

SPECIAL ADMINISTRATIVE BOARD OF THE TRANSITIONAL SCHOOL DISTRICT OF THE CITY OF ST. LOUIS

RFP TITLE: Safety and Security Equipment Upgrade

Extended Bid Due Date: September 23rd, 2016 at 10 AM

RFP # 013-1617

Addendum #5:

This addendum is to advise all bidders that the below changes were made to the scope of work.

- Extend Bid Due Date to Sept 23rd, 2016 at 10am
- Revised scope of work and disregard previous scope of work
- Provide hourly/afterhours/weekend rate for installation

PURPOSE OF PROPOSAL:

The vendor shall provide costs for Network Disk Recorder, camera type 1, camera type 2, handheld and walk-through metal detectors, Videofied Video Security System, and the Raptor Visitor Management Software system. Vendor must provide hourly/afterhours/weekend rate for installation onsite training for district employees. The security equipment must include the minimum requirements listed below or equal.

1. Network Disk Recorder

PART 1 GENERAL

1.01 SUMMARY

1.02 WARRANTY

A. Provide manufacturer's standard warranty.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Provide High Performance Network Disk Recorder for Network Cameras

2.02 High Performance Network Disk Recorder for Network Cameras

- A. The recorder shall be capable of connecting to up to 64 network cameras without extra license fees and their images can be recorded simultaneously.
- B. The recorder shall be equipped with 9 hot plug HDD slots. It shall allow up to 9TB HDD storage to be installed in the main unit. The recorder shall have the capability of expansion up to 54 TB with five optional Hard Disk Extension Units, each with 9 HDD slots.
- C. The recorder shall have Intelligent VMD search function that allow motions in a specified area in the recorded images of the compatible i-Pro cameras* to be quickly searched.
- D. The recorder shall be the equipment with an embedded real-time operating system and shall not be based on a Microsoft Windows OS. The OS must reside completely in the hardware and not be installed on the hard disk drives. Installed disk drives must be dedicated to recording videos.
- E. The recorder shall support MPEG-4 and JPEG multi format.
- F. The recorder shall provide Various Recording Mode: Manual, Schedule, Event (Pre/Post), Emergency, and External Timer. It shall have the capabilities to control: Pan/Tilt, Zoom, Focus, Brightness and Preset Positions. It shall be able to search using: Time & Date, Event Type and Camera number.

- G. The recorder shall have up to 8 recording programs including individual recording mode for each camera, and 6 time schedules per day.
- H. The recorder shall have up to 64 audio capabilities and can be recorded and played back at G.726 (ADPCM) 32 kbps.
- The recorder shall have various alarm sources such as 32x Terminal inputs, 64x Camera alarm, Alarm Protocol. The alarm actions shall include Alarm recording, Email notification, Alarm message, Camera positioning, FTP image transfer, Terminal output, alarm protocol output, Buzzer and LED.
- J. The recorder shall have 2x built-in Gigabit network interfaces (10Base-T / 100Base-T X / 1000Base-T) for camera recording and client access.
- K. The recorder shall have the quick discovery and IP setup function for network cameras.
- L. The recorder shall have the capabilities to transfer recorded images to FTP server upon alarm and/or live image periodically. Images recorded in the SD memory card in the cameras can be transferred to the recorder automatically even when the recorder is in recording status.
- M. The recorder shall have User/Host authentication, 4 programmable user levels, 16 user priorities and User-Camera View/Control partitioning setup for sophisticated user management. It shall be capable of up to 32 user registrations.
- N. The recorder shall have Alteration detection and recorded data encryption for data security.
- O. Multi recorder, Multi site systems shall be connected with the optional Management Software.
- P. The recorder shall have RAID5/6 redundant recording for data security. The RAID6 feature allows the recorder to recover from a two-disk failure without any loss of data (minimum four HDDs are required). With hot plug support, drives can be replaced without any downtime, allowing 24/7 operations. It shall have Disk partitioning to include Normal, Event, Pre-Event and Copy for flexible record management.
- Q. The recorder shall be viewable from any properly connected PC using Microsoft Internet Explorer version 6.0 or later

- R. The recorder shall provide user authentication and support different user privileges based on logon ID. From the client the user should (with proper authentication) be able to do the following:
 - Setup cameras
 - Define live viewing, recording rates and quality settings
 - Define recording programs and schedules
 - View live video in either single or quad views
 - Search and playback recorded video
 - Download selected recorded video
 - Control connected cameras
- S. The recorder shall work with the optional viewer software which is capable of viewing multiple cameras from multiple recorders on a single screen and provide the following features:
 - Software shall be able to manage up to 100 networks connected recorders.
 - Software shall be able to display live video from any camera on any connected recorder.
 - Software shall be able to display 1, 2x2, 3x3 or 4x4 multiplexed video.
 - Software shall show registered recorders as icons in a drop down menu. Cameras will be shown as icons on the same menu, indented under the attached recorder.
 - Software shall enable user to assign any video from any recorder into any window on the multiplexed display
 - Software shall permit to register up to 32 users and each password and provide up to 5 different levels of user privileges.
 - Software shall permit the remote operation of properly configured cameras according to the user privilege level.
 - Software shall provide search functions for registered recorders and allow search by Event, Mark or Motion. It must apply these search criteria across multiple recorders.
 - Software shall permit the simultaneous playback of up to 16 videos.
 - Software must run on an IBM-PC/AT compatible computer with the following minimum specifications:
 - 1. OS: Microsoft Windows XP Home SP2/ XP Professional SP2/ 32bit Vista Ultimate
 - 2. CPU: Intel Core 2 Duo 2.66 GHz or faster
 - 3. RAM: 1 GB or more
 - 4. VRAM: 64 MB or more
 - 5. Microsoft DirectX 9.0c or later
 - 6. Graphics Card supporting more than 1024 x 768 resolution
 - 7. 100/1000 Ethernet Network Card

