.ii	Types of reports built into software	<p>Reveal's DEMS software includes a reporting module which the user may use, select, and customize the reporting criteria to include various parameters – such as a date range, camera, user, and location. The output of the reports can be directed to a printer, PDF, Excel, HTML, XPS, or RTF formats.</p> <ul style="list-style-type: none"> • <u>Camera Activities</u> – available for all or by user selected designated camera, user, booking state, or location

		<ul style="list-style-type: none"> • <u>Camera Booking Log</u> – available for all or by user selected date range, camera, user, or location • <u>Disk Usage by time</u> - available for all or by user selected date range, camera, or user • <u>Items Uploaded by day of week</u> - available by user selected date range, camera, user, or location • <u>Recording Time by Shift</u> – reporting information regarding duration, number of videos, and percentage for the shift • <u>Users Activity</u> – reporting user activity regarding uploaded videos, deleted videos, played videos, burned videos, exported videos, and snapshots created • <u>Users Uploading Statistics</u> - available for all or by user selected date range and reports by user the number of non-evidential files, evidential files, deleted files, total files, total duration time, and total size in storage by gigabytes.
3.b.ii.1	Standard reports	Please reference 3.b.ii
3.b.ii.2	Daily reports, historical reports, etc.	Please reference 3.b.ii
3.b.ii.3	Audit reports that support chain-of-custody requirements	Yes, audit reports are available
3.b.ii.4	Customization of reports	Yes, please reference 3.b.ii
3.b.iii	Facial recognition capabilities	N/A
3.b.iv	Weapons detection capabilities	N/A
3.b.v	Other analytical capabilities	Please reference 3.b.ii
3.c	Video Security and Authentication	
3.c.i	Compatibility of BWC video output with existing video management software for reviewing and recording	Recordings from camera are available for upload into a non-Reveal evidence software.
3.c.ii	File integrity checks to ensure authenticity	<p>Yes, file integrity checks are used in combination of:</p> <ul style="list-style-type: none"> • 256 bit AES encryption • Unique SHA electronic signature • System generated officer PIN number to access • Active Directory use • Recordings are hidden from view on the camera • Encrypted access and usage log maintained on camera • Complete audit trail maintained for each recording
3.c.iii	Data protection mechanism while in transit and during storage	Recordings are retained onboard camera until camera is docked with DEMS evidence software. After upload, software performs verification and authentication process for each and before recording(s) is removed from the camera.
3.c.iv	Routine software updates	Yes routine software updates are announced to clients and available for download
3.c.v	Cost of software updates	No charge; Lifetime software updates and technical

		support are included with DEMS evidence software at no-cost.
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RFI Q.#	Survey Question (abbreviated)	Response
Usability/Training		
4.a	Usability validation processes	Yes
4.b	User community data	Yes
4.c	User-group meetings and frequency	Yes
4.d	Typical problems reported	Yes
4.d.i	Resolution to problems	Yes
4.e	Hours of tech. support and location	7:00 a.m. – 5:00 p.m.
4.f	Training provided (hours)	Yes; length of training dependent upon size of department

RFI Q.#	Survey Question (abbreviated)	Response
Installation		
5.a	Average time to install and activate	2 days. Dependent upon size of and choice of department of DEMS (evidence software deployment – standalone, server, cloud, or hybrid.

4.47 Safety Innovations VidCam VX



Figure 47. Safety Innovations VidCam VX

RFI Q.#	Survey Question (abbreviated)	Response
Vendor Information		
0	Responded to FRN?	No
1.a	Name	Safety Innovations
1.b	Address/phone number	(801) 371-8900
1.c	Website	www.safetyinnovations.com
1.d	Years in business	20 years
1.e	Number and types of customers	Information not found on website
1.f	Manufacturing location(s)	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – BWC		
2.a	General	
2.a.i	Name and model number	VidCam VX
2.a.ii	Physical dims (H" x W" x D")	Information not found on website
2.a.iii	Weight (oz.)	Information not found on website
2.a.iv	Mounting options	Information not found on website
2.a.iv.1	Accessories needed for mounting	Information not found on website
2.a.v	Ability to mount on vehicle dashboard	Information not found on website
2.a.v.1	Accessories for vehicle dashboard mount	Information not found on website
2.a.vi	LCD display	Information not found on website
2.a.vii	Recording capacity	8 GB, up to 64 GB
2.a.viii	Operating conditions or limitations	Information not found on website
2.b	Video and Optics	
2.b.i	Maximum video resolution	Information not found on website
2.b.ii	Field of view	92°
2.b.iii	Lux rating	Information not found on website

2.b.iv	Night mode/format	AccuView technology automatically adjusts rapidly to high and low light.
2.b.v	Recording speed	Information not found on website
2.b.vi	Recording format	Information not found on website
2.b.vii	Recording time under default resolution settings	14 hours
2.b.viii	Ability to capture still photos	Information not found on website
2.b.ix	Ability to embed date/time stamp on recorded video	Information not found on website
2.b.ix.1	Ability to authenticate and validate date/time stamp integrity	Information not found on website
2.b.x	Pre-event recording feature	Yes
2.b.x.1	Time buffered and whether audio is recorded	45 seconds
2.b.xi	Event marking capability	Information not found on website
2.b.xii	Wireless capabilities for communication	Information not found on website
2.c	Audio	
2.c.i	Microphone feature	Information not found on website
2.c.ii	Microphone sensitivity	Information not found on website
2.c.iii	Audio format	Information not found on website
2.c.iv	Default police radio interface for BWC	Information not found on website
2.d	Data Upload	
2.d.i	Single device vs. multiple upload docking station	Both single and multiple available
2.d.ii	Data transfer method	Via docking station or the VidSync multi-charger
2.d.iii	Manual vs. automatic upload	Automatic
2.e	Battery Information	
2.e.i	Battery type; internal or removable	Information not found on website
2.e.ii	Recording duration	14 hours
2.e.iii	Battery standby duration	Information not found on website
2.e.iv	Battery charge time	5 hours
2.e.v	Battery lifetime until replacement	Information not found on website
2.e.vi	Battery replacement procedure	Information not found on website
2.e.vii	Availability of supplemental charger for emergency battery charging	Information not found on website
2.f	GPS	
2.f.i	BWC possess GPS	Information not found on website
2.f.i.1	Embedded GPS coordinates in recorded video	Information not found on website
2.f.ii	Alternative geolocation methods	Information not found on website
2.g	Consumer Testing Results	
2.g.i	Sturdiness/fragility	Information not found on website
2.g.i.1	Drop test results	Yes; built for impact
2.g.i.2	Dust intrusion/water resistance rating	Yes; water resistant
2.g.i.3	Ruggedized	Yes
2.g.i.4	Pressure/depth	Information not found on website
2.g.i.5	Shock	Information not found on website
2.g.i.6	Vibrations	Information not found on website
2.g.ii	Other environmental testing	Information not found on website
2.g.ii.1	Specify tests, pass/fail results, and	Information not found on website

	ratings received	
2.h	Safeguards	
2.h.i	Privacy safeguards or features	Information not found on website
2.h.i.1	Remote viewing	Information not found on website
2.h.i.2	Remote activation/deactivation	Information not found on website
2.h.i.3	Privacy masking	Information not found on website
2.h.i.4	Redacting/editing capabilities	Information not found on website
2.h.ii	Safeguards for cyber security, unintentional disassembly, etc.	Information not found on website
2.i	Regulatory	
2.i.i	Regulatory and Compliance safety requirements	Information not found on website
2.i.ii	Radiation safety standards	Information not found on website
2.j	Warranty and Maintenance Plans	
2.j.i	Length of warranty (in months)	Information not found on website
2.j.ii	Optional extended warranties	Information not found on website
2.j.ii.1	Duration and cost of extended warranties	Information not found on website
2.j.iii	Availability of extended maintenance plans	Information not found on website
2.j.iii.1	Duration and cost of extended maintenance plans	Information not found on website
2.j.iv	Service contract costs	Information not found on website
2.k	Auxiliary Equipment	
2.k.i	Manufacturer suggested retail price (MSRP) for each auxiliary equipment	Information not found on website
2.l	MSRP without optional features, accessories, or service plans	Information not found on website
2.m	Manufacturer's estimated lifetime of device	Information not found on website
2.n	Other relevant information	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – Software for Video Data Storage and Management		
3.a	Data Management	
3.a.i	Searching capabilities	Yes
3.a.ii	Categorizing capabilities	Information not found on website
3.a.iii	Tagging capabilities	Yes
3.a.iv	Archiving and file retention	Yes
3.a.v	Data saved on or offsite	Both
3.a.v.1	If saved offsite, specific data accessibility and storage costs	Information not found on website
3.a.v.2	Video data storage capacity local vs. cloud	Information not found on website
3.a.v.3	Capability to accommodate multiple site installations	Information not found on website
3.a.vi	Export capabilities	Yes
3.a.vi.1	Traceability feature that shows which user exported the data	Information not found on website
3.a.vii	Redacting/editing capabilities	Information not found on website

3.a.vii.1	Specify whether changes are permanent	Information not found on website
3.a.viii	Support provided for chain-of-custody requirements	Yes
3.a.ix	Scalability for different organization size	Information not found on website
3.a.x	User management and role-based access levels	Information not found on website
3.b	Video Analytics	
3.b.i	Companion software to analyze recorded video and audio data	Information not found on website
3.b.ii	Types of reports built into software	Information not found on website
3.b.ii.1	Standard reports	Information not found on website
3.b.ii.2	Daily reports, historical reports, etc.	Information not found on website
3.b.ii.3	Audit reports that support chain-of-custody requirements	Yes
3.b.ii.4	Customization of reports	Information not found on website
3.b.iii	Facial recognition capabilities	Information not found on website
3.b.iv	Weapons detection capabilities	Information not found on website
3.b.v	Other analytical capabilities	Information not found on website
3.c	Video Security and Authentication	
3.c.i	Compatibility of BWC video output with existing video management software for reviewing and recording	Information not found on website
3.c.ii	File integrity checks to ensure authenticity	Information not found on website
3.c.iii	Data protection mechanism while in transit and during storage	Information not found on website
3.c.iv	Routine software updates	Information not found on website
3.c.v	Cost of software updates	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Usability/Training		
4.a	Usability validation processes	Information not found on website
4.b	User community data	Information not found on website
4.c	User-group meetings and frequency	Information not found on website
4.d	Typical problems reported	Information not found on website
4.d.i	Resolution to problems	Information not found on website
4.e	Hours of tech. support and location	Information not found on website
4.f	Training provided (hours)	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Installation		
5.a	Average time to install and activate	Information not found on website

4.48 Safety Innovations VidMic VX



Figure 48. Safety Innovations VidMic VX

RFI Q.#	Survey Question (abbreviated)	Response
Vendor Information		
0	Responded to FRN?	No
1.a	Name	Safety Innovations
1.b	Address/phone number	(801) 371-8900
1.c	Website	www.safetyinnovations.com
1.d	Years in business	20 years
1.e	Number and types of customers	Information not found on website
1.f	Manufacturing location(s)	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – BWC		
2.a	General	
2.a.i	Name and model number	VidMic VX
2.a.ii	Physical dims (H" x W" x D")	Information not found on website
2.a.iii	Weight (oz.)	Information not found on website
2.a.iv	Mounting options	Uniform, belt
2.a.iv.1	Accessories needed for mounting	Information not found on website
2.a.v	Ability to mount on vehicle dashboard	Information not found on website
2.a.v.1	Accessories for vehicle dashboard mount	Information not found on website
2.a.vi	LCD display	Information not found on website
2.a.vii	Recording capacity	8 GB up to 64 GB
2.a.viii	Operating conditions or limitations	Information not found on website
2.b	Video and Optics	
2.b.i	Maximum video resolution	Information not found on website
2.b.ii	Field of view	92°
2.b.iii	Lux rating	Information not found on website

2.b.iv	Night mode/format	Yes; Accuvue technology adjusts automatically to light
2.b.v	Recording speed	Information not found on website
2.b.vi	Recording format	Information not found on website
2.b.vii	Recording time under default resolution settings	Information not found on website
2.b.viii	Ability to capture still photos	Information not found on website
2.b.ix	Ability to embed date/time stamp on recorded video	Information not found on website
2.b.ix.1	Ability to authenticate and validate date/time stamp integrity	Information not found on website
2.b.x	Pre-event recording feature	Yes
2.b.x.1	Time buffered and whether audio is recorded	45 seconds
2.b.xi	Event marking capability	Information not found on website
2.b.xii	Wireless capabilities for communication	Information not found on website
2.c	Audio	
2.c.i	Microphone feature	Yes
2.c.ii	Microphone sensitivity	Information not found on website
2.c.iii	Audio format	Information not found on website
2.c.iv	Default police radio interface for BWC	Yes
2.d	Data Upload	
2.d.i	Single device vs. multiple upload docking station	Docking station available for automatic uploading and battery charging
2.d.ii	Data transfer method	Information not found on website
2.d.iii	Manual vs. automatic upload	Automatic
2.e	Battery Information	
2.e.i	Battery type; internal or removable	Information not found on website
2.e.ii	Recording duration	14 hours
2.e.iii	Battery standby duration	Information not found on website
2.e.iv	Battery charge time	5 hours
2.e.v	Battery lifetime until replacement	Information not found on website
2.e.vi	Battery replacement procedure	Information not found on website
2.e.vii	Availability of supplemental charger for emergency battery charging	Information not found on website
2.f	GPS	
2.f.i	BWC possess GPS	Information not found on website
2.f.i.1	Embedded GPS coordinates in recorded video	Information not found on website
2.f.ii	Alternative geolocation methods	Information not found on website
2.g	Consumer Testing Results	
2.g.i	Sturdiness/fragility	Information not found on website
2.g.i.1	Drop test results	Information not found on website
2.g.i.2	Dust intrusion/water resistance rating	Information not found on website
2.g.i.3	Ruggedized	Information not found on website
2.g.i.4	Pressure/depth	Information not found on website
2.g.i.5	Shock	Information not found on website
2.g.i.6	Vibrations	Information not found on website
2.g.ii	Other environmental testing	Information not found on website
2.g.ii.1	Specify tests, pass/fail results, and ratings received	Information not found on website

2.h	Safeguards	
2.h.i	Privacy safeguards or features	Information not found on website
2.h.i.1	Remote viewing	Information not found on website
2.h.i.2	Remote activation/deactivation	Information not found on website
2.h.i.3	Privacy masking	Information not found on website
2.h.i.4	Redacting/editing capabilities	Information not found on website
2.h.ii	Safeguards for cyber security, unintentional disassembly, etc.	Information not found on website
2.i	Regulatory	
2.i.i	Regulatory and Compliance safety requirements	Information not found on website
2.i.ii	Radiation safety standards	Information not found on website
2.j	Warranty and Maintenance Plans	
2.j.i	Length of warranty (in months)	Information not found on website
2.j.ii	Optional extended warranties	Information not found on website
2.j.ii.1	Duration and cost of extended warranties	Information not found on website
2.j.iii	Availability of extended maintenance plans	Information not found on website
2.j.iii.1	Duration and cost of extended maintenance plans	Information not found on website
2.j.iv	Service contract costs	Information not found on website
2.k	Auxiliary Equipment	
2.k.i	Manufacturer suggested retail price (MSRP) for each auxiliary equipment	Information not found on website
2.l	MSRP without optional features, accessories, or service plans	Information not found on website
2.m	Manufacturer's estimated lifetime of device	Information not found on website
2.n	Other relevant information	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – Software for Video Data Storage and Management		
3.a	Data Management	
3.a.i	Searching capabilities	Yes
3.a.ii	Categorizing capabilities	Information not found on website
3.a.iii	Tagging capabilities	Yes
3.a.iv	Archiving and file retention	Yes
3.a.v	Data saved on or offsite	Both
3.a.v.1	If saved offsite, specific data accessibility and storage costs	Information not found on website
3.a.v.2	Video data storage capacity local vs. cloud	Information not found on website
3.a.v.3	Capability to accommodate multiple site installations	Information not found on website
3.a.vi	Export capabilities	Yes
3.a.vi.1	Traceability feature that shows which user exported the data	Information not found on website
3.a.vii	Redacting/editing capabilities	Information not found on website
3.a.vii.1	Specify whether changes are permanent	Information not found on website

3.a.viii	Support provided for chain-of-custody requirements	Yes
3.a.ix	Scalability for different organization size	Information not found on website
3.a.x	User management and role-based access levels	Information not found on website
3.b	Video Analytics	
3.b.i	Companion software to analyze recorded video and audio data	Information not found on website
3.b.ii	Types of reports built into software	Information not found on website
3.b.ii.1	Standard reports	Information not found on website
3.b.ii.2	Daily reports, historical reports, etc.	Information not found on website
3.b.ii.3	Audit reports that support chain-of-custody requirements	Yes
3.b.ii.4	Customization of reports	Information not found on website
3.b.iii	Facial recognition capabilities	Information not found on website
3.b.iv	Weapons detection capabilities	Information not found on website
3.b.v	Other analytical capabilities	Information not found on website
3.c	Video Security and Authentication	
3.c.i	Compatibility of BWC video output with existing video management software for reviewing and recording	Information not found on website
3.c.ii	File integrity checks to ensure authenticity	Information not found on website
3.c.iii	Data protection mechanism while in transit and during storage	Information not found on website
3.c.iv	Routine software updates	Information not found on website
3.c.v	Cost of software updates	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Usability/Training		
4.a	Usability validation processes	Information not found on website
4.b	User community data	Information not found on website
4.c	User-group meetings and frequency	Information not found on website
4.d	Typical problems reported	Information not found on website
4.d.i	Resolution to problems	Information not found on website
4.e	Hours of tech. support and location	Information not found on website
4.f	Training provided (hours)	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Installation		
5.a	Average time to install and activate	Information not found on website

4.49 Safety Vision Prima Facie



Figure 49. Safety Vision Prima Facie

RFI Q.#	Survey Question (abbreviated)	Response
Vendor Information		
0	Responded to FRN?	Yes
1.a	Name	Safety Vision
1.b	Address/phone number	6100 West Sam Houston Parkway North, Houston, TX 77041 (713) 929-1162
1.c	Website	www.safetyvision.com
1.d	Years in business	23 years
1.e	Number and types of customers	150,000 + worldwide (law enforcement, mass transit, pupil transportation, first responders, work & truck industry – on & off-highway)
1.f	Manufacturing location(s)	Domestic, China, Malaysia, Taiwan, Korea, Japan, Mexico

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – BWC		
2.a	General	
2.a.i	Name and model number	Prima Facie SV-PRIMAFACE32E
2.a.ii	Physical dims (H" x W" x D")	3.66" H x 2.3" W x 1.66" D
2.a.iii	Weight (oz.)	5.28 oz
2.a.iv	Mounting options	360 degree rotatable clip allows mounting virtually anywhere; epaulet clip; external camera input connection
2.a.iv.1	Accessories needed for mounting	Rotatable clip, epaulet clip, external camera
2.a.v	Ability to mount on vehicle dashboard	Yes
2.a.v.1	Accessories for vehicle dashboard mount	Windshield mount
2.a.vi	LCD display	2" built-in LCD screen

2.a.vii	Recording capacity	32GB of internal, non-volatile flash memory.
2.a.viii	Operating conditions or limitations	Operating temperature: -13°F to 140°F Storage temperature: -25°F to 155°F
2.b	Video and Optics	
2.b.i	Maximum video resolution	1080 P
2.b.ii	Field of view	120°
2.b.iii	Lux rating	0 lux rating
2.b.iv	Night mode/format	Yes; Built-in Infrared (IRs)
2.b.v	Recording speed	30 fps
2.b.vi	Recording format	MP4
2.b.vii	Recording time under default resolution settings	5 hours
2.b.viii	Ability to capture still photos	Yes; 16MP; JPEG
2.b.ix	Ability to embed date/time stamp on recorded video	Yes
2.b.ix.1	Ability to authenticate and validate date/time stamp integrity	Yes; non-encrypted server authentication; watermark
2.b.x	Pre-event recording feature	Yes
2.b.x.1	Time buffered and whether audio is recorded	10 second pre-event recording video (with audio)
2.b.xi	Event marking capability	No
2.b.xii	Wireless capabilities for communication	No
2.c	Audio	
2.c.i	Microphone feature	Yes
2.c.ii	Microphone sensitivity	Amplified speaker and dual omni-directional microphones
2.c.iii	Audio format	WAV
2.c.iv	Default police radio interface for BWC	Yes
2.d	Data Upload	
2.d.i	Single device vs. multiple upload docking station	Both
2.d.ii	Data transfer method	USB
2.d.iii	Manual vs. automatic upload	Single base docking station – manual 8-bay docking station – automatic
2.e	Battery Information	
2.e.i	Battery type; internal or removable	Built-in, rechargeable lithium-polymer battery
2.e.ii	Recording duration	5 hours
2.e.iii	Battery standby duration	8 hours
2.e.iv	Battery charge time	4 hours
2.e.v	Battery lifetime until replacement	500 charge cycles
2.e.vi	Battery replacement procedure	Factory
2.e.vii	Availability of supplemental charger for emergency battery charging	USB, wall adapter, and car charger
2.f	GPS	
2.f.i	BWC possess GPS	No
2.f.i.1	Embedded GPS coordinates in recorded video	No
2.f.ii	Alternative geolocation methods	No
2.g	Consumer Testing Results	
2.g.i	Sturdiness/fragility	Rugged polycarbonate housing
2.g.i.1	Drop test results	1-meter drop test

2.g.i.2	Dust intrusion/water resistance rating	IP55 (dust and water jet spray)
2.g.i.3	Ruggedized	Rugged polycarbonate housing
2.g.i.4	Pressure/depth	IP55
2.g.i.5	Shock	Shock-absorbing bumpers on each corner
2.g.i.6	Vibrations	Shock-absorbing bumpers on each corner
2.g.ii	Other environmental testing	No information provided
2.g.ii.1	Specify tests, pass/fail results, and ratings received	No information provided
2.h	Safeguards	
2.h.i	Privacy safeguards or features	Yes; proprietary hardware/software
2.h.i.1	Remote viewing	No streaming from device. Secure connection to server.
2.h.i.2	Remote activation/deactivation	No
2.h.i.3	Privacy masking	Yes; basic redaction (scene)
2.h.i.4	Redacting/editing capabilities	Yes; basic redaction (scene)
2.h.ii	Safeguards for cyber security, unintentional disassembly, etc.	Yes; proprietary hardware/software; sealed unit; no wireless
2.i	Regulatory	
2.i.i	Regulatory and Compliance safety requirements	FCC 15
2.i.ii	Radiation safety standards	None
2.j	Warranty and Maintenance Plans	
2.j.i	Length of warranty (in months)	12 months
2.j.ii	Optional extended warranties	Yes
2.j.ii.1	Duration and cost of extended warranties	<ul style="list-style-type: none"> • 2 year extended warranty - \$99ea • 3 year extended warranty - \$250ea (does not include battery) • 4 year extended warranty - \$300ea (does not include battery) • 5 year extended warranty - \$350ea (does not include battery)
2.j.iii	Availability of extended maintenance plans	Yes
2.j.iii.1	Duration and cost of extended maintenance plans	<ul style="list-style-type: none"> • 2 year advance replacement warranty - \$109ea • 3 year advance replacement warranty - \$350ea • 4 year advance replacement warranty - \$450ea
2.j.iv	Service contract costs	2.5 year automatic replacement warranty - \$600ea **Replacement unit at 2.5 years** \$20/month x 30 months or \$240/year 5 year automatic replacement warranty - \$1,200ea **Replacement unit at 2.5 and 5 years** \$20/month x 60 months or \$240/year
2.k	Auxiliary Equipment	
2.k.i	Manufacturer suggested retail price (MSRP) for each auxiliary equipment	<ul style="list-style-type: none"> • 8-bay USB 3.0 docking station - \$749 (Software included) • Radio cables - \$149 • 12" V1 earphone - \$51.40 • External camera with audio - \$129 • 12V car charger accessory - \$29 • 3 ft or 6 ft USB download/charging cable - \$15
2.l	MSRP without optional features, accessories, or service plans	\$579

2.m	Manufacturer's estimated lifetime of device	3 years
2.n	Other relevant information	No information provided

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – Software for Video Data Storage and Management		
3.a	Data Management	
3.a.i	Searching capabilities	Yes; video, still images, and audio-only files can be searched for by date, time, category, and case number.
3.a.ii	Categorizing capabilities	Yes; categories are fully user-definable
3.a.iii	Tagging capabilities	Yes; files can be tagged by category and specific notes added
3.a.iv	Archiving and file retention	Yes; multiple custom retention policies can be created that automatically move video meeting certain criteria (so many days old, no case number, etc) to a recycle bin, to be reviewed before final deletion.
3.a.v	Data saved on or offsite	On-site
3.a.v.1	If saved offsite, specific data accessibility and storage costs	No information provided
3.a.v.2	Video data storage capacity local vs. cloud	No information provided
3.a.v.3	Capability to accommodate multiple site installations	Yes
3.a.vi	Export capabilities	Yes
3.a.vi.1	Traceability feature that shows which user exported the data	Yes
3.a.vii	Redacting/editing capabilities	Yes; basic redaction (scene)
3.a.vii.1	Specify whether changes are permanent	A redacted copy is made
3.a.viii	Support provided for chain-of-custody requirements	Yes
3.a.ix	Scalability for different organization size	Yes
3.a.x	User management and role-based access levels	Yes; each user is assigned a login name and unique alphanumeric password. Users can be restricted to viewing files from specific camera units or be allowed to view all files. Users can be restricted from exporting files.
3.b	Video Analytics	
3.b.i	Companion software to analyze recorded video and audio data	No
3.b.ii	Types of reports built into software	No
3.b.ii.1	Standard reports	No
3.b.ii.2	Daily reports, historical reports, etc.	No
3.b.ii.3	Audit reports that support chain-of-custody requirements	No
3.b.ii.4	Customization of reports	No
3.b.iii	Facial recognition capabilities	No
3.b.iv	Weapons detection capabilities	No
3.b.v	Other analytical capabilities	No
3.c	Video Security and Authentication	
3.c.i	Compatibility of BWC video output	Limited

	with existing video management software for reviewing and recording	
3.c.ii	File integrity checks to ensure authenticity	Yes; password
3.c.iii	Data protection mechanism while in transit and during storage	Yes; password
3.c.iv	Routine software updates	Yes
3.c.v	Cost of software updates	No charge

RFI Q.#	Survey Question (abbreviated)	Response
Usability/Training		
4.a	Usability validation processes	In-depth testing
4.b	User community data	Demo units for T&E. Repeat Customers
4.c	User-group meetings and frequency	Prima Facie was ranked as a top scoring product in the DHS SAVER report.
4.d	Typical problems reported	Battery life
4.d.i	Resolution to problems	Ability to disable/enable certain functions to preserve battery life. (IRs, Status LED) Car charger
4.e	Hours of tech. support and location	7am – 6pm CST Monday – Friday Houston, TX
4.f	Training provided (hours)	24 hours

RFI Q.#	Survey Question (abbreviated)	Response
Installation		
5.a	Average time to install and activate	To encompass the entire software suite, 1-2 hours per unit

4.50 TASER Axon Body 2



Figure 50. TASER Axon Body 2

RFI Q.#	Survey Question (abbreviated)	Response
Vendor Information		
0	Responded to FRN?	Yes
1.a	Name	TASER International, Inc.
1.b	Address/phone number	17800 N 85 th Street, Scottsdale, AZ 85255 (800) 978-2737
1.c	Website	www.taser.com and www.axon.io
1.d	Years in business	23 years
1.e	Number and types of customers	90% of Major Cities, 3500+ Law Enforcement Agencies have purchased Axon cameras in the U.S., 5,000+ Police Agencies use Evidence.com.
1.f	Manufacturing location(s)	Scottsdale, AZ

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – BWC		
2.a	General	
2.a.i	Name and model number	Axon Body 2 Camera Model No. 74001
2.a.ii	Physical dims (H" x W" x D")	3.42" H x 2.76" W x 1.01" D
2.a.iii	Weight (oz.)	5.0 oz
2.a.iv	Mounting options	Z bracket mount (male and female), rapid release mount, belt holsters, flexible magnet mount and pocket mount
2.a.iv.1	Accessories needed for mounting	The Axon Body 2 is designed to be worn by connecting to a mount through TASER's proprietary RapidLock mounting platform. No additional accessories or modifications are necessary.
2.a.v	Ability to mount on vehicle dashboard	No

2.a.v.1	Accessories for vehicle dashboard mount	No
2.a.vi	LCD display	No. TASER offers alternative display capabilities through mobile devices or MDTs/MDCs.
2.a.vii	Recording capacity	64 GB
2.a.viii	Operating conditions or limitations	Operating temperature: -4°F to 122°F
2.b	Video and Optics	
2.b.i	Maximum video resolution	1080P
2.b.ii	Field of view	142°
2.b.iii	Lux rating	≤ 0.1 lux
2.b.iv	Night mode/format	Yes; the Axon Body 2 has “Retina Low-Light” Imaging Technology. Retina low light capabilities and stealth mode.
2.b.v	Recording speed	30 fps
2.b.vi	Recording format	MP4
2.b.vii	Recording time under default resolution settings	23 hours @ 720P
2.b.viii	Ability to capture still photos	No, but can be done using Evidence.com.
2.b.ix	Ability to embed date/time stamp on recorded video	Yes; video files generated by the Axon are embedded with metadata, or data about data. When a video is created, the date and time stamp is recorded as metadata and is embedded in the file.
2.b.ix.1	Ability to authenticate and validate date/time stamp integrity	Yes; Axon cameras date and time stamps sync with the atomic clocks at the National Institute of Standards and Technology (NIST). The time and date cannot be altered, which protects the chain of custody.
2.b.x	Pre-event recording feature	Yes
2.b.x.1	Time buffered and whether audio is recorded	0-120 seconds (in 15 second increments) and features on/off audio capture.
2.b.xi	Event marking capability	Yes
2.b.xii	Wireless capabilities for communication	Yes; 802.11 a/b/g/n Wi-Fi connectivity.
2.c	Audio	
2.c.i	Microphone feature	Yes
2.c.ii	Microphone sensitivity	The Axon Body 2 can be adjusted to include both primary and background noise.
2.c.iii	Audio format	AAC
2.c.iv	Default police radio interface for BWC	No
2.d	Data Upload	
2.d.i	Single device vs. multiple upload docking station	Both single camera and multiple camera docking stations
2.d.ii	Data transfer method	One method is through the Axon docking station, which allows for seamless upload of captured media. At the conclusion of an officer’s shift, they will dock their Axon camera into the docking station. Officers may also upload captured media through the MDT/MDC application on their device while in the field. Another method is through wireless offload via cellular or WiFi connection.
2.d.iii	Manual vs. automatic upload	Both; automatic upload is recommended, however manual upload can be done. Video can be retrieved from the Axon camera in two ways; either automatically using the Axon Dock or manually with the Evidence

		Sync desktop software. The “dock and walk” scenario is completely automated, “sync” requires some user involvement to connect and initiate the upload sequence (either online to Evidence.com or offline to a local system), WiFi will mirror these workflows.
2.e	Battery Information	
2.e.i	Battery type; internal or removable	Internal, rechargeable, lithium-ion polymer 3000 mAh battery. Can be disassembled and replaced.
2.e.ii	Recording duration	<ul style="list-style-type: none"> • The Low SD setting – 70 hours @ 480P • The High SD setting – 35 hours @ 480P • Low HD setting – 23 hours @ 720P • High HD setting – 11.3 hours @ 1080P
2.e.iii	Battery standby duration	12+ hours
2.e.iv	Battery charge time	6 hours
2.e.v	Battery lifetime until replacement	1 year
2.e.vi	Battery replacement procedure	Replacing the battery involves removing the back of the camera and installing a new camera back:
2.e.vii	Availability of supplemental charger for emergency battery charging	The Axon cable is comprised of a TRS (headphone jack) on one end and USB on the other. It can be charged in any electrical charger, whether it's NEMA-5 (standard wall jack), or a car charger, as long as the individual have a USB charging adapter. Users may also use a wall charger or computer to charge the battery via a USB to 2.5mm connector cable. TASER is able to also provide suitable in-vehicle USB chargers for use with cigarette lighters.
2.f	GPS	
2.f.i	BWC possess GPS	Not on BWC, but is available with TASER's free mobile application, Axon View, is installed on an officer's smart device and paired with his camera via Bluetooth.
2.f.i.1	Embedded GPS coordinates in recorded video	Yes; when using Axon View, the Axon Body 2 camera will source GPS location information from the mobile device and video files are automatically tagged with GPS locations.
2.f.ii	Alternative geolocation methods	Using TASER's free mobile applications, Axon Capture and Axon View, an officer can pair his Axon camera with an Android or iOS device via Bluetooth technology and the Axon will source GPS location information from the paired device. TASER's CAD/RMS integration solution also embeds GPS coordinates directly into the metadata.
2.g	Consumer Testing Results	
2.g.i	Sturdiness/fragility	The device is designed as a sealed compartment with no moving parts, articulating heads or fragile electronics (LCD screen).
2.g.i.1	Drop test results	6 ft
2.g.i.2	Dust intrusion/water resistance rating	IP67 water resistant and complete protection against dust and debris intrusion.
2.g.i.3	Ruggedized	Axon cameras are ruggedized and designed with robustness and shock resistance in mind. Axon cameras are designed to hold up; even when dropped from 6 feet onto a hard surface the camera remains functional.
2.g.i.4	Pressure/depth	Complete protection against water immersion at 1

		meter for 30 minutes.
2.g.i.5	Shock	Axon cameras test to and pass: ETSI EN 301 489-1 V1.81, Sec 7.2/ EN61000-4-2 Electrostatic Discharge.
2.g.i.6	Vibrations	MIL-STD-810G
2.g.ii	Other environmental testing	TASER designed devices and sub-components are tested prior to release for manufacturing. During this initial phase, development devices are subjected to environmental testing, that includes, but is not limited to, rain / humidity chambers, hot / cold cycle chambers, solar chambers, and vibration testing that is conducted by the Validation Department that is an independent department working in the Quality Assurance umbrella. Devices are testing throughout development, supplier processing, and TASER in-process manufacturing at regularly scheduled intervals by TASER test stands and the Validation. All engineering, process, and supplier modifications or continuous improvements undergo revalidation and regression testing to be conducted by the Validation Department. The Validation Department consists of electrical/electronic technicians and engineers that utilize a wide variety of tools that include, but are not limited to, oscilloscopes, multi-meters, force gauges, and environmental chambers. Final acceptance testing is conducted 100% on all devices by final inspection technicians that is overseen by the Quality Assurance Department.
2.g.ii.1	Specify tests, pass/fail results, and ratings received	Please see section 2.g.ii above.
2.h	Safeguards	
2.h.i	Privacy safeguards or features	All Axon video data is securely stored on a solid-state, non-removable, embedded Multimedia Card (eMMC) inside the Axon device. Rather than using an SD card, the media is populated directly on the circuit board, providing several levels of physical and virtual security. The Axon Body 2 uses a non-standard connection, thus preventing access to the storage without destruction of the device. Accessing and reading eMMC is difficult and would require destruction and/or modification of the circuit board. The storage media does not have a partition table and will show as an unreadable drive/card (under any operating system). The data stored on the camera is secure and can be encrypted by means of 256-bit AES encryption. The camera does not allow any footage to be deleted, overwritten, or otherwise modified.
2.h.i.1	Remote viewing	Yes; video can be viewed before upload to Evidence.com from a paired smart device using the Axon View mobile application. Through pairing the camera to the mobile application, one can also view a live feed of what is being viewed by the camera.
2.h.i.2	Remote activation/deactivation	Yes; Axon Signal is a communication platform that allows auto activation of Axon cameras, initially offering activation integrated with CEW and light bar. Axon Signal will activate all enabled cameras within range to ensure events are not missed and multiple

		perspectives are captured
2.h.i.3	Privacy masking	Not on the BWC, but available via Evidence.com, a cloud hosted storage solution. It provides the ability to redact video evidence files as needed, such as to protect the identity of persons in a video.
2.h.i.4	Redacting/editing capabilities	Not on the BWC, but available via Evidence.com. Bulk redaction creates a copy of the original video and a blur filter over the entire video. Assisted redaction brings intelligent, automated support to an agency's video redaction workload. Using assisted redaction, an officer can easily create a redaction that tracks up to 10 objects in a video. Manual redaction allows an officer to control the size, shape, and placement of redaction masks precisely, frame by frame.
2.h.ii	Safeguards for cyber security, unintentional disassembly, etc.	<p>In order to access the files on the camera's non-removable storage device, someone would need to guess/discover the partition offset and create a partition table, or use forensic data recovery methods to understand/find the files.</p> <p>In order to access video stored on the camera, a non-standard USB cable is needed to connect the camera to a computer. Even if the necessary cable was obtained, Axon cameras will not natively mount to any operating system like a mass storage device would (i.e. a flash drive or external hard drive). Video on the camera can only be accessed using TASER's free desktop application, Evidence Sync. If the camera is destroyed, and the SD card removed the card does not have a partition table (not formatted as NTFS or FAT32 etc.), so it will show as an unreadable drive/card (under any OS). Windows will ask if the user wants to format the card.</p>
2.i	Regulatory	
2.i.i	Regulatory and Compliance safety requirements	FCC approved
2.i.ii	Radiation safety standards	The Axon Body 2 is compliant for localized specific absorption rate (SAR) for uncontrolled environment/general exposure limits specified in ANSI/IEEE Std. C95. 1-1992
2.j	Warranty and Maintenance Plans	
2.j.i	Length of warranty (in months)	12 months
2.j.ii	Optional extended warranties	TASER offers an extended warranty and the TASER Assurance Plan (TAP) that includes the extended warranty coverage as well as spare products and upgraded models at the end of the TAP term.
2.j.ii.1	Duration and cost of extended warranties	The extended warranty is a 2-year term and is \$199.95 for the Axon Body 2. The TASER Assurance Plan (TAP) is a 5-year term and has an annual payment of \$204 for the Axon Body 2. The Axon Dock 2 (1-bay) has a 2-year extended warranty for \$129.90 and the 6-bay for \$499.90. The TASER Assurance Plan (TAP) is a 5-year term for the Axon Dock 2 and is based on the number of cameras purchased at \$36 ea.
2.j.iii	Availability of extended maintenance	Included as part of Evidence.com.

