AVERTX

HD IP | *PRO* Series Surveillance Systems
System and Camera Specifications

Features:

- *Professional Grade: Performance, Quality, and Support*

- *Recording up to 4K (8MP) Ultra HD*

- *Free remote viewing apps*

- *Power and video over a single cable*

- *Rich and intuitive user interface*

NVR Specifications

Model Number	AVX-NV80-PRO	AVX-NV160-PRO
Operating System	Embedded Linux	
Local Display Resolution	Auto-detect HDMI, up to 1080p	
Total Number of IP Channels	8	16
Alarm Sensor Inputs	8	16
Relay Outputs	2	4
Video Signal Loss Detection	Yes	
Image Compression	H.264	
Recording/Playback Resolutions and Rates*	4K Ultra HD (8MP) resolution @ 30 images per second on all channels	Up to 5MP HD+ resolution @ 30 images per second on all channels 4K Ultra HD (8MP) resolution @ 15 images per second on all channels
Motion Detection	AvertX Cameras, Adjustable Thresholds and Motion Fields Configurable	
Supported IP Cameras	AvertX and ONVIF Profile S Cameras**	
PoE Network Ports	8 (Includes two high priority ports)	16 (Includes two high priority ports)
Remote Software	Internet Explorer; free AvertX apps for Android, Apple, and Mac devices	
Pan Tilt Zoom (PTZ) Control	AvertX PTZ cameras and compliant IP PTZs	
Recording Mode	Continuous, Motion, Schedule, Sensor	
Playback Search	Date/Time, Event Search	
Remote Device Connection	AvertX Connect or DDNS (free account included)	
Concurrent Users	Up to 6	
Security	Local/remote user management, Encrypted passwords, uPnP disabled	
Digital Signature Support	Digital Watermark	
Internal Storage	Up to 12TB	
External Storage***	2 USB 3.0 Ports; up to 6TB per drive	
Rack Mountable	Yes, 2U Bracket Required	
Operating Temperature	32°F - 104°F (0°C - 40°C)	
Operating Relative Humidity	10% - 90% Non-condensing	
Dimensions	W: 17.25" (428 mm) x H: 3.75" (95.25 mm) x D: 9.625 (244.475 mm)	

NVR Storage

The amount of video storage on your NVR depends on many factors. Changes to the frame rate, bit rate, and the amount of motion in the area being recorded will affect the number of days of recorded video.

For questions about storage options, please call the AvertX Pro Team at 1-855-228-3789.

CAMERAS	HARD DRIVE SPACE	STORAGE (IN DAYS)†
8	6TB	15 ~ 117
8	8TB	20 ~ 121
16	6TB	8 ~ 58
16	12TB	16 ~ 118

* System default set at 15 ips to optimize storage
** Plug and Play and full functionality only available with AvertX Cameras
*** Use only surveillance grade storage drives
† Numbers are based on system default settings of 15 frames per second and a bit rate of 4096.

AvertX IP Cameras

Features:

- *Up to 4MP resolution*
- *PoE single cable installation*
- *microSD slot for on-camera video backup*

