Portable Two-way Radios:

60 -VHF, 5 watt, 128 channel capacity, with analogy and TDMA digital capabilities equivalent to Motorola XPR3300 or better. Must include standard antenna 144-165 MHz, Li-ion Impres Battery 1500 mAH or better, Impres single unit charger, belt clip, dust cover, and 2 year warranty. One time programming to be included. Unit must be capable of being upgraded for IP site connect and Linked Capacity Plus operation.

TOTAL PRICE PER UNIT

_____Each _____Total

The quantities are estimates only and are not guaranteed to be purchased. Warren County Schools has the right to reject bid.

Award of bid subject to Warren County Schools Maintenance Department budget.

Warren County Schools
CCTV Equipment Bid

Device	QTY	Price each	Total Amount
16 channel 1080p HD-TVI DVR	5	$	$
Intensifier T 1080p Bullet camera	60	$	$
960H WDR Indoor dome camera	20	$	$
Intensifier H Dome/Turret camera	20	$	$
Wall Mount	20	$	$
Intensifier H Traditional camera	20	$	$
2.8-12mm lens	20	$	$

Note: **The quantities are estimates only and are not guaranteed to be purchased.**

Warren County Schools has the right to purchase as package or by line item or to reject bid.

Award of bid subject to Warren County Schools Maintenance Department budget.

16 Channel 1080p HD-TVI Digital Video Recorder

Speco Model # D16VT or Equivalent

			D4VT	D8VT	D16VT
Video	Input	Channel	4	8	16
		Input Level	Composite, 1.0Vp-p, 75 ohms		
		Signal Format	NTSC / PAL		
		Video Loss Check	Yes		
	Output	HDMI®	1 HDMI (1024x768, 1280x720, 1280x1024, 1920x1080)		
		VGA	1 VGA (1024x768, 1280x720, 1280x1024, 1920x1080)		
		CVBS / Spot	1 main or 1 spot		
Audio	Input & Output		4 line input & 1 line output		
	Audio Codec		G.711		
Alarm	Sensor Input		4 channel (NC/NO selectable)		
	Alarm Output		1 alarm out by sensor, motion, video loss, HDD temperature and HDD failure		
Serial	RS-485	PTZ	1		
Recording	Compression		H.264		
	Multi-Operation		QUADPLEX (play / record / network / backup)		
	Resolution	1080p	60fps	120fps	240fps
		720p	120fps	240fps	480fps
		960H	120fps	240fps	480fps
	Recording Mode		Continuous / Schedule / Motion / Sensor / Manual / Continuous + Motion / Continuous + Sensor		
	Motion Detection		Motion detection setup by grid		
	Recording by Channel's Resolution		Yes		
	Pre-Recording		Max. 20 minutes		
	Post Recording		Max. 60 seconds		
Playback	Multi-Decoding		1, 4	1, 4, 8	1, 4, 9, 16
	Search Mode		EZ Search, Smart (Museum) Search, Timeline, Event, Archive, Log		
Storage	HDD	Interface Type	Serial ATA		
		Capacity of 1 HDD	4 TB		
		Internal HDD	2		
	Backup	USB Flash Drive	Video & Still Image		
		USB External HDD	Video & Still Image		
		Network	Video & Still Image		
	USB Port		1 front, 1 rear		
User I/F	Menu Display		GUI		
	Input Method		IR, Mouse, Keyboard Controller		
Network	Interface		10/100Base-T		10/100/1000Base-T
	Streaming		CIF 15fps / channel max.		
Network Access	Mobile Viewer		Live, Search, PTZ, 2-Way Audio		
	PC Web Viewer		Internet Explorer, Chrome, Firefox, Safari (Live, Search, Backup, PTZ, Remote Setup)		
	PC Client		SpecoTech Multi-Client Viewer and SecureGuard® Plus CMS (Live, Search, Backup, PTZ, Remote Setup)		
	MAC Client		Speco Client for MAC and SecureGuard® CMS (Live, Search, Backup, PTZ, Remote Setup)		

