

# Altitude 9840A Pro Series

## Network PTZ Domes

18x, 23x and 35x Optical Zoom 4CIF Resolution  
Color, Day/Night and Electronic Image Stabilization Options

The Altitude 9840A series of industrial-grade, high-resolution network based video and audio PTZ dome cameras incorporate the latest DSP technology for camera imaging to provide unparalleled video quality. This series of IP-based video and audio dome camera systems are designed to meet the toughest surveillance applications with a full set of programmable camera features including high-speed precision camera presets, patterns, guard tours, privacy sectors or windows as well as a user friendly onscreen programming interface. Available with ceiling or bracket mounts, each is available in an indoor or outdoor housing, making the 9840A series domes suited for the most demanding security and surveillance applications.

The 9840A provides a wide range of camera options, ranging from an economical 18x color, to 23x day/night, to 35x day/night with electronic image stabilization which provides a stable or fixed image when there is a potential for camera movement based upon windy conditions or road vibration. This feature ensures that live and recorded video images remain viewable and high quality no matter the environmental or external conditions impacting the camera. All these heads are all interchangeable in the housings for easy field upgrade. In addition to high-resolution video, the 9840A is a complete part of the security system, providing high quality bi-directional audio, serial data port, alarm inputs and relay outputs which can be interfaced to a wide variety of systems or accessories.

The Altitude 9840A series provides highly efficient, dual stream, MPEG-4, 4CIF (704x480 NTSC, 704x576 PAL) based IP cameras with maximum video resolution at a full frame rate of 30fps NTSC/ 25fps PAL. Using advancements in video compression technology, the 9840A series provides high frame rate and high-resolution video, while maintaining a significantly lower file size and reduced bandwidth utilization compared to other cameras on the market. The 9840A series also utilizes IGMP Snooping (Layer-2 multicasting) technology, which enables a single stream to be transmitted to multiple viewers on the network simultaneously with no additional bandwidth on the network.

The Altitude 9840A's dual streaming technology allows for fully independent viewing and recording streams so the live stream can be set for real-time viewing at 30fps NTSC/25 PAL while simultaneously recording at up to 15fps NTSC/12.5 PAL. When combined with the Latitude Virtual Matrix capability, which permits full switching of any camera to any monitor or tile, sequencing and alarm handling, the DVTel digital solution can be an end to end replacement for the legacy analog system. In addition, the migration from an existing analog system to the DVTel digital solution is made complete with the support of 3rd party CCTV keyboards as well as by using 7400 or 7500 series IP based decoders to permit viewing of both live and recorded video on an analog CCTV monitor.

The Altitude 9840A is fully compatible with the Adaptive Visualization Technology (AVT™) based SceneTracker™ system. SceneTracker permits multiple streams to be "stitched" together for real time situational awareness. With the 9840A Pro Series PTZs wide choice in optics, housings, power and mounting options, there is a model suited to virtually any application.



Bracket sold separately

- Fully compatible with the AVT SceneTracker
- Multicast, 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)
- Advanced 1/4" DSP CCD camera with up to 35x Optical, 12x digital zoom
- Auto iris, auto focus and back-light compensation
- Wide dynamic range
- Electronic Image Stabilization (Z series)
- Proportional high-speed pan and tilt and automatic flip
- 128 presets, 4 patterns and 16 areas with titles
- Eight programmable privacy windows (D, Z series)
- Bi-Directional Audio
- Exceeds IP66 and NEMA-4X specifications
- Anti-ice & anti-mist, built-in heater and air circulating system (outdoor bracket and ceiling only)
- Vandal-resistant polycarbonate bubble standard
  - Clear and Tinted (Smoked) options
- 24VAC and 12VDC power options (not interchangeable)
- Mounting options include ceiling, wall, pendant, corner and over-the-roof mounts
- Remote access for configuration, viewing and control via standard web browser