	plans	
2.j.iii.1	Duration and cost of extended maintenance plans	Included as part of Evidence.com.
2.j.iv	Service contract costs	<ul style="list-style-type: none"> • Basic Evidence.com License 1 year \$180 ea • Standard Evidence.com License 1 year \$300 ea • Pro Evidence.com License 1 year \$468 ea • Ultimate Evidence.com annual payment \$660 ea • Evidence.com Unlimited plan annual payment \$948ea • Officer Safety Plan annual payment \$1,188 ea. • Evidence.com Integration License annual payment \$180 ea • Evidence.com storage (GB) 1 year \$0.75 ea • Axon Full Professional Services \$15,000 ea • Axon Starter Service \$2,500 ea • Axon 1-Day Training Service \$2,000 ea
2.k	Auxiliary Equipment	
2.k.i	Manufacturer suggested retail price (MSRP) for each auxiliary equipment	<ul style="list-style-type: none"> • The Axon Body 2 battery: \$29.95 ea • Men's Z-Bracket \$29.95 ea • Women's Z-Bracket \$29.95 ea • Magnet, Flexible \$29.95 ea • Magnet, Outerwear \$29.95 ea • Small Pocket, 4" \$29.95 ea • Large Pocket, 6" \$29.95 ea
2.l	MSRP without optional features, accessories, or service plans	<p>The Axon Body 2 Camera is \$399 ea.</p> <p>The Axon Dock 2 6-bay is \$1,495 ea.</p> <p>The Axon Dock 2 1-bay is \$249 ea.</p>
2.m	Manufacturer's estimated lifetime of device	3 years
2.n	Other relevant information	Please check with TASER

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – Software for Video Data Storage and Management		
3.a	Data Management – Evidence.com	
3.a.i	Searching capabilities	Yes
3.a.ii	Categorizing capabilities	Yes
3.a.iii	Tagging capabilities	Yes
3.a.iv	Archiving and file retention	Yes; as part of the Axon commitment to provide customers a true SaaS offering, TASER is leveraging the cloud platform to offer an agency unlimited, highly available storage for Axon captured assets. This allows an agency instantaneous access to all body worn camera evidence for a low, predictable cost without having to manage archived data. Evidence retention times should comply with relevant local, state, and federal authorities. Agencies are responsible for developing and enforcing their own permissions and record retention policies.
3.a.v	Data saved on or offsite	Offsite (cloud storage)
3.a.v.1	If saved offsite, specific data accessibility and storage costs	Access to data, anytime is available when utilizing Evidence.com. Each agency owns its data and it is

		always accessible from anywhere your team may need it. TASER offers a variety of storage options including \$0.75 per GB per year or unlimited through select plans. Please see response in section 2.j.iv.
3.a.v.2	Video data storage capacity local vs. cloud	Evidence.com is by nature, highly scalable—so there aren't any constraints to expanding Evidence.com utilization aside from the cost of storing data in the cloud. Customers may purchase additional storage as needed or an unlimited storage plan.
3.a.v.3	Capability to accommodate multiple site installations	N/A. Users can access Evidence.com, TASER's web-based evidence management interface, from any supported internet browser regardless of site location (unless restricted by IP access restrictions, configurable by the agency). This is a standard feature of Evidence.com, so requires no configuration.
3.a.vi	Export capabilities	Yes
3.a.vi.1	Traceability feature that shows which user exported the data	Yes. All content uploaded to Evidence.com is paired with an audit trail indicating every action applied to that evidence and its metadata.
3.a.vii	Redacting/editing capabilities	Yes. Evidence.com provides the ability to redact video evidence files as needed, such as to protect the identity of persons in a video. This can be done in the following ways: bulk redaction, assisted redaction, automatic redaction and manual redaction.
3.a.vii.1	Specify whether changes are permanent	Changes are not permanent, the redaction tools enable users to create redacted versions of video evidence files without affecting the original file.
3.a.viii	Support provided for chain-of-custody requirements	Yes; Evidence.com ensures a reliable chain of custody for all video files by providing a high level of security, reliability, and expandability. Proper documentation of chain of custody is preserved and can be used to ensure video evidence can be tendered in court as an exhibit. There are also several levels of evidence protection implemented such as, encryption, access control, hashing and other security protocols. To ensure a robust chain of custody, evidence can be verified for authenticity by matching the SHA hash of original file ingested in Evidence.com with the copy.
3.a.ix	Scalability for different organization size	Yes
3.a.x	User management and role-based access levels	Yes
3.b	Video Analytics	
3.b.i	Companion software to analyze recorded video and audio data	<ul style="list-style-type: none"> • Axon Convert is a single tool that acts as a video file format converter, allowing a user to easily convert unplayable video file formats into playable files that can later be exported to Evidence.com. • Axon Five is an image processing software application specifically designed for investigative, forensic and security applications. • Axon Detect is a photo analysis software for forensic image authentication and tamper detection on digital photos.
3.b.ii	Types of reports built into software	Evidence.com allows administrators and those with the

		reporting permission to generate reports showing Evidence.com utilization. Evidence.com has pre-set categories, however, agencies can add customized categories based on agency guidelines and protocols.
3.b.ii.1	Standard reports	Yes; standard report types include: evidence created, evidence deleted, category summary, uncategorized evidence, user summary and axon video summary
3.b.ii.2	Daily reports, historical reports, etc.	Yes; In Evidence.com daily and historical reports can be run based on the report type and criteria selected by the administrator.
3.b.ii.3	Audit reports that support chain-of-custody requirements	Yes; TASER's complete on-officer video and evidence management systems safeguards against a break in the chain of custody. Evidence.com automatically logs a detailed Evidence Audit Trail for every piece of digital evidence and of anything that happens to that video or its metadata. The log can be used to determine a chain of custody that surpasses chain of custody regulations.
3.b.ii.4	Customization of reports	Yes; Evidence.com allows users to fully customize reports through an API or through existing reports using services found in Microsoft Excel or other spreadsheet applications. Administrators can use the reports API to retrieve report data, which they then can provide to other applications or systems as needed for reporting, analysis, or other needs.
3.b.iii	Facial recognition capabilities	No
3.b.iv	Weapons detection capabilities	No
3.b.v	Other analytical capabilities	TASER partners with Microsoft and Amped while also allowing agencies to create great interoperability and analysis through the use of APIs. TASER understands the importance of eliminating silos and increasing the capacity to intelligently police and are aggressively pursuing opportunities through an open platform to increase capabilities through partner (agency and 3rd party) led efforts.
3.c	Video Security and Authentication	
3.c.i	Compatibility of BWC video output with existing video management software for reviewing and recording	Yes. Video and audio is recorded and exported to the application in a standard, open, and non-proprietary format, including both codec and container. Audio and video are recorded as the same MP4 encoded file ensuring perfect synchronization. The video format is MP4 using the H.264 compression standard. Sound is recorded via AAC coding standard for lossy digital audio compression. The MP4 files can be played using all freely available standard software (i.e. Windows Media player, Real player, QuickTime, VLC, etc.).
3.c.ii	File integrity checks to ensure authenticity	Yes. All communication to and from Evidence.com is conducted via 256-bit AES encryption. At the time the camera(s) are connected to the docking station they are recognized and analyzed. Part of the analysis is to apply the SHA-1 cryptographic hash function. A SHA checksum is generated for every MP4 video on the Axon camera. In layman's terms, the DNA of each video file is captured. The cryptographic hash function

		and various annotations the officer has entered pertaining to the video are transmitted to Evidence.com. Upon receipt the upload process begins. At the completion of the upload process, the SHA cryptographic hash values are evaluated to detect data corruption of any kind. Once the upload is completed and the data integrity verified, the camera information is deleted. The MP4 file now saved on Evidence.com is the original copy down to the last bit, as verified by the SHA hash.
3.c.iii	Data protection mechanism while in transit and during storage	Evidence.com uses strong encryption to protect evidence data in transit and at rest. Data in Transit - Evidence data is encrypted during transfer: SSL with RSA 2048 bit key, 256 bit ciphers, TLS 1.0-1.2, Perfect Forward Secrecy. Data at Rest - Evidence data is encrypted in storage: 256-bit Advanced Encryption Standard (AES-256).
3.c.iv	Routine software updates	TASER releases software patches on both scheduled and nonscheduled basis as required. Updates to firmware supporting Axon cameras and Axon Docks are "pushed" from the internet the local devices through the Axon Docks without the need for agency interaction. Evidence.com software upgrades are handled in a similar way. TASER will release a software update to Evidence.com during a period of low traffic usage. Software upgrades are "pushed" to Evidence.com and are immediately available upon login, eliminating the need to perform manual software updates.
3.c.v	Cost of software updates	The latest product features and enhancements are included as part of the investment in Evidence.com. Evidence.com software is updated monthly, and these updates are included in the price of the software licenses.

RFI Q.#	Survey Question (abbreviated)	Response
Usability/Training		
4.a	Usability validation processes	<p>TASER has a fully staffed product team with backgrounds in user experience design, user research and visual design. TASER has a multi-disciplinary design process that includes engineering, design and product management. At the core of that process is an iterative loop focused on building prototypes and testing them with users.</p> <p>Tasks related to product design and maintenance at TASER include, but are not restricted to the following:</p> <ul style="list-style-type: none"> ▪ Requirements gathering in sessions with current and prospective customers ▪ Regular and continuous observation of product usage in the field ▪ Behavioral and task oriented analysis of current and prospective customers

		<ul style="list-style-type: none"> ▪ Both low and high fidelity prototyping of hardware and software products ▪ Prototype testing with current and prospective customers ▪ Regularly scheduled voice of customer feedback sessions ▪ Collection and analysis of usage data on all of the software and hardware products
4.b	User community data	TASER conducts a number of Voice of Customer (VOC) activities throughout each year. Most are regional events where product managers interact directly with customers for feedback on existing products and desired new features. TASER also have a standing Customer Advisory Board (CAB) consisting of a variety of customer role representatives from large, medium and small customer agencies. The board meets twice per year for briefings and feedback on roadmap hardware and software initiatives.
4.c	User-group meetings and frequency	TASER conducts a number of Voice of Customer (VOC) activities throughout each year. Most are regional events where product managers interact directly with customers for feedback on existing products and desired new features. TASER also has a standing Customer Advisory Board (CAB) consisting of a variety of customer role representatives from large, medium and small customer agencies. The Board meets twice per year for briefings and feedback on roadmap hardware and software initiatives.
4.d	Typical problems reported	<ol style="list-style-type: none"> 1. Forgot username/password for Evidence.com 2. Evidence.com practical use training 3. Evidence sync installation assistance 4. RMA status
4.d.i	Resolution to problems	<ol style="list-style-type: none"> 1. If the caller is an administrator in their Evidence.com account, customer service is able to reset the password and/or security questions. If the caller is in any other role besides administrator, customer service will direct the caller to their account admin to reset if the forgot password/username feature on the website is not working for them. 2. Callers will reach out to customer service for general help with adding users, configuring roles, updating retention, among many other things. The team will assist the caller and provide online resources as a secondary resource for help in the future if needed. 3. Callers will need assistance with locating the executable file for the evidence sync program for use with their CEWs or Axon cameras. Customer service will direct the caller to their Evidence.com account to download the file or provide a link. From there, the Support representative will assist with logging in the program if in use with Evidence.com or assisting with how to download files in offline mode.

		4. Callers will call in to ask about the status of a device returned due to an issue or a credit. Customer service will provide the status of the return and advise on the expected turnaround time.
4.e	Hours of tech. support and location	TASER has a full customer support division; live phone support is available Monday-Thursday, 6:00AM – 12:00AM (Arizona Time), Friday, 6:00AM – 5:00PM and Sunday, 4:00PM – 12:00AM. Critical Incident/Emergency assistance is available 24/7. For technical or customer service assistance, contact a customer service representative at 800-978-2737, or via email at customerservice@taser.com. A user may also submit a case to the customer service department at any time through the website TASER.com. Online and email-based support and remote-location troubleshooting are included on an ongoing basis as part of the purchase price.
4.f	Training provided (hours)	In-person end-user training takes approximately 90 minutes. Administrators will receive additional training on how to use and easily manage Evidence.com. Administrator training generally lasts 60 minutes. Administrators should attend all of the training sessions that are decided upon. Additional training can be provided at \$2,000 per day.

RFI Q.#	Survey Question (abbreviated)	Response
Installation		
5.a	Average time to install and activate	The entire system can be implemented the day it arrives. The system is designed to be a simple, intuitive, out-of-the-box experience. Product manuals and quick-start guides are included with the hardware, and video tutorials and FAQs are available on TASER.com. During the on-site training, TASER's team will provide best practice guides, an end-to-end deployment guide, manuals, administrator guides, installation guides, policies, etc., to assist with training and support.

4.51 TASER Axon Flex



Figure 51. TASER Axon Flex

RFI Q.#	Survey Question (abbreviated)	Response
Vendor Information		
0	Responded to FRN?	Yes
1.a	Name	TASER International, Inc.
1.b	Address/phone number	17800 N 85 th Street Scottsdale, AZ 85255 (800) 978-2737
1.c	Website	www.taser.com and www.axon.io
1.d	Years in business	23 years
1.e	Number and types of customers	90% of major cities, 3500+ law enforcement agencies have purchased Axon cameras in the U.S., 5000+ police agencies use Evidence.com.
1.f	Manufacturing location(s)	Scottsdale, AZ

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – BWC		
2.a	General	
2.a.i	Name and model number	Axon Flex Camera Model No. 73000 series
2.a.ii	Physical dims (H" x W" x D")	Axon Flex Camera: 0.8" H x 0.7" W x 3.2" D Axon Flex Controller: 3.3" H x 2.6" W x 0.8" D
2.a.iii	Weight (oz.)	3.83 oz
2.a.iv	Mounting options	Oakley eyewear mount, low rider headband, hat mount, collar mount, epaulet mount, adhesive mount and SWAT mount.
2.a.iv.1	Accessories needed for mounting	The Axon Flex controller can be carried in a Hybrid Holster that clips to clothing or gear.
2.a.v	Ability to mount on vehicle dashboard	No
2.a.v.1	Accessories for vehicle dashboard mount	No

2.a.vi	LCD display	No. TASER offers alternative display capabilities through mobile devices or MDTs/MDCs.
2.a.vii	Recording capacity	8 GB
2.a.viii	Operating conditions or limitations	Operating temperature: -4°F to 122°F
2.b	Video and Optics	
2.b.i	Maximum video resolution	480P
2.b.ii	Field of view	75°
2.b.iii	Lux rating	≤ 1 lux
2.b.iv	Night mode/format	Yes; “Retina low-light” imaging technology with capability of stealth mode.
2.b.v	Recording speed	30 fps
2.b.vi	Recording format	MP4
2.b.vii	Recording time under default resolution settings	9 hours
2.b.viii	Ability to capture still photos	Not on BWC, but can be done via Evidence.com. Users can create a snapshot or still from video playback in Evidence.com by creating a marker. Once a marker is created, users can download the snapshot and edit/add metadata like a title and description.
2.b.ix	Ability to embed date/time stamp on recorded video	Yes. Video files generated by the Axon are embedded with metadata, or data about data. When a video is created, the date and time stamp is recorded as metadata and is embedded in the file.
2.b.ix.1	Ability to authenticate and validate date/time stamp integrity	Yes. Axon cameras date and time stamps sync with the atomic clocks at the National Institute of Standards and Technology (NIST). The time and date cannot be altered, which protects the chain of custody.
2.b.x	Pre-event recording feature	Yes
2.b.x.1	Time buffered and whether audio is recorded	30 seconds, no audio
2.b.xi	Event marking capability	Not on BWC, but can be done via Evidence.com. Markers can be used to indicate key moments or highlight important aspects of a video or audio evidence file.
2.b.xii	Wireless capabilities for communication	No, but the Axon Flex 2 will feature Wi-Fi capability upon release.
2.c	Audio	
2.c.i	Microphone feature	Yes
2.c.ii	Microphone sensitivity	The Axon Flex microphone can detect audio at 15-20 feet when spoken at a normal conversational volume.
2.c.iii	Audio format	AAC
2.c.iv	Default police radio interface for BWC	No
2.d	Data Upload	
2.d.i	Single device vs. multiple upload docking station	Both; TASER offers single camera and multiple camera docking stations for the Axon Flex.
2.d.ii	Data transfer method	One method is through the Axon docking station, which allows for seamless upload of captured media. At the conclusion of an officer's shift, they will dock their Axon camera into the docking station. Individuals can also upload the Flex camera through the use of a cable and the Evidence sync application on their MDTs or MDCs, directly from their vehicle.
2.d.iii	Manual vs. automatic upload	Both; automatic upload is recommended, however

		manual upload can be done. Video can be retrieved from the Axon camera in two ways; either automatically using the Axon Dock or manually with the Evidence Sync desktop software. The “dock and walk” scenario is completely automated, “sync” requires some user involvement to connect and initiate the upload sequence (either online to Evidence.com or offline to a local system), WiFi will mirror these workflows.
2.e	Battery Information	
2.e.i	Battery type; internal or removable	The Axon Flex controller houses the camera’s battery. The rechargeable lithium-ion 2500 mAh battery cannot be removed or replaced.
2.e.ii	Recording duration	High setting – 4 hours Medium setting – 9 hours Low setting – 12+ hours
2.e.iii	Battery standby duration	12+ hours
2.e.iv	Battery charge time	6 hours
2.e.v	Battery lifetime until replacement	2 years
2.e.vi	Battery replacement procedure	Field; the Axon Flex camera system separates the DVR (recorder) from the controller (battery), connected by a thin wire tested for officer safety. The controller contains a non-replaceable lithium-ion polymer battery. Many agencies wishing to extend battery life have a second controller that is easily swappable as it quickly connects to the DVR recorder. After this quick transition, the officer can continue recording an additional 12+ hours.
2.e.vii	Availability of supplemental charger for emergency battery charging	The recommended method of charging is via the Axon Dock. The Axon cable is comprised of a TRS (headphone jack) on one end and USB on the other. It can be charged in any electrical charger, whether it’s NEMA-5 (standard wall jack), or a car charger, as long as you have a USB charging adapter. Users can also use a wall charger or computer to charge the battery via a USB to 2.5mm connector cable. TASER is able to also provide suitable in-vehicle USB chargers for use with cigarette lighters. Using a non-TASER approved wall charger may degrade device performance and will void the warranty.
2.f	GPS	
2.f.i	BWC possess GPS	Not on BWC, but is available when TASER’s free mobile application, Axon View, is installed on an officer’s smart device and paired with his camera via Bluetooth.
2.f.i.1	Embedded GPS coordinates in recorded video	Yes; When using Axon View, the Axon Flex camera will source GPS location information from the mobile device and video files are automatically tagged with GPS locations.
2.f.ii	Alternative geolocation methods	Using TASER’s free mobile applications, Axon Capture and Axon View, an officer can pair his Axon camera with an Android or iOS device via Bluetooth technology and the Axon will source GPS location information from the paired device. TASER’s CAD/RMS Integration solution also embeds GPS coordinates directly into the metadata.
2.g	Consumer Testing Results	

2.g.i	Sturdiness/fragility	Axon cameras are designed to hold up; even when dropped from 6 feet onto a hard surface the camera remains functional. The Axon Flex is rigorously tested to IEC 60529 IPx2 (dripping rain) and MIL-STD-810G Method 510.5 Procedure 1 (blowing dust). The Axon Flex has a universal magnetic clip that is strong enough to hold the camera in place while running or fighting. If the magnet was to come loose or off, the camera will pop off but stay connected to the controller. The Controller has a raised tactical feel for easy locating.
2.g.i.1	Drop test results	6 ft
2.g.i.2	Dust intrusion/water resistance rating	The Axon Flex is rigorously tested to IEC 60529 IPx2 (dripping rain) and MIL-STD-810G Method 510.5 Procedure 1 (blowing dust).
2.g.i.3	Ruggedized	Axon cameras are ruggedized and designed with robustness and shock resistance in mind. Axon cameras are designed to hold up; even when dropped from 6 feet onto a hard surface the camera remains functional.
2.g.i.4	Pressure/depth	IPX2
2.g.i.5	Shock	Axon cameras test to and pass: ETSI EN 301 489-1 V1.81, Sec 7.2/ EN61000-4-2 Electrostatic Discharge.
2.g.i.6	Vibrations	MIL-STD-810G
2.g.ii	Other environmental testing	TASER designed devices and sub-components are tested prior to release for manufacturing. During this initial phase, development devices are subjected to environmental testing, that includes, but is not limited to, rain / humidity chambers, hot / cold cycle chambers, solar chambers, and vibration testing that is conducted by the Validation Department that is an independent department working in the quality assurance umbrella. Devices are tested throughout development, supplier processing, and TASER in-process manufacturing at regularly scheduled intervals by TASER test stands and the validation. All engineering, process, and supplier modifications or continuous improvements undergo revalidation and regression testing to be conducted by the Validation Department. The validation Department consists of electrical/electronic technicians and engineers that utilize a wide variety of tools that include, but are not limited to, oscilloscopes, multi-meters, force gauges, and environmental chambers. Final acceptance testing is conducted 100% on all devices by final inspection technicians that is overseen by the Quality Assurance Department.
2.g.ii.1	Specify tests, pass/fail results, and ratings received	Please see section 2.g.ii above.
2.h	Safeguards	
2.h.i	Privacy safeguards or features	All Axon video data is securely stored on a solid-state, non-removable, embedded Multimedia Card (eMMC) inside the Axon device. Rather than using an SD card, the media is populated directly on the circuit board, providing several levels of physical and virtual security. The Axon Flex uses a non-standard connection, thus preventing access to the storage without destruction of

		the device. Accessing and reading eMMC is difficult and would require destruction and/or modification of the circuit board. The storage media does not have a partition table and will show as an unreadable drive/card (under any operating system). The data stored on the camera is secure and can be encrypted by means of 256-bit AES encryption. The camera does not allow any footage to be deleted, overwritten, or otherwise modified.
2.h.i.1	Remote viewing	Yes; video can be viewed before upload to Evidence.com from a paired smart device using the Axon View mobile application. Through pairing the camera to the mobile application, one can also view a live feed of what is being viewed by the camera.
2.h.i.2	Remote activation/deactivation	Yes; Axon Signal is a communication platform that allows auto activation of Axon cameras, initially offering activation integrated with CEW and light bar. Axon Signal will activate all enabled cameras within range to ensure events are not missed and multiple perspectives are captured
2.h.i.3	Privacy masking	Not on BWC, but available via Evidence.com, the cloud hosted storage solution, provides the ability to redact video evidence files as needed, such as to protect the identity of persons in a video.
2.h.i.4	Redacting/editing capabilities	Not on BWC, but available via Evidence.com. Bulk redaction creates a copy of the original video and a blur filter over the entire video. Assisted redaction brings intelligent, automated support to your agency's video redaction workload. Using assisted redaction, you can easily create a redaction that tracks up to 10 objects in a video. Manual redaction allows you to control the size, shape, and placement of redaction masks precisely, frame by frame.
2.h.ii	Safeguards for cyber security, unintentional disassembly, etc.	<p>In order to access the files on the camera's non-removable storage device, someone would need to guess/discover the partition offset and create a partition table, or use forensic data recovery methods to understand/find the files.</p> <p>In order to access video stored on the camera, a non-standard USB cable is needed to connect the camera to a computer.</p> <p>Even if the necessary cable was obtained, Axon cameras will not natively mount to any operating system like a mass storage device would (i.e. a flash drive or external hard drive). Video on the camera can only be accessed using TASER's free desktop application, Evidence Sync.</p> <p>If the camera is destroyed, and the SD card removed the card does not have a partition table (not formatted as NTFS or FAT32 etc.), so it will show as an unreadable drive/card (under any OS). Windows will ask if the user wants to format the card.</p>
2.i	Regulatory	
2.i.i	Regulatory and Compliance safety	FCC approved

	requirements	
2.i.ii	Radiation safety standards	The Axon Flex is compliant for localized specific absorption rate (SAR) for general population/uncontrolled exposure specified in IEEE Std. 1528-2013.
2.j	Warranty and Maintenance Plans	
2.j.i	Length of warranty (in months)	12 months
2.j.ii	Optional extended warranties	TASER offers an extended warranty and the TASER Assurance Plan (TAP) which includes the extended warranty coverage as well as spare products and upgraded models at the end of the TAP term.
2.j.ii.1	Duration and cost of extended warranties	The extended warranty is a 2-year term and is \$299.95 for the Axon Flex kit. The TASER Assurance Plan (TAP) is a 5-year term and has an annual payment of \$276 for the Axon Flex. The Axon Dock (1-bay) has a 2-year extended warranty for \$129.90 and the 6-bay Dock for \$499.90. The TASER Assurance Plan (TAP) for the Axon Docks (both 1-bay and 6-bay) are based on the number of cameras purchased at \$36 ea.
2.j.iii	Availability of extended maintenance plans	Included as part of Evidence.com.
2.j.iii.1	Duration and cost of extended maintenance plans	Included as part of Evidence.com.
2.j.iv	Service contract costs	<ul style="list-style-type: none"> • Basic Evidence.com License 1 year \$180 ea • Standard Evidence.com License 1 year \$300 ea • Pro Evidence.com License 1 year \$468 ea • Ultimate Evidence.com annual payment \$660 ea • Evidence.com Unlimited plan annual payment \$948ea • Officer Safety Plan annual payment \$1,188 ea • Evidence.com Integration License annual payment \$180 ea • Evidence.com storage (GB) 1 year \$0.75 ea • Axon Full Professional Services \$15,000 ea • Axon Starter Service \$2,500 ea • Axon 1-Day Training Service \$2,000 ea
2.k	Auxiliary Equipment	
2.k.i	Manufacturer suggested retail price (MSRP) for each auxiliary equipment	<ul style="list-style-type: none"> • The USB sync cable with wall charger \$14.95 ea • The Oakley mount \$19.95 ea • The ratchet collar/versatile/cap mount \$29.95 ea • The ball cap mount \$29.95 ea • The low rider headband \$49.95 ea • The controller holster/belt clips \$29.95 ea • The epaulet mount \$19.95 ea • The helmet mount \$19.95 ea • The universal magnet clip \$7.95 ea • The multi-mounting kit (Low Rider Headband, ratchet collar mount, epaulet mount and Oakley clip) \$199.95 ea • The ballistic vest mount, rotating \$19.95 ea • Cable, coiled, straight to right angle, 36" \$12.95 ea • Cable, coiled, straight to right angle 48" \$12.95 ea • TASER CAM HD/Axon camera universal charger w/

		US and international adaptors \$14.95 ea • Helmet mount, SWAT Kit \$29.95 ea.
2.l	MSRP without optional features, accessories, or service plans	<ul style="list-style-type: none"> • The Axon Flex Camera System (camera, controller and product model 73060) is \$599 ea • The Axon Flex Camera System Signal equipped (signal version of 73096) is \$688 ea • The Axon Dock 6-bay is \$1,495 ea • The Axon Dock 1-bay is \$249 ea
2.m	Manufacturer's estimated lifetime of device	3 years
2.n	Other relevant information	Please check with TASER

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – Software for Video Data Storage and Management		
3.a	Data Management – Evidence.com	
3.a.i	Searching capabilities	Yes
3.a.ii	Categorizing capabilities	Yes
3.a.iii	Tagging capabilities	Yes
3.a.iv	Archiving and file retention	Yes; as part of the Axon commitment to provide customers a true SaaS offering, TASER is leveraging the cloud platform to offer an agency unlimited, highly available storage for Axon captured assets. This allows an agency instantaneous access to all of your body worn camera evidence for a low, predictable cost without having to manage archived data. Evidence retention times should comply with relevant local, state, and federal authorities. Agencies are responsible for developing and enforcing their own permissions and record retention policies.
3.a.v	Data saved on or offsite	Offsite (cloud storage)
3.a.v.1	If saved offsite, specific data accessibility and storage costs	Access to data, anytime is available when utilizing Evidence.com. Each agency owns its data and it is always accessible from anywhere your team may need it. TASER offers a variety of storage options including \$0.75 per GB per year or unlimited through select plans. Please see response in 2.j.iv.
3.a.v.2	Video data storage capacity local vs. cloud	Evidence.com is by nature, highly scalable—so there aren't any constraints to expanding Evidence.com utilization aside from the cost of storing data in the cloud. Customers may purchase additional storage as needed or an unlimited storage plan.
3.a.v.3	Capability to accommodate multiple site installations	N/A. Users can access Evidence.com, TASER's web-based evidence management interface, from any supported internet browser regardless of site location (unless restricted by IP access restrictions, configured by agency). This is a standard feature of Evidence.com, so requires no configuration.
3.a.vi	Export capabilities	Yes
3.a.vi.1	Traceability feature that shows which user exported the data	Yes. All content uploaded to Evidence.com is paired with an audit trail indicating every action applied to that evidence and its metadata.
3.a.vii	Redacting/editing capabilities	Yes. Evidence.com provides the ability to redact video

		evidence files as needed, such as to protect the identity of persons in a video. This can be done in the following ways: bulk redaction, assisted redaction, automatic redaction and manual redaction.
3.a.vii.1	Specify whether changes are permanent	Changes are not permanent; the redaction tools enable users to create redacted versions of video evidence files without affecting the original file.
3.a.viii	Support provided for chain-of-custody requirements	Yes; Evidence.com ensures a reliable chain of custody for all video files by providing a high level of security, reliability, and expandability. Proper documentation of chain of custody is preserved and can be used to ensure video evidence can be tendered in court as an exhibit. There are also several levels of evidence protection implemented such as, encryption, access control, hashing and other security protocols. To ensure a robust chain of custody, evidence can be verified for authenticity by matching the SHA hash of original file ingested in Evidence.com with the copy.
3.a.ix	Scalability for different organization size	Yes. Evidence.com is designed to integrate with existing law enforcement solutions such as CAD, RMS, and others, to provide a seamless workflow and reliable mechanism to manage all digital evidence within an organization. It is also, by nature, highly scalable—so there aren't any constraints to expanding Evidence.com utilization at the agency aside from the cost of storing data in "the cloud." The agency may acquire storage as needed without limit, in accordance with storage purchased.
3.a.x	User management and role-based access levels	Yes. Each Evidence.com user is assigned a role. Roles determine a user's permissions, which control levels of access to features and functions in Evidence.com. Administrators assign the roles and actions of all users and create individual user accounts with varying degrees of access, i.e. administrative accounts, basic user accounts, etc. Account administrators can customize the roles and authorization levels of each account user, or what they are permitted to do. This functionality was created to preserve chain of custody and to clarify what each user is permitted to do.
3.b	Video Analytics	
3.b.i	Companion software to analyze recorded video and audio data	<ul style="list-style-type: none"> Axon Convert is a single tool that acts as a video file format converter, allowing you to easily convert unplayable video file formats into playable files that can later be exported to Evidence.com. Axon Five is an image processing software application specifically designed for investigative, forensic and security applications. Axon Detect is a photo analysis software for forensic image authentication and tamper detection on digital photos.
3.b.ii	Types of reports built into software	Evidence.com allows administrators and those with the reporting permission to generate reports showing Evidence.com utilization. Evidence.com has pre-set categories, however, agencies can add customized categories based on agency guidelines and protocols.

3.b.ii.1	Standard reports	Yes; standard report types include: evidence created, evidence deleted, category summary, uncategorized evidence, user summary and Axon video summary
3.b.ii.2	Daily reports, historical reports, etc.	Yes; In Evidence.com daily and historical reports can be run based on the report type and criteria selected by the administrator.
3.b.ii.3	Audit reports that support chain-of-custody requirements	Yes; TASER's complete on-officer video and evidence management systems safeguards against a break in the chain of custody. Evidence.com automatically logs a detailed evidence audit trail for every piece of digital evidence and of anything that happens to that video or its metadata. The log can be used to determine a chain of custody that surpasses chain of custody regulations.
3.b.ii.4	Customization of reports	Yes; Evidence.com allows users to fully customize reports through an API or through existing reports using services found in Microsoft Excel or other spreadsheet applications. Administrators can use the reports API to retrieve report data, which they then can provide to other applications or systems as needed for reporting, analysis, or other needs.
3.b.iii	Facial recognition capabilities	No
3.b.iv	Weapons detection capabilities	No
3.b.v	Other analytical capabilities	TASER partner with Microsoft and Amped while also allowing agencies to create great interoperability and analysis through the use of APIs. TASER understands the importance of eliminating silos and increasing the capacity to intelligently police and are aggressively pursuing opportunities through an open platform to increase capabilities through partner (agency and 3rd party) led efforts.
3.c	Video Security and Authentication	
3.c.i	Compatibility of BWC video output with existing video management software for reviewing and recording	<p>Yes. Video and audio is recorded and exported to the application in a standard, open, and non-proprietary format, including both codec and container.</p> <p>Audio and video are recorded as the same MP4 encoded file ensuring perfect synchronization. The video format is MPEG4 using the H.264 compression standard. Sound is recorded via AAC. The MP4 files can be played using all freely available standard software (i.e. Windows Media player, Real player, QuickTime, VLC, etc.).</p>
3.c.ii	File integrity checks to ensure authenticity	Yes. All communication to and from Evidence.com is conducted via 256-bit AES encryption. At the time the camera(s) are connected to the docking station they are recognized and analyzed. Part of the analysis is to apply the SHA-1 cryptographic hash function. A SHA checksum is generated for every MP4 video on the Axon camera. In layman's terms TASER captures the DNA of each video file. The cryptographic hash function and various annotations the officer has entered pertaining to the video are transmitted to Evidence.com. Upon receipt the upload process begins. At the completion of the upload process, the SHA cryptographic hash values are evaluated to detect

		data corruption of any kind. Once the upload is completed and the data integrity verified, the camera information is deleted. The MP4 file now saved on Evidence.com in all essence is the original copy down to the last bit, as verified by the SHA hash.
3.c.iii	Data protection mechanism while in transit and during storage	Evidence.com uses strong encryption to protect evidence data in transit and at rest. Data in transit - evidence data is encrypted during transfer: SSL with RSA 2048 bit key, 256 bit ciphers, TLS 1.0-1.2, perfect forward secrecy. Data at rest - evidence data is encrypted in storage: 256-bit Advanced Encryption Standard (AES-256).
3.c.iv	Routine software updates	TASER releases software patches on both scheduled and nonscheduled basis as required. Updates to firmware supporting Axon cameras and Axon Docks are "pushed" from the internet the local devices though the Axon Docks without the need for agency interaction. Evidence.com software upgrades are handled in a similar way. TASER will release a software update to Evidence.com during a period of low traffic usage. Software upgrades are "pushed" to Evidence.com and are immediately available to you as soon as you log on, eliminating the need to perform manual software updates.
3.c.v	Cost of software updates	The latest product features and enhancements are included as part of the investment in Evidence.com. Evidence.com software is updated monthly, and these updates are included in the price of the software licenses.

RFI Q.#	Survey Question (abbreviated)	Response
Usability/Training		
4.a	Usability validation processes	<p>TASER has a fully staffed product team with backgrounds in user experience design, user research and visual design. TASER has a multi-disciplinary design process that includes engineering, design and product management. At the core of that process is an iterative loop focused on building prototypes and testing them with users.</p> <p>Tasks related to product design and maintenance at TASER include, but are not restricted to the following:</p> <ul style="list-style-type: none"> • Requirements gathering in sessions with current and prospective customers. • Regular and continuous observation of product usage in the field. • Behavioral and task oriented analysis of current and prospective customers. • Both low and high fidelity prototyping of hardware and software products. • Prototype testing with current and prospective customers.

