

# DVTEL'S HIGH-RESOLUTION MPEG-4 VIDEO ENCODERS

## 7608E SERIES OF EIGHT (8) VIDEO INPUTS VIDEO SERVER

The 7608E series of high-resolution encoders are the most economical solution for high-density, high-resolution video and audio applications with the best cost per input while providing high frame rate per input and maintaining high video resolution. The 7608E is available in three versions, the 7608E (video only), 7608EA (video and a single pair of bi-directional audio) and 7608EU (video and 12 unidirectional high-fidelity audio inputs).

The 7608E series of MPEG-4 video encoders provides eight independent video inputs that can be set for 30fps NTSC/25 PAL at 4CIF (704x480/704x576) resolution. Utilizing the advancement in video and audio compression, the 7608E provides high-frame rate, high-resolution video and high-fidelity audio, while maintaining a significantly lower file size which requires less network bandwidth and storage space compared to other varieties of image compression encoders/cameras.

The 7608E series of video encoders 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 7608E Encoder provides more than just high-resolution video, it also provides bi-directional audio, unidirectional audio, data and serial communications and dry contact alarms both in and out. The 7608E dual video streaming technology combined with the Latitude Network Video Management System (NVMS™) Digital Virtual Matrix Switcher allows independent settings for the live video and recorded streams. An authorized user can select the viewing stream, at a high frame rate and resolution, while the recording stream is being captured on a 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's advanced features, presents the ability to replace the complete analog system with a completely digital solution.

The 7608E is fully compatible with the Adaptive Visualization Technology (AVT™) software. SceneTracker™ permits multiple video streams from separate cameras to be "stitched" together. Combined with the Latitude NVMS live or recorded video can be viewed on a traditional analog monitor using the 7500 family of IP-based decoders. A networked 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 NVMS.

This addition to the Intelligent Security Operations Center (iSOC™) is designed to provide high density video inputs, while maintaining a smaller footprint, for retrofitting an existing security communication room where all camera coax cables are already terminated.



- Fully compatible with the AVT SceneTracker system
- Multi video resolution settings at up to 4CIF 704x480 NTSC, 704x576 PAL per channel
- Up to 30fps NTSC/25 PAL per channel at 4CIF resolution
- Dual video stream per channel for independent viewing and recording settings
- Twelve (12) dry contact alarm inputs
- Three (3) relay outputs
- Audio Options:
  - Optional pair of bi-directional full duplex audio in/out
  - Optional twelve (12) uni-directional audio inputs
- High density eight video inputs in 19" 1U (1.75") high rack mount enclosure
- RS-232 and RS-422/485 serial communication ports for interfacing with CCTV keyboards, PTZ cameras and access control systems, building management systems, and other serial applications
- Firmware upgrades via the network
- Remote access for configuration, viewing and control via standard web browser
- RTP/IP, UDP/IP and TCP/IP network communication protocol options
- IGMP Multicast network protocol enabled
- Power over Ethernet (PoE) support via optional injector/splitter accessory



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### Specifications

<b>Network</b>	
Interface	Ethernet 10/100Base-T
Connector	RJ-45
Protocols	Transport: RTP/IP, UDP/IP, TCP/IP with full multicast support. DNS and DHCP
Security	SSL-based authentication
<b>Video</b>	
Input	Eight composites, 1Vpp into 75 ohms (NTSC/PAL)
Connectors	Eight BNC female connectors
Termination	75 Ohm software selectable per input
Compression	MPEG-4
Resolution	Scalable from CIF to 4CIF 352x240 to 704x480 NTSC, 352x288 to 704x576 PAL
Frame Rate	1-30 FPS Programmable NTSC (full motion) - CIF, 2CIF and 4CIF 1-25 FPS Programmable PAL (full motion) - CIF, 2CIF and 4CIF
Bandwidth	Each stream is configurable between 30 Kbps and 4 Mbps for a total of 6 Mbps per camera (dual streaming - viewing and recording combined)
<b>Alarm</b>	
Input	12 dry contacts
Output	3 Relay Contact, 48V AC/DC at 100 mA max.
<b>Audio (optional)</b>	
Bi-directional Audio (EA)	Input: -46 to -3 dBV into 1 kOhm Output: -46 to -3 dBV into 16 ohms minimum Connectors: One set of 0.14 in. (3.5 mm) input and output stereo jacks
Unidirectional Audio (EU)	Programmable bias: 0-9V DC 16-bit resolution 8, 16, or 24 KHz sampling rate Connectors: 12 0.14 in. (3.5 mm) input stereo jacks
<b>Serial Port</b>	
Communication Protocols	Port 1: RS-232 (maximum 230 Kbps) Port 2: RS-422/485 2/4 Wires (maximum of 230 Kbps)
Connectors	Port 1: DB-9 Port 2: pluggable screw-terminal strip
Operating Mode	Transparent serial port supports any asynchronous serial protocol
<b>Management</b>	
Configuration	Remote: Via the Latitude AdminCenter and/or standard web browser Local: Telnet via the serial port using any ASCII Terminal
Firmware Upgrade	Flash memory for upgrade of encoders and application firmware over the network



### Physical, Electrical, Environmental and Regulatory

<b>Physical</b>	
Enclosure	Metal case with flange mount (black color)
Dimensions (W x D x H)	17" x 6.1" x 1.7" 431.8mm x 154.9mm x 43.2mm
Unit Weight	5.2 Lbs. (2.4Kg)
Unit Shipping Weight	7 Lbs. (3.2Kg)
<b>Electrical</b>	
Input Voltage	12V DC +/- 10%
Power Consumption	22W
Power Connector	2-pin 2.5mm plug
<b>Environment</b>	
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	95% (non-condensing)
<b>Regulatory (Pending)</b>	
USA	FCC part 15 (subpart B, class A)
Europe	CE marked, EN55022-1998 Class A, EN55024
Canada	ICES-003/NMB-003 Class A
<b>Warranty</b>	2-year limited warranty, covering parts

### 7608xx Video Encoder and Latitude NVMS Software Options

<b>Latitude software packages</b>		
DVT-7608E	Eight Port Encoder	
DVT-7608EA	Eight Port Audio Encoder (bi-directional in/out)	
DVT-7608EU	Eight Port Uni-Directional Audio Encoder	
Latitude Classic	LAT35-C-DMC	LAT50-C-DMC
Latitude Elite	LAT35-EL-DMC	LAT50-EL-DMC
Latitude Enterprise	N/A	LAT50-NT-DMC

### Accessories for 7608xx Video Encoder

<b>Power and Accessories</b>	
DVT-PWR-200W	200W Power Supply for up to 8 units
DVT-PWR-40W	40W Power Supply for single unit
DVT-WHK-4UA	4 Unit Power Cable for DVT-PWR-200W
7501D/DA	Single port Decoder (DA - with Audio)
7504D/DA	4-port Decoder (DA - with Audio)