- 8. Internet Explorer 6.0 SP2 or later
- 9. Mouse, Keyboard, 1x USB port
- T. Supported protocols: TCP/IP, UDP/IP, HTTP, FTP, SMTP, DHCP, DNS, DDNS, NTP, SNMP
- U. The power source shall be 120VAC, 60Hz at approx. 170W

2. Camera Type 1 - Fixed Dome Network Camera

PART 1 GENERAL

1.03 SUMMARY

1.04 WARRANTY

B. Provide manufacturer's standard warranty.

PART 2 PRODUCTS

2.01 MANUFACTURERS

B. Provide Video Surveillance Camera from single source manufacturer.

2.02 Model Requirements

- V. The camera shall incorporate a 1/3" progressive MOS sensor, 2048(H) x 1536(V) pixels effective (with a micro lens on each pixel for superior picture detail and clarity).
- W. The camera's MOS sensor shall be charged with long and short charges, creating both standard shutter speeds and fast shutter speeds simultaneously, on a single image field. The MOS sensor shall automatically apply each exposure pattern to bright and dark areas. The MOS sensor shall feature images with a dynamic range of up to128 times.
- The camera shall compliant to IEC impact test standard (IEC 60068-2-75 test Eh) 50J.
- Y. The camera shall compliant to IP66 Weather and Dust resistance with IEC60529 measurement standard.
- Z. The camera shall have a minimum illumination of WV-SW158 1.2 lx color .
- AA. The camera shall feature Full HD pixel (1920x1080) image transmitting.
- BB. The camera shall be capable of generating and transmitting images to meet the following specifications.

<u>3 Megapixel Mode [4:3 Format]</u> JPEG: 2,048 x 1,536 , up to 15 fps H.264: 1,280 x 960 , up to 15 fps

<u>2 Megapixel Mode [16:9 Format]</u> JPEG (MJPEG): 1920 x 1080 / 640 x 360 / 320 x 180, up to 30 fps H.264: 1920 x 1080 / 640 x 360 / 320 x 180, up to 30 fps

<u>1.3 Megapixel Mode [16:9 Format]</u> JPEG (MJPEG): 1,280 x 720 / 640 x 360 / 320 x 180, up to 30 fps H.264: 1,280 x 720 / 640 x 360 / 320 x 180, up to 30 fps

<u>1.3 Megapixel Mode [4:3 Format]</u> JPEG: 1,280 x 960 / VGA (640 x 480) / QVGA (320 x 240), up to 30 fps H.264: 1,280 x 960 / VGA (640 x 480) / QVGA (320 x 240) , up to 30 fps

Simultaneous JPEG and two independent H.264 streams which are different resolutions and bits. .

- CC. The camera shall feature 1.95 mm built in lens. The lens shall be suitable for use in areas where there is a varying light source. The lens shall have a maximum aperture ratio of 1:2.2 (wide). The unit shall have an angular field-of-view of 100 degrees wide (horizontal), and 81.0 degrees wide (vertical).
- DD. The camera's built-in shutter shall feature 14 settings of off, 1/30, 3/100, 3/120, 2/100, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000 and 1/10000 sec. A special menu shall allow fine adjustment of chrominance, pedestal and aperture level.
- EE. The power source for the camera shall be PoE IEEE 802.3af (compliant power device. All units shall be UL listed.)
- FF. Picture quality mode is dynamically changed by camera itself upon picture characteristic to feed 30 fps at H.264 mode.
- GG. The camera shall be able to support uni-cast and multi-cast transmissions.
- HH. The camera shall have a built-in web server so that access to the IP video stream can be obtained using Internet Explorer Version 7.0 or better. The web browser shall permit the user to make adjustments and settings to the camera.
- II. The Bandwidth Limit shall be adjustable to 64/128/256/512/768/1024/2048/3072/4096/8192kbps or unlimited.

- JJ. The camera shall be capable of being configured to automatically transmit alarm images transfer via FTP file transfer and/or e-mail. In addition the camera shall support the scheduled transfer of image data via FTP to an FTP server.
- KK. The camera shall have one-way audio feature and be capable of transmitting the audio stream through the same Ethernet connection as the video. The audio shall be encoded using the G.726 or equivalent ADPCM standard.
- LL. The camera shall provide an SD Card (SDXC/SDHC/SD) slot which can support a maximum of a 64Gbytes SDXC card that can cache images in the event of a network failure. The camera shall also support manual recording to the optional SD Memory Card
- MM. Supported protocols:

IPv6: TCP/IP, UDP/IP, HTTP, HTTPS, RTP, FTP, SMTP, DNS, NTP, DHCPv6, ICMP, ARP and SNMP. IPv4:TCP/IP, UDP/IP, HTTP, HTTPS, RTSP, RTP, RTP/RTCP, FTP, SMTP, DHCP, DNS, DDNS, NTP, SNMP, UPnP, IGMP, ICMP, and ARP.

The camera shall support IPV4 and IPV6 network addressing.