Features

EZ Set-Up Wizards: One click wizard guides you to set up essentials of the system in a logical and easy to understand sequence.
- Date/Time - Recording method - Recording video quality - Network - Port forwarding

EZ Search: quickly search events from thumbnails
EZ Record: quickly setup recording resolutions and recording type
EZ Copy: auto copy what you are playing onto a USB flash drive

- 1080p @ 15fps / 720p @ 30fps over coax (HD-TVI)
- Backwards compatible with all analog cameras
- UTC function allows for zoom/focus and OSD control over coax
- Video Out: 1 HDMI®, 1 VGA, 1 CVBS
- H.264 video compression
- Networkable DVR with free Speco DDNS server
- Digital Deterrent® supports up to 8 audio files for triggering during sensor or motion detection
- 2-way audio communication
- Built-in S.M.A.R.T. Technology (Self-Monitoring, Analysis and Reporting Technology for HDD)
- 4 channel audio recording
- Covert camera operation provides enhanced security and administrator control
- Password to secure installation authorization
- Switch between low and high quality stream during simultaneous Continuous + Motion or Continuous + Sensor recording modes for storage optimization
- Smart (Museum) Search - Quickly search for a specific video event without the need for motion setup.
- Easy firmware upgrade by USB port or network
- Instant and convenient backup via USB flash drive or network
- Supports multiple PC based browsers such as Internet Explorer, Google Chrome, Firefox and Safari
- Simultaneous playback/record while continuing to network transfer or backup
- User Access: up to 4 concurrent users for live viewing, 1 user for playback
- Remote monitoring / recording / playback / configuration / software upgrades and PTZ control via internet
- Network accessible via SpecoTech Multi-Client Software, SecureGuard™ Plus, Web-Viewer and Speco Player Mobile Viewer
- PC and MAC® compatible
- IR remote control and mouse included
- Digital watermarking
- 3 year warranty

Features

Speco Model # HTINT70T or Equivalent

- Full HD resolution over coax (HD-TVI)
- Supports up to Full HD 1080p @ 30fps
- True WDR operation
- Superior low-light performance
- Amplify existing light with no distance limitation
- With presets: Indoor, Outdoor, Low Light, Lobby, Elevator
- Heater circuitry and anti-moisture glass reduce fog or condensation under any weather condition
- 3-axis for wall and ceiling mounting
- Full OSD operation through on-board control and UTC (up the coax)
- 12VDC & 24VAC dual voltage operation
- Vandal / tamper resistant
- IP67 compliant
- 5 year warranty

Camera Specifications

Image Sensor ..... 1/3" Sony Exmor CMOS, 2.0MP
Minimum Illumination..... 0.001 lux
Effective Pixels ..... 1984 (H) x 1105 (V)
Total Pixels ..... 2000 (H) x 1121 (V)
Scanning System..... Progressive
S/N Ratio ..... More than 50dB
Output Resolution..... 1920x1080 @30fps / 1280x720 @ 60fps
Video Output..... 1.0Vp-p / 75 Ohms
Electronic Shutter ..... Auto / Manual (1/30 – 1/30,000 sec.) / Flicker
WDR..... On (Low / Middle / High) / Off
Day / Night..... Auto / Color / BW / External
White Balance ..... Auto / AWB / AWC-Set / Manual
Brightness..... 0 – 20 (adjustable)
AGC..... 0 – 20 (adjustable)
Sense-up ..... 2x – 32x (adjustable)
Backlight..... BLC / HSBLC
Motion Detection..... On / Off (4 zones)
Privacy Masking ..... On / Off (16 zones)

Camera Specifications (continued)

Mirror..... On / Off
V-Flip ..... On / Off
Sharpness ..... 0 – 20 (adjustable)
Lens Shading..... On / Off
DNR..... Off / Low / Middle / High
Test Monitor Output..... CVBS
Communication..... UTC (up the coax)

Operating & Unit Specifications

Power ..... 12VDC / 24VAC dual voltage (power supply not included)
Power Consumption ..... 12VDC, 500mA max. / 24VAC, 195mA max.
Operating Temperature... -4° F - 140° F
Operating Humidity..... 20% - 95% RH
Unit Dimensions ..... 3.94" (W) x 3.94" (H) x 8.27" (L)
Unit Weight..... 3.1 lbs
Certifications..... FCC, RoHS