		<ul style="list-style-type: none"> • Regularly scheduled voice of customer feedback sessions. • Collection and analysis of usage data on all of the software and hardware products.
4.b	User community data	TASER conducts a number of Voice of Customer (VOC) activities throughout each year. Most are regional events where product managers interact directly with customers for feedback on existing products and desired new features. TASER also have a standing Customer Advisory Board (CAB) consisting of a variety of customer role representatives from large, medium and small customer agencies. The Board meets twice per year for briefings and feedback on roadmap hardware and software initiatives.
4.c	User-group meetings and frequency	TASER conducts a number of Voice of Customer (VOC) activities throughout each year. Most are regional events where product managers interact directly with customers for feedback on existing products and desired new features. TASER also have a standing Customer Advisory Board (CAB) consisting of a variety of customer role representatives from large, medium and small customer agencies. The Board meets twice per year for briefings and feedback on roadmap hardware and software initiatives.
4.d	Typical problems reported	<ol style="list-style-type: none"> 1. Forgot username/password for Evidence.com 2. Evidence.com practical use training 3. Evidence sync installation assistance 4. RMA status
4.d.i	Resolution to problems	<ol style="list-style-type: none"> 1. If the caller is an administrator in their Evidence.com account, customer service is able to reset the password and/or security questions. If the caller is in any other role besides administrator, customer service will direct the caller to their account admin to reset if the forgot password/username feature on the website is not working. 2. Callers will reach out to customer service for general help with adding users, configuring roles, updating retention, among many other things. The team will assist the caller and provide online resources as a secondary resource for help in the future if needed. 3. Callers will need assistance with locating the executable file for the Evidence sync program for use with their CEWs or Axon cameras. Customer service will direct the caller to their Evidence.com account to download the file or provide a link. From there, the support representative will assist with logging in the program if in use with Evidence.com or assisting with how to download files offline. 4. Callers will call in to ask about the status of a device returned due to an issue or a credit. Customer service will provide the status of the return and advise on the expected turnaround time.
4.e	Hours of tech. support and location	TASER has a full customer support division; live phone support is available Monday-Thursday, 6:00AM –

		12:00AM (Arizona Time), Friday, 6:00AM – 5:00PM and Sunday, 4:00PM – 12:00AM. Critical Incident/Emergency assistance is available 24/7. For technical or customer service assistance, contact a customer service representative at 800-978-2737, or via email at customerservice@taser.com. A customer may also submit a case to TASER's customer service department at any time through TASER.com. Online and email-based support and remote-location troubleshooting are included on an ongoing basis as part of the purchase price.
4.f	Training provided (hours)	In-person end-user training takes approximately 90 minutes. Administrators will receive additional training on how to use and easily manage Evidence.com. Administrator training generally lasts 60 minutes. Administrators should attend all of the training sessions that are decided upon. Additional training can be provided at \$2,000 per day.

RFI Q.#	Survey Question (abbreviated)	Response
Installation		
5.a	Average time to install and activate	The entire system can be implemented the day it arrives. The system is designed to be a simple, intuitive, out-of-the-box experience. Product manuals and Quick-Start Guides are included with the hardware, and video tutorials and FAQs are available on TASER.com. During the on-site training, TASER will provide best practice guides, an end-to-end deployment guide, manuals, administrator guides, installation guides, policies, etc., to assist you with your training and support. All of those materials are the SRPD's to keep and use if/when needed.

4.52 Titan BWC-3HV2



Figure 52. Titan BWC-3HV2

RFI Q.#	Survey Question (abbreviated)	Response
Vendor Information		
0	Responded to FRN?	Yes
1.a	Name	Titan Body Worn Camera
1.b	Address/phone number	772 Twin Rail Drive, Minooka, IL 60447 (815) 467-6464
1.c	Website	www.titanbodycamera.com
1.d	Years in business	15
1.e	Number and types of customers	20+ (including municipalities, police departments, end users)
1.f	Manufacturing location(s)	China

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – BWC		
2.a	General	
2.a.i	Name and model number	Titan Body Camera – Part number BWC-3HV2
2.a.ii	Physical dims (H" x W" x D")	3.7" H x 2.3" W x 1.4" D
2.a.iii	Weight (oz.)	6 oz
2.a.iv	Mounting options	May be mounted from center of chest, left or right shoulder, at eye level, or collar.
2.a.iv.1	Accessories needed for mounting	Additional accessories needed for eye level and collar mounting.
2.a.v	Ability to mount on vehicle dashboard	Dash mount available in future application.
2.a.v.1	Accessories for vehicle dashboard mount	Dash mount needed as additional accessory.
2.a.vi	LCD display	2.1" LCD screen for playback options
2.a.vii	Recording capacity	16 GB, 32 GB, and 64 GB storage capacity available

2.a.viii	Operating conditions or limitations	IP67 certified allowing most temperature and weather conditions to be appropriate.
2.b	Video and Optics	
2.b.i	Maximum video resolution	1080 P
2.b.ii	Field of view	110°
2.b.iii	Lux rating	< 1
2.b.iv	Night mode/format	Night vision IR infrared capable, can set as automatic or manual usage
2.b.v	Recording speed	60 fps
2.b.vi	Recording format	MP4
2.b.vii	Recording time under default resolution settings	13-15 hours recording time of the BWC under default settings
2.b.viii	Ability to capture still photos	Yes; at 16 MP images
2.b.ix	Ability to embed date/time stamp on recorded video	Yes; BWC does embed a date/time stamp in the recorded video.
2.b.ix.1	Ability to authenticate and validate date/time stamp integrity	Customizable watermark able to be set, as well as a master file, gives un-editable info on every video upload.
2.b.x	Pre-event recording feature	Yes
2.b.x.1	Time buffered and whether audio is recorded	Pre-event can be set from 15-53 seconds; audio is recorded.
2.b.xi	Event marking capability	Yes
2.b.xii	Wireless capabilities for communication	No wireless capabilities to ensure chain of custody.
2.c	Audio	
2.c.i	Microphone feature	Dual microphone capability
2.c.ii	Microphone sensitivity	-65 dBV
2.c.iii	Audio format	Wave audio format
2.c.iv	Default police radio interface for BWC	No information provided
2.d	Data Upload	
2.d.i	Single device vs. multiple upload docking station	Single device docking station and K2 device docking available
2.d.ii	Data transfer method	Wired data transfer to ensure chain of custody.
2.d.iii	Manual vs. automatic upload	Manual and automatic uploading available.
2.e	Battery Information	
2.e.i	Battery type; internal or removable	Lithium ion 3200 mah battery, removable by manufacturer
2.e.ii	Recording duration	13-15 hours recording life
2.e.iii	Battery standby duration	120 hour standby duration
2.e.iv	Battery charge time	2-4 hour full charge duration
2.e.v	Battery lifetime until replacement	2-4 years depending on use
2.e.vi	Battery replacement procedure	If battery needs to be replaced, can send to vendor for quick swap.
2.e.vii	Availability of supplemental charger for emergency battery charging	Charging options available for house, USB, car charging. Extended battery available (30 hours recording time).
2.f	GPS	
2.f.i	BWC possess GPS	Yes
2.f.i.1	Embedded GPS coordinates in recorded video	Coordinates embedded in video and photo.
2.f.ii	Alternative geolocation methods	N/A
2.g	Consumer Testing Results	

2.g.i	Sturdiness/fragility	Yes
2.g.i.1	Drop test results	Drop test results show signs of minor abrasion and scuffs; no serious damage.
2.g.i.2	Dust intrusion/water resistance rating	IP67 certified
2.g.i.3	Ruggedized	Ruggedized
2.g.i.4	Pressure/depth	15 ft depth
2.g.i.5	Shock	Shock resistant
2.g.i.6	Vibrations	Vibration resistant
2.g.ii	Other environmental testing	Yes
2.g.ii.1	Specify tests, pass/fail results, and ratings received	<ul style="list-style-type: none"> • 6 x 6 x 6 drop test = Pass • Submersible test = Pass • Field test = Pass • Humidity test = Pass
2.h	Safeguards	
2.h.i	Privacy safeguards or features	Yes
2.h.i.1	Remote viewing	Yes
2.h.i.2	Remote activation/deactivation	NA
2.h.i.3	Privacy masking	Yes
2.h.i.4	Redacting/editing capabilities	Redaction software available
2.h.ii	Safeguards for cyber security, unintentional disassembly, etc.	Internal seals present to notify of tampering.
2.i	Regulatory	
2.i.i	Regulatory and Compliance safety requirements	CE certified. EMC certified.
2.i.ii	Radiation safety standards	No information provided.
2.j	Warranty and Maintenance Plans	
2.j.i	Length of warranty (in months)	24 month warranty on device; 12 month warranty on battery
2.j.ii	Optional extended warranties	Yes
2.j.ii.1	Duration and cost of extended warranties	N/A
2.j.iii	Availability of extended maintenance plans	Yes
2.j.iii.1	Duration and cost of extended maintenance plans	N/A
2.j.iv	Service contract costs	Non-contractual
2.k	Auxiliary Equipment	
2.k.i	Manufacturer suggested retail price (MSRP) for each auxiliary equipment	Auxiliary equipment car charges, extended battery, Mini POV Camera, POV Axis Camera, GPS adapter, PTT cable <ul style="list-style-type: none"> • Extended battery \$60 • Mini POV \$50 • POV Axis \$135 • GPS Adapter \$90 • PTT cable \$60
2.l	MSRP without optional features, accessories, or service plans	\$350
2.m	Manufacturer's estimated lifetime of device	3-5 years
2.n	Other relevant information	N/A

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – Software for Video Data Storage and Management		
3.a	Data Management	
3.a.i	Searching capabilities	Searching capable by remarks, user name, case number, date, level of importance, and key words.
3.a.ii	Categorizing capabilities	Categorizing available, customizable categories
3.a.iii	Tagging capabilities	Tagging capabilities are able to tag additional information to meta data.
3.a.iv	Archiving and file retention	Archiving and retention able to set per department settings.
3.a.v	Data saved on or offsite	Data saved on or offsite, via server or cloud storage.
3.a.v.1	If saved offsite, specific data accessibility and storage costs	When saved offsite, cost differs per each site's needs, quoting available.
3.a.v.2	Video data storage capacity local vs. cloud	No information provided
3.a.v.3	Capability to accommodate multiple site installations	No information provided
3.a.vi	Export capabilities	Yes
3.a.vi.1	Traceability feature that shows which user exported the data	Exporting capable with traceable operations log
3.a.vii	Redacting/editing capabilities	Redaction software available
3.a.vii.1	Specify whether changes are permanent	Redaction software available and are not permanent. When redaction original file is never used, just copied.
3.a.viii	Support provided for chain-of-custody requirements	Chain of custody is held intact by using copies of original video instead of editing it. Retrieval of video and redaction is monitored by internal system operations log.
3.a.ix	Scalability for different organization size	Easy scalability between 1 to 500 officer departments.
3.a.x	User management and role-based access levels	User management and roles are customizable to department's needs. This programming is included before installation.
3.b	Video Analytics	
3.b.i	Companion software to analyze recorded video and audio data	Universal file types allow information to be viewed on any default media player. Jwplayer provided at no additional cost if needed for viewing.
3.b.ii	Types of reports built into software	See below
3.b.ii.1	Standard reports	Yes; standard reports of distribution of number of hours of recording per officer in a given period, how many photos/videos taken and by whom.
3.b.ii.2	Daily reports, historical reports, etc.	Yes; daily and historical reports available at request with additional software use.
3.b.ii.3	Audit reports that support chain-of-custody requirements	N/A
3.b.ii.4	Customization of reports	Yes
3.b.iii	Facial recognition capabilities	N/A
3.b.iv	Weapons detection capabilities	N/A
3.b.v	Other analytical capabilities	N/A
3.c	Video Security and Authentication	
3.c.i	Compatibility of BWC video output with existing video management software for reviewing and	Yes; compatible with most video outputs and existing video management software for viewing and recording.

	recording	
3.c.ii	File integrity checks to ensure authenticity	Yes; file integrity checks to ensure authenticity available through operation log.
3.c.iii	Data protection mechanism while in transit and during storage	Yes; password encryption at terminal and software level to access.
3.c.iv	Routine software updates	Updates done as needed, provide and done manually.
3.c.v	Cost of software updates	No additional cost for software updates.

RFI Q.#	Survey Question (abbreviated)	Response
Usability/Training		
4.a	Usability validation processes	Extensive field testing and certification provided by police to ensure usability of hardware and software products. Constant field units being tested by police for insight and acknowledgement on approving devices and software.
4.b	User community data	Interviews, observations during hands-on training, survey, satisfaction surveys, repeat customers, to evaluate products every 30, 60, and 90 days after initial installations.
4.c	User-group meetings and frequency	N/A
4.d	Typical problems reported	Categories of problems submitted involve <ul style="list-style-type: none"> • User error; and/or • Lack of knowledge on unit Less than 1% defect rate
4.d.i	Resolution to problems	Further training provided to rectify any issues.
4.e	Hours of tech. support and location	24/7 support provided at office location in Minooka, IL or by phone. Customers are provided numbers at time of purchase.
4.f	Training provided (hours)	Online and onsite training provided at no charge for 2 business days.

RFI Q.#	Survey Question (abbreviated)	Response
Installation		
5.a	Average time to install and activate	20-40 minutes average time for installation after delivery.

4.53 Utility BodyWorn



Figure 53. Utility BodyWorn

RFI Q.#	Survey Question (abbreviated)	Response
Vendor Information		
0	Responded to FRN?	Yes
1.a	Name	Utility Associates, Inc.
1.b	Address/phone number	250 E Ponce de Leon Ave, Ste 700, Decatur, GA 30030 (404) 816-0300
1.c	Website	www.utility.com
1.d	Years in business	16 years
1.e	Number and types of customers	law enforcement, fire, EMS, electric & gas utilities, public transit
1.f	Manufacturing location(s)	Decatur, GA and Covington, GA

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – BWC		
2.a	General	
2.a.i	Name and model number	BodyWorn
2.a.ii	Physical dims (H" x W" x D")	5.54" H x 2.85" W x 0.15" D
2.a.iii	Weight (oz.)	5.08 oz
2.a.iv	Mounting options	Chest
2.a.iv.1	Accessories needed for mounting	Body armor vest, duty shirt, raincoat, winter jacket, tactical vest – BodyWorn is embedded in the police officer's uniform. Lanyard mount with breakaway strap for detectives.
2.a.v	Ability to mount on vehicle dashboard	Yes; however, can be paired with vehicle wireless router where optional IP cameras can be connected, providing a far
2.a.v.1	Accessories for vehicle dashboard mount	Mounting clip, vehicle wireless router

2.a.vi	LCD display	5.2" AMOLED 1080p Full HD 1920 x 1080 423ppi Corning® Gorilla® Glass 3
2.a.vii	Recording capacity	Up to 64 GB
2.a.viii	Operating conditions or limitations	IP67
2.b	Video and Optics	
2.b.i	Maximum video resolution	Up to 4K, standard 720 P
2.b.ii	Field of view	130°
2.b.iii	Lux rating	1 lux
2.b.iv	Night mode/format	Ring flash with dual LEDs, auto HDR
2.b.v	Recording speed	30 fps
2.b.vi	Recording format	MP4, AVI, MOV
2.b.vii	Recording time under default resolution settings	30+ hours, but video is typically uploaded to a CJIS compliant storage vault on a minute by minute basis when recording, so in practice there is no limit to the amount of recording the BWC can provide.
2.b.viii	Ability to capture still photos	Yes
2.b.ix	Ability to embed date/time stamp on recorded video	Yes; BWC embeds cellular / GPS date/time, latitude, longitude, and other metadata in the integrated video / audio / metadata stream. Date / time and other metadata is displayed as a series of bars displayed below the video playback. Hard-coded date/time stamp does not obscure a section of the video.
2.b.ix.1	Ability to authenticate and validate date/time stamp integrity	Yes; Date/time stamp is automatically set by the cellular / GPS atomic synchronization clock as the BWC operates. Does not have to be set by an operator or the police officer while docked or logged into a video management system.
2.b.x	Pre-event recording feature	Yes; BWC can be set to do a simplistic pre-event recording time of up to 999 seconds. However, BWC also provides a far more effective "first contact" pre-event methodology to capture all pre-event video from the start of an interaction – whether that is 30 seconds, 5 minutes, or whatever time the "first contact" interaction begins.
2.b.x.1	Time buffered and whether audio is recorded	Configurable for a simplistic set time limit, or variable through the "first contact" event processing. Configurable to record or not record audio.
2.b.xi	Event marking capability	Yes
2.b.xii	Wireless capabilities for communication	Yes; BWC includes 4G-LTE cellular, WiFi, and Bluetooth connectivity to central dispatch, police CAD systems, In-vehicle video recording systems, in-vehicle wireless routers, authorized WiFi access points, and Bluetooth devices.
2.c	Audio	
2.c.i	Microphone feature	Yes; BWC is also the wireless microphone for in-car video recording system
2.c.ii	Microphone sensitivity	BWC includes 4 separate microphones with automatic noise cancellation for optimal audio capture
2.c.iii	Audio format	AAC
2.c.iv	Default police radio interface for BWC	No
2.d	Data Upload	
2.d.i	Single device vs. multiple upload docking station	The BWC uploads metadata such as recording start / stop events with GPS location on a real-time basis, so

		that central dispatch is aware of the real-time location of all BWC, and which BWC are actively recording video at any given time. This recording event data is logged in the chain of custody and audit trail reporting of all video recording activity. Video and audio can be live-streamed to central dispatch on a selective basis by the police officer, or by central dispatch if video/audio is already being recorded. Central dispatch can remotely start recording. GeoFence entry or exit can automatically start or stop recording. Video and audio data can be uploaded on a minute by minute basis as it is being recorded over 4G-LTE cellular connectivity, over WiFi to an authorized WiFi access point, or via WiFi to an in-car wireless router and video recorder as the CJIS compliant video storage vault. There is no need to have docking stations, or have officers return to a police station at the end of a shift to manually place a BWC into a docking station to upload video. Automatic upload eliminates the risk that video will be lost or deleted before it is manually uploaded.
2.d.ii	Data transfer method	Wireless; all video, audio and metadata is uploaded wireless. There is no removable media.
2.d.iii	Manual vs. automatic upload	Automatic uploading; all video is automatically uploaded without requiring manual insertion into docking stations at the end of a shift. Video can also be live-streamed to central dispatch and other authorized viewers.
2.e	Battery Information	
2.e.i	Battery type; internal or removable	BWC models have internal 2300mAh up to 4000mAh batteries, and can have supplemental batteries with up to 10,000mAh capacity.
2.e.ii	Recording duration	12+ hours
2.e.iii	Battery standby duration	24 to 48 hours depending on battery configuration
2.e.iv	Battery charge time	Varies – 30 minutes or more
2.e.v	Battery lifetime until replacement	5 years
2.e.vi	Battery replacement procedure	Factory; battery cannot be replaced. BWC hardware device is replaced every 3 years.
2.e.vii	Availability of supplemental charger for emergency battery charging	12v DC car charger, 110v AC wall charger, external USB charger, external USB connection to supplemental rechargeable battery pack.
2.f	GPS	
2.f.i	BWC possess GPS	Yes; A-GPS and GLONASS
2.f.i.1	Embedded GPS coordinates in recorded video	Yes
2.f.ii	Alternative geolocation methods	Smartphone, Bluetooth
2.g	Consumer Testing Results	
2.g.i	Sturdiness/fragility	Yes
2.g.i.1	Drop test results	IK04
2.g.i.2	Dust intrusion/water resistance rating	IP67
2.g.i.3	Ruggedized	Yes; uniform holster case seals the BWC
2.g.i.4	Pressure/depth	IP67
2.g.i.5	Shock	MIL Spec 810 G

2.g.i.6	Vibrations	MIL Spec 810 G
2.g.ii	Other environmental testing	Yes
2.g.ii.1	Specify tests, pass/fail results, and ratings received	Various additional tests performed by Motorola, Samsung, and other certified BWC hardware manufacturers. See manufacturer websites for test specifics.
2.h	Safeguards	
2.h.i	Privacy safeguards or features	Yes
2.h.i.1	Remote viewing	Yes; provides live video streaming to central dispatch and other authorized viewers on a selective basis based upon roles and authorized permissions.
2.h.i.2	Remote activation/deactivation	Yes; by central dispatch and other authorized viewers on a selective basis based upon roles and permissions
2.h.i.3	Privacy masking	Not on the BWC; smart redaction is included as part of the video management SaaS. Smart redaction automatically redacts faces and skin to protect the privacy of police officers and citizens while keeping the rest of the video clear, so there is a context of the events being shown in the video.
2.h.i.4	Redacting/editing capabilities	Yes; source video cannot be edited in any way. All export of partial video and redaction is performed on a copy of the source video.
2.h.ii	Safeguards for cyber security, unintentional disassembly, etc.	<p>Yes; all H.264 compliant video is encrypted at rest on the BWC as it is recorded using AES-256 bit encryption. Video in transit from the BWC to Cloud storage is transmitted through an AES-256 bit encrypted VPN tunnel. Video continues to be AES-256 bit encrypted while in cloud storage. Since video is uploaded on a minute-by-minute basis, video is already in cloud storage and therefore cannot be lost by later tampering or destruction of the BWC.</p> <p>All video can be selectively watermarked during viewing with the login ID of the viewer, so that the source of a video leak to YouTube or other social media sites is identified if someone uses a personal device to record a video of the video.</p> <p>A complete audit trail of all viewers with IP address, notes, and export of each video is maintained in comprehensive chain of custody reporting.</p>
2.i	Regulatory	
2.i.i	Regulatory and Compliance safety requirements	BWC meets all 4G-LTE regulatory and compliance requirements.
2.i.ii	Radiation safety standards	BWC meets all 4G-LTE regulatory and compliance requirements.
2.j	Warranty and Maintenance Plans	
2.j.i	Length of warranty (in months)	BWC is warranted for as long as the annual or multi-year subscription fee is paid.
2.j.ii	Optional extended warranties	Included
2.j.ii.1	Duration and cost of extended warranties	BWC is warranted for as long as the annual or multi-year subscription fee is paid.
2.j.iii	Availability of extended maintenance plans	N/A; BWC is warranted for as long as the annual or multi-year subscription fee is paid.

2.j.iii.1	Duration and cost of extended maintenance plans	Included
2.j.iv	Service contract costs	Subscription renewal includes warranty
2.k	Auxiliary Equipment	
2.k.i	Manufacturer suggested retail price (MSRP) for each auxiliary equipment	Market Price – USB car and wall charging devices and supplemental batteries are widely available at competitive prices.
2.l	MSRP without optional features, accessories, or service plans	\$400
2.m	Manufacturer's estimated lifetime of device	5 years
2.n	Other relevant information	<ul style="list-style-type: none"> Automatic officer down reporting: BWC can identify officer down situations. If the officer does not respond to prompts from the BWC, then the BWC sends an automatic "officer down emergency alert" to central dispatch with the exact location of the officer and start video recording. Motion-based automatic recording start: The BWC detects rapid motion such as an officer running or involved in a struggle and will start recording automatically. Biometric automatic recording start: BWC can receive messages from devices that track officer heart rate, and can automatically start recording when an officer's heart rate spikes above the configuration percentage. BOLO, Amber, Silver Alert Distribution: central dispatch can send real-time BOLO (Be On the Look Out) messages and Amber/Silver alerts with pictures and text to one, some, or all officers on duty. Integration with the uniform: The BWC is integrated with the officer's uniform rather than being an external clip-on camera that is prone to fall off, get snatched off, or bounce around uncontrollably during an Incident, preventing the reliable recording of video of an Incident. NFC for auto login: BWC includes a near field communications chip reader capability that reads an NFC chipset embedded in the officer uniform to automatically force a logout from another officer, and auto login of the BWC to the officer wearing the BWC. Magnetic and proximity sensors: confirms the BWC is seated in the uniform holster. Officer down reporting suspended when the BWC is removed from the uniform holster. Compatible video file format with in-car Video recording: The H.264 compliant video file format is the same as used in the utility rocket IoT in-car wireless router and video recorder storage vault. GeoFence polygon zones: two levels of GeoFence polygons can be defined – system and personal. GeoFence-based recording privacy zones:

		<p>temporary or permanent GeoFences can be set around police stations, police officer homes, courthouses, churches, mosques, synagogues, and other areas where it has been decided that Video will not be recorded.</p> <ul style="list-style-type: none"> • Cloud-based video redaction processing: All video redaction processing is cloudbased. No need to install video redaction software on a local computer. • Web browser video viewer: The video management system is web browser based.
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RFI Q.#	Survey Question (abbreviated)	Response
Product Information – Software for Video Data Storage and Management		
3.a	Data Management	
3.a.i	Searching capabilities	Yes
3.a.ii	Categorizing capabilities	Yes
3.a.iii	Tagging capabilities	Yes
3.a.iv	Archiving and file retention	Yes; based upon classifications and police department retention policies
3.a.v	Data saved on or offsite	Amazon AWS cloud storage
3.a.v.1	If saved offsite, specific data accessibility and storage costs	Unlimited storage as long as the police department purges data according to their retention policy. Data is accessible from a web browser login subject to source IP address range limitations and other security policies.
3.a.v.2	Video data storage capacity local vs. cloud	Unlimited storage as long as the police department purges data according to their retention policy. Data is accessible from a web browser login subject to source IP address range limitations and other security policies.
3.a.v.3	Capability to accommodate multiple site installations	No information provided
3.a.vi	Export capabilities	Yes
3.a.vi.1	Traceability feature that shows which user exported the data	All exports are logged in the chain of custody audit trail log and reporting.
3.a.vii	Redacting/editing capabilities	Yes – Smart Redaction
3.a.vii.1	Specify whether changes are permanent	Original source H.264 video files are never edited.
3.a.viii	Support provided for chain-of-custody requirements	Yes; full audit trail log of any “touch” of any video is maintained in the comprehensive chain of custody reporting.
3.a.ix	Scalability for different organization size	Scalable up to the largest police departments.
3.a.x	User management and role-based access levels	Yes
3.b	Video Analytics	
3.b.i	Companion software to analyze recorded video and audio data	Yes; H.264 can be analyzed by an H.264 compliant video analytics toolset.
3.b.ii	Types of reports built into software	See below
3.b.ii.1	Standard reports	Yes; comprehensive set of reports by officer, precinct, department type (patrol, vice, burglary) by time period.
3.b.ii.2	Daily reports, historical reports, etc.	Yes
3.b.ii.3	Audit reports that support chain-of-custody requirements	Yes

3.b.ii.4	Customization of reports	Yes
3.b.iii	Facial recognition capabilities	Yes
3.b.iv	Weapons detection capabilities	Yes; if Bluetooth or WiFi message details are disclosed.
3.b.v	Other analytical capabilities	Variety of third party widgets such as weather and Google traffic can be included in video management viewer dashboard.
3.c	Video Security and Authentication	
3.c.i	Compatibility of BWC video output with existing video management software for reviewing and recording	Yes
3.c.ii	File integrity checks to ensure authenticity	Yes
3.c.iii	Data protection mechanism while in transit and during storage	Yes; encryption
3.c.iv	Routine software updates	Yes. Monthly updates. Automatic.
3.c.v	Cost of software updates	Included

RFI Q.#	Survey Question (abbreviated)	Response
Usability/Training		
4.a	Usability validation processes	Typical rapid prototyping software development process with re-executable system test model validation.
4.b	User community data	Customer feedback and enhancement requests obtained through interviews, training, user surveys, user requests, and trade show meetings. Feedback collected constantly. Enhancements typically implemented through periodic software updates
4.c	User-group meetings and frequency	Annual user group meeting
4.d	Typical problems reported	Hardware – cracked screen glass replaced as part of warranty. Less than 1%
4.d.i	Resolution to problems	Replaced BWC
4.e	Hours of tech. support and location	24/7 unlimited telephone support. No additional cost – included as part of annual software subscription.
4.f	Training provided (hours)	Typically train the trainer. User orientation is a 2 hour class. Extensive library of YouTube instructional videos.

RFI Q.#	Survey Question (abbreviated)	Response
Installation		
5.a	Average time to install and activate	Less than 2 hours. BWC typically activated and pre-configured at utility support center and then shipped to customer. One or more days of initial Onsite configuration validation, video administrator, and initial officer training is typical, depending upon number of officers included in initial rollout. Subsequent rollouts typically supported by the customer video administrator. If the BWC is paired with a Rocket IoT vehicle wireless router, the Rocket IoT installation is typically two hours per vehicle.

4.54 VieVu LE4



Figure 54. VieVu LE4

RFI Q.#	Survey Question (abbreviated)	Response
Vendor Information		
0	Responded to FRN?	Yes
1.a	Name	VieVu LLC (member of the Safariland Group)
1.b	Address/phone number	645 Elliott Ave W, Suite #370, Seattle, WA 98119 (888) 285-4548
1.c	Website	www.vievu.com
1.d	Years in business	9 years
1.e	Number and types of customers	Law enforcement customers and private professionals worldwide
1.f	Manufacturing location(s)	Vendor states that this information is proprietary and confidential.

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – BWC		
2.a	General	
2.a.i	Name and model number	VieVu LE4
2.a.ii	Physical dims (H" x W" x D")	3.3" H x 2.1" W x 1.1" D
2.a.iii	Weight (oz.)	5.5 oz
2.a.iv	Mounting options	Chest-mounted (uniforms, vests), LE4 Cradle, Car Kit
2.a.iv.1	Accessories needed for mounting	LE4 Cradle, Car Kit
2.a.v	Ability to mount on vehicle dashboard	Only with Car Kit
2.a.v.1	Accessories for vehicle dashboard mount	Car Kit (suction cup mount, USB cable, 12V adaptor) mounts to window and nonporous desktops, but not designed for dashboard.
2.a.vi	LCD display	No
2.a.vii	Recording capacity	Up to 64 GB
2.a.viii	Operating conditions or limitations	Operating temperature: - 4°F to 122°F

2.b	Video and Optics	
2.b.i	Maximum video resolution	1080 P
2.b.ii	Field of view	95°
2.b.iii	Lux rating	No information provided
2.b.iv	Night mode/format	No night mode
2.b.v	Recording speed	30 fps
2.b.vi	Recording format	MPEG-4, H.264 Codec, AVI Container
2.b.vii	Recording time under default resolution settings	up to 10 hrs at FHD, 25 hrs at HD, and 50 hrs at SD resolution
2.b.viii	Ability to capture still photos	Yes, can print a still image frame
2.b.ix	Ability to embed date/time stamp on recorded video	Yes; GMT or local time embedded on video
2.b.ix.1	Ability to authenticate and validate date/time stamp integrity	No information provided
2.b.x	Pre-event recording feature	Yes
2.b.x.1	Time buffered and whether audio is recorded	30 second buffer (audio recorded but can be muted so pre-event without sound if desired)
2.b.xi	Event marking capability	Yes; can be marked as “never delete” and for lockdown
2.b.xii	Wireless capabilities for communication	Yes; 802.11 G, connects to smartphone or tablet up to 10 ft without an antenna. With included antenna up to 200 ft.
2.c	Audio	
2.c.i	Microphone feature	Yes
2.c.ii	Microphone sensitivity	No information provided
2.c.iii	Audio format	PCM
2.c.iv	Default police radio interface for BWC	No information provided
2.d	Data Upload	
2.d.i	Single device vs. multiple upload docking station	Multi-dock available to automatically download video, metadata, and recharge up to 10 LE4 cameras
2.d.ii	Data transfer method	USB 2.0 Mini B or mini HDMI
2.d.iii	Manual vs. automatic upload	No information provided
2.e	Battery Information	
2.e.i	Battery type; internal or removable	Lithium-Ion (Non-Removable)
2.e.ii	Recording duration	Up to 10 hrs at 1080P, 11 hrs at 720P, 12 hrs at 480P with prerecord buffer disabled
2.e.iii	Battery standby duration	Up to 14 hours
2.e.iv	Battery charge time	7 hours
2.e.v	Battery lifetime until replacement	500 Cycles > 75% Capacity
2.e.vi	Battery replacement procedure	No information provided
2.e.vii	Availability of supplemental charger for emergency battery charging	External battery pack compatible
2.f	GPS	
2.f.i	BWC possess GPS	No
2.f.i.1	Embedded GPS coordinates in recorded video	No
2.f.ii	Alternative geolocation methods	GPS information can be added to metadata from a tablet or smartphone GPS
2.g	Consumer Testing Results	
2.g.i	Sturdiness/fragility	IP65, waterproof, non-submersible with antenna or antenna cover fitted
2.g.i.1	Drop test results	Drop resistance 10 feet onto hard surface
2.g.i.2	Dust intrusion/water resistance	IP65

	rating	
2.g.i.3	Ruggedized	No information provided
2.g.i.4	Pressure/depth	No information provided
2.g.i.5	Shock	No information provided
2.g.i.6	Vibrations	No information provided
2.g.ii	Other environmental testing	No information provided
2.g.ii.1	Specify tests, pass/fail results, and ratings received	FCC Class B, CE 2004/108, RoHS, WEEE
2.h	Safeguards	
2.h.i	Privacy safeguards or features	No information provided
2.h.i.1	Remote viewing	No information provided
2.h.i.2	Remote activation/deactivation	No information provided
2.h.i.3	Privacy masking	No information provided
2.h.i.4	Redacting/editing capabilities	No information provided
2.h.ii	Safeguards for cyber security, unintentional disassembly, etc.	No information provided
2.i	Regulatory	
2.i.i	Regulatory and Compliance safety requirements	No information provided
2.i.ii	Radiation safety standards	No information provided
2.j	Warranty and Maintenance Plans	
2.j.i	Length of warranty (in months)	3 months
2.j.ii	Optional extended warranties	No information provided
2.j.ii.1	Duration and cost of extended warranties	No information provided
2.j.iii	Availability of extended maintenance plans	No information provided
2.j.iii.1	Duration and cost of extended maintenance plans	No information provided
2.j.iv	Service contract costs	No information provided
2.k	Auxiliary Equipment	
2.k.i	Manufacturer suggested retail price (MSRP) for each auxiliary equipment	No information provided
2.l	MSRP without optional features, accessories, or service plans	No information provided
2.m	Manufacturer's estimated lifetime of device	No information provided
2.n	Other relevant information	None

Data Management includes three options compatible with both LE4 and LE4-mini:

- 1. VIEVU Solution – Fully-hosted cloud software platform**
- 2. VERIPATROL – On-site software platform**
- 3. VERIPATROL HYBRID – Hybrid cloud and on-site storage platform**

VIEVU Solution Data Management (Vendor supplied information only for this option)

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – Software for Video Data Storage and Management		
3.a	Data Management	
3.a.i	Searching capabilities	Yes, including case number, event number, record date, upload date, GPS coordinates, officer name, categories, location, file name, and/or comments.

3.a.ii	Categorizing capabilities	Yes, as above
3.a.iii	Tagging capabilities	Metadata must be entered using smartphone/tablet app, but includes file category, case number, report number, geolocation, comments, unlimited additional attributes
3.a.iv	Archiving and file retention	Retention periods associated with a video category and set by administrator
3.a.v	Data saved on or offsite	Local, hybrid (local software and storage in CJIS compliant cloud), cloud (Microsoft Azure)
3.a.v.1	If saved offsite, specific data accessibility and storage costs	For the cloud solution, the agency is able to access the data anytime through the VIEVU Solution (web based application). The storage cost is negotiated with each agency.
3.a.v.2	Video data storage capacity local vs. cloud	Unspecified, except dependent on the agency's needs.
3.a.v.3	Capability to accommodate multiple site installations	Fully capable of accommodating multiple sites
3.a.vi	Export capabilities	2 methods of sharing video and files in non-proprietary formats with external parties. Sharing is not limited by the number of licenses purchased. <input type="checkbox"/> A secure self-expiring link that can be shared easily through an email. The expiration date can be set by the user sharing the video. <input type="checkbox"/> A login ID and password.
3.a.vi.1	Traceability feature that shows which user exported the data	Yes
3.a.vii	Redacting/editing capabilities	Yes, automated
3.a.vii.1	Specify whether changes are permanent	No information provided
3.a.viii	Support provided for chain-of-custody requirements	Yes
3.a.ix	Scalability for different organization size	Yes
3.a.x	User management and role-based access levels	Yes
3.b	Video Analytics	
3.b.i	Companion software to analyze recorded video and audio data	VieVu Solution
3.b.ii	Types of reports built into software	See below
3.b.ii.1	Standard reports	No information provided
3.b.ii.2	Daily reports, historical reports, etc.	No information provided
3.b.ii.3	Audit reports that support chain-of-custody requirements	Yes
3.b.ii.4	Customization of reports	No information provided
3.b.iii	Facial recognition capabilities	No information provided
3.b.iv	Weapons detection capabilities	No information provided
3.b.v	Other analytical capabilities	No information provided
3.c	Video Security and Authentication	
3.c.i	Compatibility of BWC video output with existing video management software for reviewing and recording	No information provided
3.c.ii	File integrity checks to ensure authenticity	Yes.