- NN. With uploading extension software and optional Registration Key, the camera shall support optionally Face detection function.
- OO. The camera shall have Fog Compensation.
- PP. The camera shall have Advanced VBR in transmission priority.
- QQ. The camera shall have SD memory card life notification function.
- RR. The camera shall be compliant with ONVIF Profile G.
- SS. The camera shall be capable of operating at an Ambient Temperature of -22 degrees F \sim +122 degrees F (-30 degrees C \sim +50 degrees C)
- TT. All units shall be UL listed.
- UU. The camera should also contain a connector for Ethernet.

PART 3 EXECUTION

- **3.01** ACCEPTABLE INSTALLERS
- 3.01 INSTALLATION

3. Camera - Type 2 FIXED DOME NETWORK CAMERA

PART 1 GENERAL

1.05 SUMMARY

1.06 WARRANTY

C. Provide manufacturer's standard warranty.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Provide Video Surveillance Camera from single source manufacturer

2.2 DYNAMIC HD VANDAL RESISTANT AND WATERPROOF FIXED DOME NETWORK CAMERA

A. GENERAL CHARACTERISTICS

- 1. The Camera shall produce a resolution of 1,280 x 720 pixels (HD 720p) at up to 60 fps with a 16:9 aspect ratio.
- 2. The Fixed Dome Camera shall produce a resolution of 1,920 x 1,080 pixels at 30fps with a 16:9 aspect ratio.
- 3. The Fixed Dome Camera shall utilize an approximate 1/3 type high sensitivity MOS image sensor.
- 4. The Fixed Dome Camera shall feature a 133dB wide dynamic range based on Enhanced Super Dynamic and Adaptive Black Stretch technology (ABS).
- 5. The Dynamc Fixed Dome Camera shall generate multiple simultaneous video streams of JPEG streams and up to four (4) high profile H.264 streams.
- 6. The Fixed Dome Camera shall be equipped with GOP control and Auto-VIQS as bitrate reducing technology.
- 7. The Fixed Dome Camera shall utilize 3D-Multi process Noise Reduction (3D-MNR) and Frequency Divided Filter (FDF) to remove visual noises in low light conditions.
- 8. The Fixed Dome Camera shall be rated to IP66 and NEMA 4X standard against water and dust ingress.

- 9. The Fixed Dome Camera shall be rated to IK10 vandal resistance and IEC 60068-2-75 test Eh, 50J.
- 10. A user shall be able to view video on a PC using a browser.
- 11. A user shall be able to view video on a smartphone and tablet using viewer software for iPhone and Android.
- 12. The Fixed Dome Camera shall offer Video Motion Detection (VMD) with four (4) programmable detection areas, 15 steps sensitivity level and 10 steps detection size.
- 13. The Fixed Dome Camera shall offer an optional intelligent VMD (i-VMD) which provides intruder detection, loitering detection, direction detection, scene change detection, object detection and cross line detection.
- 14. The Fixed Dome Camera shall offer an optional face detection function.
- 15. The Fixed Dome Camera shall have 2x and 4x digital zoom function.
- 16. The Fixed Dome Camera shall provide Variable Image Quality on Specified Area (VIQS) which sets different image qualities to up to eight (8) areas in the full view to reduce bandwidth and storage capacity requirements.
- 17. The Fixed Dome Camera shall provide Cropping function which sends out the full view and up to four (4) areas cropped from the full view simultaneously so it enables to view the full view and details at the same time.
- 18. The Fixed Dome Camera shall have which ensures clear face image.
- 19. The Fixed Dome Camera shall have Fog compensation function.
- 20. The Fixed Dome Camera shall have High light compensation (HLC) function.
- 21. The Fixed Dome Camera shall have Super Chroma Compensation (SCC) which realizes a better color reproducibility in the low illumination.
- 22. The Fixed Dome Camera shall have Lens Distortion Compensation to compensate the barrel distortion.
- 23. The Fixed Dome Camera shall provide up to eight (8) areas of electronic privacy masking.
- 24. The Fixed Dome Camera shall offer the prioritized stream control which transmits a video stream to the specified client PC or recorder preferentially.

- 25. The Fixed Dome Camera shall have a SD memory card slot that supports SD, SDHC and SDXC memory card for local storage.
- 26. The Fixed Dome Camera shall offer full-duplex bi-directional audio communication between the camera and monitoring site.
- 27. The Fixed Dome Camera shall have a dehumidification unit to keep the camera dry inside.
- 28. The Fixed Dome Camera shall conform to the ONVIF standard.

B. CAMERA

1. Image Sensor	1/3 type MOS image sensor
2. Scanning Mode	Progressive
3. Scanning Area	4.86 mm (H) x 3.89 mm (V) {3/16 inches(H) x 5/32
inches(V)}	
4. Minimum Illumination	
a. WV-SFV311A	
i. Color	0.01 lux (F1.6, Maximum shutter: Max. 1/30s, Gain:
On(High))	
ii. B/W	0.003 lux (F1.6, Maximum shutter : Max. 1/30s, Gain :
On(High))	
b. WV-SFV310A	
i. Color	0.01 lux (F1.6, Maximum shutter: Max. 1/30s, Gain:
On(High))	
ii. B/W	0.008 lux (F1.6, Maximum shutter : Max. 1/30s, Gain :
On(High))	
5. Day & Night	
a. WV-SFV311A	IR Cut filter Removal
b. WV-SFV310A	Electrical
6. Dynamic Range	133 dB typ. (Super Dynamic : ON, Light Control Mode :
indoor)	
C. Lens	
1. Vari-Focal Length	2.8 ~ 10mm (1/8 ~ 25/64 inches)
2. Max. Aperture Ratio	1 : 1.6 (WIDE) ~ 1 : 3.4 (TELE)
Angular Field of View	