Features

Speco Model # WDRD21HW or Equvialent

- True WDR technology allows for improved image quality in scenes consisting of both bright and dark areas
- 1/3" Sony Super HAD™ CCD
- 700 TV lines of resolution
- 3DNR (digital noise reduction)
- Smart digital zoom
- Full OSD operation
- Digital image stabilizer
- 3 axis lens mount
- 12VDC / 24VAC dual voltage operation
- 5 year warranty

Speci¿cations

Image Sensor .....1/3" Sony Super HAD™ CCD (dual scan)
Resolution.....700 TV lines
Minimum Illumination.....0.000006 lux
Effective Pixels .....976 (H) x 494 (V)
Total Pixels .....1028 (H) x 508 (V)
TV System.....NTSC
Scanning System.....2:1 interlace
S/N Ratio 48dB
Video Output.....1.0Vp-p / 75 ohms
Backlight Compensation.....BLC / HLC / Off
Day/Night.....Auto / Color / BW / Ext
AGC.....High / Middle / Low
Sense-Up.....Auto / Off (x2 – x512)
White Balance .....ATW / AWB / AWC – Set / Manual (1,800°K – 10,500°K)

Mirror .....H-Rev / V-Rev / Rotate / PIP
Digital Zoom x16
Defect Compensation.....Auto (64 points)
3DNR.....Off / Low / Mid. Low / Mid. High / High
DIS.....On / Off
Power Supply .....12VDC / 24VAC dual voltage operation (power supply not included)
Power Consumption 12VDC, 400mAW 24VAC, 170mA
Storage Temperature/ Humidity.....-4° F – 140° F / 20% – 95% RH
Operating Temperature/ Humidity.....-4° F – 140° F / 20% – 80% RH
Dimensions.....5.51" (Dia.) x 4.09" (H)
Weight .....1.54 lbs.

Features

Speco Model # HTINTD8H or Equivalent

- 1/3" 960H ExView™ HAD CCD II
- 700 lines of color resolution
- Amplify existing light with no distance limitations
- No problems caused by objects that reflect or absorb IR light sources
- Minimum illumination 0.00002 lux (Intensify @ 512x)
- Now with presets: Outdoor, Indoor, Elevator, Lobby, Hallway & Dark
- 12VDC / 24VAC dual voltage operation
- Full OSD operation and test monitor output
- 3-axis wall or ceiling mount
- External controls for zoom & focus
- EZ mount system simplifies installation
- Relay outputs for motion detection
- Weather resistant operation
- IP66 compliant
- Anti-moisture glass and circuitry eliminates fog or condensation under any weather condition
- 5 year warranty

Specifications

Image Sensor	1/3" 960H ExView™ HAD CCD II
Resolution	700 TV lines
Minimum Illumination	0.00002 lux
Effective Pixels	976 (H) x 494 (V)
Total Pixels	1020 (H) x 508 (V)
TV System	NTSC
Scanning Frequency	15.734kHz (H) / 59.94Hz (V)
Scanning System	2:1 interlace
Synchronization	Internal
S/N Ratio	More than 52dB
Video Output	CVBS: 1.0Vp-p / 75 ohms
Electronic Shutter Speed	1/60 sec. - 1/120,000 sec.
OSD	Available
DWDR	On / Off (level adjustable)
Backlight Compensation	BLC / HLC / Off
Day/Night	Color / BW / Auto / Ext
AGC	High / Low / Off
White Balance	ATW / Outdoor / Indoor / Manual / AWC (1,700°K – 11,000°K)
Intensify	Auto / Off (selectable 2x – 512x)
Motion Detection	On / Off (8 programmable zones)
Privacy Masking	On / Off (12 programmable zones)
Speco DNR	On / Off (level adjustable)
Digital Zoom	On / Off (1x - 16x)
DIS	On / Off
Sharpness	On / Off (level adjustable)
Flip / Mirror	On / Off
Power Consumption	12VDC, 400mA / 24VAC, 170mA
Power Supply	12VDC / 24VAC dual voltage operation (power supply not included)
Operating Temperature	- 4° F – 140° F
Dimensions	4.36" (H) x 5.47" (Dia.)
Weight	3.08 lbs.