3.c.iii	Data protection mechanism while in transit and during storage	VERIPATROL includes several layers of security to keep your data secure and utilizes a FIPS 140-2 compliant Digital Signature process to prove that video has not been altered.
3.c.iv	Routine software updates	No information provided
3.c.v	Cost of software updates	No information provided

RFI Q.#	Survey Question (abbreviated)	Response
Usability/Training		
4.a	Usability validation processes	The following testing are done with every installation: <ul style="list-style-type: none"> • Product performance testing • Interface testing • Security testing • Encryption in transit and rest using AES-256 • Data upload testing • Auto tagging testing • Hardware and network capacity testing
4.b	User community data	Gathers information from the user community through the following channels: during in person hands-on training, satisfaction surveys, and feedback from customers and prospects in written and oral form.
4.c	User-group meetings and frequency	Unspecified law enforcement panels, otherwise No information provided
4.d	Typical problems reported	No information provided
4.d.i	Resolution to problems	No information provided
4.e	Hours of tech. support and location	24/7/365 phone and email support.
4.f	Training provided (hours)	<ul style="list-style-type: none"> • Administrative training- suggested 8 hours • IT personnel training- suggested 8 hours • Train the trainers program (TTT)- suggested 4 hours • Supervisor training -suggested 4 hours • End user training -suggested 3 hours • Academy training-suggested 3 hours • Computer learning training- N/A – continuous learning platform

RFI Q.#	Survey Question (abbreviated)	Response
Installation		
5.a	Average time to install and activate	Not specified; varies according to needs, infrastructure, etc.

4.55 VieVu LE4 Mini



Figure 55. VieVu LE4 Mini

RFI Q.#	Survey Question (abbreviated)	Response
Vendor Information		
0	Responded to FRN?	Yes
1.a	Name	VieVu LLC (member of the Safariland Group)
1.b	Address/phone number	645 Elliott Ave W, Suite #370, Seattle, WA 98119 (888) 285-4548
1.c	Website	www.vievu.com
1.d	Years in business	9 years
1.e	Number and types of customers	Law enforcement customers and private professionals worldwide
1.f	Manufacturing location(s)	Vendor states that this information is proprietary and confidential.

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – BWC		
2.a	General	
2.a.i	Name and model number	VieVu LE4 Mini
2.a.ii	Physical dims (H" x W" x D")	1.9" H x 1.9" W x 0.95" D
2.a.iii	Weight (oz.)	2.5 oz
2.a.iv	Mounting options	Chest-mounted, LE4 Cradle, Car Kit (window)
2.a.iv.1	Accessories needed for mounting	LE4 Cradle, Car Kit
2.a.v	Ability to mount on vehicle dashboard	No information provided
2.a.v.1	Accessories for vehicle dashboard mount	No information provided
2.a.vi	LCD display	No

2.a.vii	Recording capacity	Up to 64 GB
2.a.viii	Operating conditions or limitations	Operating temperature: -4°F to 122°F
2.b	Video and Optics	
2.b.i	1920 X 1080P (FHD)	1080P
2.b.ii	Field of view	95°
2.b.iii	Lux rating	No information provided
2.b.iv	Night mode/format	No
2.b.v	Recording speed	30 fps
2.b.vi	Recording format	MPEG-4, H.264 Codec, AVI Container
2.b.vii	Recording time under default resolution settings	Up to 10 hrs at 1080P, 25 hrs at 720P, and 50 hrs at 480P resolution
2.b.viii	Ability to capture still photos	Yes, can print still images from frames
2.b.ix	Ability to embed date/time stamp on recorded video	Yes, GMT or local time embedded on video
2.b.ix.1	Ability to authenticate and validate date/time stamp integrity	No information provided
2.b.x	Pre-event recording feature	Yes
2.b.x.1	Time buffered and whether audio is recorded	30 second buffer (audio recorded but can be muted so pre-event without sound if desired)
2.b.xi	Event marking capability	Can be marked as “never delete” and for lockdown
2.b.xii	Wireless capabilities for communication	Yes; 802.11 G, connects to smartphone or tablet up to 10 ft without antenna. With included antenna up to 200 ft.
2.c	Audio	
2.c.i	Microphone feature	Yes
2.c.ii	Microphone sensitivity	No information provided
2.c.iii	Audio format	PCM
2.c.iv	Default police radio interface for BWC	No information provided
2.d	Data Upload	
2.d.i	Single device vs. multiple upload docking station	Multi-dock available to automatically download video, metadata, and recharge up to 10 LE4 cameras
2.d.ii	Data transfer method	USB 2.0 Mini B or mini HDMI
2.d.iii	Manual vs. automatic upload	No information provided
2.e	Battery Information	
2.e.i	Battery type; internal or removable	Lithium-Ion (non-removable)
2.e.ii	Recording duration	Up to 2 hrs at 1080P, 2.5 hrs at 720P, up to 3 hrs at 480P
2.e.iii	Battery standby duration	Up to 3 hours
2.e.iv	Battery charge time	2 hours
2.e.v	Battery lifetime until replacement	500 Cycles > 75% Capacity
2.e.vi	Battery replacement procedure	No information provided
2.e.vii	Availability of supplemental charger for emergency battery charging	External battery pack compatible
2.f	GPS	
2.f.i	BWC possess GPS	No
2.f.i.1	Embedded GPS coordinates in recorded video	No
2.f.ii	Alternative geolocation methods	GPS information can be added to metadata from a tablet or smartphone GPS
2.g	Consumer Testing Results	
2.g.i	Sturdiness/fragility	IP65, waterproof, non-submersible with antenna or antenna cover fitted

2.g.i.1	Drop test results	Drop resistance 10 feet onto hard surface
2.g.i.2	Dust intrusion/water resistance rating	IP65
2.g.i.3	Ruggedized	No information provided
2.g.i.4	Pressure/depth	No information provided
2.g.i.5	Shock	No information provided
2.g.i.6	Vibrations	No information provided
2.g.ii	Other environmental testing	No information provided
2.g.ii.1	Specify tests, pass/fail results, and ratings received	FCC Class B, CE 2004/108, RoHS, WEEE
2.h	Safeguards	
2.h.i	Privacy safeguards or features	No information provided
2.h.i.1	Remote viewing	No information provided
2.h.i.2	Remote activation/deactivation	No information provided
2.h.i.3	Privacy masking	No information provided
2.h.i.4	Redacting/editing capabilities	No information provided
2.h.ii	Safeguards for cyber security, unintentional disassembly, etc.	No information provided
2.i	Regulatory	
2.i.i	Regulatory and Compliance safety requirements	No information provided
2.i.ii	Radiation safety standards	No information provided
2.j	Warranty and Maintenance Plans	
2.j.i	Length of warranty (in months)	3 months
2.j.ii	Optional extended warranties	No information provided
2.j.ii.1	Duration and cost of extended warranties	No information provided
2.j.iii	Availability of extended maintenance plans	No information provided
2.j.iii.1	Duration and cost of extended maintenance plans	No information provided
2.j.iv	Service contract costs	No information provided
2.k	Auxiliary Equipment	
2.k.i	Manufacturer suggested retail price (MSRP) for each auxiliary equipment	No information provided
2.l	MSRP without optional features, accessories, or service plans	No information provided
2.m	Manufacturer's estimated lifetime of device	No information provided
2.n	Other relevant information	None

Data Management includes three options compatible with both LE4 and LE4-mini:

- 1. VIEVU Solution – Fully-hosted cloud software platform**
- 2. VERIPATROL – On-site software platform**
- 3. VERIPATROL HYBRID – Hybrid cloud and on-site storage platform**

VIEVU Solution Data Management (Vendor supplied information only for this option)

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – Software for Video Data Storage and Management		
3.a	Data Management	
3.a.i	Searching capabilities	Yes, including case number, event number, record date, upload date, GPS coordinates, officer name,

		categories, location, file name, and/or comments.
3.a.ii	Categorizing capabilities	Yes, as above
3.a.iii	Tagging capabilities	Metadata must be entered using smartphone/tablet app, but includes file category, case number, report number, geolocation, comments, unlimited additional attributes
3.a.iv	Archiving and file retention	Retention periods associated with a video category and set by administrator
3.a.v	Data saved on or offsite	Local, hybrid (local software and storage in CJIS compliant cloud), cloud (Microsoft Azure)
3.a.v.1	If saved offsite, specific data accessibility and storage costs	For the cloud solution, the agency is able to access the data anytime through the VIEVU Solution (web based application). The storage cost is negotiated with each agency.
3.a.v.2	Video data storage capacity local vs. cloud	Unspecified, except dependent on the agency's needs.
3.a.v.3	Capability to accommodate multiple site installations	Fully capable of accommodating multiple sites
3.a.vi	Export capabilities	2 methods of sharing video and files in non-proprietary formats with external parties. Sharing is not limited by the number of licenses purchased. <ul style="list-style-type: none"> A secure self-expiring link that can be shared easily through an email. The expiration date can be set by the user sharing the video. A login ID and password.
3.a.vi.1	Traceability feature that shows which user exported the data	Yes
3.a.vii	Redacting/editing capabilities	Yes, automated
3.a.vii.1	Specify whether changes are permanent	No information provided
3.a.viii	Support provided for chain-of-custody requirements	Yes
3.a.ix	Scalability for different organization size	Yes
3.a.x	User management and role-based access levels	Yes
3.b	Video Analytics	
3.b.i	Companion software to analyze recorded video and audio data	VieVu Solution
3.b.ii	Types of reports built into software	See below
3.b.ii.1	Standard reports	No information provided
3.b.ii.2	Daily reports, historical reports, etc.	No information provided
3.b.ii.3	Audit reports that support chain-of-custody requirements	Yes
3.b.ii.4	Customization of reports	No information provided
3.b.iii	Facial recognition capabilities	No information provided
3.b.iv	Weapons detection capabilities	No information provided
3.b.v	Other analytical capabilities	No information provided
3.c	Video Security and Authentication	
3.c.i	Compatibility of BWC video output with existing video management software for reviewing and recording	No information provided
3.c.ii	File integrity checks to ensure	Yes.

	authenticity	
3.c.iii	Data protection mechanism while in transit and during storage	VERIPATROL includes several layers of security to keep data secure and utilizes a FIPS 140-2 compliant Digital Signature process to prove that video has not been altered.
3.c.iv	Routine software updates	No information provided
3.c.v	Cost of software updates	No information provided

RFI Q.#	Survey Question (abbreviated)	Response
Usability/Training		
4.a	Usability validation processes	The following testing are done with every installation: <ul style="list-style-type: none"> • Product performance testing • Interface testing • Security testing • Encryption in transit and rest using AES-256 • Data upload testing • Auto tagging testing • Hardware and network capacity testing
4.b	User community data	Gather information from the user community through the following channels: during in person hands-on training, satisfaction surveys, and feedback from customers and prospects in written and oral form.
4.c	User-group meetings and frequency	Unspecified law enforcement panels, otherwise No information provided
4.d	Typical problems reported	No information provided
4.d.i	Resolution to problems	No information provided
4.e	Hours of tech. support and location	24/7/365 phone and email support.
4.f	Training provided (hours)	<ul style="list-style-type: none"> • Administrative training- suggested 8 hours • IT personnel training- suggested 8 hours • Train the trainers program (TTT)- suggested 4 hours • Supervisor training -suggested 4 hours • End user training -suggested 3 hours • Academy training-suggested 3 hours • Computer learning training- N/A – continuous learning platform

RFI Q.#	Survey Question (abbreviated)	Response
Installation		
5.a	Average time to install and activate	Not specified; varies according to needs, infrastructure, etc.

4.56 VP360 Argus Gen 1 Digital BWC



Figure 56. VP360 Argus Gen 1 Digital BWC

RFI Q.#	Survey Question (abbreviated)	Response
Vendor Information		
0	Responded to FRN?	Yes
1.a	Name	Complete Integrated Solutions, LLC. DBA VP360
1.b	Address/phone number	2020 South McClintock, Suite 101, Tempe, AZ 85282 (888) 988-7630
1.c	Website	www.vp360sales.com
1.d	Years in business	2 years
1.e	Number and types of customers	50+ (municipal, county, state, federal, international)
1.f	Manufacturing location(s)	BWCS – Taiwan and China Digital Evidence Management - Escondido, CA Storage – Irvine, CA

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – BWC		
2.a	General	
2.a.i	Name and model number	Argus Gen 1 Digital BWC
2.a.ii	Physical dims (H" x W" x D")	3.5" H x 2.3" W x 0.87" D
2.a.iii	Weight (oz.)	6.17 oz
2.a.iv	Mounting options	Chest/upper torso, ear, button hole, shoulder tab
2.a.iv.1	Accessories needed for mounting	Comes standard with metal clip for chest/upper torso mounting. Optional mounting equipment includes cloth loop for permanent mounting option on zipper front shirts or other uniform tops, two-piece halo mount kit for mounting external bullet cam on head, button hole external camera (SD only) for clipping to uniform with

		limited space, and in-line pressure tab for mounting bullet camera (SD only) to shoulder tab.
2.a.v	Ability to mount on vehicle dashboard	Vehicle mounting to windshield
2.a.v.1	Accessories for vehicle dashboard mount	Suction cup mount
2.a.vi	LCD display	2.2" TFT LCD
2.a.vii	Recording capacity	16 GB up to 64 GB
2.a.viii	Operating conditions or limitations	Operating temperature: -40°F to 140°F Storage temperature: -4°F to 131°F IP65
2.b	Video and Optics	
2.b.i	Maximum video resolution	1296P
2.b.ii	Field of view	140°
2.b.iii	Lux rating	< 0.1 lux
2.b.iv	Night mode/format	Yes; low light facial definition up to 10 meters and dual IR (auto or manual activation) lens' for low/no light conditions.
2.b.v	Recording speed	30 fps
2.b.vi	Recording format	H.264, MP4, AVI
2.b.vii	Recording time under default resolution settings	8 hours
2.b.viii	Ability to capture still photos	Yes; 21 MP
2.b.ix	Ability to embed date/time stamp on recorded video	Yes
2.b.ix.1	Ability to authenticate and validate date/time stamp integrity	Yes; Encrypted with the SHA-256 cryptographic hash algorithm. There is also a full audit trail for maintaining complete chain of custody.
2.b.x	Pre-event recording feature	Yes
2.b.x.1	Time buffered and whether audio is recorded	30 seconds; audio included
2.b.xi	Event marking capability	Yes
2.b.xii	Wireless capabilities for communication	No
2.c	Audio	
2.c.i	Microphone feature	Yes
2.c.ii	Microphone sensitivity	High sensitivity
2.c.iii	Audio format	AAC2 and MP3
2.c.iv	Default police radio interface for BWC	Yes (optional)
2.d	Data Upload	
2.d.i	Single device vs. multiple upload docking station	Both
2.d.ii	Data transfer method	Wire (via single or multi-camera docking station)
2.d.iii	Manual vs. automatic upload	Automatically begin uploading once they are docked and support "interrupted upload" file integrity.
2.e	Battery Information	
2.e.i	Battery type; internal or removable	Internal 2800mAH Lithium battery, cannot be removed.
2.e.ii	Recording duration	8 hours
2.e.iii	Battery standby duration	Up to 10 hours
2.e.iv	Battery charge time	3 to 3.5 hours
2.e.v	Battery lifetime until replacement	Battery is guaranteed not to need replacement for the service life of the camera.
2.e.vi	Battery replacement procedure	N/A

2.e.vii	Availability of supplemental charger for emergency battery charging	N/A
2.f	GPS	
2.f.i	BWC possess GPS	Yes (optional)
2.f.i.1	Embedded GPS coordinates in recorded video	Yes
2.f.ii	Alternative geolocation methods	N/A
2.g	Consumer Testing Results	
2.g.i	Sturdiness/fragility	Both models are made from high impact durable plastics with no moving parts.
2.g.i.1	Drop test results	2 meter hard surface drop test
2.g.i.2	Dust intrusion/water resistance rating	IP65
2.g.i.3	Ruggedized	N/A
2.g.i.4	Pressure/depth	N/A
2.g.i.5	Shock	N/A
2.g.i.6	Vibrations	N/A
2.g.ii	Other environmental testing	N/A
2.g.ii.1	Specify tests, pass/fail results, and ratings received	N/A
2.h	Safeguards	
2.h.i	Privacy safeguards or features	Yes
2.h.i.1	Remote viewing	N/A
2.h.i.2	Remote activation/deactivation	No
2.h.i.3	Privacy masking	Yes; the solution has manual, semi-automatic, and automatic redaction capabilities for both video and audio. This allows for the blurring of faces and objects as well as editing audio.
2.h.i.4	Redacting/editing capabilities	Yes; the solution has manual, semi-automatic, and automatic redaction capabilities for both video and audio. This allows for the blurring of faces and objects as well as editing audio.
2.h.ii	Safeguards for cyber security, unintentional disassembly, etc.	No information provided
2.i	Regulatory	
2.i.i	Regulatory and Compliance safety requirements	N/A
2.i.ii	Radiation safety standards	N/A
2.j	Warranty and Maintenance Plans	
2.j.i	Length of warranty (in months)	24 months; all components have a minimum 2 years, 100% warranty. When purchased as part of an annual subscription service all components are covered 100% for the life of the service agreement.
2.j.ii	Optional extended warranties	Yes
2.j.ii.1	Duration and cost of extended warranties	Optional annual warranty extensions are available on all components and are calculated based upon a percentage of the unit price.
2.j.iii	Availability of extended maintenance plans	Yes
2.j.iii.1	Duration and cost of extended maintenance plans	Optional annual software maintenance extensions are available and are calculated based upon the initial size of the project and growth over time.
2.j.iv	Service contract costs	Service contract costs are calculated as a percentage of the entire solution package at the time of purchase.

2.k	Auxiliary Equipment	
2.k.i	Manufacturer suggested retail price (MSRP) for each auxiliary equipment	<ul style="list-style-type: none"> Multi-camera docking station \$550 External cameras: buttonhole camera \$25 ear/shoulder mount bullet camera \$170 External battery pack \$45 Radio mic connector cable \$30 Windshield suction cup mount \$15
2.l	MSRP without optional features, accessories, or service plans	\$235
2.m	Manufacturer's estimated lifetime of device	Minimum 3 years
2.n	Other relevant information	The Argus Body Worn Camera Solution is typically sold as an all-inclusive subscription service that includes cameras, multi—camera docks, digital evidence management software with redaction, all back-end video management hardware (video server, video evidence redaction workstations, video upload workstations, etc. as necessary), on- or off-premise secure storage, on-site hot swappable spare cameras and docks, and 24/7/365 service. The core of the system is the SoleraTec Phoenix Digital Evidence Management software. The solution is fully integrated, 100% supported for the duration of the agreement, and installed turn-key. Typical price-per camera/per month is between \$29.99 and \$54.99 based upon a 36-month agreement, number of cameras, and individual agency storage needs.

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – Software for Video Data Storage and Management		
3.a	Data Management	
3.a.i	Searching capabilities	Yes
3.a.ii	Categorizing capabilities	Yes
3.a.iii	Tagging capabilities	Yes
3.a.iv	Archiving and file retention	Yes; this is based upon the agency's video retention policy. The vendor can accommodate multiple archiving configurations and retention needs including complete geo-dispersed disaster recovery.
3.a.v	Data saved on or offsite	On-site, off-site, and hybrid (mix of on and off site). All options are CJIS compliant at the access level.
3.a.v.1	If saved offsite, specific data accessibility and storage costs	Off-site data is stored in a secure, CJIS compliant, Level 3 data center and is accessible to the agency 24/7/365 and dependent upon a user's permissions. Storage cost is calculated based upon estimated agency need and can be adjusted up or down as necessary every 90 days. There is no additional charge for accessing, downloading, or moving agency data from the off-site storage location.
3.a.v.2	Video data storage capacity local vs. cloud	Both options are based upon estimated agency need
3.a.v.3	Capability to accommodate multiple	Yes

	site installations	
3.a.vi	Export capabilities	Yes
3.a.vi.1	Traceability feature that shows which user exported the data	Yes
3.a.vii	Redacting/editing capabilities	Yes; the digital evidence management system has automatic, semi-automatic, and manual redaction capability for video and audio.
3.a.vii.1	Specify whether changes are permanent	In order to conduct redaction, a copy of the video or audio file is used. The original file is not permanently redacted.
3.a.viii	Support provided for chain-of-custody requirements	Yes; the digital evidence management platform in the solution maintains a full audit trail and supports complete chain-of-custody for the entire lifecycle of the video. This can be supported with documentation, technical demonstration, and testimony in a court of law if necessary.
3.a.ix	Scalability for different organization size	Yes
3.a.x	User management and role-based access levels	No information provided
3.b	Video Analytics	
3.b.i	Companion software to analyze recorded video and audio data	Yes
3.b.ii	Types of reports built into software	See below
3.b.ii.1	Standard reports	Yes
3.b.ii.2	Daily reports, historical reports, etc.	Yes
3.b.ii.3	Audit reports that support chain-of-custody requirements	Yes
3.b.ii.4	Customization of reports	Yes
3.b.iii	Facial recognition capabilities	No
3.b.iv	Weapons detection capabilities	No
3.b.v	Other analytical capabilities	N/A
3.c	Video Security and Authentication	
3.c.i	Compatibility of BWC video output with existing video management software for reviewing and recording	Yes; The BWC is saved in non-proprietary, industry standard formats. It is generally compatible with most industry standard video players and multiple video management software systems.
3.c.ii	File integrity checks to ensure authenticity	Yes; SHA-256 cryptographic hash algorithm
3.c.iii	Data protection mechanism while in transit and during storage	Yes; encryption and dual-authentication. Solution is CJIS compliant at the access level.
3.c.iv	Routine software updates	Updates typically occur every calendar quarter unless a patch or bug-fix is found to be necessary. Updating is done automatically for all backend and data management systems, cameras will be updated when they are docked.
3.c.v	Cost of software updates	None

RFI Q.#	Survey Question (abbreviated)	Response
Usability/Training		
4.a	Usability validation processes	All components of the solutions are designed to meet the most stringent security requirements, functionality,

		and mission critical reliability demands of daily law enforcement field use. VP360 works directly with the hardware and software manufacturers to design, test, analyze, and update the solution based upon the most commonly published criteria for BWC systems in the law enforcement market. VP360 frequently works directly with sworn officers and technologists in the law enforcement community to test and evaluate not just hardware, but the entire solution. Many of the features in place and on the update roadmap are a direct result of those working relationships. VP360 has conducted multiple proofs of concept and proofs of value as part of an effort to ensure the solution meets the practical and economical needs of the law enforcement market. Pre- and post-deployment assessments and multi-level user interviews are part of the standard corporate procedure. Customer feedback regarding items such as ease of use, video and audio quality, battery life, camera reliability, mounting issues, upload/download/export speeds, FOIA concerns, etc. are a regular part of the solution evaluation process.
4.b	User community data	VP360 maintains a regular working cadence with customers that include face-to-face meetings, phone conferences, and WebEx events. Customer feedback regarding items such as ease of use, video and audio quality, battery life, camera reliability, mounting issues, upload/download/export speeds, FOIA concerns, etc. are a regular part of the solution evaluation process.
4.c	User-group meetings and frequency	Currently the user-group interaction is limited to law enforcement agencies using and/or evaluating the solution.
4.d	Typical problems reported	<ul style="list-style-type: none"> • Reduced battery life when using high resolution record settings (50%) • Reduced battery life when using IR (75%) • Camera not recognized in docking station (10%) • Ear-mount bullet camera not stable (10%) • Slow recharge rate when multiple cameras were connected via USB to a computer (20%)
4.d.i	Resolution to problems	<ul style="list-style-type: none"> • Reduced battery life when using high resolution record settings - customer advised that higher resolution video will drain battery faster than factory default video resolution setting. • Reduced battery life when using IR - customer advised that IR use will drain battery at a faster rate. • Camera not recognized in docking station - In most occasions it was due to dirty contacts. Re-training the end user in cleaning the contacts and maintaining the camera resolved the issue. • Ear-mount bullet camera not stable - most agencies opt not to use ear or other head mounted bullet cameras because of their inherent stability

		<p>issues. In all cases VP360 advised users to reposition the camera to a chest/upper torso location or use the buttonhole external camera and the issue was resolved.</p> <ul style="list-style-type: none"> • Slow recharge rate when multiple cameras were connected via USB to a computer – this is a typical power related issue on the computer side due to the way USB ports draw power. Issue was resolved by having customer plug the single port docks into an AC power outlet or utilizing the multi-camera docking station to charge the cameras.
4.e	Hours of tech. support and location	<p>24/7/365 Help Desk Support Line – VP360 has a 1-800 support number that is answered by a live person in the United States. VP360 will engage the support process within 1 hour of receiving a call. A full-time, solution certified VP360 engineer will triage the problem and handle all escalation procedures. If an issue cannot be solved remotely VP360 will put an engineers on-site within 48 hours or less at no extra cost. As part of the support plan VP306 includes on-site hot swappable spare cameras and docking stations. If other back-end hardware components are part of the deployment package VP360 will include on-site spare for those as well. There is no additional cost for this. This support is offered for a minimum of 24 months with any purchase or for the lifetime of the subscription agreement. There is also complete hardware refresh (all brand new cameras and other components) for 36 month customers who renew at the end of their agreement for an additional 24 months. There is no additional cost for this option.</p>
4.f	Training provided (hours)	<p>VP360 provides the following on-site and WebEx seminar based solution training courses as part of the offering (includes BWC, digital evidence management software, and all appropriate hardware – times are approximate):</p> <ul style="list-style-type: none"> • User (2 hours) • Supervisor (3 hours) • Train-the-trainer (3 hours) • Evidence / redaction (2 hours) • System administrator (3 hours)

RFI Q.#	Survey Question (abbreviated)	Response
Installation		
5.a	Average time to install and activate	<p>Average time to install, conduct system testing, train, and go-live with the solution depends upon the agency size and all options purchased. Times stated assume contracts have been signed and product delivered on-site. Lead time for ordering and delivery is typically 14-30 days depending on quantities and certain options.</p>

		<p>Example: Deployment with 10 cameras, software, and integrated server/storage hardware at one location would take approximately 2-3 days on-site.</p> <p>Example: Deployment with 150 cameras, software, secure cloud storage, central video management server, and three separate precinct locations would take approximately 5-7 days on-site.</p> <p>Example: Deployment with 400 cameras, software, hybrid on-site/off-site cloud storage with disaster recovery, and 5 separate precinct locations would take approximately 9-12 days on-site.</p>
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4.57 VP360 Argus Gen 2 Digital BWC



Figure 57. VP360 Argus Gen 2 Digital BWC

RFI Q.#	Survey Question (abbreviated)	Response
Vendor Information		
0	Responded to FRN?	Yes
1.a	Name	Complete Integrated Solutions, LLC. DBA VP360
1.b	Address/phone number	2020 South McClintock, Suite 101, Tempe, AZ 85282 (888) 988-7630
1.c	Website	www.vp360sales.com
1.d	Years in business	2 years
1.e	Number and types of customers	50+ (municipal, county, state, federal, international)
1.f	Manufacturing location(s)	BWCS – Taiwan and China Digital Evidence Management - Escondido, CA Storage – Irvine, CA

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – BWC		
2.a	General	
2.a.i	Name and model number	Argus Gen 2 Digital BWC
2.a.ii	Physical dims (H" x W" x D")	3.5" H x 2.4" W x 1.18" D
2.a.iii	Weight (oz.)	5.9 oz
2.a.iv	Mounting options	Chest/upper torso, ear, button hole, shoulder tab
2.a.iv.1	Accessories needed for mounting	Comes standard with metal clip for chest/upper torso mounting. Optional mounting equipment includes cloth loop for permanent mounting option on zipper front shirts or other uniform tops, two-piece halo mount kit for mounting external bullet cam on head, button hole

		external camera (SD only) for clipping to uniform with limited space, and in-line pressure tab for mounting bullet camera (SD only) to shoulder tab.
2.a.v	Ability to mount on vehicle dashboard	Vehicle mounting to windshield
2.a.v.1	Accessories for vehicle dashboard mount	Suction cup mount
2.a.vi	LCD display	2" TFT LCD
2.a.vii	Recording capacity	16 GB up to 128 GB
2.a.viii	Operating conditions or limitations	Operating temperature: -4°F to 122°F Storage temperature: -22°F to 158°F IP67
2.b	Video and Optics	
2.b.i	Maximum video resolution	1080P
2.b.ii	Field of view	170°
2.b.iii	Lux rating	< 0.1
2.b.iv	Night mode/format	Yes; low light facial definition up to 10 meters and dual IR (auto or manual activation) lens' for low/no light conditions.
2.b.v	Recording speed	60 fps
2.b.vi	Recording format	H.265, MP4, AVI, and MOV
2.b.vii	Recording time under default resolution settings	8 hours
2.b.viii	Ability to capture still photos	Yes; 22 MP
2.b.ix	Ability to embed date/time stamp on recorded video	Yes
2.b.ix.1	Ability to authenticate and validate date/time stamp integrity	Yes; encrypted with the SHA-256 Cryptographic Hash Algorithm. There is also a full audit trail for maintaining complete chain of custody.
2.b.x	Pre-event recording feature	Yes
2.b.x.1	Time buffered and whether audio is recorded	30 seconds; audio included
2.b.xi	Event marking capability	Yes
2.b.xii	Wireless capabilities for communication	Yes
2.c	Audio	
2.c.i	Microphone feature	Yes
2.c.ii	Microphone sensitivity	High sensitivity
2.c.iii	Audio format	WAV
2.c.iv	Default police radio interface for BWC	Yes; For some portable radio models
2.d	Data Upload	
2.d.i	Single device vs. multiple upload docking station	Both
2.d.ii	Data transfer method	Wire (via single or multi-camera docking station) or wireless (optional)
2.d.iii	Manual vs. automatic upload	Automatically begin uploading once they are docked and support "interrupted upload" file integrity.
2.e	Battery Information	
2.e.i	Battery type; internal or removable	Internal 2800mAH Lithium battery, cannot be removed.
2.e.ii	Recording duration	8 hours
2.e.iii	Battery standby duration	Up to 18 hours
2.e.iv	Battery charge time	3 to 3.5 hours
2.e.v	Battery lifetime until replacement	Battery is guaranteed not to need replacement for the

		service life of the camera.
2.e.vi	Battery replacement procedure	N/A
2.e.vii	Availability of supplemental charger for emergency battery charging	Optional external battery packs available
2.f	GPS	
2.f.i	BWC possess GPS	Yes (optional)
2.f.i.1	Embedded GPS coordinates in recorded video	Yes
2.f.ii	Alternative geolocation methods	GSM/GPRS or 3G/4G
2.g	Consumer Testing Results	
2.g.i	Sturdiness/fragility	Both models are made from high impact durable plastics with no moving parts.
2.g.i.1	Drop test results	3 meter hard surface drop test
2.g.i.2	Dust intrusion/water resistance rating	IP67
2.g.i.3	Ruggedized	N/A
2.g.i.4	Pressure/depth	N/A
2.g.i.5	Shock	N/A
2.g.i.6	Vibrations	N/A
2.g.ii	Other environmental testing	N/A
2.g.ii.1	Specify tests, pass/fail results, and ratings received	CE, FCC, RoHS
2.h	Safeguards	
2.h.i	Privacy safeguards or features	Yes
2.h.i.1	Remote viewing	N/A
2.h.i.2	Remote activation/deactivation	Yes (optional feature)
2.h.i.3	Privacy masking	Yes; the solution has manual, semi-automatic, and automatic redaction capabilities for both video and audio. This allows for the blurring of faces and objects as well as editing audio.
2.h.i.4	Redacting/editing capabilities	Yes; the solution has manual, semi-automatic, and automatic redaction capabilities for both video and audio. This allows for the blurring of faces and objects as well as editing audio.
2.h.ii	Safeguards for cyber security, unintentional disassembly, etc.	No information provided
2.i	Regulatory	
2.i.i	Regulatory and Compliance safety requirements	CE, FCC, and RoHS approved
2.i.ii	Radiation safety standards	N/A
2.j	Warranty and Maintenance Plans	
2.j.i	Length of warranty (in months)	24 months; All components have a minimum 2 years, 100% warranty. When purchased as part of an annual subscription service all components are covered 100% for the life of the service agreement.
2.j.ii	Optional extended warranties	Yes
2.j.ii.1	Duration and cost of extended warranties	Optional annual warranty extensions are available on all components and are calculated based upon a percentage of the unit price.
2.j.iii	Availability of extended maintenance plans	Yes
2.j.iii.1	Duration and cost of extended maintenance plans	Optional annual software maintenance extensions are available and are calculated based upon the initial size of the project and growth over time.

2.j.iv	Service contract costs	Service contract costs are calculated as a percentage of the entire solution package at the time of purchase.
2.k	Auxiliary Equipment	
2.k.i	Manufacturer suggested retail price (MSRP) for each auxiliary equipment	<ul style="list-style-type: none"> • Multi-camera docking station \$550 • External cameras: buttonhole camera \$25 ear/shoulder mount bullet camera \$170 • External battery pack \$45 • Radio mic connector cable \$30 • Windshield suction cup mount \$15
2.l	MSRP without optional features, accessories, or service plans	\$295
2.m	Manufacturer's estimated lifetime of device	Minimum 3 years
2.n	Other relevant information	The Argus Body Worn Camera Solution is typically sold as an all-inclusive subscription service that includes cameras, multi—camera docks, digital evidence management software with redaction, all back-end video management hardware (video server, video evidence redaction workstations, video upload workstations, etc. as necessary), on- or off-premise secure storage, on-site hot swappable spare cameras and docks, and 24/7/365 service. The core of the system is the SoleraTec Phoenix Digital Evidence Management software. The solution is fully integrated, 100% supported for the duration of the agreement, and installed turn-key. Typical price-per camera/per month is between \$29.99 and \$54.99 based upon a 36-month agreement, number of cameras, and individual agency storage needs.