- Angular Field of View
 a. 16:9 aspect ratio H: 28° (TELE) 99° (WIDE)
 V: 16° (TELE) 54° (WIDE)
 - b. 4:3 aspect ratio H: 28° (TELE) 99° (WIDE) V: 21° (TELE) - 72° (WIDE)
- 4. Focus adjustment
 a. WV-SFV311A Auto Back Focus (ABF) / Manual
 b. WV-SFV310A Focus Assist

D. ADJUSTING ANGLE

- 1. Horizontal ±180°
- 2. Vertical ±85°
- 3. Image tilt adjustment ±100

E. VIDEO

- 1. Compression Format H.264, JPEG
- 2. Image Resolution
 - 16:9 aspect ratio (2 mega pixel mode) a.
 - 1,920 x 1,080 / 640 x 360 / 320 x 180 / 160 x 90 (30fps)
 - b. 16:9 aspect ratio (1.3 mega pixel mode)

1,280 x 720 / 640 x 360 / 320 x 180 / 160 x 90 (30/60fps)

- 4:3 aspect ratio (1.3 mega pixel mode) c. 1,280 x 960 / 800 x 600 / 640 x 480 / 400 x 300 / 320 x 240 /
 - 160x120 (30fps)
- 3. H.264
 - a. Transmission Mode Constant bitrate, VBR, Frame rate priority, Best effort,

Advanced VBR

- 1/3/5/7.5/10/12/15/20/30/60 fps b. Frame Rate
- c. Bit Rate/Client 64 / 128 / 256 / 384 / 512 / 768 / 1,024 / 1,536 / 2,048 / 3,072 /

4,096 / 6,144 / 8,192 / 10,240 / 12,288 / 14,336 / 16,384 / 20,480 / 24,576 / 30,720 / 40.960kbps

- d. Image Quality Low / Normal / Fine
- e. Transmission type Unicast, Multicast

4. JPEG

- a. Image quality 10 steps
- b. Transmission type Pull, Push

F. Audio

- a. Audio CompressionG.726 (ADPCM) 32kbps / 16kbps, G.711 64kbps, AAC-LC
- b. Audio Mode
 - i. WV-SFV311A OFF / Microphone (Line) input / Audio output / Interactive

(Half

duplex) / Interactive (Full duplex)

ii. WV-SFV310A -

G. OPERATION

- On(High) / On(Normal) / Off 1. Super Dynamic Super Dynamic is automatically set Off on 60fps mode. 2. Face Super Dynamic ON / OFF (Only at Super Dynamic : ON)
- 3. Adaptive Black Stretch ON / OFF (Only when Super Dynamic is OFF)

4.	Fog compensation stretch Off)	ON / OFF (Only when Super Dynamic/ Adaptive black	
5.	AGC	ON (LOW, MID, HIGH) / OFF	
6.	Electronic Sensitivity U 1/100 s,	Max. 1/1000 s, max. 1/500 s, max. 1/250 s, max.	
		max. 2/120 s, max. 2/100 s, max. 1/30 s, max. 2/30 s, max. 4/30 s, max. 6/30 s, max. 10/30 s, max. 16/30 s	
7.	Day & Night		
	a. WV-SFV311A b. WV-SFV310A	Off/ On/ Auto1 (Normal) / Auto2 (IR light) / Auto3 (SCC) Off / Auto	
8.	8. Digital Noise Reduction High / Low		
9.	Video Motion Detection steps	4 areas, Sensitivity:15 steps, Detection size:10	
10.	Privacy Zone	Up to 8 zones	
11.	VIQS	Up to 8 zones	
12.	Camera Title (OSD)	Up to 20 characters	
13.	Digital Zoom	1x, 2x, 4x	
14.	14. Lens Distortion Compensation 256 steps		
NET	WORK		
1.	Network Interface	10Base-T / 100Base-TX, RJ-45 connector	
2.	IP	IPv6, IPv4	
3.	Supported Protocols		
	a. IPv6	TCP/IP, UDP/IP, HTTP, HTTPS, FTP, SMTP, DNS, NTP, SNMP, DHCPv6, RTP, MLD, ICMP, ARP	
	b. IPv4	TCP/IP, UDP/IP, HTTP, HTTPS, RTSP, RTP, RTP/RTCP, FTP, SMTP, DHCP, DNS, DDNS, NTP, SNMP, UPnP, IGMP, ICMP, ARP	
4.	Max. User access	Up to 14 users	
5	Web Viewer		

5. Web Viewer

Microsoft Windows 8.1 / 8 / 7 / Vista a. Supported OS

- b. Supported Browser Microsoft Internet Explorer 11 / 10 / 9 / 8 / 7 Safari, Google Chrome, Mozilla Firefox
- c. GUI Language English, Italian, French, German, Spanish, Portuguese, Russian,

Chinese, Japanese

I. INTERFACE

Н.