Speco Model #INTWM or Equivalent

Includes: Mounting Hardware

Material: Metal

Function: Video Surveillance Camera Mounting Device

Fits: PIR Cameras, Intense-IR Cameras, Intensifier3(TM) Domes, Intensifier3(TM) Focus Free Domes, Intensifier3(TM) IP Dome, Corner Mount, Junction Box

Width: 5-3/4"

Length: 10-2/3"

Item: Wall Camera Mount

Height: 4-1/3"

Features

Speco Model # HTINTT5H or Equivalent

- 1/3" Sony Super HAD™ CCD
- 700 lines of color resolution
- Amplify existing light with no distance limitations
- No problems caused by objects that reflect or absorb IR light sources
- Minimum illumination 0.00002 lux (Intensify @ 512x)
- With presets: Outdoor, Indoor, Elevator, Lobby, Hallway & Dark
- 12VDC / 24VAC dual voltage operation
- Built-in OSD operation
- Relay outputs for motion detection
- 5 year warranty

Specifications

Image Sensor	1/3" Sony Super HAD™ CCD
Resolution	700 TV lines
Minimum Illumination	CDS Off: 0.15 lux CDS On: 0.00002 lux
Effective Pixels	976 (H) x 494 (V)
Total Pixels	1020 (H) x 508 (V)
TV System	NTSC
Scanning Frequency	15.734kHz (H) / 59.94Hz (V)
Scanning System	2:1 interlace
Synchronization	Internal
S/N Ratio	50dB
Video Output	CVBS: 1.0Vp-p / 75 ohms
Electronic Shutter Speed	1/60 sec. – 1/120,000 sec.
OSD	Available
DWDR	On / Off (level adjustable)
Backlight Compensation	BLC / HLC / Off
Day/Night	Color / BW / Auto / Ext
AGC	Level adjustable
White Balance	ATW / Push / Manual
Intensify	Auto / Off (selectable x2 - x512)
Motion Detection	On / Off (4 programmable zones)
Privacy Masking	On / Off (8 programmable zones)
Speco DNR	High / Med / Low / Off
Sharpness	On / Off (level adjustable)
Mirror	On / Off
Power Consumption	12VDC, 150mA / 24VAC, 2W
Power Supply	12VDC / 24VAC dual voltage operation (power supply not included)
Operating Temperature	14° F – 122° F
Storage Temperature	-4° F – 140° F
Dimensions	2.5" (W) x 2.2" (H) x 3.46" (L)
Weight	1.5 lbs.

2.6-12mm lens

FEATURES

- High image quality monitoring with optical performance supporting 3 megapixels
- Wide 2.8-12mm range accomodates various applications
- Designed to maximize optical performance with a high accuracy aspheric lens, low-dispersion glass and high reflective index glass
- Built-in T360 ND filter supports high sensitivity cameras

Specifications

Focal Length	2.8-12mm (4.3x)
Iris/Range	Auto DC Type / F1.4 - T360 (Equivalent to F360)
Zoom/Focus	Manual
Angle of View	1/3" Wide: 100°02' (H) x 74°03' (V) 1/3" Tele: 23°26' (H) x 17°03' (V) 1/4" Wide: 74°03' (H) x 55°06' (V) 1/4" Tele: 17°36' (H) x 13°13' (V)
Focusing Range	∞- 0.3M (from front of lens)
Max. Aperature Ratio	1:1.3 - 2.0
Object Dimensions @ M.O.D.	1/3" Wide: 753 (H) x 476 (V) 1/3" Tele: 131 (H) x 98 (V) 1/4" Wide: 476 (H) x 329 (V) 1/4" Tele: 98 (H) x 73 (V)
Mount	CS
Weight	80g

Speco Model# VFMP2.812 or Equivalent