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – Software for Video Data Storage and Management		
3.a	Data Management	
3.a.i	Searching capabilities	Yes
3.a.ii	Categorizing capabilities	Yes
3.a.iii	Tagging capabilities	Yes
3.a.iv	Archiving and file retention	Yes; This is based upon the agency's video retention policy. VP360 can accommodate multiple archiving configurations and retention needs including complete geo-dispersed disaster recovery.
3.a.v	Data saved on or offsite	On-site, off-site, and hybrid (mix of on and off site). All options are CJIS compliant at the access level.
3.a.v.1	If saved offsite, specific data accessibility and storage costs	Off-site data is stored in a secure, CJIS compliant, Level 3 data center and is accessible to the agency 24/7/365 and dependent upon a user's permissions. Storage cost is calculated based upon estimated agency need and can be adjusted up or down as necessary every 90 days. There is no additional charge for accessing, downloading, or moving agency data from the off-site storage location.
3.a.v.2	Video data storage capacity local	Both options are based upon estimated agency need

	vs. cloud	
3.a.v.3	Capability to accommodate multiple site installations	Yes
3.a.vi	Export capabilities	Yes
3.a.vi.1	Traceability feature that shows which user exported the data	Yes
3.a.vii	Redacting/editing capabilities	Yes; the digital evidence management system has automatic, semi-automatic, and manual redaction capability for video and audio.
3.a.vii.1	Specify whether changes are permanent	In order to conduct redaction, a copy of the video or audio file is used. The original file is not permanently redacted.
3.a.viii	Support provided for chain-of-custody requirements	Yes; The digital evidence management platform in the solution maintains a full audit trail and supports complete chain-of-custody for the entire lifecycle of the video. This can be supported with documentation, technical demonstration, and testimony in a court of law if necessary.
3.a.ix	Scalability for different organization size	Yes
3.a.x	User management and role-based access levels	No information provided
3.b	Video Analytics	
3.b.i	Companion software to analyze recorded video and audio data	Yes
3.b.ii	Types of reports built into software	See below
3.b.ii.1	Standard reports	Yes
3.b.ii.2	Daily reports, historical reports, etc.	Yes
3.b.ii.3	Audit reports that support chain-of-custody requirements	Yes
3.b.ii.4	Customization of reports	Yes
3.b.iii	Facial recognition capabilities	No
3.b.iv	Weapons detection capabilities	No
3.b.v	Other analytical capabilities	N/A
3.c	Video Security and Authentication	
3.c.i	Compatibility of BWC video output with existing video management software for reviewing and recording	Yes; the BWC is saved in non-proprietary, industry standard formats. It is generally compatible with most industry standard video players and multiple video management software systems.
3.c.ii	File integrity checks to ensure authenticity	Yes; SHA-256 cryptographic hash algorithm
3.c.iii	Data protection mechanism while in transit and during storage	Yes; Encryption and dual-authentication. Solution is CJIS compliant at the access level.
3.c.iv	Routine software updates	Updates typically occur every calendar quarter unless a patch or bug-fix is found to be necessary. Updating is done automatically for all backend and data management systems, cameras will be updated when they are docked.
3.c.v	Cost of software updates	None

RFI Q.#	Survey Question (abbreviated)	Response
Usability/Training		

4.a	Usability validation processes	All components of the solutions are designed to meet the most stringent security requirements, functionality, and mission critical reliability demands of daily law enforcement field use. VP360 works directly with the hardware and software manufacturers to design, test, analyze, and update the solution based upon the most commonly published criteria for BWC systems in the law enforcement market. VP360 frequently works directly with sworn officers and technologists in the law enforcement community to test and evaluate not just hardware, but the entire solution. Many of the features VP360 has in place, and on an update roadmap, are a direct result of those working relationships. The vendor has conducted multiple proofs of concept and proofs of value as part of the effort to ensure the solution meets the practical and economical needs of the law enforcement market. Pre- and post-deployment assessments and multi-level user interviews are part of the vendors standard corporate procedure. Customer feedback regarding items such as ease of use, video and audio quality, battery life, camera reliability, mounting issues, upload/download/export speeds, FOIA concerns, etc. are a regular part of the solution evaluation process.
4.b	User community data	The vendor maintain a regular working cadence with customers that includes face-to-face meetings, phone conferences, and WebEx events. Customer feedback regarding items such as ease of use, video and audio quality, battery life, camera reliability, mounting issues, upload/download/export speeds, FOIA concerns, etc. are a regular part of the solution evaluation process.
4.c	User-group meetings and frequency	The vendor currently limits user-group interactions to law enforcement agencies using and/or evaluating the solution.
4.d	Typical problems reported	<ul style="list-style-type: none"> • Reduced battery life when using high resolution record settings (50%). • Reduced battery life when using IR (75%) • Camera not recognized in docking station (10%) • Ear-mount bullet camera not stable (10%) • Slow recharge rate when multiple cameras were connected via USB to a computer (20%)
4.d.i	Resolution to problems	<ul style="list-style-type: none"> • Reduced battery life when using high resolution record settings - customer advised that higher resolution video will drain battery faster than factory default video resolution setting. • Reduced battery life when using IR - customer advised that IR use will drain battery at a faster rate. • Camera not recognized in docking station - In most occasions it was due to dirty contacts. Re-training the end user in cleaning the contacts and maintaining the camera resolved the issue.

		<ul style="list-style-type: none"> • Ear-mount bullet camera not stable - most agencies opt not to use ear or other head mounted bullet cameras because of their inherent stability issues. In all cases it was advised to reposition the camera to a chest/upper torso location or use the buttonhole external camera and the issue was resolved. • Slow recharge rate when multiple cameras were connected via USB to a computer – This is a typical power related issue on the computer side due to the way USB ports draw power. Issue was resolved by having customer plug the single port docks into an AC power outlet or utilizing the multi-camera docking station to charge the cameras.
4.e	Hours of tech. support and location	<p>24/7/365 Help Desk Support Line – VP360 has a 1-800 support number that is answered by a live person in the United States. VP360 will engage the support process within 1 hour of receiving a call. A full-time, solution certified VP360 engineer will triage the problem and handle all escalation procedures. If an issue cannot be solved remotely an engineer will be put on-site within 48 hours or less at no extra cost. As part of the support plan that includes on-site hot swappable spare cameras and docking stations. If other back-end hardware components are part of the deployment package VP360 will include on-site spare for those as well. There is no additional cost for this. This support is offered for a minimum of 24 months with any purchase or for the lifetime of the subscription agreement. There is also have complete hardware refresh (all brand new cameras and other components) for 36 month customers who renew at the end of their agreement for an additional 24 months. There is no additional cost for this option.</p>
4.f	Training provided (hours)	<p>VP360 provides the following on-site and WebEx seminar based solution training courses as part of the offering (includes BWC, digital evidence management software, and all appropriate hardware – times are approximate):</p> <ul style="list-style-type: none"> • User (2 hours) • Supervisor (3 hours) • Train-the-trainer (3 hours) • Evidence / redaction (2 hours) • System administrator (3 hours)

RFI Q.#	Survey Question (abbreviated)	Response
Installation		
5.a	Average time to install and activate	<p>Average time to install, conduct system testing, train, and go-live with the solution depends upon the agency size and all options purchased. Times stated assume contracts have been signed and product delivered on-</p>

		<p>site. Lead time for ordering and delivery is typically 14-30 days depending on quantities and certain options.</p> <p>Example: Deployment with 10 cameras, software, and integrated server/storage hardware at one location would take approximately 2-3 days on-site.</p> <p>Example: Deployment with 150 cameras, software, secure cloud storage, central video management server, and three separate precinct locations would take approximately 5-7 days on-site.</p> <p>Example: Deployment with 400 cameras, software, hybrid on-site/off-site cloud storage with disaster recovery, and 5 separate precinct locations would take approximately 9-12 days on-site.</p>
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4.58 WatchGuard Vista Extended Capacity



Figure 58. WatchGuard Vista Extended Capacity

RFI Q.#	Survey Question (abbreviated)	Response
Vendor Information		
0	Responded to FRN?	Yes
1.a	Name	Enforcement Video, LLC d/b/a WatchGuard Video
1.b	Address/phone number	415 Century Parkway, Allen, TX 75013 (972) 423-9777
1.c	Website	www.watchguardvideo.com
1.d	Years in business	WatchGuard was founded in 2002 and began full production of its mobile video products in September of 2005, with initial shipments beginning in October 2005.
1.e	Number and types of customers	WatchGuard currently has approximately 6,000 law enforcement agencies as customers and over 72,000 mobile DVR systems in the field. WatchGuard has moved solidly into the number one market share position for US sales of digital police in-car video systems. Even with about 20 companies competing in this market, nearly 1 in 4 systems sold in the US today are manufactured by WatchGuard
1.f	Manufacturing location(s)	All product manufacturing is done domestically in the company's 65,000 square foot facility located in Allen, Texas. The North Texas facility features an engineering laboratory, customer service installation bay, pristine production space, and a state-of-the-art training room. All engineering, assembly, and factory service is conducted in this facility.

RFI Q.#	Survey Question (abbreviated)	Response
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Product Information – BWC		
2.a	General	
2.a.i	Name and model number	Vista HD Extended Capacity – VIS-EXT-KIT-001
2.a.ii	Physical dims (H" x W" x D")	3.06" H x 1.87" W x 1.08" D
2.a.iii	Weight (oz.)	5.3 oz
2.a.iv	Mounting options	Chest, head
2.a.iv.1	Accessories needed for mounting	Chest mount system, rotatable shirt clip, duty belt clip, molle loop mount, velcro® plate mount, KlickFast® mount, tripod mount, and RAM® mount. A future release of VISTA, scheduled for 2016, will include a 2-Piece unit that has a sensor head separate from the DVR / battery module that will allow for additional mounting options.
2.a.v	Ability to mount on vehicle dashboard	Yes
2.a.v.1	Accessories for vehicle dashboard mount	RAM mount
2.a.vi	LCD display	No; but can view playback via smartphone app
2.a.vii	Recording capacity	32 GB
2.a.viii	Operating conditions or limitations	VISTA is designed with complete industrial grade components and constructed with cast magnesium, polyurethane rubber and a military grade polyetherimide resin. The camera is ultra-rugged, weatherproof, and has an operating temperature range of -40°F to 185°F. VISTA is designed to withstand years of real world use in the law enforcement environment. VISTA is designed to meet IP54 waterproof and drop test standards, and is MIL-STD-810F certified.
2.b	Video and Optics	
2.b.i	Maximum video resolution	720p
2.b.ii	Field of view	130°
2.b.iii	Lux rating	0.85 lux
2.b.iv	Night mode/format	Yes; VISTA uses Ultra-WDR (Wide Dynamic Range) technology that dramatically improves video quality in nighttime video and difficult lighting situations. For every frame of video, the camera actually takes two separate images, a dark exposure and a light exposure. The camera then automatically blends the two images into a single video frame. The result is an ideally exposed picture that keeps bright areas from being over-exposed and keeps darker areas from turning black.
2.b.v	Recording speed	30 fps
2.b.vi	Recording format	MP4
2.b.vii	Recording time under default resolution settings	<ul style="list-style-type: none"> 9 hours of recording at 720P 10 hours of recording at 480P
2.b.viii	Ability to capture still photos	No; but is possible in the evidence management software (Evidence Library). Evidence Library's built-in media player includes snapshot, copy/export and trimming features. Converted or modified files are saved without altering the original recording.
2.b.ix	Ability to embed date/time stamp on recorded video	Yes
2.b.ix.1	Ability to authenticate and validate date/time stamp integrity	Yes; video files include an MD5 hash that is validated during every transaction for that file. The audit log

		contains a full report of the results of the hashing. Evidence Library (WatchGuard software) maintains a complete audit trail for each device and event that is transferred, viewed and exported. It includes the results of the MD5 hashing and all user transactions.
2.b.x	Pre-event recording feature	Yes; in addition to offering pre-event recording, VISTA includes WatchGuard Video's patented Record-After-the-Fact (RATF) feature. With VISTA, continuous background recording can be enabled so that agencies can use RATF to go back in time and record an event after it happened – up to a day later. This means that agencies will not have to worry about missing critical evidence. VISTA can be administratively configured to include pre-event and RATF or to disable. The agency also has the choice of whether or not audio is included. Pre-event and RATF do not impact the battery life described above. The battery life descriptions provided are actual times with all features active.
2.b.x.1	Time buffered and whether audio is recorded	15 seconds, up to 10 minutes; audio can be administratively configured to be active during pre-event and RATF.
2.b.xi	Event marking capability	Yes; files can be bookmarked once transferred to Evidence Library, VISTA's evidence management software.
2.b.xii	Wireless capabilities for communication	No
2.c	Audio	
2.c.i	Microphone feature	Yes
2.c.ii	Microphone sensitivity	High fidelity microphone that produces true CD audio quality. The silicon based audio sensor eliminates distortion from loud sounds while still picking up soft spoken speech. The sophisticated acoustic foam chamber also blocks most wind noise.
2.c.iii	Audio format	AAC
2.c.iv	Default police radio interface for BWC	No
2.d	Data Upload	
2.d.i	Single device vs. multiple upload docking station	Both; USB docking base for single camera (transfers 1 GB in under 90 seconds). Ethernet transfer station uploads and recharges 8 VISTA cameras simultaneously.
2.d.ii	Data transfer method	USB or Ethernet. WatchGuard has designed a very rugged USB base that is used for transferring video and thus eliminated what is often the weakest piece in a wearable camera solution.
2.d.iii	Manual vs. automatic upload	Video uploads are automatic with VISTA's Dock and Go functionality. Simply dock the camera and walk away. Even if the camera is off or the battery is completely drained, the USB base will power it on and initiate the file transfer.
2.e	Battery Information	
2.e.i	Battery type; internal or removable	Lithium polymer internal battery
2.e.ii	Recording duration	9 hours of recording at 720p resolution; 10 hours of recording at 480p resolution

2.e.iii	Battery standby duration	19 hours
2.e.iv	Battery charge time	< 4 hours
2.e.v	Battery lifetime until replacement	At the vendors charge voltage level configuration the battery life cycle according to the battery manufacture will be approximately down to 85% of its original capacity after 300 complete discharge and complete charge cycles at room temperature.
2.e.vi	Battery replacement procedure	The vendor recommends factory replacement of batteries. An advanced replacement unit can be shipped to the department to reduce downtime.
2.e.vii	Availability of supplemental charger for emergency battery charging	VISTA can be charged in either the USB base connected to a workstation or directly to power. The 8-Bay Ethernet Transfer Station will also charge cameras while transferring video. VISTA WiFi will include an in-car charging cradle that can also be used for charging while in the field.
2.f	GPS	
2.f.i	BWC possess GPS	No
2.f.i.1	Embedded GPS coordinates in recorded video	N/A
2.f.ii	Alternative geolocation methods	N/A
2.g	Consumer Testing Results	
2.g.i	Sturdiness/fragility	Robust materials: cast magnesium, polyurethane rubber, military-grade ultra-hard resin, and industrial-grade electronics.
2.g.i.1	Drop test results	Designed to meet IP54 waterproof and drop test standards
2.g.i.2	Dust intrusion/water resistance rating	Designed to meet IP54 waterproof and drop test standards
2.g.i.3	Ruggedized	Yes, military grade; MIL-STD-810F
2.g.i.4	Pressure/depth	Information not found on website
2.g.i.5	Shock	Information not found on website
2.g.i.6	Vibrations	Information not found on website
2.g.ii	Other environmental testing	Information not found on website
2.g.ii.1	Specify tests, pass/fail results, and ratings received	VISTA has also passed the following testing: <ul style="list-style-type: none"> • CE CISPR 22 Class B for Radiated Emissions • CE EN6100 for Immunity • MIL-810G US Highway vibration • RoHS
2.h	Safeguards	
2.h.i	Privacy safeguards or features	VISTA prevents video files from being modified or deleted on the camera prior to transfer. After transfer the evidence management software, Evidence Library, protects files using security and access privileges and settings.
2.h.i.1	Remote viewing	No
2.h.i.2	Remote activation/deactivation	No
2.h.i.3	Privacy masking	No
2.h.i.4	Redacting/editing capabilities	No
2.h.ii	Safeguards for cyber security, unintentional disassembly, etc.	Using on premise storage, video now resides within the secured infrastructure of the agency, protected by all access controls security in place protecting other essential evidence and databases. When using cloud storage through Azure Government Cloud, all security

		and CJIS compliance in place apply to the data moving to, from, and stored in the cloud.
2.i	Regulatory	
2.i.i	Regulatory and Compliance safety requirements	VISTA was designed to meet all major standards and requirements for safety and radiation, including FCC and CE CISPR 22 Class B for Radiated Emissions.
2.i.ii	Radiation safety standards	VISTA was designed to meet all major standards and requirements for safety and radiation, including FCC and CE CISPR 22 Class B for Radiated Emissions.
2.j	Warranty and Maintenance Plans	
2.j.i	Length of warranty (in months)	12 months
2.j.ii	Optional extended warranties	36 months
2.j.ii.1	Duration and cost of extended warranties	Extended hardware warranty for VISTA may be purchased to cover the system for up to 36 months at \$380 per device. A 36 month hardware/software bundle is available at \$580 per device.
2.j.iii	Availability of extended maintenance plans	Software: May be extended annually at \$150 per device, per 12 months. A 36 month hardware/software bundle is available at \$580 per device
2.j.iii.1	Duration and cost of extended maintenance plans	Software: May be extended annually at \$150 per device, per 12 months. A 36 month hardware/software bundle is available at \$580 per device
2.j.iv	Service contract costs	24/7 service and support are included at no additional cost to the agency for the life of the product. Out of warranty repairs and replacements can be quoted on an as needed basis.
2.k	Auxiliary Equipment	
2.k.i	Manufacturer suggested retail price (MSRP) for each auxiliary equipment	<ul style="list-style-type: none"> • Locking magnetic chest mount (w/o Straps) \$65 • Adjustable strap kit, for magnetic mount \$25 • Shirt clip with slider \$40 • Duty belt clip \$25 • Molle vest adapter clip \$25 • Tripod mount base adapter \$45 • Velcro backing plate \$25 • Klick-Fast mount adapter \$45 • Ram mount kit \$45 • Suction cup RAM mount kit 6" arm \$155 • 7 Port USB hub w/external power supply \$40 • Battery, Li-ion, 3.6V 2700mA, standard \$40 • Battery, Li-ion, 3.6VDC 4050 MA, extended \$55 • 4RE, Smart PoE switch \$250 • USB charge and upload docking base \$120 • WiFi charging radio base station \$250 • 8 Bay ethernet transfer station \$1870
2.l	MSRP without optional features, accessories, or service plans	<ul style="list-style-type: none"> • MSRP \$1120 • List \$895
2.m	Manufacturer's estimated lifetime of device	3 years of continuous use
2.n	Other relevant information	N/A

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – Software for Video Data Storage and Management		
3.a	Data Management	
3.a.i	Searching capabilities	Yes, through Evidence Library for web software. Searches are performed live on the search bar, which can be simple or complex in nature, allowing all types of searches to be performed from the same area without leaving the main records events screen. The ability to perform complex searches on the search bar allows for building and saving complex searches using multiple fields, with both specific values or across ranges in a graphical environment.
3.a.ii	Categorizing capabilities	Yes; in-field event categorization, using pre-defined event list. Creating and editing the event tags is done globally using either a wizard or by manually creating them.
3.a.iii	Tagging capabilities	Yes; Evidence Library includes this functionality. Additional tags and notes can be added to the video file once transferred to Evidence Library by a user with the appropriate permissions.
3.a.iv	Archiving and file retention	<p>Yes; rules are created in the Evidence Management section of Evidence Library that determine how long video is kept before it is either deleted or archived. This section leverages the event category that was selected on the camera or later identified in the client. For each event category listed, the department is allowed to specify an action that is performed and at what interval it is performed. Both the retention period and the action performed on the event are choices left up to the department.</p> <p>Data cleanup is configurable to run on a schedule automatically or manually at times initiated by a user with Evidence management permissions.</p> <p>The VISTA Back Office Solution is architected in such a way that there are two types of stored video; online and archive. Online video refers to video whose dynamic metadata is still contained within the SQL tables. The video files themselves are stored on a secure storage device readily accessible by the server. Archive video is video whose dynamic metadata and video have been removed from the SQL tables and packaged into a file folder (archive location). An archived video will not show up in searches related to dynamic metadata (such as GPS radius searches) but can quickly be found using the static metadata (date, officer name, vehicle ID, etc.) and, if needed, re-imported into the active storage.</p>
3.a.v	Data saved on or offsite	On premise data storage using Evidence Library 4 Web software
3.a.v.1	If saved offsite, specific data accessibility and storage costs	Cloud storage will be available in Q4 2016.
3.a.v.2	Video data storage capacity local	A scalable local or cloud storage solution can be built

	vs. cloud	based on the department's recording habits and retention requirements.
3.a.v.3	Capability to accommodate multiple site installations	Yes, Evidence Library and VISTA can be deployed in a centralized deployment with multiple locations.
3.a.vi	Export capabilities	Yes, to DVD-video, AVI, WMV, MPEG-2
3.a.vi.1	Traceability feature that shows which user exported the data	Yes; Evidence Library maintains a complete audit trail for each device and event that is transferred, viewed and exported.
3.a.vii	Redacting/editing capabilities	No; under development
3.a.vii.1	Specify whether changes are permanent	Trimmed events are saved as new files; the original file is not modified.
3.a.viii	Support provided for chain-of-custody requirements	Evidence Library includes a full audit log that can be exported with a video file.
3.a.ix	Scalability for different organization size	Yes; Evidence Library is an easily scalable solution that can accommodate a small agency with just a few users, up to thousands of devices and users.
3.a.x	User management and role-based access levels	Yes; role-based access security: administrator, supervisor, evidence custodian, user (officer)
3.b	Video Analytics	
3.b.i	Companion software to analyze recorded video and audio data	Evidence Library 4 Web; Evidence Library Express (ELX-3) for standalone PC
3.b.ii	Types of reports built into software	<p>The ability to perform complex searches on the Search bar allows for building and saving complex searches using multiple fields, with both specific values or across ranges in a graphical environment. For example, a search could easily be created to find any recordings in the last 60 days tagged as "Traffic" or "Other", with a radar target speed of 55 MPH or higher, that occurred within 1.25 miles of a specific GPS location.</p> <p>Evidence Library uses SQL databases which can be used to build custom reports.</p>
3.b.ii.1	Standard reports	Reports can be built using the SQL database.
3.b.ii.2	Daily reports, historical reports, etc.	Reports can be built using the SQL database.
3.b.ii.3	Audit reports that support chain-of-custody requirements	Each video file includes an audit log to support chain-of-custody requirements.
3.b.ii.4	Customization of reports	The SQL database can be used to build and customize reports.
3.b.iii	Facial recognition capabilities	N/A
3.b.iv	Weapons detection capabilities	N/A
3.b.v	Other analytical capabilities	N/A
3.c	Video Security and Authentication	
3.c.i	Compatibility of BWC video output with existing video management software for reviewing and recording	Yes, Evidence Library includes the ability to perform case management, which allows the ability for case "container" creation and content management. With this feature, users may associate one or more VISTA or 4RE recordings with a case, as well as other general user files such as: PDFs, spreadsheets, reports, videos from 3 rd party systems, audio recordings, still pictures, drawings, etc. Cases can be further managed by adding users as case workers with specific sets of permissions for that case.
3.c.ii	File integrity checks to ensure	Yes; each file is subjected to a 128 bit MD5 hash. Hash

	authenticity	values are compared with each transaction for the video. Results of the file hashing are included in the audit log for the video file.
3.c.iii	Data protection mechanism while in transit and during storage	Yes; data encryption
3.c.iv	Routine software updates	Major software and firmware upgrades and enhancements are released every 9 to 12 months. These are delivered via an upgrade / update disc sent to the agency, or through a website downloadable file.
3.c.v	Cost of software updates	Software updates are provided at no additional charge if the department is covered under a current software maintenance plan.

RFI Q.#	Survey Question (abbreviated)	Response
Usability/Training		
4.a	Usability validation processes	Yes; through substantial research and development
4.b	User community data	WatchGuard Video constantly receives feedback and suggestions from current customers and industry experts to incorporate features and product improvements. WatchGuard is open to this feedback, either formally or informally from hands-on training, beta test sites, repeat customers, and requested customizations that could be beneficial to other customers.
4.c	User-group meetings and frequency	WatchGuard Video hosts frequent showcases and interactive webinars, as well as participating in established meetings and trade shows.
4.d	Typical problems reported	<p>The following categories rank as the top three issues reported by customers to WatchGuard Video Customer Service regarding the current body worn camera (VISTA® HD Body Camera). The percentage represents the number of customer accounts with VISTA reporting the issue from among all customer accounts with VISTA:</p> <ul style="list-style-type: none"> • Will not complete boot (Less than 1%) • Camera body mount issues (Less than 1%) • Button(s) unresponsive (Less than 1%)
4.d.i	Resolution to problems	<p>The following resolutions were made respectively:</p> <ul style="list-style-type: none"> • New firmware was made available to all customers free of charge • Released mechanical changes • New firmware was made available to all customers free of charge
4.e	Hours of tech. support and location	WatchGuard Video representatives are available 24/7 to answer questions and assist with technical issues. WatchGuard Video help desk is available to all customers for the life of their products at no additional cost to the agency. Available reporting methods include telephone support, email, and web portal.
4.f	Training provided (hours)	WatchGuard Video will provide on-site user and

		administrator training for the camera hardware and software. User guides and online training are also available.
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RFI Q.#	Survey Question (abbreviated)	Response
Installation		
5.a	Average time to install and activate	<p>This is dependent on the solution deployed. VISTA with Evidence Library Express can be installed and configured in a day.</p> <p>A full deployment with Evidence Library is generally executed within 6-8 weeks.</p> <p>Actual time on-site for an Evidence Library deployment is 3-5 days.</p>

4.59 WatchGuard Vista Standard Capacity



Figure 59. WatchGuard Vista Standard Capacity

RFI Q.#	Survey Question (abbreviated)	Response
Vendor Information		
0	Responded to FRN?	Yes
1.a	Name	Enforcement Video, LLC d/b/a WatchGuard Video
1.b	Address/phone number	415 Century Parkway, Allen, TX 75013 (972) 423-9777
1.c	Website	www.watchguardvideo.com
1.d	Years in business	WatchGuard was founded in 2002 and began full production of its mobile video products in September of 2005, with initial shipments beginning in October 2005.
1.e	Number and types of customers	WatchGuard currently has approximately 6,000 law enforcement agencies as customers and over 72,000 mobile DVR systems in the field. WatchGuard has moved solidly into the number one market share position for US sales of digital police in-car video systems. Even with about 20 companies competing in this market, nearly 1 in 4 systems sold in the US today are manufactured by WatchGuard.
1.f	Manufacturing location(s)	All product manufacturing is done domestically in the company's 65,000 square foot facility located in Allen, Texas. The North Texas facility features an engineering laboratory, customer service installation bay, pristine production space, and a state-of-the-art training room. All engineering, assembly, and factory service is conducted in this facility.

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – BWC		
2.a	General	
2.a.i	Name and model number	Vista HD Standard Capacity – VIS-STD-KIT-001
2.a.ii	Physical dims (H" x W" x D")	3.06" H x 1.87" W x 0.87" D
2.a.iii	Weight (oz.)	4.25 oz
2.a.iv	Mounting options	Chest, head
2.a.iv.1	Accessories needed for mounting	Chest mount system, rotatable shirt clip, duty belt clip, Molle loop mount, Velcro® plate mount, Klick Fast® mount, tripod mount, and RAM® mount. A future release of VISTA, scheduled for 2016, will include a 2-Piece unit that has a sensor head separate from the DVR / battery module that will allow for additional mounting options.
2.a.v	Ability to mount on vehicle dashboard	Yes
2.a.v.1	Accessories for vehicle dashboard mount	RAM mount
2.a.vi	LCD display	No; but can view playback via smartphone app
2.a.vii	Recording capacity	32 GB
2.a.viii	Operating conditions or limitations	VISTA is designed with complete industrial grade components and constructed with cast magnesium, polyurethane rubber and a military grade Polyetherimide resin. The camera is ultra-rugged, weatherproof, and has an operating temperature range of -40°F to 185°F. VISTA is designed to withstand years of real world use in the law enforcement environment. VISTA is designed to meet IP54 waterproof and drop test standards, and is MIL-STD-810F certified.
2.b	Video and Optics	
2.b.i	Maximum video resolution	720p
2.b.ii	Field of view	130°
2.b.iii	Lux rating	0.85 lux
2.b.iv	Night mode/format	Yes; VISTA uses Ultra-WDR (Wide Dynamic Range) technology that dramatically improves video quality in nighttime video and difficult lighting situations. For every frame of video, the camera actually takes two separate images, a dark exposure and a light exposure. The camera then automatically blends the two images into a single video frame. The result is an ideally exposed picture that keeps bright areas from being over-exposed and keeps darker areas from turning black.
2.b.v	Recording speed	30 fps
2.b.vi	Recording format	MP4
2.b.vii	Recording time under default resolution settings	<ul style="list-style-type: none"> • 6 hours of recording at 720P • 6.7 hours of recording at 480P
2.b.viii	Ability to capture still photos	No; but is possible in the evidence management software (Evidence Library). Evidence Library's built-in media player includes snapshot, copy/export and trimming features. Converted or modified files are saved without altering the original recording.
2.b.ix	Ability to embed date/time stamp on	Yes

	recorded video	
2.b.ix.1	Ability to authenticate and validate date/time stamp integrity	Yes; video files include an MD5 hash that is validated during every transaction for that file. The audit log contains a full report of the results of the hashing. Evidence Library (vendor's software) maintains a complete audit trail for each device and event that is transferred, viewed and exported. It includes the results of the MD5 hashing and all user transactions.
2.b.x	Pre-event recording feature	Yes; in addition to offering pre-event recording, VISTA includes WatchGuard Video's patented Record-After-the-Fact (RATF) feature. With VISTA, continuous background recording can be enabled so that agencies can use RATF to go back in time and record an event after it happened – up to a day later. This means that agencies will not have to worry about missing critical evidence. VISTA can be administratively configured to include pre-event and RATF or to disable. The agency also has the choice of whether or not audio is included. Pre-event and RATF do not impact the battery life described above. The battery life descriptions provided are actual times with all features active.
2.b.x.1	Time buffered and whether audio is recorded	15 seconds, up to 10 minutes; audio can be administratively configured to be active during pre-event and RATF.
2.b.xi	Event marking capability	Yes; files can be bookmarked once transferred to Evidence Library, VISTA's evidence management software.
2.b.xii	Wireless capabilities for communication	No
2.c	Audio	
2.c.i	Microphone feature	Yes
2.c.ii	Microphone sensitivity	High fidelity microphone that produces true CD audio quality. The silicon based audio sensor eliminates distortion from loud sounds while still picking up soft spoken speech. The sophisticated acoustic foam chamber also blocks most wind noise.
2.c.iii	Audio format	AAC
2.c.iv	Default police radio interface for BWC	No
2.d	Data Upload	
2.d.i	Single device vs. multiple upload docking station	Both; USB docking base for single camera (transfers 1 GB in under 90 seconds). Ethernet transfer station uploads and recharges 8 VISTA cameras simultaneously.
2.d.ii	Data transfer method	USB or Ethernet. WatchGuard has designed a very rugged USB base that is used for transferring video and thus eliminated what is often the weakest piece in a wearable camera solution.
2.d.iii	Manual vs. automatic upload	Video uploads are automatic with VISTA's Dock and Go functionality. Simply dock the camera and walk away. Even if the camera is off or the battery is completely drained, the USB base will power it on and initiate the file transfer.
2.e	Battery Information	

2.e.i	Battery type; internal or removable	Lithium polymer internal battery
2.e.ii	Recording duration	6 hours of recording at 720p resolution; 6.7 hours of recording at 480p resolution
2.e.iii	Battery standby duration	12.5 hours
2.e.iv	Battery charge time	< 4 hours
2.e.v	Battery lifetime until replacement	At the vendor's charge voltage level configuration the battery life cycle according to the battery manufacture will be approximately down to 85% of its original capacity after 300 complete discharge and complete charge cycles at room temperature.
2.e.vi	Battery replacement procedure	The vendor recommends factory replacement of batteries. An advanced replacement unit can be shipped to the department to reduce downtime.
2.e.vii	Availability of supplemental charger for emergency battery charging	VISTA can be charged in either the USB base connected to a workstation or directly to power. The 8-Bay Ethernet Transfer Station will also charge cameras while transferring video. VISTA WiFi will include an in-car charging cradle that can also be used for charging while in the field.
2.f	GPS	
2.f.i	BWC possess GPS	No
2.f.i.1	Embedded GPS coordinates in recorded video	N/A
2.f.ii	Alternative geolocation methods	N/A
2.g	Consumer Testing Results	
2.g.i	Sturdiness/fragility	Robust materials: cast magnesium, polyurethane rubber, military-grade ultra-hard resin, and industrial-grade electronics.
2.g.i.1	Drop test results	Designed to meet IP54 waterproof and drop test standards
2.g.i.2	Dust intrusion/water resistance rating	Designed to meet IP54 waterproof and drop test standards
2.g.i.3	Ruggedized	Yes, military grade; MIL-STD-810F
2.g.i.4	Pressure/depth	Information not found on website
2.g.i.5	Shock	Information not found on website
2.g.i.6	Vibrations	Information not found on website
2.g.ii	Other environmental testing	Information not found on website
2.g.ii.1	Specify tests, pass/fail results, and ratings received	VISTA has also passed the following testing: <ul style="list-style-type: none"> • CE CISPR 22 Class B for radiated emissions • CE EN6100 for immunity • MIL-810G US highway vibration • RoHS
2.h	Safeguards	
2.h.i	Privacy safeguards or features	VISTA prevents video files from being modified or deleted on the camera prior to transfer. After transfer the evidence management software, Evidence Library, protects files using security and access privileges and settings.
2.h.i.1	Remote viewing	No
2.h.i.2	Remote activation/deactivation	No
2.h.i.3	Privacy masking	No
2.h.i.4	Redacting/editing capabilities	No
2.h.ii	Safeguards for cyber security, unintentional disassembly, etc.	Using on premise storage, video now resides within the secured infrastructure of the agency, protected by all

		access controls security in place protecting other essential evidence and databases. When using cloud storage through Azure Government Cloud, all security and CJIS compliance in place apply to the data moving to, from, and stored in the cloud.
2.i	Regulatory	
2.i.i	Regulatory and Compliance safety requirements	VISTA was designed to meet all major standards and requirements for safety and radiation, including FCC and CE CISPR 22 Class B for radiated emissions.
2.i.ii	Radiation safety standards	VISTA was designed to meet all major standards and requirements for safety and radiation, including FCC and CE CISPR 22 Class B for radiated emissions.
2.j	Warranty and Maintenance Plans	
2.j.i	Length of warranty (in months)	12 months
2.j.ii	Optional extended warranties	36 months
2.j.ii.1	Duration and cost of extended warranties	Extended hardware warranty for VISTA may be purchased to cover the system for up to 36 months at \$380 per device. A 36 month hardware/software bundle is available at \$580 per device.
2.j.iii	Availability of extended maintenance plans	Software: may be extended annually at \$150 per device, per 12 months. A 36 month hardware/software bundle is available at \$580 per device
2.j.iii.1	Duration and cost of extended maintenance plans	Software: may be extended annually at \$150 per device, per 12 months. A 36 month hardware/software bundle is available at \$580 per device
2.j.iv	Service contract costs	24/7 service and support are included at no additional cost to the agency for the life of the product. Out of warranty repairs and replacements can be quoted on an as needed basis.
2.k	Auxiliary Equipment	
2.k.i	Manufacturer suggested retail price (MSRP) for each auxiliary equipment	<ul style="list-style-type: none"> • Locking magnetic chest mount (w/o straps) \$65 • Adjustable strap kit, for magnetic mount \$25 • Shirt clip with slider \$40 • Duty belt clip \$25 • Molle vest adapter clip \$25 • Tripod mount base adapter \$45 • Velcro backing plate \$25 • Klick-Fast mount adapter \$45 • Ram mount kit \$45 • Suction cup RAM mount kit 6" arm \$155 • 7 Port USB hub w/external power supply \$40 • Battery, Li-ion, 3.6V 2700mA, standard \$40 • Battery, Li-ion, 3.6VDC 4050 MA, extended \$55 • 4RE, smart PoE switch \$250 • USB charge and upload docking base \$120 • WiFi charging radio base station \$250 • 8 Bay ethernet transfer station \$1870
2.l	MSRP without optional features, accessories, or service plans	<ul style="list-style-type: none"> • MSRP - \$995 • List - \$795
2.m	Manufacturer's estimated lifetime of device	3 years of continuous use

2.n	Other relevant information	N/A
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RFI Q.#	Survey Question (abbreviated)	Response
Product Information – Software for Video Data Storage and Management		
3.a	Data Management	
3.a.i	Searching capabilities	Yes, through Evidence Library 4 Web software. Searches are performed live on the search bar, which can be simple or complex in nature, allowing all types of searches to be performed from the same area without leaving the main records events screen. The ability to perform complex searches on the search bar allows for building and saving complex searches using multiple fields, with both specific values or across ranges in a graphical environment.
3.a.ii	Categorizing capabilities	Yes; in-field event categorization, using pre-defined event list. Creating and editing the event tags is done globally using either a wizard or by manually creating them.
3.a.iii	Tagging capabilities	Yes; Evidence Library includes this functionality. Additional tags and notes can be added to the video file once transferred to Evidence Library by a user with the appropriate permissions.
3.a.iv	Archiving and file retention	<p>Yes; rules are created in the evidence management section of Evidence Library that determine how long video is kept before it is either deleted or archived. This section leverages the event category that was selected on the camera or later identified in the client. For each event category listed, the department is allowed to specify an action that is performed and at what interval it is performed. Both the retention period and the action performed on the event are choices left up to the department.</p> <p>Data cleanup is configurable to run on a schedule automatically or manually at times initiated by a user with evidence management permissions.</p> <p>The VISTA Back Office Solution is architected in such a way that there are two types of stored video; online and archive. Online video refers to video whose dynamic metadata is still contained within the SQL tables. The video files themselves are stored on a secure storage device readily accessible by the server. Archive video is video whose dynamic metadata and video have been removed from the SQL tables and packaged into a file folder (archive location). An archived video will not show up in searches related to dynamic metadata (such as GPS radius searches) but can quickly be found using the static metadata (date, officer name, vehicle ID, etc.) and, if needed, re-imported into the active storage.</p>
3.a.v	Data saved on or offsite	On premise data storage using Evidence Library 4 Web software

3.a.v.1	If saved offsite, specific data accessibility and storage costs	Cloud storage will be available in Q4 2016.
3.a.v.2	Video data storage capacity local vs. cloud	A scalable local or cloud storage solution can be built based on the department's recording habits and retention requirements.
3.a.v.3	Capability to accommodate multiple site installations	Yes, Evidence Library and VISTA can be deployed in a centralized deployment with multiple locations.
3.a.vi	Export capabilities	Yes, to DVD-video, AVI, WMV, MPEG-2
3.a.vi.1	Traceability feature that shows which user exported the data	Yes; Evidence Library maintains a complete audit trail for each device and event that is transferred, viewed and exported.
3.a.vii	Redacting/editing capabilities	No; under development
3.a.vii.1	Specify whether changes are permanent	Trimmed events are saved as new files; the original file is not modified.
3.a.viii	Support provided for chain-of-custody requirements	Evidence Library includes a full audit log that can be exported with a video file.
3.a.ix	Scalability for different organization size	Yes; Evidence Library is an easily scalable solution that can accommodate a small agency with just a few users, up to thousands of devices and users.
3.a.x	User management and role-based access levels	Yes; role-based access security: administrator, supervisor, evidence custodian, user (officer)
3.b	Video Analytics	
3.b.i	Companion software to analyze recorded video and audio data	Evidence Library 4 Web; Evidence Library Express (ELX-3) for standalone PC
3.b.ii	Types of reports built into software	<p>The ability to perform complex searches on the search bar allows for building and saving complex searches using multiple fields, with both specific values or across ranges in a graphical environment. For example, a search could easily be created to find any recordings in the last 60 days tagged as "Traffic" or "Other", with a radar target speed of 55 MPH or higher, that occurred within 1.25 miles of a specific GPS location.</p> <p>Evidence Library uses SQL databases which can be used to build custom reports.</p>
3.b.ii.1	Standard reports	Reports can be built using the SQL database.
3.b.ii.2	Daily reports, historical reports, etc.	Reports can be built using the SQL database.
3.b.ii.3	Audit reports that support chain-of-custody requirements	Each video file includes an audit log to support chain-of-custody requirements.
3.b.ii.4	Customization of reports	The SQL database can be used to build and customize reports.
3.b.iii	Facial recognition capabilities	N/A
3.b.iv	Weapons detection capabilities	N/A
3.b.v	Other analytical capabilities	N/A
3.c	Video Security and Authentication	
3.c.i	Compatibility of BWC video output with existing video management software for reviewing and recording	Yes, Evidence Library includes the ability to perform case management, which allows the ability for case "container" creation and content management. With this feature, users may associate one or more VISTA or 4RE recordings with a case, as well as other general user files such as: PDFs, spreadsheets, reports, videos from 3 rd party systems, audio recordings, still pictures, drawings, etc. Cases can be further managed by

		adding users as case workers with specific sets of permissions for that case.
3.c.ii	File integrity checks to ensure authenticity	Yes; each file is subjected to a 128 bit MD5 hash. Hash values are compared with each transaction for the video. Results of the file hashing are included in the audit log for the video file.
3.c.iii	Data protection mechanism while in transit and during storage	Yes; data encryption
3.c.iv	Routine software updates	Major software and firmware upgrades and enhancements are released every 9 to 12 months. These are delivered via an upgrade / update disc sent to the agency, or through a website downloadable file.
3.c.v	Cost of software updates	Software updates are provided at no additional charge if the department is covered under a current software maintenance plan.