- VBS : 1.0 V [p-p] / 75 ohm, NTSC / PAL composite, 1. Monitor Output ø3.5mm mini jack, for adjustment
- 2. Microphone/Line input
 - a. WV-SFV311A ø3.5 mm monaural mini jack
 - b. WV-SFV310A
- 3. Audio Output a. WV-SFV311A ø3.5 mm stereo mini jack (monaural output)

- b. WV-SFV310A
- 4. External I/O Terminals

a.	WV-SFV311A	ALARM IN 1/DAY/NIGHT IN, ALARM IN 2/ALARM OUT,
		ALARM IN 3/AUX OUT
b.	WV-SFV310A	ALARM IN 1, ALARM IN 2/ALARM OUT, ALARM IN 3/AUX
	OUT	

5. SD memory card slot 1 slot, SD/SDHC/SDXC

J. ELECTRICAL

1.	Power Source	DC 12V/710mA, PoE (Class 0)
2.	Power Consumption	Approx. 8.5W (DC 12V), Approx. 9.6W (PoE)

K. SAFETY / EMC

1. Safety	UL (UL60950-1), C-UL (CAN/CSA C22.2 No.60950-1),
	CE, IEC60950-1
2. EMC	FCC (Part15 Class A), ICES003 Class A, EN55022 Class B,
	EN55024

L. MECHANICAL

1.	Dimensions (D x H)	ø164 mm x 139 mm (ø6-15/32 x 5-15/32 inches)
		(Including the base bracket)
	-	

- 2. Weight Approx. 1.6 kg (3.53 lbs.)
- 3. Construction material

a. Main body

- a. Main body Aluminum die cast
- b. Dome section Polycarbonate resin
- 4. Finish

b. Dome section Clear

M. ENVIRONMENTAL

- 1. Vandal Resistance IEC 60068-2-75 test Eh, 50J / IEC 62262 IK10
- 2. Ingress Resistance IP66, IEC60529 measuring standard compatible, Type 4X (UL50), NEMA 4X compliant
- 3. Operating Temperature -40 °C \sim +50 °C (-40 °F \sim 122 °F)
- 4. Operating Humidity 10 % ~ 90 % (without condensation)

N. SOFTWARE OPTIONS

- 1. Extension Software for Face Detection function
- 2. Extension Software for intelligent Video Motion Detection

O. OPTIONAL ACCESSARIES

- 1. Ceiling Mount Bracket
- 2. Wall Mount Bracket
- 3. Smoke Dome Cover
- 4. Sun Shade

4. Handheld Metal Detector

PD240 Handheld Metal Detector Specifications

The PD240 is a Handheld Metal Detector that combines high reliability and ergonomics with advanced detection and operator signaling features. Effective sensitivity to all metals, full compliance with the latest Security Standards and high immunity to external metal masses are among the main peculiarities of this new device. The PD240 incorporates innovative technical solutions which make it possible to operate much closer to floors with steel reinforcement bars than was previously possible with conventional Handheld and Walk-Through Metal Detectors. All this without any reduction in sensitivity.

Elegant, Robust and Ergonomic

The PD240 features a special ergonomic design consisting of an offset hand grip which ensures that the operator's hand does not interfere with the sensitive detection area. On the new model the sensitive area is 70% wider than before.

This means fewer scans per person and therefore shorter inspection times per person. Special care has gone into the mechanical design of the detector. Absence of sharp edges or corners allows the detector to be passed smoothly over the inspected area without getting caught in buttons, buckles, folds or other parts of clothing.

NIJ Standard 0602.02 Compliant

The technical features of the detector comply with the NIJ standard 0602.02 and the new NIJ draft standard 0602.03. The PD240 has uniform sensitivity to magnetic and non-magnetic targets including those made of stainless steel. At the same time the detector offers excellent body-effect compensation and has high immunity to external disturbance from electromagnetic and mechanical sources.

Full Digital Design

The PD240 is fully digital. Electronic functions include a inspection field transmitter-receiver based on Digital Signal Processing (DSP) technology, a digital operator interface and external communications over the incorporated USB port. This design combined with a special printed antenna ensures top reliability and very high repeatability.

Advanced Control Panel

The control panel with switches and warning lights is made from high-thickness silicon guaranteeing high degree of protection to make the PD240 suitable for indoor and outdoor use.

Advanced Alarm Indication

The alarm signaling modes include: optical alarm which is fixed or is proportional to the intensity of the detection signal; acoustic alarm with a constant tone or a tone which is proportional to the size of the object detected; vibration alarm signal.

It is also possible for the safety manager or the checkpoint supervisor to lock one or more operator commands.

Extended Continuous Operation Time

The PD240 metal detector is powered by two AA-size NiMH batteries with a battery life of over 100 hours. A Low Power Mode is automatically activated during pauses, extending the battery life up to 200 hours. An internal circuit optimizes battery recharging which takes less than five hours.

Latest Plastic Materials Technology

The metal detector casing is made from next-generation technical polymers. These plastics offer high chemical resistance and mechanical strength ensuring a long detector life even in heavy duty conditions.

Sophisticated Communication Capabilities

The digital design of the new metal detector also enables the maximum flexibility in selecting how detection alarms are signaled. Users can keep the factory settings or connect the detector over its USB to a PC and then personalize the settings with a dedicated graphic interface.

