

ALTITUDE HIGH-RESOLUTION MPEG-4 NETWORK CAMERAS

9440 SERIES OF VANDAL RESISTANT MINI-DOMES

The Altitude™ 9440 series of high-resolution, network based vandal proof mini-dome cameras incorporate the latest imaging technology and are available as high-resolution CCD or Super Wide Dynamic Range CMOS imagers. Both imagers provides superior video quality. The 9440 is available with three (3) lens options to cover a wide range of application from 2.6mm to 22mm. These cameras are based on MPEG-4 digital video algorithm, and provides full 4CIF (704x480 NTSC, 704x576 PAL) video resolution at full-frame rate of 30fps NTSC/ 25fps PAL. Available in recessed, ceiling, corner and “No Grip” surface mount vandal resistant housing, the 9440 series is suited for the most demanding installations.

The Altitude 9440 is the most recent addition to DVTel’s line of MPEG-4 based IP cameras. Using advancements in video compression technology, the 9440 provides both high-frame rate and high-resolution video, while maintaining a significantly lower file size that requiring less bandwidth, compared to other varieties of image compression cameras.

The Altitude 9440 Mini-Dome camera utilizes IGMP Snooping (Layer-2 multicasting) technology, which enables a single stream to be transmitted to multiple viewers on the network simultaneously. Multicasting reduces bandwidth demands, allowing more cameras to be transmitted over the network than unicast based products including unicast IP cameras and DVRs.

The Altitude 9440 dual streaming technology combined with Latitude Network Video Management System’s (NVMS™) Digital Virtual Matrix Switch allows independent settings for the live video and recorded streams. An authorized user can select to observe the viewing stream at a high-frame rate and resolution, while the recording stream is being captured on the Latitude Media Archive Server storage system at a different frame rate. For example, a Camera can be set to be viewed at 30fps NTSC/25 PAL while recording at 15fps NTSC/12.5 PAL. This, combined with Latitude NVMS Virtual Matrix’s advanced features, presents the ability to replace the complete analog system with a digital one.

Using the Latitude NVMS ControlCenter and its applications, live or recorded video can be viewed on a traditional analog monitor using the 7500 family of IP-based decoders. A networked decoder can be installed anywhere on the system to provide operation over analog CCTV monitor or for recording to a VCR or DVR.

The Altitude 9440 is fully compatible with the Adaptive Visualization Technology (AVT™) SceneTracker™ application. SceneTracker permits multiple video streams from separate cameras to be “stitched” together. A network MPEG-4 decoder can be installed where live viewing is required on an analog CCTV monitor, or for recording to a VCR or DVR. The decoder can also be used for live monitoring or to review recorded video using the Latitude ControlCenter.

This addition to the Intelligent Security Operation Center (iSOC™) is designed for high-resolution video monitoring and recording. The Altitude 9440 Mini-Dome provides more than just high-resolution video, it also provides bi-directional audio, data and serial communications and dry in and out contact alarms. By delivering dual video streaming, the Latitude NVMS Virtual Matrix Switch is able to achieve true matrix quality operations for live monitoring.



Surface and ceiling mount option shown (stainless steel optional)

- Fully compatible with the AVT SceneTracker System
- Dual-stream MPEG-4 video for independent viewing and recording settings
- Multi video resolution settings at up to 4CIF 704x480 NTSC, 704x576 PAL at 30fps NTSC/25 PAL
- Multi-Digital Signal Processing (DSP)
- Imager options:
 - Sony HQ-1 DSP with 1/3” format CCD imager with 768(H) x 494(V) pixels with 540 TV Lines
 - Pixim DPS with 1/3” format CMOS imager with 720(H) x 540(V) pixels with 500+ TV Lines
- DC auto iris, varifocal 2.6 - 6.0, 3.5 - 9.5 and 9 - 22.0 mm lens options
- Automatic white balance
- Automatic Gain Control (AGC)
- Advanced Back Light Compensation (BLC) capability
- Day/Night mode
- Indoor/Outdoor surface mount.
- Marine grade stainless steel option
- IP 67 and NEMA 4 rated
- Impact and scratch resistant polycarbonate bubble with camera shroud to conceal camera position
- 3/4” NTP standard conduit knockouts
- Power over Ethernet (PoE) support via optional power injector/splitter accessory
- Remote access for configuration, viewing and control via Latitude NVMS or standard web browser