RFI Q.#	Survey Question (abbreviated)	Response
Usability/Training		
4.a	Usability validation processes	Yes; through substantial research and development
4.b	User community data	WatchGuard Video constantly receives feedback and suggestions from current customers and industry experts to incorporate features and product improvements. WatchGuard is open to this feedback, either formally or informally from hands-on training, beta test sites, repeat customers, and requested customizations that could be beneficial to other customers.
4.c	User-group meetings and frequency	WatchGuard video hosts frequent showcases and interactive webinars, as well as participating in established meetings and trade shows.
4.d	Typical problems reported	<p>The following categories rank as the top three issues reported by customers to WatchGuard video customer service regarding the current body-worn camera (VISTA® HD Body Camera). The percentage represents the number of customer accounts with VISTA reporting the issue from among all customer accounts with VISTA:</p> <ul style="list-style-type: none"> • Will not complete boot (Less than 1%) • Camera body mount issues (Less than 1%) • Button(s) unresponsive (Less than 1%)
4.d.i	Resolution to problems	<p>The following resolutions were made respectively:</p> <ul style="list-style-type: none"> • New firmware was made available to all customers free of charge • Released mechanical changes • New firmware was made available to all customers free of charge
4.e	Hours of tech. support and location	WatchGuard Video representatives are available 24/7 to answer questions and assist with technical issues. WatchGuard Video help desk is available to all customers for the life of their products at no additional

		cost to the agency. Available reporting methods include telephone support, email, and web portal.
4.f	Training provided (hours)	WatchGuard Video will provide on-site user and administrator training for the camera hardware and software. User guides and online training are also available.

RFI Q.#	Survey Question (abbreviated)	Response
Installation		
5.a	Average time to install and activate	<p>This is dependent on the solution deployed. VISTA with Evidence Library Express can be installed and configured in a day.</p> <p>A full deployment with Evidence Library is generally executed within 6-8 weeks.</p> <p>Actual time on-site for an Evidence Library deployment is 3-5 days.</p>

4.60 WatchGuard Vista WiFi



Figure 60. WatchGuard Vista WiFi

RFI Q.#	Survey Question (abbreviated)	Response
Vendor Information		
0	Responded to FRN?	Yes
1.a	Name	Enforcement Video, LLC d/b/a WatchGuard Video
1.b	Address/phone number	415 Century Parkway, Allen, TX 75013 (972) 423-9777
1.c	Website	www.watchguardvideo.com
1.d	Years in business	WatchGuard was founded in 2002 and began full production of its mobile video products in September of 2005, with initial shipments beginning in October 2005.
1.e	Number and types of customers	WatchGuard currently has approximately 6,000 law enforcement agencies as customers and over 72,000 mobile DVR systems in the field. WatchGuard has moved solidly into the number one market share position for US sales of digital police in-car video systems. Even with about 20 companies competing in this market, nearly 1 in 4 systems sold in the US today are manufactured by WatchGuard.
1.f	Manufacturing location(s)	All product manufacturing is done domestically in the company's 65,000 square foot facility located in Allen, Texas. The North Texas facility features an engineering laboratory, customer service installation bay, pristine production space, and a state-of-the-art training room. All engineering, assembly, and factory service is conducted in this facility.

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – BWC		
2.a	General	
2.a.i	Name and model number	Vista WiFi – VIS-EXT-WIF-001
2.a.ii	Physical dims (H" x W" x D")	3.06" H x 1.87" W x 1.08" D
2.a.iii	Weight (oz.)	5.3 oz
2.a.iv	Mounting options	Chest, head
2.a.iv.1	Accessories needed for mounting	Chest mount system, rotatable shirt clip, duty belt clip, Molle loop mount, Velcro® plate mount, Klick Fast® mount, tripod mount, and RAM® mount. A future release of VISTA, scheduled for 2016, will include a 2-Piece unit that has a sensor head separate from the DVR / battery module that will allow for additional mounting options.
2.a.v	Ability to mount on vehicle dashboard	Yes
2.a.v.1	Accessories for vehicle dashboard mount	RAM mount
2.a.vi	LCD display	No; but can view playback via smartphone app
2.a.vii	Recording capacity	32 GB
2.a.viii	Operating conditions or limitations	VISTA is designed with complete industrial grade components and constructed with cast magnesium, polyurethane rubber and a military grade Polyetherimide resin. The camera is ultra-rugged, weatherproof, and has an operating temperature range of -40°F to 185°F. VISTA is designed to withstand years of real world use in the law enforcement environment. VISTA is designed to meet IP54 waterproof and drop test standards, and is MIL-STD-810F certified.
2.b	Video and Optics	
2.b.i	Maximum video resolution	720P
2.b.ii	Field of view	130°
2.b.iii	Lux rating	0.85 lux
2.b.iv	Night mode/format	Yes; VISTA uses Ultra-WDR (Wide Dynamic Range) technology that dramatically improves video quality in nighttime video and difficult lighting situations. For every frame of video, the camera actually takes two separate images, a dark exposure and a light exposure. The camera then automatically blends the two images into a single video frame. The result is an ideally exposed picture that keeps bright areas from being over-exposed and keeps darker areas from turning black.
2.b.v	Recording speed	30 fps
2.b.vi	Recording format	MP4
2.b.vii	Recording time under default resolution settings	<ul style="list-style-type: none"> 9 hours of recording at 720P 10 hours of recording at 480P
2.b.viii	Ability to capture still photos	No; but is possible in the evidence management software (Evidence Library). Evidence Library's built-in media player includes snapshot, copy/export and trimming features. Converted or modified files are saved without altering the original recording.
2.b.ix	Ability to embed date/time stamp on recorded video	Yes

2.b.ix.1	Ability to authenticate and validate date/time stamp integrity	Yes; video files include an MD5 hash that is validated during every transaction for that file. The audit log contains a full report of the results of the hashing. Evidence Library (vendor's software) maintains a complete audit trail for each device and event that is transferred, viewed and exported. It includes the results of the MD5 hashing and all user transactions.
2.b.x	Pre-event recording feature	Yes; in addition to offering pre-event recording, VISTA includes WatchGuard Video's patented Record-After-the-Fact (RATF) feature. With VISTA, continuous background recording can be enabled so that agencies can use RATF to go back in time and record an event after it happened – up to a day later. This means that agencies will not have to worry about missing critical evidence. VISTA can be administratively configured to include pre-event and RATF or to disable. The agency also has the choice of whether or not audio is included. Pre-event and RATF do not impact the battery life described above. The battery life descriptions provided are actual times with all features active.
2.b.x.1	Time buffered and whether audio is recorded	15 seconds, up to 10 minutes; audio can be administratively configured to be active during pre-event and RATF.
2.b.xi	Event marking capability	Yes; files can be bookmarked once transferred to Evidence Library, VISTA's evidence management software.
2.b.xii	Wireless capabilities for communication	No
2.c	Audio	
2.c.i	Microphone feature	Yes
2.c.ii	Microphone sensitivity	High fidelity microphone that produces true CD audio quality. The silicon based audio sensor eliminates distortion from loud sounds while still picking up soft spoken speech. The sophisticated acoustic foam chamber also blocks most wind noise.
2.c.iii	Audio format	AAC
2.c.iv	Default police radio interface for BWC	No
2.d	Data Upload	
2.d.i	Single device vs. multiple upload docking station	Both; USB docking base for single camera (transfers 1 GB in under 90 seconds). Ethernet transfer station uploads and recharges 8 VISTA cameras simultaneously.
2.d.ii	Data transfer method	USB or Ethernet. WatchGuard has designed a very rugged USB base that is used for transferring video and thus eliminated what is often the weakest piece in a wearable camera solution.
2.d.iii	Manual vs. automatic upload	Video uploads are automatic with VISTA's Dock and Go functionality. Simply dock the camera and walk away. Even if the camera is off or the battery is completely drained, the USB base will power it on and initiate the file transfer.
2.e	Battery Information	
2.e.i	Battery type; internal or removable	Lithium polymer internal battery

2.e.ii	Recording duration	9 hours of recording at 720p resolution; 10 hours of recording at 480p resolution
2.e.iii	Battery standby duration	19 hours
2.e.iv	Battery charge time	< 4 hours
2.e.v	Battery lifetime until replacement	At the vendor's charge voltage level configuration the battery life cycle according to the battery manufacture will be approximately down to 85% of its original capacity after 300 complete discharge and complete charge cycles at room temperature.
2.e.vi	Battery replacement procedure	The vendor recommends factory replacement of batteries. An advanced replacement unit can be shipped to the department to reduce downtime.
2.e.vii	Availability of supplemental charger for emergency battery charging	VISTA can be charged in either the USB base connected to a workstation or directly to power. The 8-Bay Ethernet Transfer Station will also charge cameras while transferring video. VISTA WiFi will include an in-car charging cradle that can also be used for charging while in the field.
2.f	GPS	
2.f.i	BWC possess GPS	Yes
2.f.i.1	Embedded GPS coordinates in recorded video	Yes
2.f.ii	Alternative geolocation methods	N/A
2.g	Consumer Testing Results	
2.g.i	Sturdiness/fragility	Robust materials: cast magnesium, polyurethane rubber, military-grade ultra-hard resin, and industrial-grade electronics.
2.g.i.1	Drop test results	Designed to meet IP54 waterproof and drop test standards
2.g.i.2	Dust intrusion/water resistance rating	Designed to meet IP54 waterproof and drop test standards
2.g.i.3	Ruggedized	Yes, military grade; MIL-STD-810F
2.g.i.4	Pressure/depth	Information not found on website
2.g.i.5	Shock	Information not found on website
2.g.i.6	Vibrations	Information not found on website
2.g.ii	Other environmental testing	Information not found on website
2.g.ii.1	Specify tests, pass/fail results, and ratings received	VISTA has also passed the following testing: <ul style="list-style-type: none"> • CE CISPR 22 Class B for radiated emissions • CE EN6100 for immunity • MIL-810G US highway vibration • RoHS
2.h	Safeguards	
2.h.i	Privacy safeguards or features	VISTA prevents video files from being modified or deleted on the camera prior to transfer. After transfer the evidence management software, Evidence Library, protects files using security and access privileges and settings.
2.h.i.1	Remote viewing	No
2.h.i.2	Remote activation/deactivation	Yes; Vista WiFi supports remote activation/deactivating using Distributed Multi-Peer Recording technology. WatchGuard's Distributed Multi-Peer Recording technology distributes decision-making to each camera in a multi-peer relationship. Imagine a network of cameras continually sensing the recording status of

		<p>each other, acting in a peer-to-peer relationship.</p> <ul style="list-style-type: none"> Any camera (VISTA WiFi) can initiate a recording, and the other cameras, sensing a change in recording status, will begin recording. No one camera acts as a single, central controller, thus removing the single point of failure. A camera that initiated the group recording can move out of connectivity range without stopping the group recording in progress <p>A VISTA WiFi that's currently recording can "walk into" a group network on which it was previously associated, and the other cameras, sensing the recording status of that VISTA WiFi, will begin recording.</p>
2.h.i.3	Privacy masking	No
2.h.i.4	Redacting/editing capabilities	No
2.h.ii	Safeguards for cyber security, unintentional disassembly, etc.	Using on premise storage, video now resides within the secured infrastructure of the agency, protected by all access controls security in place protecting other essential evidence and databases. When using cloud storage through Azure Government Cloud, all security and CJIS compliance in place apply to the data moving to, from, and stored in the cloud.
2.i	Regulatory	
2.i.i	Regulatory and Compliance safety requirements	VISTA was designed to meet all major standards and requirements for safety and radiation, including FCC and CE CISPR 22 Class B for Radiated Emissions.
2.i.ii	Radiation safety standards	VISTA was designed to meet all major standards and requirements for safety and radiation, including FCC and CE CISPR 22 Class B for Radiated Emissions.
2.j	Warranty and Maintenance Plans	
2.j.i	Length of warranty (in months)	12 months
2.j.ii	Optional extended warranties	36 months
2.j.ii.1	Duration and cost of extended warranties	<p>Extended hardware warranty for VISTA may be purchased to cover the system for up to 36 months at \$380 per device.</p> <p>A 36 month hardware/software bundle is available at \$580 per device.</p>
2.j.iii	Availability of extended maintenance plans	Software: May be extended annually at \$150 per device, per 12 months. A 36 month hardware/software bundle is available at \$580 per device
2.j.iii.1	Duration and cost of extended maintenance plans	Software: May be extended annually at \$150 per device, per 12 months. A 36 month hardware/software bundle is available at \$580 per device
2.j.iv	Service contract costs	24/7 service and support are included at no additional cost to the agency for the life of the product. Out of warranty repairs and replacements can be quoted on an as needed basis.
2.k	Auxiliary Equipment	
2.k.i	Manufacturer suggested retail price (MSRP) for each auxiliary equipment	<ul style="list-style-type: none"> Locking magnetic chest mount (w/o Straps) \$65 Adjustable strap kit, for magnetic mount \$25 Shirt clip with slider \$40

		<ul style="list-style-type: none"> • Duty belt clip \$25 • Molle vest adapter clip \$25 • Tripod mount base adapter \$45 • Velcro backing plate \$25 • Klick-Fast mount adapter \$45 • RAM mount kit \$45 • Suction cup RAM mount Kit 6" arm \$155 • 7 Port USB hub w/external power supply \$40 • Battery, Li-ion, 3.6V 2700mA, standard \$40 • Battery, Li-ion, 3.6VDC 4050 MA, extended \$55 • 4RE, smart PoE switch \$250 • USB charge and upload docking base \$120 • WiFi charging radio base Station \$250 • 8 Bay ethernet transfer station \$1870
2.l	MSRP without optional features, accessories, or service plans	<ul style="list-style-type: none"> • MSRP - \$1250 • List - \$995
2.m	Manufacturer's estimated lifetime of device	3 years of continuous use
2.n	Other relevant information	N/A

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – Software for Video Data Storage and Management		
3.a	Data Management	
3.a.i	Searching capabilities	Yes, through Evidence Library 4 Web software. Searches are performed live on the search bar, which can be simple or complex in nature, allowing all types of searches to be performed from the same area without leaving the main records events screen. The ability to perform complex searches on the search bar allows for building and saving complex searches using multiple fields, with both specific values or across ranges in a graphical environment.
3.a.ii	Categorizing capabilities	Yes; in-field event categorization, using pre-defined event list. Creating and editing the event tags is done globally using either a wizard or by manually creating them.
3.a.iii	Tagging capabilities	Yes; Evidence Library includes this functionality. Additional tags and notes can be added to the video file once transferred to Evidence Library by a user with the appropriate permissions.
3.a.iv	Archiving and file retention	<p>Yes; Rules are created in the evidence management section of Evidence Library that determine how long video is kept before it is either deleted or archived. This section leverages the event category that was selected on the camera or later identified in the client. For each event category listed, the department is allowed to specify an action that is performed and at what interval it is performed. Both the retention period and the action performed on the event are choices left up to the department.</p> <p>Data cleanup is configurable to run on a schedule</p>

		<p>automatically or manually at times initiated by a user with evidence management permissions.</p> <p>The VISTA Back Office Solution is architected in such a way that there are two types of stored video; online and archive. Online video refers to video whose dynamic metadata is still contained within the SQL tables. The video files themselves are stored on a secure storage device readily accessible by the server. archive video is video whose dynamic metadata and video have been removed from the SQL tables and packaged into a file folder (archive location). An archived video will not show up in searches related to dynamic metadata (such as GPS radius searches) but can quickly be found using the static metadata (date, officer name, vehicle ID, etc.) and, if needed, re-imported into the active storage.</p>
3.a.v	Data saved on or offsite	On premise data storage using Evidence Library 4 Web software
3.a.v.1	If saved offsite, specific data accessibility and storage costs	Cloud storage will be available in Q4 2016.
3.a.v.2	Video data storage capacity local vs. cloud	A scalable local or cloud storage solution can be built based on the department's recording habits and retention requirements.
3.a.v.3	Capability to accommodate multiple site installations	Yes, Evidence Library and VISTA can be deployed in a centralized deployment with multiple locations.
3.a.vi	Export capabilities	Yes, to DVD-video, AVI, WMV, MPEG-2
3.a.vi.1	Traceability feature that shows which user exported the data	Yes; Evidence Library maintains a complete audit trail for each device and event that is transferred, viewed and exported.
3.a.vii	Redacting/editing capabilities	No; under development
3.a.vii.1	Specify whether changes are permanent	Trimmed events are saved as new files; the original file is not modified.
3.a.viii	Support provided for chain-of-custody requirements	Evidence Library includes a full audit log that can be exported with a video file.
3.a.ix	Scalability for different organization size	Yes; Evidence Library is an easily scalable solution that can accommodate a small agency with just a few users, up to thousands of devices and users.
3.a.x	User management and role-based access levels	Yes; role-based access security: administrator, supervisor, evidence custodian, user (officer)
3.b	Video Analytics	
3.b.i	Companion software to analyze recorded video and audio data	Evidence Library 4 Web; Evidence Library Express (ELX-3) for standalone PC
3.b.ii	Types of reports built into software	<p>The ability to perform complex searches on the search bar allows for building and saving complex searches using multiple fields, with both specific values or across ranges in a graphical environment. For example, a search could easily be created to find any recordings in the last 60 days tagged as "Traffic" or "Other", with a radar target speed of 55 MPH or higher, that occurred within 1.25 miles of a specific GPS location.</p> <p>Evidence Library uses SQL databases which can be</p>

		used to build custom reports.
3.b.ii.1	Standard reports	Reports can be built using the SQL database.
3.b.ii.2	Daily reports, historical reports, etc.	Reports can be built using the SQL database.
3.b.ii.3	Audit reports that support chain-of-custody requirements	Each video file includes an audit log to support chain-of-custody requirements.
3.b.ii.4	Customization of reports	The SQL database can be used to build and customize reports.
3.b.iii	Facial recognition capabilities	N/A
3.b.iv	Weapons detection capabilities	N/A
3.b.v	Other analytical capabilities	N/A
3.c	Video Security and Authentication	
3.c.i	Compatibility of BWC video output with existing video management software for reviewing and recording	Yes, Evidence Library includes the ability to perform case management, which allows the ability for case “container” creation and content management. With this feature, users may associate one or more VISTA or 4RE recordings with a case, as well as other general user files such as: PDFs, spreadsheets, reports, videos from 3 rd party systems, audio recordings, still pictures, drawings, etc. Cases can be further managed by adding users as case workers with specific sets of permissions for that case.
3.c.ii	File integrity checks to ensure authenticity	Yes; each file is subjected to a 128 bit MD5 hash. Hash values are compared with each transaction for the video. Results of the file hashing are included in the audit log for the video file.
3.c.iii	Data protection mechanism while in transit and during storage	Yes; data encryption
3.c.iv	Routine software updates	Major software and firmware upgrades and enhancements are released every 9 to 12 months. These are delivered via an upgrade / update disc sent to the agency, or through a website downloadable file.
3.c.v	Cost of software updates	Software updates are provided at no additional charge if the Department is covered under a current Software Maintenance Plan.

RFI Q.#	Survey Question (abbreviated)	Response
Usability/Training		
4.a	Usability validation processes	Yes; through substantial research and development
4.b	User community data	WatchGuard Video constantly receives feedback and suggestions from current customers and industry experts to incorporate features and product improvements. WatchGuard is open to this feedback, either formally or informally from hands-on training, beta test sites, repeat customers, and requested customizations that could be beneficial to other customers.
4.c	User-group meetings and frequency	WatchGuard Video hosts frequent showcases and interactive webinars, as well as participating in established meetings and trade shows.
4.d	Typical problems reported	The following categories rank as the top three issues reported by customers to WatchGuard Video Customer Service regarding the current body worn camera

		<p>(VISTA® HD Body Camera). The percentage represents the number of customer accounts with VISTA reporting the issue from among all customer accounts with VISTA:</p> <ul style="list-style-type: none"> • Will not complete boot (Less than 1%) • Camera body mount issues (Less than 1%) • Button(s) unresponsive (Less than 1%)
4.d.i	Resolution to problems	<p>The following resolutions were made respectively:</p> <ul style="list-style-type: none"> • New firmware was made available to all customers free of charge • Released mechanical changes • New firmware was made available to all customers free of charge
4.e	Hours of tech. support and location	<p>WatchGuard Video representatives are available 24/7 to answer questions and assist with technical issues. WatchGuard Video help desk is available to all customers for the life of their products at no additional cost to the agency. Available reporting methods include telephone support, email, and web portal.</p>
4.f	Training provided (hours)	<p>WatchGuard Video will provide on-site user and administrator training for the camera hardware and software. User guides and online training are also available.</p>

RFI Q.#	Survey Question (abbreviated)	Response
Installation		
5.a	Average time to install and activate	<p>This is dependent on the solution deployed. VISTA with Evidence Library Express can be installed and configured in a day.</p> <p>A full deployment with Evidence Library is generally executed within 6-8 weeks.</p> <p>Actual time on-site for an Evidence Library deployment is 3-5 days.</p>

4.61 WOLFCOM 3rd Eye



Figure 61. WOLFCOM 3rd Eye

RFI Q.#	Survey Question (abbreviated)	Response
Vendor Information		
0	Responded to FRN?	Yes
1.a	Name	WOLFCOM
1.b	Address/phone number	5910 W. Sunset Blvd, Los Angeles, CA 90028 (800) 282-1352
1.c	Website	www.wolfcomusa.com
1.d	Years in business	13 years
1.e	Number and types of customers	450+ departments; municipal, county, and state
1.f	Manufacturing location(s)	Hollywood, CA

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – BWC		
2.a	General	
2.a.i	Name and model number	3 rd Eye
2.a.ii	Physical dims (H" x W" x D")	3.75" H x 2.35" W x 1.25" D
2.a.iii	Weight (oz.)	5.5 oz
2.a.iv	Mounting options	Chest, belt
2.a.iv.1	Accessories needed for mounting	No information provided
2.a.v	Ability to mount on vehicle dashboard	Yes
2.a.v.1	Accessories for vehicle dashboard mount	Car windshield mount
2.a.vi	LCD display	Yes
2.a.vii	Recording capacity	32 GB
2.a.viii	Operating conditions or limitations	No information provided

2.b	Video and Optics	
2.b.i	Maximum video resolution	1080P
2.b.ii	Field of view	120°
2.b.iii	Lux rating	1 lux
2.b.iv	Night mode/format	Yes; low light or can turn on IR lens
2.b.v	Recording speed	60 fps
2.b.vi	Recording format	MOV
2.b.vii	Recording time under default resolution settings	18 hours
2.b.viii	Ability to capture still photos	Yes
2.b.ix	Ability to embed date/time stamp on recorded video	Yes
2.b.ix.1	Ability to authenticate and validate date/time stamp integrity	Date and time information is accurately obtained through GPS and stamped onto every video and image file. Once ingested into the management software, a hash algorithm is applied to prevent tampering or editing.
2.b.x	Pre-event recording feature	No
2.b.x.1	Time buffered and whether audio is recorded	N/A
2.b.xi	Event marking capability	Yes
2.b.xii	Wireless capabilities for communication	No
2.c	Audio	
2.c.i	Microphone feature	Yes
2.c.ii	Microphone sensitivity	No information provided
2.c.iii	Audio format	AAC
2.c.iv	Default police radio interface for BWC	Yes
2.d	Data Upload	
2.d.i	Single device vs. multiple upload docking station	Single device
2.d.ii	Data transfer method	Wired USB cable
2.d.iii	Manual vs. automatic upload	Automatic with management software
2.e	Battery Information	
2.e.i	Battery type; internal or removable	Internal lithium polymer
2.e.ii	Recording duration	6.5 hours
2.e.iii	Battery standby duration	No information provided
2.e.iv	Battery charge time	4 hours
2.e.v	Battery lifetime until replacement	> 300 cycles
2.e.vi	Battery replacement procedure	Send unit back to factory for replacement
2.e.vii	Availability of supplemental charger for emergency battery charging	Backup battery
2.f	GPS	
2.f.i	BWC possess GPS	Yes
2.f.i.1	Embedded GPS coordinates in recorded video	Yes
2.f.ii	Alternative geolocation methods	No
2.g	Consumer Testing Results	
2.g.i	Sturdiness/fragility	Yes
2.g.i.1	Drop test results	6 ft
2.g.i.2	Dust intrusion/water resistance rating	IPX3

2.g.i.3	Ruggedized	No information provided
2.g.i.4	Pressure/depth	No information provided
2.g.i.5	Shock	No information provided
2.g.i.6	Vibrations	No information provided
2.g.ii	Other environmental testing	No information provided
2.g.ii.1	Specify tests, pass/fail results, and ratings received	No information provided
2.h	Safeguards	
2.h.i	Privacy safeguards or features	AVD: prevents the camera from being shut off when the activation switch gets bumped during a struggle with a suspect.
2.h.i.1	Remote viewing	No
2.h.i.2	Remote activation/deactivation	No
2.h.i.3	Privacy masking	Not on camera, but available on backend software
2.h.i.4	Redacting/editing capabilities	Not on camera, but available on backend software
2.h.ii	Safeguards for cyber security, unintentional disassembly, etc.	Security screws and tamper stickers
2.i	Regulatory	
2.i.i	Regulatory and Compliance safety requirements	CE, RoHS
2.i.ii	Radiation safety standards	No information provided
2.j	Warranty and Maintenance Plans	
2.j.i	Length of warranty (in months)	12 months
2.j.ii	Optional extended warranties	24 months
2.j.ii.1	Duration and cost of extended warranties	\$175 for 24 months
2.j.iii	Availability of extended maintenance plans	Yes
2.j.iii.1	Duration and cost of extended maintenance plans	Dependent on contract
2.j.iv	Service contract costs	No information provided
2.k	Auxiliary Equipment	
2.k.i	Manufacturer suggested retail price (MSRP) for each auxiliary equipment	Car chargers
2.l	MSRP without optional features, accessories, or service plans	\$475
2.m	Manufacturer's estimated lifetime of device	2 to 3 years
2.n	Other relevant information	No information provided

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – Software for Video Data Storage and Management		
3.a	Data Management – Wolfcom Evidence Management Software	
3.a.i	Searching capabilities	Yes
3.a.ii	Categorizing capabilities	Yes
3.a.iii	Tagging capabilities	Yes
3.a.iv	Archiving and file retention	Yes
3.a.v	Data saved on or offsite	Yes
3.a.v.1	If saved offsite, specific data accessibility and storage costs	Data is stored at Microsoft's CJIS compliant data center and is accessible via user permissions. Cost is dependent on user's storage, features, and policy

		requirements.
3.a.v.2	Video data storage capacity local vs. cloud	Local storage is by far the most cost-effective alternative to cloud storage and the most secure. Adding additional storage is easier and the department owns the entire solution. Users can quickly access and view video footage instantly. Cloud storage is more convenient at a higher cost. Accessing video for playback is not instantaneous as user must first upload the video to cloud and then download it for playback. Internet speed for police departments utilizing cloud will be severely affected unless a standalone internet connection is purchased.
3.a.v.3	Capability to accommodate multiple site installations	Yes
3.a.vi	Export capabilities	Yes
3.a.vi.1	Traceability feature that shows which user exported the data	No information provided
3.a.vii	Redacting/editing capabilities	Yes
3.a.vii.1	Specify whether changes are permanent	Yes
3.a.viii	Support provided for chain-of-custody requirements	Yes
3.a.ix	Scalability for different organization size	Yes
3.a.x	User management and role-based access levels	Yes
3.b	Video Analytics	
3.b.i	Companion software to analyze recorded video and audio data	No
3.b.ii	Types of reports built into software	Audit reports, login and user reports, upload/download reports, deletion, purge and edit reports
3.b.ii.1	Standard reports	Yes
3.b.ii.2	Daily reports, historical reports, etc.	Yes
3.b.ii.3	Audit reports that support chain-of-custody requirements	Yes
3.b.ii.4	Customization of reports	Yes
3.b.iii	Facial recognition capabilities	Optional
3.b.iv	Weapons detection capabilities	No
3.b.v	Other analytical capabilities	No
3.c	Video Security and Authentication	
3.c.i	Compatibility of BWC video output with existing video management software for reviewing and recording	Yes
3.c.ii	File integrity checks to ensure authenticity	Yes
3.c.iii	Data protection mechanism while in transit and during storage	Yes; encryption and password protection
3.c.iv	Routine software updates	Updates are available every 3 to 6 months and can be applied both manually and automatically.
3.c.v	Cost of software updates	No charge

RFI	Survey Question	Response
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Q.#	(abbreviated)	
Usability/Training		
4.a	Usability validation processes	WOLFCOM body cameras and software are the results of direct feedback from hundreds of law enforcement officers. This has enabled WOLFCOM to create a body camera solution that not only is reliable and easy to use, but can also be configured to meet or exceed specific requirements. Each camera is drop tested, and aged to ensure that quality and reliability is maintained. Size, weight, switches, and buttons are carefully measured to ensure that ergonomic requirements by a multitude of users are satisfied.
4.b	User community data	Product feedback forms are sent in by officers that tested evaluate Wolfcom's body cameras. Feedbacks are also provided via telephone and email by current users. Some officers visit WOLFCOM's facility in Los Angeles to offer suggestions on improvements.
4.c	User-group meetings and frequency	WOLFCOM receives occasional visits from individual officers at the Los Angeles facility. These officers are mostly current users of WOLFCOM's body cameras and their valuable feedbacks are used to enhance products.
4.d	Typical problems reported	N/A
4.d.i	Resolution to problems	N/A
4.e	Hours of tech. support and location	No information provided
4.f	Training provided (hours)	N/A

RFI Q.#	Survey Question (abbreviated)	Response
Installation		
5.a	Average time to install and activate	N/A

4.62 WOLFCOM Vision



Figure 62. WOLFCOM Vision

RFI Q.#	Survey Question (abbreviated)	Response
Vendor Information		
0	Responded to FRN?	Yes
1.a	Name	WOLFCOM
1.b	Address/phone number	5910 W. Sunset Blvd, Los Angeles, CA 90028 (800) 282-1352
1.c	Website	www.wolfcomusa.com
1.d	Years in business	13 years
1.e	Number and types of customers	450+ departments; municipal, county, and state
1.f	Manufacturing location(s)	Hollywood, CA

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – BWC		
2.a	General	
2.a.i	Name and model number	Vision Body Camera
2.a.ii	Physical dims (H" x W" x D")	2.9" H x 1.5" W x 0.6" D
2.a.iii	Weight (oz.)	2.2 oz
2.a.iv	Mounting options	Chest, shoulder, head, glasses, helmet, hat, gun, belt
2.a.iv.1	Accessories needed for mounting	No information provided
2.a.v	Ability to mount on vehicle dashboard	Yes
2.a.v.1	Accessories for vehicle dashboard mount	Car windshield mount
2.a.vi	LCD display	No
2.a.vii	Recording capacity	32 GB to 64 GB
2.a.viii	Operating conditions or limitations	No information provided
2.b	Video and Optics	
2.b.i	Maximum video resolution	1080P
2.b.ii	Field of view	120°
2.b.iii	Lux rating	1 lux
2.b.iv	Night mode/format	Yes; low light
2.b.v	Recording speed	60 fps
2.b.vi	Recording format	MOV or MP4 (selectable)

2.b.vii	Recording time under default resolution settings	18 hours
2.b.viii	Ability to capture still photos	Yes
2.b.ix	Ability to embed date/time stamp on recorded video	Yes
2.b.ix.1	Ability to authenticate and validate date/time stamp integrity	Date/time information is accurately obtained through GPS and stamped onto every video and image file. Once ingested into the management software, a hash algorithm is applied to prevent tampering or editing.
2.b.x	Pre-event recording feature	Yes
2.b.x.1	Time buffered and whether audio is recorded	Configurable between 1 minute to 30 minutes; Audio can be turned on or off.
2.b.xi	Event marking capability	No
2.b.xii	Wireless capabilities for communication	No
2.c	Audio	
2.c.i	Microphone feature	Yes
2.c.ii	Microphone sensitivity	No information provided
2.c.iii	Audio format	WAV
2.c.iv	Default police radio interface for BWC	No
2.d	Data Upload	
2.d.i	Single device vs. multiple upload docking station	Docking station for multiple camera upload
2.d.ii	Data transfer method	Wired
2.d.iii	Manual vs. automatic upload	Automatic through software
2.e	Battery Information	
2.e.i	Battery type; internal or removable	Lithium polymer
2.e.ii	Recording duration	2.5 hours
2.e.iii	Battery standby duration	> 5 days
2.e.iv	Battery charge time	2 hours
2.e.v	Battery lifetime until replacement	2 years
2.e.vi	Battery replacement procedure	Send unit back to factory for replacement
2.e.vii	Availability of supplemental charger for emergency battery charging	Back up 23 hour battery
2.f	GPS	
2.f.i	BWC possess GPS	Yes
2.f.i.1	Embedded GPS coordinates in recorded video	Yes
2.f.ii	Alternative geolocation methods	No
2.g	Consumer Testing Results	
2.g.i	Sturdiness/fragility	Yes
2.g.i.1	Drop test results	6 ft
2.g.i.2	Dust intrusion/water resistance rating	IPX4
2.g.i.3	Ruggedized	No information provided
2.g.i.4	Pressure/depth	No information provided
2.g.i.5	Shock	No information provided
2.g.i.6	Vibrations	Yes
2.g.ii	Other environmental testing	No information provided
2.g.ii.1	Specify tests, pass/fail results, and ratings received	No information provided
2.h	Safeguards	