Specifications

Power Supply

- 2x AA size NiMH, rechargeable batteries
- Fully customizable control panel
- Optical, acoustic and vibratory alarm modes
- 3-level sensitivity selection buttons

Detection and operational functions

• Customizable via HHMD Configuration tool

Battery

- Battery life: 100 + hours (AA NiMH batteries 2500 mAh); up to 200 hours with automatic sleep mode
- Low battery indicator
- Built-in fast battery charger in combination with the HHDS Docking station

Operating temperature

• -40°C to 70°C

Storage temperature

• -40°C to 80°C

Relative humidity

• 0 to 98% (without condensation)

Dimensions

- 430 mm x 80 mm x 40 mm
- HHDS Docking station: 175 mm x 115 mm x 85 mm
- Carry Bag: 430 mm x 340 mm x 105 mm

Weight

- With battery: 470 g
- HHDS Docking station (with power adapter): 755 g
- Carry Bag: 1,3 kg

Color

- Light grey RAL 7040
- Carry Bag: Green RAL 7013

Manufactured

• In grey shock-resistant technical polymers

Compliance

- Conforms to the NIJ 0602.02 and the new NIJ 0602.03 Standards for metal detection
- Conforms to the international standards currently applicable for safety, EMC and to the applicable CE regulations

NATO stock number

• 6665150114797

5. Walk-Through Metal Detector

Hi-PE Plus Walk-Through Metal Detector Specifications

The installing technician must have an engineering key to complete installation.

A Multi-zone Walk-Through Metal Detector for "Building Security"

Detection Capability

The Multi Zone Metal Detector should detect metal weapons and/or metal contraband items carried on a person, regardless of the orientation or the manner in which they are worn through the archway, independently from their orientation, trajectory and transit speed (range: 0.5...1.3m/s). The detection capability of the Multi Zone Metal Detector shall be stable without variation. The Multi Zone Metal Detector should require periodic recalibration. Calibration samples should be available at the competent Authority's Premises for the setting of the Working Parameters during the tests.

The Metal Detector should detect the samples required by the following Security Level:

- Minimum signal magnetic Disassembled Gun
- Minimum signal non-magnetic Disassembled Gun

Programming

- The Metal Detector programming access should be protected by a mechanical lock and by a password made up of 6 alphanumeric characters.
- The Metal Detector should have two independent levels of programming (user and administrator), each one protected by a password.

• The Metal Detector should have two programming methods: Local using keypad on the control unit Remote through a RS232 port and a laptop

Optical/Acoustical Indications

• The Metal Detector should be equipped with two full-height luminous bars, so one can be placed at the entrance and one at the exit side of the archway. The bars shall indicate the position of the metal objects causing the alarm with a minimum resolution of 35 cm.

• The Metal Detector control unit should be equipped with an optical display alarm and messages notifications, clearly visible and readable at a minimum distance of 5 m. The optical alarm display should have a bar graph indication proportional to the metal mass in transit. The

signals below the alarm threshold should be displayed in green, whilst those above the threshold should be displayed in red.

• The Metal Detector should be equipped with an audible alarm signal adjustable in duration, tone and volume.

• The minimum volume available at operator level should be determined by an appropriate programming parameter at administrator level.

• The Metal Detector should display the current Security Level at start-up.

• The Metal Detector should provide the operator with appropriate acoustic and optical signals during the start-up and normal operation.

Other Technical Specifications

• The Metal Detector should have an anti-tamper On/Off switch.

• Regular operation of the Metal Detector is required even when two Metal Detectors are installed at a reciprocal gate distance of 5 cm, without the use of synchronization cable(s).

• The Metal Detector should be equipped with a self diagnosis system which ensures the immediate signaling of faults or performance changes both at start-up and during operation.

• The construction of the Metal Detector should be completely modular in order to make any maintenance operation on electronic and mechanical parts easy.

Mechanical Specifications

- Minimum height of the Transit Area: 80 inch (2030mm)
- Minimum width of the Transit Area: 28 inch (710mm)

• The Metal Detector should be a standalone unit, provided with smooth, robust and washable surfaces.

• The Metal Detector archway should be equipped with four anchoring points to the floor and once installed; it should be capable to withstand a force of 80 kg at 2 m from the ground without falling down.

• The Metal Detector archway should be equipped with lower side protections against damages due to bumps of floor cleaning machineries and sprinkling of water or other substances.

• The display and the keypad on the Metal Detector should be protected by a plastic transparent cover lockable by key.

Environmental Characteristics

- Storage temperature: from -31°F (-35°C) to 158°F (70°C).
- Working temperature: from -4ºF (-20ºC) to 158ºF (+70ºC).
- Relative storage humidity: from 0 to 95% without condensation
- Relative working humidity: from 0 to 95% without condensation

Electrical Safety, harmlessness and certifications

• The Metal Detector should be certified by a third party accredited Laboratory as conforming to International Standards on the Human Exposure to Electromagnetic Fields.

• Electrical Safety: For safety reason, in order to prevent any probability of electrical hazard, the Metal Detector should be powered by a nominal voltage to ground not exceeding 50V alternating current to prevent the risk of people in transit coming into accidental contact with parts of the gate powered at mains voltage.

• The Metal Detector should use CW (continuous wave) magnetic fields for best pacemaker and vital supports harmlessness technology.

• The Metal Detector should not interfere with medical devices such as hearing aids, cardiac stimulators, defibrillators, neurological stimulators

6. Videofied Wireless Video Alarm Security

Videofied Wireless Video Alarm Security Specifications

Videofied is not a CCTV surveillance system that simply records videos that are accessed by the owner. Rather, Videofied is a complete video alarm system that sends a short video clip with the alarm notification to the central station for immediate review. Videofied links the video with the central station – self-surveillance does not. A monitored video alarm delivers quicker police dispatch.

Detection Capability

Videofied is an intrusion detection system that is professionaly monitored for immediate video verification of the alarm and priority police response to the intrusion. With our control panels and full range of wireless devices, Videofied is versatile enough to provide verified security for any application: indoors or outdoors in any weather, local or remote, for large and small properties, as a standalone system or as a video verification upgrade to existing burglar alarms.