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### General Specifications

General	E Option - Color 18x	D Option - Day/Night 23x	Z Option- Day/Night 35x
Image Sensor	¼-inch CCD	¼-inch CCD	¼-inch Progressive Scan CCD
Video Resolution	480 TVL	470 TVL \ 550 TVL	550 TVL
Zoom - Optical/Digital	18x / 12x	23x / 12x	35x / 12x
Scanning system	2:1 Interlacing	2:1 Interlacing	2:1 Interlacing
Pixel Array	758 (H) x 504 (V)	795 (H) x 596 (V)	811 (H) x 508 (V)
Signal Processing	SONY EXview HAD	Hitachi DSP Gen 6	Hitachi DSP Gen.7
Min Illumination @ 50IRE F1.4	0.7 lux	0.1 (Day) 0.01 (Night) lux	0.1 (Day) 0.01 (Night) lux
Digital Slow Shutter (DSS)	Yes	Yes	Yes
Wide Dynamic Range (WDR)	On/Off	On/Off	On/Off
Automatic White Balance (AWB)	Auto/Manual	Auto/Manual	Auto/Manual
Backlight Compensation (BLC)	Automatic	Automatic	Automatic
Signal to Noise Ratio (SNR)	≥50dB	≥50dB	≥50dB
Automatic Gain Control (AGC)	No	Yes (40 levels)	Yes (40 levels)
Electronic Image Stabilization (EIS)	No	No	On/Off
EIS suppression ratio	No	No	Horizontal: Less than -12dB against 5Hz vibration Vertical : Less than -12dB against 5Hz vibration
Image Reverse		On/Off	On/Off
Image Freeze	On/Off	On/Off	On/Off
Iris	Auto/Manual	Auto/Manual	Auto/Manual
Focus	Auto/Manual	Auto/Manual	Auto/Manual
Day/Night Mode	N/A	On/Off	On/Off
IR Cut filter	N/A	On/Off	On/Off
Shutter Speed	1/60–1/4k s : Seamless	1/60–1/4k s : Seamless	1/60–1/4k s : Seamless
Mirror Image Function	On/Off	On/Off	On/Off
Minimum Focal Distance	0.1m (wide) - 1.0m (tele)	0.1m (wide) - 1.0m (tele)	0.1mm (wide) - 1.0mm (tele)
Variofocal Length	4.1mm - 73.8mm	3.6mm - 82.8mm	3.4mm - 119.0mm
Angle of View	Wide 48° / Tele 2.7°	Wide 54° / Tele 2.5°	Wide 55.8° / Tele 1.7°
<b>Physical</b>	<b>Indoor Ceiling</b>	<b>Indoor Bracket</b>	<b>Outdoor Bracket</b>
Dimensions (Dia x H)	8.267" (Dia) x 9.296" (H) 210mm (Dia) x 236mm (H)	8.582" (Dia) x 10.433" (H) 218mm (Dia) x 265mm (H)	9.448 (Dia) x 11.220 (H) 234mm (Dia) x 285mm (H)
Mount	N/A	1½" NPT	1½" NPT
Unit Weight	7.2 Lbs (3.3Kg)	7.2 Lbs (3.3Kg)	7.2 Lbs (3.3Kg)
Shipping Weight	13.2 Lbs (6.0Kg)	13.2 Lbs (6.0Kg)	13.2 Lbs (6.0Kg)
<b>Video</b>			
Video Standard	NTSC / PAL		
Video Compression Standard	MPEG-4, ISO standard (SP), Dual Stream;		
Frame Rate	1-30 FPS (NTSC) in all Resolutions 1-25 FPS (PAL) in all Resolutions		
Video Resolution	Scalable from CIF-4CIF: 352x240 to 704x480 (NTSC) 352x288 to 704x576 (PAL)		
Bandwidth	Configurable between 64 Kbps and 6 Mbps - total for both streams		
<b>Communication</b>			
Network Protocols	Transport: RTP (Unicast/multicast), UDP (Unicast/multicast), TCP Others: DNS, NTP, HTTP server, IGMP V1/V2, FTP client, Telnet client and DHCP client		
Ethernet	10/100 Base-T Auto sensing, Half/Full Duplex		
<b>Management</b>			
Configuration	Remote: Via the Latitude AdminCenter, Web Access or Local: Telnet		
<b>Regulatory</b>			
FCC	FCC part 15 (class B)		
CE	IEC60950, EN55022, EN55024, EN55130, EN55103-1, -2; EN61000-3, -2; EN61000-3, -3		
UL/cUL	UL60950-1; CSA C22.2 No. 60950-1-03		
<b>Warranty</b>	2-year limited warranty, covering parts		



### Alarm, Audio, Mechanical, Electrical and Environmental

Alarm	
Input	4 Dry Contacts (2 local, 2 system)
Output	1 Local Relay- 30VA, 1A max. 1 System Relay - 60V AC/DC at 500 mA max.
Camera Presets and Patterns	
Presets	128
Patterns	4
Audio	
Bi-directional Audio	Input: -46 to -3 dBV into 30 KOhm Output: -46 to -3 dBV into 16 Ohms minimum Sampling Rate: 8khz, 32khz
Connector	Accessory Cable (pre-installed)
Mechanical	
Manual Pan/Tilt Speed	0.1° - 180° per second (based on zoom position)
Preset Pan/Tilt Speed	200° per second
Pan Travel	360° Continuous
Tilt Travel	-0° - +90° (with auto-flip)
Pan/Tilt accuracy	±0.1°
Zoom/Focus Accuracy	±0.5°
Motor	Brushless micro stepping motor
Electrical	
Input Voltage	24 VAC Units: 18- 26.4 VAC 12 VDC Units: 11-17 VDC
Power Consumption	25W (indoor) / 45W (outdoor) for 24VAC 22W (indoor) / 30W (outdoor) for 12VDC
Power Connector	2 pin terminal block
Environment	
Indoor Operating Temperature	32° F to 122° F (0° C to 50° C)
Outdoor Operating Temperature	-40° F to 131° F (-40° C to 55° C)
Storage Temperature	32° F to 140° F (0° C to 60° C)
Continuous fan, auto heater	Fan and Heater (outdoor version only)
Humidity	0 - 95% (non-condensing)
Ratings	IP66 and NEMA 4X Specifications

### Accessories

Power Accessories	
DVT-PWR-24VAC	24V power supply (110V 60Hz) - Indoor only
DVT-PWR-24AC3A	24VAC power supply (110V 60Hz), Outdoor, NEMA-4X, UL Approved

### Altitude 9840A Part number conversion table - DVT9840A(I/O)(C/B)(C/T)-(E/D/Z) (N/P) (12)

Example DVT9840AIBV-ZN	Type	Family	Series	Type	Mount	Bubble	-	Optics	Video Format	12VDC Option
DVT	98	40	A	I/O	C/B	C/T	-	E/D/Z	N/P	12
DVTel	98-PTZ Dome	40 - Pro	A- Series A	I - Indoor O - Outdoor	C - Ceiling B - Bracket	T - Tinted (Smoked) Vandal C - Clear Vandal	-	E - Economy (18x) D - Day/Night (23x) Z—Day/Night (35x)	N - NTSC P - PAL	No Dash - 24VAC 12 - 12VDC

12VDC option for all modules add "12" suffix to part number - no additional cost (e.g. DVT9840AIBC-ZN12)