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General Specifications



Physical, Electrical, Environmental and Regulatory

Physical	
Dimensions (Dia x H)	6" (152mm) Dia. x 5.375 (136.5mm) H
Bubble Thickness	0.1" (2.5mm)
Bubble F-Stop	F0.0 (clear bubble)
Pan & Effective Tilt Range	360° & 180° (±90°) at 17In distance
Unit Weight Recessed/Surface	2.7 Lbs. (1.3Kg) / 3.3 Lbs. (1.5Kg)
Unit Shipping Weight	3.5 Lbs. (1.6Kg) / 4.0 Lbs. (1.9Kg)
Electrical	
Input Voltage	36-57V DC 802.3af PoE or 12VDC
Power Consumption	7.5W
Power Connector	2-pin Terminal block or 2.5mm plug
Environment	
Indoor Operating Temperature	32° F to 122° F (0° C to 50° C)
Storage Temperature	32° F to 140° F (0° C to 60° C)
Humidity	90% (non-condensing)
Regulatory (Pending)	
USA	FCC part 15 (subpart B, class A)
Europe	CE marked, EN55022, EN55024
Warranty	2-year limited warranty, covering parts

Latitude NVMS Software Options

Latitude software packages		
Latitude Classic	LAT35-C-DMC	LAT50-C-DMC
Latitude Elite	LAT35-EL-DMC	LAT50-EL-DMC
Latitude Enterprise	N/A	LAT50-EP-DMC

Accessories

Power Accessories	
DVT-PWR-ETH48IS	12VDC Power over Ethernet injector/splitter
DVT-PWR-200W	12VDC 200W Power Supply
DVT-PWR-19W	12VDC 19W Power Supply
7501D/DA	Single port Decoder (DA - with Audio)
7504D/DA	4-port Decoder (DA - with Audio)

General	Super Wide Dynamic Range	High Resolution Day/Night
Imager	1/2-inch CMOS, Pixim Orca Sensor	1/2-inch CCD, Sony HQ-1 DSP
Scanning System	500+ TVL	540 TVL Color / 570 TVL BW
Pixel Array	720 (H) x 540 (V)	NTSC 768(H) x 494(V)
Signal Processing	DSP	DSP
Minimum Illumination	0.95 Lux at 40 IRE, F1.2	0.65 Lux at 40 IRE, F1.2
Digital Slow Shutter (DSS)	2x (default) - 32x	N/A
Super Wide Dynamic Range	120dB/17bit	N/A
White Balance	Automatic White Balance (AWD)	Automatic White Balance (AWD)
White Balance Range - Normal (Extended)	2200-7500 K (2000—11000 K)	2700-11000 K (2000—18000 K)
Iris Control	Automatic	Automatic
Day/Night Mode	On/Off	On/Off
Backlight Compensation	N/A	On/Off
Signal to Noise Ratio (SNR)	>42dB	50dB
Power Consumption	8 Watts	7.5 Watts

Lens Specifications

General	Option 2	Option 3	Option 9
Verifocal Length	2.6mm - 6mm	3.8mm - 9.5mm	9mm - 22mm
F-Stop	F1.3 ~ 360	F1.2 ~ 360	F1.8 ~ 360
Field of View	108.2° x 80.4° (W) 47.6° x 35.6° (T)	74.2° x 54.0° (W) 30.0° x 22.4° (T)	30.7° x 22.7° (W) 14.1° x 10.6° (T)
Min Illumination	0.65 Lux at 40 IRE, F1.3	0.65 Lux at 40 IRE, F1.2	1.0 Lux at 40 IRE, F1.8

Digital Video Encoder Specifications

Video	
Video Standard	NTSC / PAL
Video Compression Standard	MPEG-4
Frame Rate	1-30 FPS (NTSC) in all Resolutions 1-25 FPS (PAL) in all Resolutions
Video Resolution	Scalable from 352x240 to 704x480 (NTSC) 352x288 to 704x576 (PAL)
Bandwidth	Configurable between 64 Kbps and 4 Mbps
Communication	
Network Protocols	RTP/IP, UDP/IP, TCP/IP, or multicast IP, DNS and DHCP client
Ethernet	10/100 Base-T Auto sensing, Half/Full Duplex (RJ45)
Security	SSL
Alarm	
Input	2 Dry Contacts
Output	1 Relay Contact, 30VA, 1A
Audio	
Bi-directional Audio	Input: -20 to -3 dBV into 30 kilohms Output: -46 to -3 dBV into 16 ohms minimum
Connector	.14 in (3.5 MM) Input and Output Stereo Jacks via terminal block
Management	
Configuration	Remote: Via the Latitude AdminCenter, Web Access Local: Telnet

Altitude 9440 Part number conversion table - DVT-944(2/3/9)(D/W)V(S/R/C)-(N/P)(SS)

	Family	Resolution	Lens	Optics	Construction	Mount	Video Format	Color
DVT	94	4	2/3/9	D/W	V	S/R/C	N/P	/SS
DVTel	94 - Vandal Mini-Dome	4 - 4CIF	2 - 2.6-6.0mm 3 - 3.5-9.5mm 9 - 9.0-22mm	D - Day/Night (CCD) W - SWDR (CMOS)	V - Vandal	S - Surface R - Recessed C - Corner	N - NTSC P - PAL	- Off-white SS - Stainless steel

Stainless Steel option for all models add "SS" suffix to part number (e.g. DVT-9443DVS-NSS)