Videofied delivers faster police response to an actual crime because the human operators filter out false alarms. Videofied systems provide responsive security to a large variety of commercial, industrial and residential sites and applications from large homes and small offices to remote mining plants and urban substations.

A video-verified alarm can make all the difference for all parties involved:

- Police: verified response, more arrests, reduced crime
- Property owners: reduced losses, enhanced peace of mind
- Dealers: better value proposition, more results, happier customers

Outdoor Panel

Part #: XTO-IP630

The Outdoor XT Control Panel is designed for securing outdoor and large commercial applications that have adequate cellular reception or an Ethernet/IP connection available. With integrated high-gain RF and cellular antennas, this panel is perfect for protecting outdoor storage lots, critical infrastructure, remote sites and large warehouses. When battery-powered and communicating over cell, the Videofied system is completely portable and can be moved to new locations (construction sites, vacant homes, storage lots) as the security needs change.

This panel is rated for extreme temperatures and comes in an IP65 waterproof NEMA case with a simple mounting bracket for pole, corner and flat wall mounting.

Programming An alphanumeric keypad (XMA621 or WMB621) or the Frontel Installer Software (with the TMT USB Programming Kit) is required for programming and maintenance Communication to devices 915 MHz RF (military grade) RF range 500-1500 ft (varies by environment, amount of obstructions like metal, earth and concrete) Communication to central station Cellular or Ethernet (Dynamic or Static) with cellular backup Power options PP1 (4 D-Cell Lithium batteries) or PP4 (12V DC power supply with backup Alkaline batteries; required if using Ethernet connection or using programmable inputs and/or outputs) Operating temperature range -20/+140°F (-30/+60°C) Wireless zones 24 Wired inputs 3 programmable (i.e. hardwired zones), 2 arming Arming modes 3 (stay, away, perimeter) Partitions 2 Arming options Alpha keypad (XMA621, WMB621), Prox Tag Arming Station (BR651), Remote (RC601), schedule, VideoApp4All or other smartphone app (conditional, see Notes), existing burglar alarm panel relay trigger to Videofied arming inputs (when panel is in Xtender mode) User/access codes 20 (19 users, 1 installer)

Vertical Alpha Keypad

Part #: XMA621

The Vertical Alpha Keypad is a battery-operated, wireless, alphanumeric keypad designed for the configuring/programming, maintenance and arming/disarming of indoor Videofied systems.

- Temperature range: +14/+104°F (-10/+40°C)
- Up to 3 alpha keypads can be added to each control panel
- Built-in sounder provides entry/exit delay beeps and alarm sounds
- Dual tamper provides detection for both wall and cover
- Up to 4 years battery life for low alarm activity

• The XMA621 keypad is a mobile programmer that can be used anywhere on the installation site during system programming

• Typically installed near entry/exit doors to allow system users enough time to arm and exit the premises, and to enter and disarm the system before time delay expires

Indoor MotionViewer

Part #: IMV601

The Indoor MotionViewer[®] is a battery-powered device that includes an integrated PIR motion sensor, digital video camera and infrared illuminators. It is designed to detect an intruder, instantaneously record a short video clip and send it over military-grade RF to the control panel

which then transmits the alarm signal + video clip to a monitoring station via cell or Ethernet. After receiving and reviewing the video clip, monitoring operators will verify the intrusion event and dispatch to law enforcement for priority response to a crime-in-progress.

- Infrared illumination up to 23 feet from device for night vision
- Military grade RF to and from control panel
- Temperature range: +14/+122°F (-10/+50°C)
- Up to 4 years battery life for low alarm activity
- Video: color/day, monochrome/night
- Full VGA color for remote Look-in via smartphone app
- Programmable PIR sensitivity
- Programmable video resolution

Outdoor MotionViewer

Part #: OMV601MB

The Outdoor MotionViewer[®] is a battery-powered PIR motion sensor with an integrated video camera and infrared illuminators. It is designed to detect an intruder, instantaneously record a short video clip and transmit the video to the control panel. The panel then transmits the video alarm signal to the central station for immediate review and dispatch to law enforcement for priority response to a crime-in-progress

Product Details New and Improved Features

- Infrared illumination up to 30 feet from device.
- IP 65 Weatherproof rated.
- Temperature rated to -20° to +140°F (-30° to +60°C)
- Operates for years on one set of AA batteries

• RF range between panel and device: 500ft; up to 1000ft for line-of-sight contexts (zero obstruction)

• 1/4 inch x 20 mounting thread • Multiple Fresnel lens options

- Enhanced night vision
- Accelerometer tamper
- Input/output (3/1) terminals for integrating 3rd party devices
- VGA day/night video camera
- Doubled wireless transmission speed
- Easy battery change

Wireless Indoor Siren

Part #: SE601

The Indoor siren enhances intruder deterrence and delivers a 110 db blast in the event of an intrusion. Totally wireless, it can be mounted easily anywhere without the need to drill holes to run signal or power. Multiple sirens can be placed on one system.

- Annunciates the alarm sounds and entry/exit delay beeps of Videofied security systems
- Compatible with all control panels
- Produces an output level of 110 dB at 3 ft for 1.5-3 minutes during alarm
- Typically installed in hallways, foyers, or other similar areas where sound can resonate so occupants can hear alarms
- Dual tamper function provides detection for both wall and cover tamper
- Up to 4 year battery life on alkaline batteries
- Temperature range: +14/+104°F (-10/+40°C)

7. The Raptor System

The Raptor System

Web-based. Feature-rich. Easy to use.