2.h.i	Privacy safeguards or features	AVD: prevents the camera from being shut off when the activation switch gets bumped during a struggle with a suspect. CRC: backup camera will resume recording in the event the main wired camera becomes detached.
2.h.i.1	Remote viewing	No; but is designed to accept future technologies
2.h.i.2	Remote activation/deactivation	No
2.h.i.3	Privacy masking	Not on camera; available through backend software
2.h.i.4	Redacting/editing capabilities	Not on camera; available through backend software
2.h.ii	Safeguards for cyber security, unintentional disassembly, etc.	Security screws and tamper stickers
2.i	Regulatory	
2.i.i	Regulatory and Compliance safety requirements	No information provided
2.i.ii	Radiation safety standards	No information provided
2.j	Warranty and Maintenance Plans	
2.j.i	Length of warranty (in months)	12 months
2.j.ii	Optional extended warranties	24 months
2.j.ii.1	Duration and cost of extended warranties	\$175 for 24 months
2.j.iii	Availability of extended maintenance plans	No information provided
2.j.iii.1	Duration and cost of extended maintenance plans	Yes, dependent on contract
2.j.iv	Service contract costs	No information provided
2.k	Auxiliary Equipment	
2.k.i	Manufacturer suggested retail price (MSRP) for each auxiliary equipment	Car chargers, external cameras, battery packs, VTA kit
2.l	MSRP without optional features, accessories, or service plans	\$349.99
2.m	Manufacturer's estimated lifetime of device	2-3 years
2.n	Other relevant information	No information provided

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – Software for Video Data Storage and Management		
3.a	Data Management – Wolfcom Evidence Management Software	
3.a.i	Searching capabilities	Yes
3.a.ii	Categorizing capabilities	Yes
3.a.iii	Tagging capabilities	Yes
3.a.iv	Archiving and file retention	Yes
3.a.v	Data saved on or offsite	Yes
3.a.v.1	If saved offsite, specific data accessibility and storage costs	Data is stored at Microsoft's CJIS compliant data center and is accessible via user permissions. Cost is dependent on user's storage, features, and policy requirements.
3.a.v.2	Video data storage capacity local vs. cloud	Local storage is by far the most cost-effective alternative to cloud storage and the most secure. Adding additional storage is easier and the department owns the entire solution. Users can quickly access and view video footage instantly. Cloud storage is more

		convenient at a higher cost. Accessing video for playback is not instantaneous as user must first upload the video to cloud and then download it for playback. Internet speed for police departments utilizing cloud will be severely affected unless a standalone internet connection is purchased.
3.a.v.3	Capability to accommodate multiple site installations	Yes
3.a.vi	Export capabilities	Yes
3.a.vi.1	Traceability feature that shows which user exported the data	No information provided
3.a.vii	Redacting/editing capabilities	Yes
3.a.vii.1	Specify whether changes are permanent	Yes
3.a.viii	Support provided for chain-of-custody requirements	Yes
3.a.ix	Scalability for different organization size	Yes
3.a.x	User management and role-based access levels	Yes
3.b	Video Analytics	
3.b.i	Companion software to analyze recorded video and audio data	No
3.b.ii	Types of reports built into software	Audit reports, login and user reports, upload/download reports, deletion, purge and edit reports
3.b.ii.1	Standard reports	Yes
3.b.ii.2	Daily reports, historical reports, etc.	Yes
3.b.ii.3	Audit reports that support chain-of-custody requirements	Yes
3.b.ii.4	Customization of reports	Yes
3.b.iii	Facial recognition capabilities	Optional
3.b.iv	Weapons detection capabilities	No
3.b.v	Other analytical capabilities	No
3.c	Video Security and Authentication	
3.c.i	Compatibility of BWC video output with existing video management software for reviewing and recording	Yes
3.c.ii	File integrity checks to ensure authenticity	Yes
3.c.iii	Data protection mechanism while in transit and during storage	Yes; encryption and password protection
3.c.iv	Routine software updates	Updates are available every 3 to 6 months and can be applied both manually and automatically.
3.c.v	Cost of software updates	No charge

RFI Q.#	Survey Question (abbreviated)	Response
Usability/Training		
4.a	Usability validation processes	WOLFCOM body cameras and software are the results of direct feedback from hundreds of law enforcement officers. This has enabled WOLFCOM to create a body camera solution that not only is reliable and easy to

		use, but can also be configured to meet or exceed specific requirements. Each camera is drop tested, and aged to ensure that quality and reliability is maintained. Size, weight, switches, and buttons are carefully measured to ensure that ergonomic requirements by a multitude of users are satisfied.
4.b	User community data	Product feedback forms are sent in by officers that tested/evaluated the body cameras. Feedbacks are also provided via telephone and email by current users. Some officers visit the facility in Los Angeles to offer suggestions on improvements.
4.c	User-group meetings and frequency	WOLFCOM receives occasional visits from individual officers at the Los Angeles facility. These officers are mostly current users of body cameras and their valuable feedbacks are used to enhance products.
4.d	Typical problems reported	N/A
4.d.i	Resolution to problems	N/A
4.e	Hours of tech. support and location	No information provided
4.f	Training provided (hours)	N/A

RFI Q.#	Survey Question (abbreviated)	Response
Installation		
5.a	Average time to install and activate	N/A; trade secrets

4.63 Zepcam TI



Figure 63. Zepcam TI

RFI Q.#	Survey Question (abbreviated)	Response
Vendor Information		
0	Responded to FRN?	No
1.a	Name	Zepcam
1.b	Address/phone number	Hogeweg 29, 5301 LB Zaltbommel, The Netherlands +31-85-3010290
1.c	Website	www.zepcam.com
1.d	Years in business	Information not found on website
1.e	Number and types of customers	Zepcam has clients in over 25 countries worldwide, including: Police departments (German, Dutch, Swiss, Australian, Finnish, Czech, Hungarian, Austrian, and Hong Kong; Fire departments, municipalities, public transport, industries, private security companies, first responders, special forces, and others.
1.f	Manufacturing location(s)	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – BWC		
2.a	General	
2.a.i	Name and model number	TI
2.a.ii	Physical dims (H" x W" x D")	2.36" H x 1.3" W X 3.8" D
2.a.iii	Weight (oz.)	6.2 oz
2.a.iv	Mounting options	Helmet, flat surfaces, shoulder
2.a.iv.1	Accessories needed for mounting	Optional - clip camera (clothing mount), spycam, IR cam (see accessories)
2.a.v	Ability to mount on vehicle dashboard	Information not found on website
2.a.v.1	Accessories for vehicle dashboard mount	Information not found on website
2.a.vi	LCD display	Yes
2.a.vii	Recording capacity	Up to 32 GB
2.a.viii	Operating conditions or limitations	Operating temperature: 14°F to 122°F
2.b	Video and Optics	
2.b.i	Maximum video resolution	576P

2.b.ii	Field of view	Information not found on website
2.b.iii	Lux rating	0.05 lux
2.b.iv	Night mode/format	Yes
2.b.v	Recording speed	25 fps
2.b.vi	Recording format	MOV; AVI; h.264; PAL
2.b.vii	Recording time under default resolution settings	Information not found on website
2.b.viii	Ability to capture still photos	Information not found on website
2.b.ix	Ability to embed date/time stamp on recorded video	Yes
2.b.ix.1	Ability to authenticate and validate date/time stamp integrity	Information not found on website
2.b.x	Pre-event recording feature	Information not found on website
2.b.x.1	Time buffered and whether audio is recorded	Information not found on website
2.b.xi	Event marking capability	Information not found on website
2.b.xii	Wireless capabilities for communication	Information not found on website
2.c	Audio	
2.c.i	Microphone feature	Yes; In cable + 3.5 mm Aux input for external mic
2.c.ii	Microphone sensitivity	90 dB AGC range, -42dB@1KHz
2.c.iii	Audio format	Information not found on website
2.c.iv	Default police radio interface for BWC	Information not found on website
2.d	Data Upload	
2.d.i	Single device vs. multiple upload docking station	Multiple device docking option with Zepcam desktop software
2.d.ii	Data transfer method	Using Zepcam desktop software
2.d.iii	Manual vs. automatic upload	Automatic using Zepcam software
2.e	Battery Information	
2.e.i	Battery type; internal or removable	6.200 maH
2.e.ii	Recording duration	Information not found on website
2.e.iii	Battery standby duration	20 hours
2.e.iv	Battery charge time	Information not found on website
2.e.v	Battery lifetime until replacement	Information not found on website
2.e.vi	Battery replacement procedure	Information not found on website
2.e.vii	Availability of supplemental charger for emergency battery charging	Information not found on website
2.f	GPS	
2.f.i	BWC possess GPS	Yes; GPS data is real time transmitted to the Zepcam video server.
2.f.i.1	Embedded GPS coordinates in recorded video	Yes
2.f.ii	Alternative geolocation methods	Information not found on website
2.g	Consumer Testing Results	
2.g.i	Sturdiness/fragility	Yes; rigid ballistic shell, weather resistant
2.g.i.1	Drop test results	Drop resistance 9 feet
2.g.i.2	Dust intrusion/water resistance rating	Recorder, camera, remote control: IP67 (up to 1 meter below water level) live unit: IP 66
2.g.i.3	Ruggedized	Information not found on website
2.g.i.4	Pressure/depth	up to 1 meter below water level
2.g.i.5	Shock	Information not found on website

2.g.i.6	Vibrations	Information not found on website
2.g.ii	Other environmental testing	Information not found on website
2.g.ii.1	Specify tests, pass/fail results, and ratings received	Information not found on website
2.h	Safeguards	
2.h.i	Privacy safeguards or features	Information not found on website
2.h.i.1	Remote viewing	Yes, using Zepcam software
2.h.i.2	Remote activation/deactivation	Yes, using Zepcam software
2.h.i.3	Privacy masking	Information not found on website
2.h.i.4	Redacting/editing capabilities	Information not found on website
2.h.ii	Safeguards for cyber security, unintentional disassembly, etc.	Information not found on website
2.i	Regulatory	
2.i.i	Regulatory and Compliance safety requirements	Information not found on website
2.i.ii	Radiation safety standards	Information not found on website
2.j	Warranty and Maintenance Plans	
2.j.i	Length of warranty (in months)	Information not found on website
2.j.ii	Optional extended warranties	Information not found on website
2.j.ii.1	Duration and cost of extended warranties	Information not found on website
2.j.iii	Availability of extended maintenance plans	Information not found on website
2.j.iii.1	Duration and cost of extended maintenance plans	Information not found on website
2.j.iv	Service contract costs	Information not found on website
2.k	Auxiliary Equipment	
2.k.i	Manufacturer suggested retail price (MSRP) for each auxiliary equipment	Information not found on website
2.l	MSRP without optional features, accessories, or service plans	Information not found on website
2.m	Manufacturer's estimated lifetime of device	Information not found on website
2.n	Other relevant information	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – Software for Video Data Storage and Management		
3.a	Data Management	
3.a.i	Searching capabilities	Information not found on website
3.a.ii	Categorizing capabilities	Information not found on website
3.a.iii	Tagging capabilities	Yes; optional, tag import file
3.a.iv	Archiving and file retention	Information not found on website
3.a.v	Data saved on or offsite	Shared & secure Zepcam managed video server, Zepcam Black Box, Zepcam video server software or own private server
3.a.v.1	If saved offsite, specific data accessibility and storage costs	Information not found on website
3.a.v.2	Video data storage capacity local vs. cloud	Available Zepcam cloud service
3.a.v.3	Capability to accommodate multiple site installations	Information not found on website

3.a.vi	Export capabilities	Information not found on website
3.a.vi.1	Traceability feature that shows which user exported the data	Information not found on website
3.a.vii	Redacting/editing capabilities	Information not found on website
3.a.vii.1	Specify whether changes are permanent	Information not found on website
3.a.viii	Support provided for chain-of-custody requirements	Information not found on website
3.a.ix	Scalability for different organization size	Information not found on website
3.a.x	User management and role-based access levels	Information not found on website
3.b	Video Analytics	
3.b.i	Companion software to analyze recorded video and audio data	Information not found on website
3.b.ii	Types of reports built into software	Information not found on website
3.b.ii.1	Standard reports	Information not found on website
3.b.ii.2	Daily reports, historical reports, etc.	Information not found on website
3.b.ii.3	Audit reports that support chain-of-custody requirements	Information not found on website
3.b.ii.4	Customization of reports	Information not found on website
3.b.iii	Facial recognition capabilities	Information not found on website
3.b.iv	Weapons detection capabilities	Information not found on website
3.b.v	Other analytical capabilities	Information not found on website
3.c	Video Security and Authentication	
3.c.i	Compatibility of BWC video output with existing video management software for reviewing and recording	Information not found on website
3.c.ii	File integrity checks to ensure authenticity	Information not found on website
3.c.iii	Data protection mechanism while in transit and during storage	AES 128 encryption
3.c.iv	Routine software updates	Firmware updates for new software & feature releases. Over the air updates are possible
3.c.v	Cost of software updates	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Usability/Training		
4.a	Usability validation processes	Information not found on website
4.b	User community data	Information not found on website
4.c	User-group meetings and frequency	Information not found on website
4.d	Typical problems reported	Information not found on website
4.d.i	Resolution to problems	Information not found on website
4.e	Hours of tech. support and location	Information not found on website
4.f	Training provided (hours)	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Installation		
5.a	Average time to install and activate	Information not found on website

4.64 Zepcam TI XT



Figure 64. Zepcam TI XT

RFI Q.#	Survey Question (abbreviated)	Response
Vendor Information		
0	Responded to FRN?	No
1.a	Name	Zepcam
1.b	Address/phone number	Hogeweg 29, 5301 LB Zaltbommel, The Netherlands +31-85-3010290
1.c	Website	www.zepcam.com
1.d	Years in business	Information not found on website
1.e	Number and types of customers	Zepcam has clients in over 25 countries worldwide, including: Police departments (German, Dutch, Swiss, Australian, Finnish, Czech, Hungarian, Austrian, and Hong Kong; Fire departments, municipalities, public transport, industries, private security companies, first responders, special forces, and others.
1.f	Manufacturing location(s)	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – BWC		
2.a	General	
2.a.i	Name and model number	TI XT
2.a.ii	Physical dims (H" x W" x D")	Information not found on website
2.a.iii	Weight (oz.)	Information not found on website
2.a.iv	Mounting options	Helmets, shoulder, flat surfaces, straps, clothing
2.a.iv.1	Accessories needed for mounting	Information not found on website
2.a.v	Ability to mount on vehicle dashboard	Information not found on website
2.a.v.1	Accessories for vehicle dashboard mount	Information not found on website
2.a.vi	LCD display	2.8"
2.a.vii	Recording capacity	Up to 32 GB
2.a.viii	Operating conditions or limitations	Operating temperature: 14°F to 122°F
2.b	Video and Optics	
2.b.i	Maximum video resolution	576P
2.b.ii	Field of view	Information not found on website
2.b.iii	Lux rating	0.05 lux

2.b.iv	Night mode/format	Information not found on website
2.b.v	Recording speed	30 fps
2.b.vi	Recording format	MOV; h.264; PAL
2.b.vii	Recording time under default resolution settings	Information not found on website
2.b.viii	Ability to capture still photos	Information not found on website
2.b.ix	Ability to embed date/time stamp on recorded video	Yes
2.b.ix.1	Ability to authenticate and validate date/time stamp integrity	Information not found on website
2.b.x	Pre-event recording feature	Information not found on website
2.b.x.1	Time buffered and whether audio is recorded	Information not found on website
2.b.xi	Event marking capability	Information not found on website
2.b.xii	Wireless capabilities for communication	3G, 4G, WiFi (managed & Ad-hoc)
2.c	Audio	
2.c.i	Microphone feature	Yes; Cable mounted & 3.5mm Aux mic. input on handheld unit
2.c.ii	Microphone sensitivity	90 dB AGC range, -42dB@1KHz
2.c.iii	Audio format	Information not found on website
2.c.iv	Default police radio interface for BWC	Information not found on website
2.d	Data Upload	
2.d.i	Single device vs. multiple upload docking station	Multiple device docking option with Zepcam desktop software
2.d.ii	Data transfer method	Using Zepcam desktop software
2.d.iii	Manual vs. automatic upload	Automatic using Zepcam software
2.e	Battery Information	
2.e.i	Battery type; internal or removable	LiPo battery, 3.100 mAh or 6.200 mAh
2.e.ii	Recording duration	8 GB (6 hour), extendable to 32 GB (+/- 24 hour)
2.e.iii	Battery standby duration	Information not found on website
2.e.iv	Battery charge time	Information not found on website
2.e.v	Battery lifetime until replacement	Information not found on website
2.e.vi	Battery replacement procedure	Information not found on website
2.e.vii	Availability of supplemental charger for emergency battery charging	Information not found on website
2.f	GPS	
2.f.i	BWC possess GPS	Yes; GPS data is real time transmitted to the Zepcam video server.
2.f.i.1	Embedded GPS coordinates in recorded video	Yes
2.f.ii	Alternative geolocation methods	Information not found on website
2.g	Consumer Testing Results	
2.g.i	Sturdiness/fragility	Information not found on website
2.g.i.1	Drop test results	Information not found on website
2.g.i.2	Dust intrusion/water resistance rating	Recorder, camera, remote control: IP67, live unit: IP66
2.g.i.3	Ruggedized	Information not found on website
2.g.i.4	Pressure/depth	up to 1 meter below water level
2.g.i.5	Shock	Information not found on website
2.g.i.6	Vibrations	Information not found on website
2.g.ii	Other environmental testing	Information not found on website

2.g.ii.1	Specify tests, pass/fail results, and ratings received	Information not found on website
2.h	Safeguards	
2.h.i	Privacy safeguards or features	Information not found on website
2.h.i.1	Remote viewing	Yes, using Zepcam software
2.h.i.2	Remote activation/deactivation	Yes, using Zepcam software
2.h.i.3	Privacy masking	Information not found on website
2.h.i.4	Redacting/editing capabilities	Information not found on website
2.h.ii	Safeguards for cyber security, unintentional disassembly, etc.	Information not found on website
2.i	Regulatory	
2.i.i	Regulatory and Compliance safety requirements	Information not found on website
2.i.ii	Radiation safety standards	Information not found on website
2.j	Warranty and Maintenance Plans	
2.j.i	Length of warranty (in months)	Information not found on website
2.j.ii	Optional extended warranties	Information not found on website
2.j.ii.1	Duration and cost of extended warranties	Information not found on website
2.j.iii	Availability of extended maintenance plans	Information not found on website
2.j.iii.1	Duration and cost of extended maintenance plans	Information not found on website
2.j.iv	Service contract costs	Information not found on website
2.k	Auxiliary Equipment	
2.k.i	Manufacturer suggested retail price (MSRP) for each auxiliary equipment	Information not found on website
2.l	MSRP without optional features, accessories, or service plans	Information not found on website
2.m	Manufacturer's estimated lifetime of device	Information not found on website
2.n	Other relevant information	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – Software for Video Data Storage and Management		
3.a	Data Management	
3.a.i	Searching capabilities	Information not found on website
3.a.ii	Categorizing capabilities	Information not found on website
3.a.iii	Tagging capabilities	Yes; optional, tag import file
3.a.iv	Archiving and file retention	Information not found on website
3.a.v	Data saved on or offsite	Shared & secure Zepcam managed video server, Zepcam Black Box, Zepcam video server software or own private server
3.a.v.1	If saved offsite, specific data accessibility and storage costs	Information not found on website
3.a.v.2	Video data storage capacity local vs. cloud	Available Zepcam cloud service
3.a.v.3	Capability to accommodate multiple site installations	Information not found on website
3.a.vi	Export capabilities	Information not found on website
3.a.vi.1	Traceability feature that shows	Information not found on website

	which user exported the data	
3.a.vii	Redacting/editing capabilities	Information not found on website
3.a.vii.1	Specify whether changes are permanent	Information not found on website
3.a.viii	Support provided for chain-of-custody requirements	Information not found on website
3.a.ix	Scalability for different organization size	Information not found on website
3.a.x	User management and role-based access levels	Information not found on website
3.b	Video Analytics	
3.b.i	Companion software to analyze recorded video and audio data	Information not found on website
3.b.ii	Types of reports built into software	Information not found on website
3.b.ii.1	Standard reports	Information not found on website
3.b.ii.2	Daily reports, historical reports, etc.	Information not found on website
3.b.ii.3	Audit reports that support chain-of-custody requirements	Information not found on website
3.b.ii.4	Customization of reports	Information not found on website
3.b.iii	Facial recognition capabilities	Information not found on website
3.b.iv	Weapons detection capabilities	Information not found on website
3.b.v	Other analytical capabilities	Information not found on website
3.c	Video Security and Authentication	
3.c.i	Compatibility of BWC video output with existing video management software for reviewing and recording	Information not found on website
3.c.ii	File integrity checks to ensure authenticity	Information not found on website
3.c.iii	Data protection mechanism while in transit and during storage	AES 128 encryption
3.c.iv	Routine software updates	Firmware updates for new software & feature releases.
3.c.v	Cost of software updates	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Usability/Training		
4.a	Usability validation processes	Information not found on website
4.b	User community data	Information not found on website
4.c	User-group meetings and frequency	Information not found on website
4.d	Typical problems reported	Information not found on website
4.d.i	Resolution to problems	Information not found on website
4.e	Hours of tech. support and location	Information not found on website
4.f	Training provided (hours)	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Installation		
5.a	Average time to install and activate	Information not found on website

4.65 Zepcam TI Live



Figure 65. Zepcam TI XT Live

RFI Q.#	Survey Question (abbreviated)	Response
Vendor Information		
0	Responded to FRN?	No
1.a	Name	Zepcam
1.b	Address/phone number	Hogeweg 29, 5301 LB Zaltbommel, The Netherlands +31-85-3010290
1.c	Website	www.zepcam.com
1.d	Years in business	Information not found on website
1.e	Number and types of customers	Zepcam has clients in over 25 countries worldwide, including: Police departments (German, Dutch, Swiss, Australian, Finnish, Czech, Hungarian, Austrian, and Hong Kong; Fire departments, municipalities, public transport, industries, private security companies, first responders, special forces, and others.
1.f	Manufacturing location(s)	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – BWC		
2.a	General	
2.a.i	Name and model number	TI Live
2.a.ii	Physical dims (H" x W" x D")	Information not found on website
2.a.iii	Weight (oz.)	Information not found on website
2.a.iv	Mounting options	Helmets, shoulder, flat surfaces, straps, clothing
2.a.iv.1	Accessories needed for mounting	Information not found on website
2.a.v	Ability to mount on vehicle dashboard	Information not found on website
2.a.v.1	Accessories for vehicle dashboard mount	Information not found on website
2.a.vi	LCD display	2.8"
2.a.vii	Recording capacity	8 GB up to 32 GB
2.a.viii	Operating conditions or limitations	Operating temperature: 14°F to 122°F
2.b	Video and Optics	
2.b.i	Maximum video resolution	576P
2.b.ii	Field of view	Information not found on website
2.b.iii	Lux rating	0.05 lux

2.b.iv	Night mode/format	Information not found on website
2.b.v	Recording speed	25 fps
2.b.vi	Recording format	MOV; h.264; PAL
2.b.vii	Recording time under default resolution settings	Information not found on website
2.b.viii	Ability to capture still photos	Information not found on website
2.b.ix	Ability to embed date/time stamp on recorded video	Yes; officer ID, region code & watermark Time / date, GPS & frame counter
2.b.ix.1	Ability to authenticate and validate date/time stamp integrity	Information not found on website
2.b.x	Pre-event recording feature	Information not found on website
2.b.x.1	Time buffered and whether audio is recorded	Information not found on website
2.b.xi	Event marking capability	Information not found on website
2.b.xii	Wireless capabilities for communication	3G, 4G, WiFi (managed and Ad-hoc)
2.c	Audio	
2.c.i	Microphone feature	Yes; cable mounted & 3.5mm aux mic. input on handheld unit
2.c.ii	Microphone sensitivity	90 dB AGC range, -42dB@1KHz
2.c.iii	Audio format	Information not found on website
2.c.iv	Default police radio interface for BWC	Information not found on website
2.d	Data Upload	
2.d.i	Single device vs. multiple upload docking station	Multiple device docking option with Zepcam desktop software
2.d.ii	Data transfer method	Using Zepcam desktop software
2.d.iii	Manual vs. automatic upload	Automatic using Zepcam software
2.e	Battery Information	
2.e.i	Battery type; internal or removable	LiPo battery, 3.100 mAh or 6.200 mAh
2.e.ii	Recording duration	8 GB (6 hour), extendable to 32 GB (+/- 24 hour)
2.e.iii	Battery standby duration	20 hours
2.e.iv	Battery charge time	Information not found on website
2.e.v	Battery lifetime until replacement	Information not found on website
2.e.vi	Battery replacement procedure	Information not found on website
2.e.vii	Availability of supplemental charger for emergency battery charging	Information not found on website
2.f	GPS	
2.f.i	BWC possess GPS	Yes; GPS data is real time transmitted to the Zepcam video server.
2.f.i.1	Embedded GPS coordinates in recorded video	Yes
2.f.ii	Alternative geolocation methods	Information not found on website
2.g	Consumer Testing Results	
2.g.i	Sturdiness/fragility	Information not found on website
2.g.i.1	Drop test results	Information not found on website
2.g.i.2	Dust intrusion/water resistance rating	Recorder, camera, remote control: IP67 (up to 1 meter below water level) live unit: IP 66
2.g.i.3	Ruggedized	Information not found on website
2.g.i.4	Pressure/depth	up to 1 meter below water level
2.g.i.5	Shock	Information not found on website
2.g.i.6	Vibrations	Information not found on website
2.g.ii	Other environmental testing	Information not found on website

2.g.ii.1	Specify tests, pass/fail results, and ratings received	Information not found on website
2.h	Safeguards	
2.h.i	Privacy safeguards or features	Information not found on website
2.h.i.1	Remote viewing	Yes; Zepcam T1 Live can be controlled remotely from a command & control room
2.h.i.2	Remote activation/deactivation	start/ stop recording & streaming, GPS on/ off, adjust bit rate/ frame rate/ resolution
2.h.i.3	Privacy masking	Information not found on website
2.h.i.4	Redacting/editing capabilities	Information not found on website
2.h.ii	Safeguards for cyber security, unintentional disassembly, etc.	Information not found on website
2.i	Regulatory	
2.i.i	Regulatory and Compliance safety requirements	Information not found on website
2.i.ii	Radiation safety standards	Information not found on website
2.j	Warranty and Maintenance Plans	
2.j.i	Length of warranty (in months)	Information not found on website
2.j.ii	Optional extended warranties	Information not found on website
2.j.ii.1	Duration and cost of extended warranties	Information not found on website
2.j.iii	Availability of extended maintenance plans	Information not found on website
2.j.iii.1	Duration and cost of extended maintenance plans	Information not found on website
2.j.iv	Service contract costs	Information not found on website
2.k	Auxiliary Equipment	
2.k.i	Manufacturer suggested retail price (MSRP) for each auxiliary equipment	Information not found on website
2.l	MSRP without optional features, accessories, or service plans	Information not found on website
2.m	Manufacturer's estimated lifetime of device	Information not found on website
2.n	Other relevant information	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – Software for Video Data Storage and Management		
3.a	Data Management	
3.a.i	Searching capabilities	Information not found on website
3.a.ii	Categorizing capabilities	Information not found on website
3.a.iii	Tagging capabilities	Yes; optional, tag import file
3.a.iv	Archiving and file retention	Information not found on website
3.a.v	Data saved on or offsite	Shared & secure Zepcam managed video server, Zepcam Black Box, Zepcam video server software or own private server
3.a.v.1	If saved offsite, specific data accessibility and storage costs	Information not found on website
3.a.v.2	Video data storage capacity local vs. cloud	Available Zepcam cloud service
3.a.v.3	Capability to accommodate multiple site installations	Information not found on website

3.a.vi	Export capabilities	Information not found on website
3.a.vi.1	Traceability feature that shows which user exported the data	Information not found on website
3.a.vii	Redacting/editing capabilities	Information not found on website
3.a.vii.1	Specify whether changes are permanent	Information not found on website
3.a.viii	Support provided for chain-of-custody requirements	Officer ID login, device PIN code login
3.a.ix	Scalability for different organization size	Information not found on website
3.a.x	User management and role-based access levels	Information not found on website
3.b	Video Analytics	
3.b.i	Companion software to analyze recorded video and audio data	Information not found on website
3.b.ii	Types of reports built into software	Information not found on website
3.b.ii.1	Standard reports	Information not found on website
3.b.ii.2	Daily reports, historical reports, etc.	Information not found on website
3.b.ii.3	Audit reports that support chain-of-custody requirements	Information not found on website
3.b.ii.4	Customization of reports	Information not found on website
3.b.iii	Facial recognition capabilities	Information not found on website
3.b.iv	Weapons detection capabilities	Information not found on website
3.b.v	Other analytical capabilities	Information not found on website
3.c	Video Security and Authentication	
3.c.i	Compatibility of BWC video output with existing video management software for reviewing and recording	Information not found on website
3.c.ii	File integrity checks to ensure authenticity	Information not found on website
3.c.iii	Data protection mechanism while in transit and during storage	AES 128 encryption
3.c.iv	Routine software updates	Firmware updates for new software & feature releases.
3.c.v	Cost of software updates	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Usability/Training		
4.a	Usability validation processes	Information not found on website
4.b	User community data	Information not found on website
4.c	User-group meetings and frequency	Information not found on website
4.d	Typical problems reported	Information not found on website
4.d.i	Resolution to problems	Information not found on website
4.e	Hours of tech. support and location	Information not found on website
4.f	Training provided (hours)	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Installation		
5.a	Average time to install and activate	Information not found on website

4.66 Zetronix HD Blue Line Police Body Camera



Figure 66. Zetronix HD Blue Line Police Body Camera

RFI Q.#	Survey Question (abbreviated)	Response
Vendor Information		
0	Responded to FRN?	No
1.a	Name	Zetronix
1.b	Address/phone number	119 Braintree St 701, Boston MA 02134 (617) 861-4894
1.c	Website	www.zetronix.com
1.d	Years in business	11
1.e	Number and types of customers	Information not found on website
1.f	Manufacturing location(s)	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – BWC		
2.a	General	
2.a.i	Name and model number	HD Blue Line Police Body Camera
2.a.ii	Physical dims (H" x W" x D")	2.36" H x 1.3" W X 3.8" D
2.a.iii	Weight (oz.)	6.2 oz
2.a.iv	Mounting options	Pocket, belt, lapel, collar, placket, most protective armor, and uniform lapel at the shoulder
2.a.iv.1	Accessories needed for mounting	Steel clip, lapel adapter
2.a.v	Ability to mount on vehicle dashboard	No
2.a.v.1	Accessories for vehicle dashboard mount	N/A
2.a.vi	LCD display	2.0" LCD
2.a.vii	Recording capacity	Up to 32 GB
2.a.viii	Operating conditions or limitations	Information not found on website
2.b	Video and Optics	
2.b.i	Maximum video resolution	1080P
2.b.ii	Field of view	View Angle Lens: 130

		Camera Lens: 160
2.b.iii	Lux rating	Information not found on website
2.b.iv	Night mode/format	IR – Auto Manual 6 LEDs
2.b.v	Recording speed	60 fps
2.b.vi	Recording format	MP4
2.b.vii	Recording time under default resolution settings	9 hours
2.b.viii	Ability to capture still photos	Yes, JPEG
2.b.ix	Ability to embed date/time stamp on recorded video	Yes, year month date hour minute second, device ID & user ID
2.b.ix.1	Ability to authenticate and validate date/time stamp integrity	Information not found on website
2.b.x	Pre-event recording feature	Yes
2.b.x.1	Time buffered and whether audio is recorded	15 seconds
2.b.xi	Event marking capability	Information not found on website
2.b.xii	Wireless capabilities for communication	Information not found on website
2.c	Audio	
2.c.i	Microphone feature	Yes
2.c.ii	Microphone sensitivity	Information not found on website
2.c.iii	Audio format	AAC
2.c.iv	Default police radio interface for BWC	Two way radio compatible with both digital & analog
2.d	Data Upload	
2.d.i	Single device vs. multiple upload docking station	Information not found on website
2.d.ii	Data transfer method	USB 2.0 Mini B or mini HDMI
2.d.iii	Manual vs. automatic upload	Information not found on website
2.e	Battery Information	
2.e.i	Battery type; internal or removable	3200mAh
2.e.ii	Recording duration	Up to 9 hours at 720p
2.e.iii	Battery standby duration	Up to 120 hours
2.e.iv	Battery charge time	Information not found on website
2.e.v	Battery lifetime until replacement	Information not found on website
2.e.vi	Battery replacement procedure	Information not found on website
2.e.vii	Availability of supplemental charger for emergency battery charging	Information not found on website
2.f	GPS	
2.f.i	BWC possess GPS	Information not found on website
2.f.i.1	Embedded GPS coordinates in recorded video	Information not found on website
2.f.ii	Alternative geolocation methods	Information not found on website
2.g	Consumer Testing Results	
2.g.i	Sturdiness/fragility	Rigid ballistic shell, weather resistant
2.g.i.1	Drop test results	Drop resistance 9 feet
2.g.i.2	Dust intrusion/water resistance rating	IP67
2.g.i.3	Ruggedized	Information not found on website
2.g.i.4	Pressure/depth	Information not found on website
2.g.i.5	Shock	Information not found on website
2.g.i.6	Vibrations	Information not found on website
2.g.ii	Other environmental testing	Information not found on website

2.g.ii.1	Specify tests, pass/fail results, and ratings received	Information not found on website
2.h	Safeguards	
2.h.i	Privacy safeguards or features	Information not found on website
2.h.i.1	Remote viewing	Information not found on website
2.h.i.2	Remote activation/deactivation	Information not found on website
2.h.i.3	Privacy masking	Information not found on website
2.h.i.4	Redacting/editing capabilities	Information not found on website
2.h.ii	Safeguards for cyber security, unintentional disassembly, etc.	Information not found on website
2.i	Regulatory	
2.i.i	Regulatory and Compliance safety requirements	Information not found on website
2.i.ii	Radiation safety standards	Information not found on website
2.j	Warranty and Maintenance Plans	
2.j.i	Length of warranty (in months)	12 months product replacement guarantee
2.j.ii	Optional extended warranties	Information not found on website
2.j.ii.1	Duration and cost of extended warranties	Information not found on website
2.j.iii	Availability of extended maintenance plans	Information not found on website
2.j.iii.1	Duration and cost of extended maintenance plans	Information not found on website
2.j.iv	Service contract costs	Information not found on website
2.k	Auxiliary Equipment	
2.k.i	Manufacturer suggested retail price (MSRP) for each auxiliary equipment	Information not found on website
2.l	MSRP without optional features, accessories, or service plans	\$399.99
2.m	Manufacturer's estimated lifetime of device	Information not found on website
2.n	Other relevant information	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – Software for Video Data Storage and Management		
3.a	Data Management	
3.a.i	Searching capabilities	Information not found on website
3.a.ii	Categorizing capabilities	Information not found on website
3.a.iii	Tagging capabilities	Optional, tag import file
3.a.iv	Archiving and file retention	Information not found on website
3.a.v	Data saved on or offsite	Information not found on website
3.a.v.1	If saved offsite, specific data accessibility and storage costs	Information not found on website
3.a.v.2	Video data storage capacity local vs. cloud	Information not found on website
3.a.v.3	Capability to accommodate multiple site installations	Information not found on website
3.a.vi	Export capabilities	Information not found on website
3.a.vi.1	Traceability feature that shows which user exported the data	Information not found on website
3.a.vii	Redacting/editing capabilities	Information not found on website

3.a.vii.1	Specify whether changes are permanent	Information not found on website
3.a.viii	Support provided for chain-of-custody requirements	Information not found on website
3.a.ix	Scalability for different organization size	Information not found on website
3.a.x	User management and role-based access levels	Information not found on website
3.b	Video Analytics	
3.b.i	Companion software to analyze recorded video and audio data	Information not found on website
3.b.ii	Types of reports built into software	Information not found on website
3.b.ii.1	Standard reports	Information not found on website
3.b.ii.2	Daily reports, historical reports, etc.	Information not found on website
3.b.ii.3	Audit reports that support chain-of-custody requirements	Information not found on website
3.b.ii.4	Customization of reports	Information not found on website
3.b.iii	Facial recognition capabilities	Information not found on website
3.b.iv	Weapons detection capabilities	Information not found on website
3.b.v	Other analytical capabilities	Information not found on website
3.c	Video Security and Authentication	
3.c.i	Compatibility of BWC video output with existing video management software for reviewing and recording	Information not found on website
3.c.ii	File integrity checks to ensure authenticity	Information not found on website
3.c.iii	Data protection mechanism while in transit and during storage	Information not found on website
3.c.iv	Routine software updates	Information not found on website
3.c.v	Cost of software updates	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Usability/Training		
4.a	Usability validation processes	Information not found on website
4.b	User community data	Community activity posts available on website
4.c	User-group meetings and frequency	Information not found on website
4.d	Typical problems reported	Information not found on website
4.d.i	Resolution to problems	Information not found on website
4.e	Hours of tech. support and location	Information not found on website
4.f	Training provided (hours)	Training videos available on website

RFI Q.#	Survey Question (abbreviated)	Response
Installation		
5.a	Average time to install and activate	Information not found on website

5. BWC DATA MANAGEMENT/STORAGE STANDALONE SYSTEMS

5.1 IBM Intelligent Video Analytics Data Management System

RFI Q.#	Survey Question (abbreviated)	Response
Vendor Information		
0	Responded to FRN?	Yes
1.a	Name	IBM
1.b	Address/phone number	6710 Rockledge Drive, Bethesda, MD 20817-1827 (571) 375-6169
1.c	Website	www.ibm.com
1.d	Years in business	105
1.e	Number and types of customers	No information provided
1.f	Manufacturing location(s)	No information provided

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – Software for Video Data Storage and Management		
3.a	Data Management	
3.a.i	Searching capabilities	Yes
3.a.ii	Categorizing capabilities	Yes, can automatically generate metadata values
3.a.iii	Tagging capabilities	Yes, manual tagging with short or long text fields, user IDs, calculated values, customized properties
3.a.iv	Archiving and file retention	View, store, and organize the video/audio files generated
3.a.v	Data saved on or offsite	Storage on premise or cloud or hybrid
3.a.v.1	If saved offsite, specific data accessibility and storage costs	No information provided
3.a.v.2	Video data storage capacity local vs. cloud	Cloud listed as 10PB, local not provided
3.a.v.3	Capability to accommodate multiple site installations	Yes
3.a.vi	Export capabilities	Yes
3.a.vi.1	Traceability feature that shows which user exported the data	Yes
3.a.vii	Redacting/editing capabilities	Yes, allows for automatic setting
3.a.vii.1	Specify whether changes are permanent	Once entered into system, content can never be altered. Copies can be made and redaction applied to copies, but original video remains immutable.
3.a.viii	Support provided for chain-of-custody requirements	Yes
3.a.ix	Scalability for different organization size	Yes
3.a.x	User management and role-based access levels	Yes; access control can be defined by group and/or individual. Option to allow viewing of metadata without viewing video.
3.b	Video Analytics	
3.b.i	Companion software to analyze recorded video and audio data	Intelligent Video Analytics
3.b.ii	Types of reports built into software	Standard reports (number hrs video recorded by officer, by geolocation if metadata exists, by unit, etc.)

