

# Altitude 9540A Pro Series SW/DW WDR Network Cameras

## 1/3 Inch Super Wide Dynamic Range CMOS High Resolution 4CIF Color and Day/Night Cameras

The Altitude 9540A SW/DW series of high-resolution, IP cameras incorporates Super Wide Dynamic Range CMOS imaging system to provide unparalleled image quality. The Altitude 9540 is available as standard (color) or Day/Night (BW) modes with a mechanical IR cut filter for superior performance in "Night" mode. This leading-edge technology allows both brightly lit and shadowed areas of an image to be clearly viewed simultaneously. This product has been designed to work seamlessly within a computer network by incorporating the 802.3af standard for Power over Ethernet (PoE).

The Altitude 9540A is the most recent addition to DVTel's line of MPEG-4, 4CIF-based IP cameras (704x480 NTSC, 704x576 PAL). At 4CIF, video resolution can be maintained at the full frame rate of 30fps NTSC/25fps PAL. Using advancements in video compression technology, the 9540A provides both high-frame rate and high-resolution video, while maintaining a significantly lower file size that requires less network bandwidth and storage space compared to other varieties of image compression cameras.

The Altitude 9540A 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 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 Switch's advanced features, presents the ability to replace the complete analog system with a digital fully one.

Using the Latitude NVMS ControlCenter and its applications, live or recorded video can be viewed on a traditional analog monitor using the 7400 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 9540A is fully compatible with the Adaptive Visualization Technology (AVT™) SceneTracker™ software. SceneTracker permits multiple video streams from separate cameras to be "stitched" together.

This addition to the Intelligent Security Operation Center (iSOC™) is designed for high-resolution video monitoring and recording. The Altitude 9540A IP Camera provides more than just high-resolution video, it also provides dry contact alarm inputs, relay outputs and serial ports for peripheral device control making the 9540A a true system camera.



Lens sold separately

- Fully compatible with the AVT SceneTracker System
- Multi video resolution settings at up to 4CIF 704x480 NTSC, 704x576 PAL
- Up to 30fps NTSC/25 PAL at 4CIF resolution
- Dual video stream for independent viewing and recording settings
- Multi Digital Signal Processing (DSP)
- PIXIM™ DPS Digital Pixel System
- 1/3" format CMOS imager (752(H) x 554(V) pixels)
- Super wide dynamic range (SWDR)
- Day/Night Option (Mechanical IR cut filter)
- Automatic white balance modes
- Automatic Gain Control (AGC)
- Automatic Electronic Shutter (AES)
- Advanced Back Light Compensation (BLC) capability
- 2 Alarm Inputs /1 Relay Output
- RS232 and RS422/485 Serial ports
- C/CS lens mount
- DC auto iris lens compatibility
- 12VDC or 802.3af PoE
- Remote access for configuration, viewing and control via Latitude NVMS or standard web browser



# Altitude 9540A SW/DW Series High-Resolution Network Cameras

## Camera and Imaging Specifications

General	Super Wide Dynamic Range (Color)	Super Wide Dynamic Range (Day/Night)
Imager	½-inch CMOS, Pixim™ Orca Sensor	½-inch CMOS, Pixim™ Orca Sensor
Scanning System	480+ TVL	480+ TVL Color / 570 TVL BW
Pixel Array	742 (H) x 554 (V)	742 (H) x 554 (V)
Signal Processing	DSP	DSP
Minimum Illumination	0.5 Lux at 40 IRE, F1.2	0.5(C), 0.05(BW) Lux at 40 IRE, F1.2
Digital Slow Shutter (DSS)	2x (default) - 32x	2x (default) - 32x
Super Wide Dynamic Range	102dB Typical, 120dB Maximum	102dB Typical, 120dB Maximum
White Balance	Automatic White Balance	Automatic White Balance
White Balance Range - Normal (Extended)	2,200-7,500 K (2,000—11,000 K)	2,200-7,500 K (2,000—11,000 K)
Iris Control	Automatic DC-Drive	Automatic DC-Drive
Day/Night Mode (Mechanical IR cut filter)	NA	On/Off
Backlight Compensation	On/Off	On/Off
Signal to Noise Ratio (SNR)	>48dB	>48dB

## Camera and Encoder Specifications

Video	
Video Compression Standard	MPEG-4, ISO standard (SP), Dual Stream;
Frame Rate	1-30 FPS in all Resolutions 1-25 FPS in all Resolutions
Video Resolution	Scalable from CIF to 4CIF (352x240 - 704x480 NTSC — 352x288 - 704x576 PAL)
Bandwidth	Configurable between 64 Kbps and 6 Mbps
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
Audio Connections	Terminal block
Communication	
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 (RJ45)
Serial Port	
Electrical Levels	RS-422/485 2/4 Wires (maximum of 115Kbps)
Connectors	Via 5 pin removable plug
Operating Mode	Transparent serial port supports any asynchronous serial protocol
Alarm	
Input	2 dry contacts
Output	1 Relay Contact, 60V AC/DC at 500 mA max.
Management	
Configuration	Remote: Via the Latitude AdminCenter or Web Access
Firmware Upgrade	Flash memory for upgrade of video codec firmware over the network

## Altitude 9540 Part number conversion table - DVT9540A-(S/D)(N/P)

	Type	Series	Version	-	Options
DVT	95	40	A	-	SW/DW
DVTel	95 - box style camera	40 - Pro Series	Version A	-	S - Standard (Color) D - Day/Night (Color/BW)

## Lens Specifications (CS Mount) (sold separately)

DVT-LENS-VM03IR	DVT-LENS-VM85IR	DVT-LENS-VA28IR	DVT-LENS-VA03IR	DVT-LENS-VA75IR
Manual Iris, 3.0-8.5mm f1.0 Day/Night, IR Corrected	Manual Iris, 8.5-40.0mm f1.3 Day/Night, IR Corrected	DC Auto Iris, 2.8-12mm f1.2 Day/Night, IR Corrected	DC Auto Iris, 3.0-8.5mm f1.0 Day/Night, IR Corrected	DC Auto Iris, 7.5-50mm f1.3 Day/Night, IR Corrected



Lens sold separately

## Physical, Electrical, Environmental and Regulatory

Physical	
Enclosure	Metal case with ¼-inch UNC-20 screw mount
Dimensions (W x D x H)	2.6" x 5.1" x 2.4" 67mm x 130mm x 60mm
Unit Weight	1.1 Lbs. (0.5Kg)
Unit Shipping Weight	3.2 Lbs. (1.5Kg)
Electrical	
Input Voltage	12VDC ±10% or 802.3af PoE
Power Consumption	8W
Power Connector	12VDC Via terminal block
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	
USA	FCC part 15 (subpart B, class A)
Europe	CE marked, EN55022-1998 Class A, EN55024
Warranty	2-year limited warranty, covering parts

## Ordering Information

Software	
Latitude NVMS	Version. 5.0
Video Decoder	
DVT-7401DA	Single Port Decoder (DA - audio version)