The Raptor System provides an effective and affordable way to help schools and community facilities keep unwanted visitors out while tracking those they allow in. Simply scan a visitor's Driver's License or other state issued ID and the Raptor System instantly screens for registered sex offenders in all 50 states and can also screen for individuals with restraining orders, custody issues, suspended or expelled students, known gang members, or for any custom alert.

When a visitor is cleared, the Raptor System prints a badge featuring the visitor's name, photo, date and time, and destination. If a potential threat is identified, the Raptor System sends instant alerts to designated officials, including administrators and law enforcement, via email and/or text messaging. Only the Raptor System has FP logic to help prevent repeat positive sex offender matches.

The Raptor System can also be used to track and report faculty and volunteer hours as well as student tardies and early sign-outs.

Raptor's web-based platform is accessible from any workstation with a high speed Internet connection, even off-site computers. This is especially important in emergency situations.

Easy to set up and install. All you need to run the Raptor System is a computer with an internet connection, a Raptor Optical Scanner, and a Badge Printer. Software installation is quick and Raptor can have a single school or an entire district protected within days.

No per seat/workstation license fee. Each facility/building can host an unlimited number of Raptor workstations per site.

Live customer support. Raptor provides live customer support from 7 am to 5 pm CT Monday through Friday. Raptor also provides on-demand online training as well Remote Assistance.

Easy reporting tools. The Raptor System offers a variety of reporting options including visitors logged, "Who's in the building", volunteer hours worked, student tardies, sex offenders logged, and activities by date range. Reports can be run from any computer with an internet connection.

Alert monitoring. Raptor is the only visitor management provider that monitors your facility's sex offender alerts in real-time.

Free automatic software upgrades. No need to pay for upgrades. Raptor is web-based, so updates are installed automatically.

RAPTORTRACE - Criminal Background Checks for Volunteers

Millions of Records. Instant Results.

With RaptorTrace's online criminal background screening service, schools and other organizations can know that the people they bring into their organization are people they can trust. RaptorTrace offers an affordable way to instantly pre-screen individuals such as applicants, volunteers, faculty, and members, against more than 313,000,000 national records* including:

- Arrest Records (ARST)
- Administrative Office of the Courts
- Department of Corrections
- County Court
- District Court
- Superior Court
- Municipal Court
- District Clerk
- Common Pleas
- Clerk of Court

* Important note: Only electronically filed records can be accessed using RaptorTrace. Any records that are not filed electronically are not searched by RaptorTrace.

Works with the Raptor System to pre-screen volunteers. The Raptor System works in conjunction with RaptorTrace, providing schools with an easy solution to pre-screen Volunteers. Simply set up an approval queue through the Raptor System and new volunteer information is automatically entered into RaptorTrace.

Nation's Leading K-12 Visitor Management Software

Raptor Technologies offers a full range of visitor management products that can improve safety and protect any facility from registered sex offenders.

Raptor products include:

• Raptor System - Raptor's signature software for K-12 schools and facilities with children

- RaptorTrace Online, real-time criminal background screening service
- Virtual Volunteer School volunteer management tool
- Batch Screening Sex offender screening tool for membership lists

What Makes Raptor Different?

Raptor is the visitor management software of choice for over 15,000 K-12 schools and over 500 YMCAs and similar organizations around the country. There is a reason why Raptor serves more K-12 schools and community facilities than any other visitor management provider. The reason is that Raptor beats the competition on 5 key dimensions:

• Feature Functionality – Raptor has a broad range of feature functionality that addresses the full list of needs for visitor, student tardy, and volunteer management.

• Comprehensive Database – Raptor has the most comprehensive database of registered sex offenders of any provider because Raptor has been accumulating data on offenders for over a decade and updates its database every week.

• Offender Alert Monitoring – Raptor assists front desk personnel by monitoring every potential offender match for visitors and volunteers, ensuring that our clients properly differentiate between false positives and actual offenders.

• Customer Service – Raptor provides phone and email technical support from 7 am to 5 pm CT to ensure that customer issues or requests are taken care of in a timely manner. Raptor's customer support is unmatched in our industry.

• New Products – Raptor continues to develop new cutting edge products from fully customizable student tardy workflow to visitor management for use on mobile devices.

Data Security & Reliability

Data security is always a top priority for Raptor. Raptor's system uses only the minimum data needed for an instant sex offender screening. Raptor also uses state of the art firewalls, intrusion detection systems, host integrity monitoring, port filtering and other security processes and procedures to protect all its systems.

Raptor Basic System

2 door signs, 1 installation and maintenance packet)

One system required for each building.

Package Contains Annual Access Fee (1 year)

Sex Offender Alert Monitoring--FREE!!

Raptor Duplex ID Scanner

Raptor Turbo 450 Badge Printer

Raptor Self-Expiring Badges (Adhesive)

Raptor has added an additional security measure by branding the Raptor logo on all adhesive badges.

Quality guaranteed for one (1) year after purchase date. THERMAL!!!! Do not store in direct sunlight or extreme environments. Climate controlled environment recommended. Rotate current inventory to be used first.

All Raptor badges are now branded with the Raptor logo.

Cost Sheet

Please provide cost per unit below

1.	Network Disk Recorder	\$ Per Unit
2.	Camera - Type 1	\$ Per Unit
3.	Camera - Type 2	\$ Per Unit
4.	Handheld Detector	\$ Per Unit
5.	Walk-Through Detector	\$ Per Unit
6.	Videofied Wireless System	\$ Per Unit
7.	Raptor System	\$ Per Unit

Installation cost



End of Scope