3.b.ii.1	Standard reports	Yes, as described above
3.b.ii.2	Daily reports, historical reports, etc.	No information provided
3.b.ii.3	Audit reports that support chain-of-custody requirements	Yes
3.b.ii.4	Customization of reports	Yes
3.b.iii	Facial recognition capabilities	Yes
3.b.iv	Weapons detection capabilities	Can be trained to detect objects if given a large enough training dataset
3.b.v	Other analytical capabilities	Open and extensible platform allows third-party partner to add new types of analytics
3.c	Video Security and Authentication	
3.c.i	Compatibility of BWC video output with existing video management software for reviewing and recording	Aspera Fast Adaptive Secure Protocol (FASP) and Open Network Video Interface Forum (ONVIF) compatible
3.c.ii	File integrity checks to ensure authenticity	Aspera Fast Adaptive Secure Protocol (FASP)
3.c.iii	Data protection mechanism while in transit and during storage	Aspera Fast Adaptive Secure Protocol (FASP)
3.c.iv	Routine software updates	Quarterly rollout of software updates, manual if on-premise and automatic if on cloud
3.c.v	Cost of software updates	Included with operations and maintenance contract, but dollar amount not provided

RFI Q.#	Survey Question (abbreviated)	Response
Usability/Training		
4.a	Usability validation processes	<ul style="list-style-type: none"> Assess and design. Full assessment of the environment to identify functional, technical, and business requirements, leading to the development of the solution design for execution. Configure, test, and deploy. The team configures and tests the solution to meet customer requirements and design specifications. The solution is then deployed based on a rollout plan specific to the customer. Support, maintain, and improve. Support, maintenance, and improvement of the BWC solution. Sustaining the program to meet operation and performance requirements and expectations
4.b	User community data	Optional Usability Manager
4.c	User-group meetings and frequency	IBM may participate in existing BWC user groups
4.d	Typical problems reported	No information provided
4.d.i	Resolution to problems	Yes
4.e	Hours of tech. support and location	24/7/365 telephone support
4.f	Training provided (hours)	No information provided

RFI Q.#	Survey Question (abbreviated)	Response
Installation		
5.a	Average time to install and activate	No information provided

5.2 MotionDSP Ikena Spotlight Video Redaction Software

RFI Q.#	Survey Question (abbreviated)	Response
Vendor Information		
0	Responded to FRN?	No
1.a	Name	MotionDSP
1.b	Address/phone number	700 Airport Blvd, Suite 270, Burlingame, CA 94010 (650) 579-5680
1.c	Website	www.motiondsp.com
1.d	Years in business	11 years
1.e	Number and types of customers	Military, law enforcement, oil and gas, forestry, inspection services, energy, transportation and more.
1.f	Manufacturing location(s)	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – Software for Video Data Storage and Management		
3.a	Data Management	
3.a.i	Searching capabilities	Information not found on website
3.a.ii	Categorizing capabilities	Information not found on website
3.a.iii	Tagging capabilities	Information not found on website
3.a.iv	Archiving and file retention	Information not found on website
3.a.v	Data saved on or offsite	Information not found on website
3.a.v.1	If saved offsite, specific data accessibility and storage costs	Information not found on website
3.a.v.2	Video data storage capacity local vs. cloud	Information not found on website
3.a.v.3	Capability to accommodate multiple site installations	Information not found on website
3.a.vi	Export capabilities	Yes
3.a.vi.1	Traceability feature that shows which user exported the data	Information not found on website
3.a.vii	Redacting/editing capabilities	Yes; auto redaction and modulation
3.a.vii.1	Specify whether changes are permanent	Information not found on website
3.a.viii	Support provided for chain-of-custody requirements	Information not found on website
3.a.ix	Scalability for different organization size	Information not found on website
3.a.x	User management and role-based access levels	Information not found on website
3.b	Video Analytics	
3.b.i	Companion software to analyze recorded video and audio data	Information not found on website
3.b.ii	Types of reports built into software	Information not found on website
3.b.ii.1	Standard reports	Information not found on website
3.b.ii.2	Daily reports, historical reports, etc.	Information not found on website
3.b.ii.3	Audit reports that support chain-of-custody requirements	Information not found on website
3.b.ii.4	Customization of reports	Information not found on website
3.b.iii	Facial recognition capabilities	Yes; advanced tracking algorithms greatly reduce the

		number of steps needed to track faces and objects and either blur or highlight them.
3.b.iv	Weapons detection capabilities	Information not found on website
3.b.v	Other analytical capabilities	Information not found on website
3.c	Video Security and Authentication	
3.c.i	Compatibility of BWC video output with existing video management software for reviewing and recording	Information not found on website
3.c.ii	File integrity checks to ensure authenticity	Information not found on website
3.c.iii	Data protection mechanism while in transit and during storage	Information not found on website
3.c.iv	Routine software updates	Information not found on website
3.c.v	Cost of software updates	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Usability/Training		
4.a	Usability validation processes	Information not found on website
4.b	User community data	Information not found on website
4.c	User-group meetings and frequency	Information not found on website
4.d	Typical problems reported	Information not found on website
4.d.i	Resolution to problems	Information not found on website
4.e	Hours of tech. support and location	Information not found on website
4.f	Training provided (hours)	Information not found on website

RFI Q.#	Survey Question (abbreviated)	Response
Installation		
5.a	Average time to install and activate	Information not found on website

5.3 Quantum BWC Storage

RFI Q.#	Survey Question (abbreviated)	Response
Vendor Information		
0	Responded to FRN?	Yes
1.a	Name	Quantum Corporation
1.b	Address/phone number	224 Airport Pkwy #300, San Jose, CA 95110 (703) 863-4293
1.c	Website	www.quantum.com
1.d	Years in business	35+
1.e	Number and types of customers	Thousands, including most government agencies and fortune 500 companies
1.f	Manufacturing location(s)	United States

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – Software for Video Data Storage and Management		
3.a	Data Management	
3.a.i	Searching capabilities	No; this is a function of the VMS. Quantum provides intelligent storage built to work with the VMS.
3.a.ii	Categorizing capabilities	No; this is a function of the VMS. Quantum provides intelligent storage built to work with the VMS.
3.a.iii	Tagging capabilities	No; this is a function of the VMS. Quantum provides intelligent storage built to work with the VMS.
3.a.iv	Archiving and file retention	This is a strength of the Quantum Xcellis platform, which automatically creates protection copies of footage onto lower-cost media for long-term retention. “archive” tiers can be disk, tape, object storage, and Public/private cloud.
3.a.v	Data saved on or offsite	Quantum Xcellis provides options for both.
3.a.v.1	If saved offsite, specific data accessibility and storage costs	Cost varies greatly, depending on private/public cloud, and size of the data repository.
3.a.v.2	Video data storage capacity local vs. cloud	Both local and cloud storage can start small, and grow to multiple petabytes.
3.a.v.3	Capability to accommodate multiple site installations	Yes. This is typically a function of the VMS.
3.a.vi	Export capabilities	This is typically a function of the VMS.
3.a.vi.1	Traceability feature that shows which user exported the data	This is typically a function of the VMS.
3.a.vii	Redacting/editing capabilities	This is typically a function of the VMS.
3.a.vii.1	Specify whether changes are permanent	This is typically a function of the VMS.
3.a.viii	Support provided for chain-of-custody requirements	This is typically a function of the VMS. Additionally, Quantum can provide WORM tape as an archive tier, guaranteeing that any footage has not been modified since it was written.
3.a.ix	Scalability for different organization size	Yes
3.a.x	User management and role-based access levels	No; this is a function of the VMS. Quantum provides intelligent storage built to work with the VMS.
3.b	Video Analytics	

3.b.i	Companion software to analyze recorded video and audio data	No; this is a function of the VMS. Quantum provides intelligent storage built to work with the VMS.
3.b.ii	Types of reports built into software	No; this is a function of the VMS. Quantum provides intelligent storage built to work with the VMS.
3.b.ii.1	Standard reports	No; this is a function of the VMS. Quantum provides intelligent storage built to work with the VMS.
3.b.ii.2	Daily reports, historical reports, etc.	No; this is a function of the VMS. Quantum provides intelligent storage built to work with the VMS.
3.b.ii.3	Audit reports that support chain-of-custody requirements	No; this is a function of the VMS. Quantum provides intelligent storage built to work with the VMS.
3.b.ii.4	Customization of reports	No; this is a function of the VMS. Quantum provides intelligent storage built to work with the VMS.
3.b.iii	Facial recognition capabilities	No; this is a function of the VMS. Quantum provides intelligent storage built to work with the VMS.
3.b.iv	Weapons detection capabilities	No; this is a function of the VMS. Quantum provides intelligent storage built to work with the VMS.
3.b.v	Other analytical capabilities	No; this is a function of the VMS. Quantum provides intelligent storage built to work with the VMS.
3.c	Video Security and Authentication	
3.c.i	Compatibility of BWC video output with existing video management software for reviewing and recording	No; this is a function of the VMS. Quantum provides intelligent storage built to work with the VMS.
3.c.ii	File integrity checks to ensure authenticity	No; this is a function of the VMS. Quantum provides intelligent storage built to work with the VMS.
3.c.iii	Data protection mechanism while in transit and during storage	No; this is a function of the VMS. Quantum provides intelligent storage built to work with the VMS.
3.c.iv	Routine software updates	No; this is a function of the VMS. Quantum provides intelligent storage built to work with the VMS.
3.c.v	Cost of software updates	No; this is a function of the VMS. Quantum provides intelligent storage built to work with the VMS.

RFI Q.#	Survey Question (abbreviated)	Response
Usability/Training		
4.a	Usability validation processes	No information provided
4.b	User community data	No information provided
4.c	User-group meetings and frequency	No information provided
4.d	Typical problems reported	No information provided
4.d.i	Resolution to problems	No information provided
4.e	Hours of tech. support and location	No information provided
4.f	Training provided (hours)	No information provided

RFI Q.#	Survey Question (abbreviated)	Response
Installation		
5.a	Average time to install and activate	No information provided

5.4 Visual Labs Body Camera Solution

RFI Q.#	Survey Question (abbreviated)	Response
Vendor Information		
0	Responded to FRN?	Yes
1.a	Name	Visual Labs, Inc.
1.b	Address/phone number	607 Menlo Avenue, Menlo Park, CA 94025 (650) 485-1597
1.c	Website	www.visuallabsinc.com
1.d	Years in business	2 years
1.e	Number and types of customers	Municipal police, campus police, private security firms (close protection), public security firms, (events and professional sports), other
1.f	Manufacturing location(s)	All software engineering personnel are based in Menlo Park, CA

Important note: The Visual Labs Body Camera Solution is software and includes no camera or other hardware. Instead, a Visual Labs app is installed on any available Android smartphone. This app adds certain features to the Android smartphone: 1) ability to embed, authenticate, and validate date/time stamp; 2) pre-event recording, including audio, with programmable buffer time; 3) event marking; and 4) ability to upload, either manually or automatically, from smartphones directly to cloud without a docking device. The remainder of the Visual Labs Body Solution includes a video data management and analytics system as documented in the table below.

RFI Q.#	Survey Question (abbreviated)	Response
Product Information – Software for Video Data Storage and Management		
3.a	Data Management	
3.a.i	Searching capabilities	Yes; videos are searchable by time, date, officer/officers, geographic location, shift, and/or annotation
3.a.ii	Categorizing capabilities	Yes; videos can be annotated to provide categorization. Categorization by geographic location is automatic
3.a.iii	Tagging capabilities	Yes; users can add additional metadata such as case number and case notes.
3.a.iv	Archiving and file retention	File retention policies are customized for (set by) each client. Videos may be stored indefinitely as needed, without any capacity limitation.
3.a.v	Data saved on or offsite	Cloud storage
3.a.v.1	If saved offsite, specific data accessibility and storage costs	Data is always accessible (i.e., 24/7). Storage costs are included in the Visual Labs monthly fee.
3.a.v.2	Video data storage capacity local vs. cloud	Cloud storage is (for all practical purposes) unlimited.
3.a.v.3	Capability to accommodate multiple site installations	Yes, there is no limit to number of site installations. The Visual Labs system can be utilized anywhere in the world via the Internet.
3.a.vi	Export capabilities	Yes
3.a.vi.1	Traceability feature that shows which user exported the data	Yes, logs are maintained as a traceability feature.
3.a.vii	Redacting/editing capabilities	Yes
3.a.vii.1	Specify whether changes are permanent	Redaction/edits to a video do not alter the original video. A separate redaction “layer” is appended to the original video file.
3.a.viii	Support provided for chain-of-	Yes; videos and photos are date, time, and location

	custody requirements	stamped. A digital “fingerprint” is also maintained to ensure authenticity.
3.a.ix	Scalability for different organization size	Yes, the Visual Labs system can be used by organizations of any size (i.e., no scalability restrictions).
3.a.x	User management and role-based access levels	Yes, access to all features of the Visual Labs system is permission-based and set as determined by client.
3.b	Video Analytics	
3.b.i	Companion software to analyze recorded video and audio data	Yes, video analytics software is included as part of the Visual Lab system.
3.b.ii	Types of reports built into software	See below
3.b.ii.1	Standard reports	Yes
3.b.ii.2	Daily reports, historical reports, etc.	Yes
3.b.ii.3	Audit reports that support chain-of-custody requirements	Yes
3.b.ii.4	Customization of reports	Yes
3.b.iii	Facial recognition capabilities	Yes
3.b.iv	Weapons detection capabilities	No, but could be added based on client-specific requirements.
3.b.v	Other analytical capabilities	Multiple videos can be synchronized and played back simultaneously. Advanced analytical capabilities such as officer and video location data can be displayed in various formats (e.g., heatmaps). Geofence capabilities and analysis is also available.
3.c	Video Security and Authentication	
3.c.i	Compatibility of BWC video output with existing video management software for reviewing and recording	Yes; video output is in standard MP4 format, compatible with 3 rd party systems.
3.c.ii	File integrity checks to ensure authenticity	Yes, a digital “fingerprint” of files is maintained to ensure authenticity.
3.c.iii	Data protection mechanism while in transit and during storage	Yes; data is encrypted in transit and at rest. SSL is used in transit. Complex passwords are required.
3.c.iv	Routine software updates	Routine app software updates are released approximately every 30 days. The update process is extremely simple for the user. Website software updates occur as needed and do not require any intervention by users.
3.c.v	Cost of software updates	No charge

RFI Q.#	Survey Question (abbreviated)	Response
Usability/Training		
4.a	Usability validation processes	Prior to implementation, Visual Labs conducts extensive discussions with clients regarding specific usability requirements. Settings on the BWC smartphone are then programmed for optimal usefulness to the client and its officers. The Visual Labs system is software-based with many variable settings that can be modified to meet client-specific requirements and/or officer preferences.

4.b	User community data	During implementation, Visual Labs provides hands-on training. After implementation, Visual Labs makes contact with clients on a monthly basis, or as needed. Client feedback is solicited on a regular basis and features are added as appropriate.
4.c	User-group meetings and frequency	Visual Labs conducts in-person and telephonic meetings with clients on an as-needed basis.
4.d	Typical problems reported	None
4.d.i	Resolution to problems	N/A
4.e	Hours of tech. support and location	Routine technical support by telephone and/or email is available during business hours. Emergency technical support by telephone and/or email is available 24/7. If needed, in-person, on-site technical support will be provided. Technical support for any software issue is provided at no cost.
4.f	Training provided (hours)	On-site, in-person group training is typically provided. Training can often be accomplished in 30 to 60 minutes for BWC users, and one hour for website users.

RFI Q.#	Survey Question (abbreviated)	Response
Installation		
5.a	Average time to install and activate	Pre-implementation setup typically takes two to three days. On-site implementation and training can generally be accomplished in four hours or less.

6. FUTURE CONSIDERATIONS

BWC technology, like many technologies, is improving seemingly every day. Three future trends seem likely to be of interest: facial recognition, weapons detection, and automated analytics.

Facial recognition features allow the user to identify or verify a person from a digital image or a video frame. This back end capability can allow law enforcement to overcome the difficulties and time involved in achieving accurate identification when reviewing video footage at a later time. It also eliminates the need for agencies to hire and train personnel for this task.

Weapons detection features allow the user to identify or verify previously programmed weapons of interest from a digital image or a video frame. Similar to facial recognition, this back-end capability can allow law enforcement to overcome the difficulties and time involved in achieving accurate identification.

Automated analytics is another feature of interest; having an automated analytics feature will be a great improvement over the manual, labor-intensive task being conducted today. Currently, the medical field has technology that can automatically redact medical images to meet strict Institutional Review Board (IRB) requirements and comply with HIPAA regulations. Bluebird Inc. saw the correlation between redacting medical images and redacting persons/objects of interest and is now adapting this technology to BWC applications for law enforcement use. In addition to auto-redaction, this standalone application has tag, search, and transcribe capabilities.

Technology is improving and increasing potential – as long as this technology trend continues, BWC system technology will continue to evolve in the coming years.

7. CONCLUSION

With recent publicity about interactions between police officers and citizens, popularity for employing body worn cameras is increasing. The BWC market is similarly growing and the number of vendors and offerings is expanding. This survey reviewed currently available literature, sought input from vendors, and compiled vendor responses to the RFI.

Key features of BWC technology include high camera resolution, low-light recording, pre-event recording, and software redaction capabilities. It is important to reiterate that implementing a body worn camera program is not as simple as choosing the best feature that the law enforcement agency can afford. Before making a choice, much planning should be done and many key points must be considered. Implementing a BWC program touches upon many financial obligations, policy concerns, and legal implications. The technology is only as good as the people who implement it. A law enforcement agency can purchase the best equipment available on the market but, without the proper policies and guidance on how to effectively use the BWC, it may become more of a problem than a solution. Technology should be implemented based upon agency objectives along with careful consideration of policy and legal implications. Privacy

laws and constitutional doctrines related to BWC systems are evolving and these issues are unclear until they are tested in court. For more background, policy and legal details, please refer to the accompanying NIJ BWC Market Survey Primer document.

There is no indication that these BWC systems will stop proliferating. In fact, vendors are developing and fine-tuning next-generation BWC features such as facial recognition and weapons detection.

This market survey revealed that there are many more vendors now that sell BWC products as compared to previous market surveys; that all the new technological BWC features prompts the strong need for clear policies; and that this is an evolving area of law and these issues are currently unclear with regard to BWCs.

This market survey presents an overview of the technologies available and information accessible at the time of data collection. Because the market is changing rapidly, additional information should be sought from the specific vendors of interest when considering an acquisition of BWC equipment.

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APPENDIX B.REQUEST FOR INFORMATION



25430

Federal Register / Vol. 81, No. 82 / Thursday, April 28, 2016 / Notices

Abstract: This form is filed with ATF Form 1, 4 or 5 applications when the applicant, maker, or transferee is other than an individual or government agency. This allows ATF to conduct background checks of persons who make, acquire, or possess firearms.

5. *An estimate of the total number of respondents and the amount of time estimated for an average respondent to respond:* An estimated 115,829 respondents will take .25 hours to respond.

6. *An estimate of the total public burden (in hours) associated with the collection:* The estimated annual public burden associated with this collection is 57,914.5 hours.

If additional information is required contact: Jerri Murray, Department Clearance Officer, United States Department of Justice, Justice Management Division, Policy and Planning Staff, Two Constitution Square, 145 N Street NE., Room 3E-405B, Washington, DC 20530.

Dated: April 22, 2016.

Jerri Murray,
Department Clearance Officer for PRA, U.S.
Department of Justice.

[FR Doc. 2016-09877 Filed 4-27-16; 8:45 am]
BILLING CODE 4410-FY-P

DEPARTMENT OF JUSTICE

[OMB Number 1140-0015]

Agency Information Collection Activities; Proposed eCollection eComments Requested; Application for Tax Exempt Transfer and Registration of Firearm (ATF Form 5 (5320.5))

AGENCY: Bureau of Alcohol, Tobacco, Firearms and Explosives, Department of Justice.

ACTION: 30-Day notice.

SUMMARY: The Department of Justice (DOJ), Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF), will submit the following information collection request to the Office of Management and Budget (OMB) for review and approval in accordance with the Paperwork Reduction Act of 1995. The proposed information collection was previously published in the **Federal Register** 81 FR 8100, on February 17, 2016, allowing for a 60-day comment period.

DATES: Comments are encouraged and will be accepted for an additional 30 days until May 31, 2016.

FOR FURTHER INFORMATION CONTACT: If you have additional comments especially on the estimated public

burden or associated response time, suggestions, or need a copy of the proposed information collection instrument with instructions or additional information, please Gary Schaible, Industry Liaison Analyst, Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF), 99 New York Ave. NE., Washington, DC 20226 at email: nfaombcomments@atf.gov. Written comments and/or suggestions can also be directed to the Office of Management and Budget, Office of Information and Regulatory Affairs, Attention Department of Justice Desk Officer, Washington, DC 20503 or sent to OIRA_submissions@omb.eop.gov.

SUPPLEMENTARY INFORMATION: Written comments and suggestions from the public and affected agencies concerning the proposed collection of information are encouraged. Your comments should address one or more of the following four points:

- Evaluate whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility;
- Evaluate the accuracy of the agency's estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used;
- Evaluate whether and if so how the quality, utility, and clarity of the information to be collected can be enhanced; and
- Minimize the burden of the collection of information on those who are to respond, including through the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, e.g., permitting electronic submission of responses.

Overview of This Information Collection

1. *Type of Information Collection:* Revision of a currently approved collection.
2. *The Title of the Form/Collection:* Application for Tax Exempt Transfer and Registration of Firearm.
3. *The agency form number, if any, and the applicable component of the Department sponsoring the collection:*
Form number: ATF Form 5 (5320.5).
Component: Bureau of Alcohol, Tobacco, Firearms and Explosives, U.S. Department of Justice.
4. *Affected public who will be asked or required to respond, as well as a brief abstract:*
Primary: State, Local, or Tribal Government.

Other (if applicable): Individuals or Households; Business or other for-Profit; and Not-for-profit institutions.

Abstract: This form is filed to obtain permission to make and transfer a National Firearms Act (NFA) firearm. Transfer without approval and possession of an unregistered NFA firearm are illegal. The approval of the application effectuates the registration of a firearm to the transferee. The transferee claims an exemption from the transfer tax by filing this application.

5. *An estimate of the total number of respondents and the amount of time estimated for an average respondent to respond:* An estimated 10,591 respondents will take .51 hours to respond.

6. *An estimate of the total public burden (in hours) associated with the collection:* The estimated annual public burden associated with this collection is 5,350 hours.

If additional information is required contact: Jerri Murray, Department Clearance Officer, United States Department of Justice, Justice Management Division, Policy and Planning Staff, Two Constitution Square, 145 N Street NE., Room 3E-405B, Washington, DC 20530.

Dated: April 22, 2016.

Jerri Murray,
Department Clearance Officer for PRA, U.S.
Department of Justice.

[FR Doc. 2016-09876 Filed 4-27-16; 8:45 am]
BILLING CODE 4410-FY-P

DEPARTMENT OF JUSTICE

Office of Justice Programs

[OJP (NIJ) Docket No. 1708]

Body Worn Camera Technologies Market Survey

AGENCY: National Institute of Justice (NIJ), Justice.

ACTION: Notice of request for information.

SUMMARY: The NIJ is soliciting information in support of the upcoming National Criminal Justice Technology Research, Test, and Evaluation Center (NIJ RT&E Center) "Market Survey of Body Worn Camera (BWC) Technologies." This market survey, which will identify commercially available body worn camera systems, will be published by NIJ to assist purchasing agents or other representatives of law enforcement officials in their assessment of relevant information prior to making purchasing decisions. Comments with regard to the market survey itself, including which

categories of information are appropriate for comparison, as well as promotional material (e.g., slick sheets) and print-quality images in electronic format, are also invited.

DATES: Responses to this request will be accepted through 11:59 p.m. Eastern Standard Time on May 31, 2016.

ADDRESSES: Responses to this request may be submitted electronically in the body of, or as an attachment to, an email sent to administrator@nijrtcenter.org with the required subject line "Body Worn Camera Federal Register Response." Questions and responses may also be sent by mail (please allow additional time for processing) to the following address: National Criminal Justice Technology Research, Test and Evaluation Center, ATTN: Body Worn Camera Federal Register Response, Johns Hopkins University Applied Physics Laboratory, 11100 Johns Hopkins Road, Mail Stop 17-N444, Laurel, MD 20723-6099.

FOR FURTHER INFORMATION CONTACT: For more information on this request, please contact Vivian Hung (NIJ RT&E Center) by telephone at (240) 228-2286 or administrator@nijrtcenter.org. For more information on the NIJ RT&E Center, visit <http://nij.gov/funding/awards/Pages/award-detail.aspx?award=2013-MU-CX-K111> and view the description, or contact Jack Harne (NIJ) by telephone at 202-616-2911 or at Jack.Harne@usdoj.gov. Please note that these are not toll-free telephone numbers.

SUPPLEMENTARY INFORMATION:

Information Sought: Information is sought for an upcoming "Market Survey of Body Worn Camera (BWC) Technologies," which seeks to identify commercially available body worn camera systems for law enforcement use.

Usage: This market survey will be published by NIJ to assist law enforcement agencies in their assessment of relevant information prior to making purchasing decisions.

Information Categories: Comments are invited with regard to the market survey, including which categories of information are appropriate for comparison, as well as promotional material (e.g., slick sheet) and print-quality photographs of the technology. At a minimum, the Center intends to include the following categories of information for each Body Worn Camera technology that may be of use to law enforcement officials:

1. Vendor Information

a. Name

- b. Address and phone number of corporate office
- c. Web site
- d. Years your company has been in business
- e. Number and types of customers (e.g., municipal, county, or state officers)
- f. Location where technology is manufactured, assembled, or refurbished

2. Product Information—BWC

a. General

- i. Name and model number
- ii. Physical dimensions (height × width × depth, in inches) of device
- iii. Weight (in ounces) of device
- iv. Mounting options (e.g., head, chest, glasses, helmet, etc.)

1. Accessories needed for optional mounting locations

- v. Whether the BWC is able to mount on a vehicle for dashboard applications

- 1. If so, any accessories needed
- vi. LCD display (i.e., whether the BWC has a playback screen for on-person video viewing)
- vii. Recording capacity (i.e., the memory storage capacity of the BWC)
- viii. Operating conditions or limitations (e.g., temperature, humidity, precipitation, high wind, etc.)

b. Video and Optics

- i. Maximum video resolution of the BWC (e.g., 640×480, 1080p)
- ii. Field of view of the BWC (e.g., 75°, 120°)

- iii. Lux rating of the BWC (i.e., minimum amount of light needed to produce an acceptable image)

- iv. Whether the BWC has a night mode and in what format (e.g., low light, IR lens, etc.)

- v. Recording speed of the BWC (e.g., 30 frames per second)

- vi. Recording format of the BWC (e.g., MPEG-4, MOV)

- vii. Recording time of the BWC under default resolution settings

- viii. Whether the BWC captures still photos

- ix. Whether the BWC embeds a time/date stamp in the recorded video

- 1. Whether there are any means to authenticate and validate the integrity of the time/date stamp

- x. Whether the BWC has a pre-event record feature (i.e., a feature that includes a data buffer before the recorded event to show what triggered the recording)

- 1. If so, the time buffered and whether audio is recorded

- xi. Whether the BWC possesses an event marking capability

- xii. Whether the BWC has wireless

capabilities to communicate with a computer or external DVR unit

c. Audio

- i. Microphone feature
- ii. Microphone sensitivity
- iii. Audio format of the BWC (e.g., MP2, AAC)

- iv. Whether there is a default police radio interface for the BWC

d. Data Upload

- i. Single device vs. docking station for multiple video/audio upload

- ii. Data transfer method (e.g., wire, wireless, removable media card, etc.)

- iii. Manual vs. automatic uploading capabilities

e. Battery Information

- i. Battery type used by the BWC and whether it is internal or removable

- ii. Recording duration

- iii. Battery standby duration

- iv. Battery charge time

- v. Battery lifetime until replacement needed

- vi. Battery replacement procedure and where it must be done (e.g., field or factory), if applicable

- vii. Availability of supplemental charger for emergency battery charging (e.g., hand crank, backup battery, external battery charger with USB, solar, etc.), if applicable

f. GPS

- i. Whether the BWC possesses a GPS

- 1. If so, whether GPS coordinates are embedded in recorded video

- ii. Alternative geolocation methods (e.g., using smartphone or Bluetooth information via cell towers)

g. Consumer Testing Results

- i. Sturdiness/fragility

- 1. Drop test results

- 2. Dust intrusion/water resistance rating (IPX scale)

- 3. Ruggedized

- 4. Pressure/depth

- 5. Shock

- 6. Vibrations

- ii. Whether the BWC has undergone environmental testing other than that listed above

- 1. If so, specify tests, pass/fail results, and ratings received

h. Safeguards

- i. Privacy safeguards or features

- 1. Remote viewing

- 2. Remote activation/deactivation

- 3. Privacy masking (i.e., feature that allows blurring or completely blocking certain areas to protect personal privacy or sensitive information)

- 4. Redacting/editing capabilities

- ii. Safeguards for cyber security, unintentional disassembly, jamming, or intentional damage

i. Regulatory

- i. Regulatory and Compliance safety

- requirements (e.g., FCC approved) and/or any potential NIJ Technology Standards, if applicable
- ii. Radiation safety standards (e.g., ANSI, ICRP, NCRP, EURATOM, etc.), if applicable
- j. Warranty and Maintenance Plans
 - i. Length of warranty (in months) that comes standard with the system/device and the components that are covered
 - ii. Optional extended warranties available
 - 1. Duration and cost of extended warranties
 - iii. Availability of extended maintenance plans
 - 1. Duration and cost of extended maintenance plans
 - iv. Service contract costs
- k. Auxiliary equipment (e.g., car chargers, emergency chargers, etc.)
 - i. Manufacturer suggested retail price (MSRP) for each piece of auxiliary equipment
 - l. MSRP without optional features, accessories or service plans
- m. Manufacturer's estimated lifetime of the device
- n. Other information or notes that are relevant to the system/device

3. Product Information—Software for Video Data Storage and Management

- a. Data Management
 - i. Searching capabilities
 - ii. Categorizing capabilities (e.g., by law enforcement officer, location, incident, etc.)
 - iii. Tagging capabilities (i.e., a feature that allows users to add additional metadata, such as case number and case notes)
 - iv. Archiving and file retention capacity
 - v. Data saved on or offsite (e.g., cloud storage)
 - 1. If saved offsite, specify data accessibility and storage costs
 - 2. Video data storage capacity local vs. cloud
 - 3. Capability to accommodate multiple site installations
 - vi. Export capabilities
 - 1. If yes, whether there is a traceability feature that shows which user exported the data
 - vii. Redacting/editing capabilities
 - 1. If redacted/edited, specify whether changes are permanent
 - viii. Support provided for chain-of-custody requirements
 - ix. Scalability for different organization size
 - x. User management and role-based access levels
- b. Video Analytics
 - i. Whether there is companion software to analyze the video and

- audio data recorded by the BWCs
- ii. Types of reports that are built into the software
 - 1. Standard reports (e.g., distribution of number of hours of recording per officer in a given period)
 - 2. Daily reports, historical reports, etc.
 - 3. Audit reports that support chain-of-custody requirements
 - 4. Customization of reports
 - iii. Facial recognition capabilities
 - iv. Weapons detection capabilities
 - v. Other analytical capabilities not mentioned above
- c. Video Security and Authentication
 - i. Compatibility of the BWC video outputs with existing video management software for viewing and recording
 - ii. File integrity checks to ensure authenticity
 - iii. Data protection mechanism while in transit and during storage (e.g., SSL, encryption, password strength, etc.)
 - iv. Routine software updates, approximate frequency, and how it is updated (e.g., manual or automatic)
 - v. Cost of software updates

4. Usability/Training

- a. Types of processes used to ensure usability of hardware and software products (e.g., requirements gathering, observation, task analysis, interaction design, usability testing, ergonomics, interoperability, etc.)
- b. Types of data gathered from the user community (e.g., interviews, observations during hands-on training, survey, satisfaction surveys, repeat customers, etc.) to evaluate your products, and how often it is collected
- c. Types of user-group meetings and frequency of their occurrence (e.g., dedicated face-to-face hosted meetings, in conjunction with established meetings such as those of the Body Work Video Steering Group and the Metropolitan Washington Council of Governments Police Technology Subcommittee, etc., interactive webinars).
- d. Categories of problems reported to the vendor and estimated percentage of user community that experienced them within the last three (3) years
 - i. Resolution(s) to the problems identified above
- e. Hours of technology support provided and location (e.g., telephone, web-based, or on site at agency), including any additional costs beyond the license/purchase

- f. Hours and type of training provided (e.g., on-site, web-based, pre-recorded, play environment etc.)

5. Installation

- a. Average time to install the complete BWC system and activate the first BWC device (in minutes, hours, or days)

Nancy Rodriguez,
Director, National Institute of Justice.
[FR Doc. 2016-09958 Filed 4-27-16; 8:45 am]
BILLING CODE 4410-18-P

DEPARTMENT OF LABOR

Employee Benefits Security Administration

Proposed Exemptions From Certain Prohibited Transaction Restrictions

AGENCY: Employee Benefits Security Administration, Labor.
ACTION: Notice of proposed exemptions.

SUMMARY: This document contains notices of pendency before the Department of Labor (the Department) of proposed exemptions from certain of the prohibited transaction restrictions of the Employee Retirement Income Security Act of 1974 (ERISA or the Act) and/or the Internal Revenue Code of 1986 (the Code). This notice includes the following proposed exemptions: D-11813, The Michael T. Sewell, M.D., P.S.C. Profit Sharing Plan (the Plan); D-11822, Plumbers' Pension Fund, Local 130, U.A. (the Plan or the Applicant); D-11858, Liberty Media 401(k) Savings Plan (the Plan); and, D-11866, Baxter International Inc. (Baxter or the Applicant).

DATES: All interested persons are invited to submit written comments or requests for a hearing on the pending exemptions, unless otherwise stated in the Notice of Proposed Exemption, within 45 days from the date of publication of this **Federal Register** Notice.

ADDRESSES: Comments and requests for a hearing should state: (1) The name, address, and telephone number of the person making the comment or request, and (2) the nature of the person's interest in the exemption and the manner in which the person would be adversely affected by the exemption. A request for a hearing must also state the issues to be addressed and include a general description of the evidence to be presented at the hearing.

All written comments and requests for a hearing (at least three copies) should be sent to the Employee Benefits