Camera Specifications

	NIGHT VISION MINI BULLET	NIGHT VISION DOME	LOW PROFILE IR DOME
		3X ZOOM	*TRUE WDR*
Model Number	**HD40D**	**HD810**	**HD310**
Tamper/Vandal Resistant	Yes	Yes	Yes
Resolution	4MP (2560x1440)	4MP (2560x1440)	2MP (1080P)
Compression	H.264 / MJPEG	H.264 / MJPEG	H.264 / MJPEG
Wide Dynamic Range	Digital WDR	Spectrum Vision True WDR	Spectrum Vision True WDR
Focal Length	2.8 mm Fixed	3 ~ 9 mm Autofocus Lens	3.6 mm Fixed
Horizontal Field Of View	93°	33˚ ~ 109°	78°
Camera Adjustment Range	N/A	Tilt 70˚ / Pan 356˚	Tilt 70˚ / Pan 356˚
Iris Control	F2.0 Fixed	P-Iris F1.7	F1.8 Fixed
Backlight Compensation	Yes	Yes	Yes
Auto Gain Control	Yes	Yes	Yes
Minimum Illumination	B/W Mode: 0.1 Lux Color Mode: 0.5 Lux	B/W Mode: 0.05 Lux Color Mode: 0.5 Lux	B/W Mode: 0.003 Lux Color Mode: 0.03 Lux
Day / Night	Digital Day / Night	True Day / Night	True Day / Night
Max IR (Night Vision) Range*	Up to 100 feet (30 m) from camera	Up to 100 feet (30 m) from camera	Up to 30 feet (10 m) from camera
Optimal IR (Night Vision) Range*	Up to 60 feet (18 m) from camera	Up to 60 feet (18 m) from camera	Up to 16 feet (5 m) from camera
IR Functions	Auto, Day, Night, Sensor, Smart, On, Off		
Motion Detection	Yes, 3 zones		
Privacy Masking	Yes	Yes	Yes
MicroSD Backup Slot**	Up to 64GB capacity	Up to 128GB capacity	Up to 64GB capacity
IP Outdoor Rating	IP66	IP66	IP66
Waterproof IP66 Connector	Yes	Yes	Yes
ONVIF Compliance	Profile S***	Profile S***	Profile S***
Heater	No	No	No
Operating Temperature	-13° ~ 122°F (-25° ~ 50°C)	-13° ~ 122°F (-25° ~ 50°C)	-13° ~ 122°F (-25° ~ 50°C)
Cold Start Temperature	18°F (-8°C)	18°F (-8°C)	18°F (-8°C)
Audio	No	No	No
Paintable Cover	No	Yes	Yes
Dimensions	W 2.8" x H: 3.4" x L: 4.9" (71 x 86.5 x 124.5 mm)	W 4.6" x 3.6" (W 117 x 9.5 mm)	W 4.625" x 2.79" (W 117 mm x 71 mm)
Weight	0.7 lbs (330 g)	0.8 lbs (370 g)	0.7 lbs (330 g)
Mounting Hardware Included	Yes	Yes	Yes

*IR range and image quality can be affected by surfaces that absorb or reflect IR light differently in total darkness. Camera location or direction may need to be adjusted to optimize image quality. Some ambient lighting provides the best results for recording in darkness.

**microSD card not included

***Contact manufacturer of the recorder to ensure full function compatibility.

HD510 HD Speed PTZ Dome

Features:

- *Autofocus 30x Optical Zoom*
- *Extreme Low Light Performance*
- *SPECTRUM VISION True WDR*
- *360° high speed endless rotation*
- *220° tilt range*
- *Extreme Temperature, IP66 rated*

Camera Specifications

Model	HD510 PTZ
Resolution	1080p (2MP) @ 30fps
Image Sensor	Progressive Scan CMOS
Tamper / Vandal Resistant	Yes
Wide Dynamic Range	Spectrum Vision True WDR
Focal Length	4.3 ~ 129 mm Zoom
Horizontal Field of View	66° ~ 2.6° (30X Optical Zoom)
Iris Control	F1.6 ~ F5.0 auto-iris
Presets	32 Preset positions, 16 Preset tours
Audio	Yes (Requires additional equipment)
Backlight Compensation	Yes
Auto Gain Control	Yes
Minimum Illumination @ 30IRE	Color: 0.1 Lux (F1.6), B/W: 0.05 Lux (F1.6)
Day / Night	True Day/Night
IR LED	No
Auto White Balance Range	2000K ~ 9000K
Compression	H.264 / MJPEG
Input Voltage	PoE+ / 24vAC
Power Consumption	25.44W Max (PoE+) / 31.5W Max (24vAC)
IP Outdoor Rating	Yes, Extreme Temperature, IP66
MicroSD Backup Slot	Up to 64GB capacity
Heater and Blower	Yes
Operating Temperature	-40°F ~ 122°F (-40°C ~ 50°C)
Alarm Inputs	4
Relay Outputs	2
Tilt/rotation	Pan: 0°-360° endless; Tilt: -20°-200°
Image Stabilization	Yes
Privacy Mask	Yes
Motion Detection	3 zone
ONVIF Compliant	Profile S
Mount Type	Wall Mount (Bracket included)
Dimensions	7.9" w x 10.9" h (200 w x 276 h mm) — Camera only
Weight	5.7 lbs (2.58 kg)
Mounting Hardware Included	No