SecureLink 7500 Series Video, Data and Audio Encoders and Decoders Over Ethernet

PRODUCT DESCRIPTION:

The SecureLink 7500 Series is a component of the Latitude Network Video Management System (NVMS) and SecureLink Transmission and Switching product families. The series include IP-based video, audio, and data video server encoders and decoders. The encoders are more than just video servers, they also provide bi-directional audio, data, serial communication and dry contact alarms in and out. They deliver high quality video streams to the Latitude NVMS Virtual Matrix, resulting in true matrix quality for live monitoring operations.

The 7500 series encoder utilizes IGMP multicast technology, which enables a single stream to be transmitted to multiple viewers on the network simultaneously. Multi-casting reduces bandwidth demands, allowing more cameras to be transmitted over the network than non-multicast enabled products such as a DVR, which requires high bandwidth. The live video stream can be viewed on a client PC using the Latitude NVMS client application. A networked MPEG-4 7501D 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 be used for live monitoring or to view recorded video from the Latitude Archive Server.

The SecureLink 7500 series' plug-and-play design and combined with the Latitude NVMS's auto-discovery feature ensures rapid installation and low maintenance costs. The SecureLink 7500 series runs over existing Ethernet networks, eliminating the need to run new coaxial cable, the most expensive and labor-intensive component of system installation. By eliminating these costs, the 7500 Encoder series immediately increases return on investment and reduces total cost of ownership. The SecureLink 7500 system is designed with open standards, not proprietary standards like most DVRs, thus providing a future-proof investment.

The 7500 series, combined with the 5500 series twisted pair transmission technology, can provide high quality video transmission at 30 fps NTSC/25 fps PAL over standard telephone (CAT3) wires while maintaining regular telephone operation. In addition, since the 7500 utilizes standard TCP/IP communication protocol, connecting to a wireless network is simple, making connection possible to locations not easy to reach by a standard wired solution.

PRODUCT FEATURES:

- True networked-based CCTV solution supporting analog CCTV cameras within the existing IP network
- IGMP Multicast network protocol
- Dual-stream MPEG-4 video enables more efficient bandwidth usage and lower storage requirements (available on 7501E, 7502M, 7504E, 7508M models)
- Combined with the powerful Latitude NVMS, view at one frame rate while recording at a different frame rate (available on 7501E, 7502M, 7504E, 7508M models)
- Firmware upgrades via the network
- Scalable resolution
- RTP, UDP, TCP network communication options
- RS-485 and RS-232 bi-directional serial ports can communicate with domes, PTZ cameras and integrate with access control systems, building management systems, and other serial applications
 - Multiple alarm contact inputs and relay outputs
- Optional bi-directional full duplex audio interface supports audio in (microphone) and audio out (speaker)
- Video loss alarm



7500 Series product reference chart

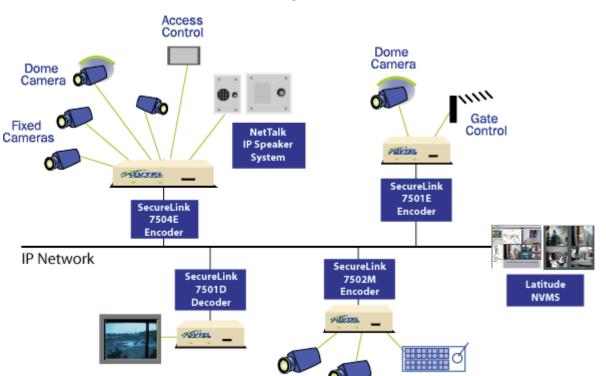
Name	Part #	Cam/Mon In/out	Max Vide	o Quality	Max view fps l per camera	Max record fps per camera	PTZ Control	Network interface	Audio	Dry Contacts I/O	Serial
			(NTSC)	(PAL)	NTSC/PAL	NTSC/PAL					
Single Port Encoder*	DVT-(L)7501E(A)	1	640x480	640x576	30/25	30/25	ક્ત	ક્ત	1 (opt)	3/1	RS-232/422/485
Dual Port Encoder	DVT-(L)7502M(A)	2	352x480	352x576	15/12.5	15/12.5			1 (opt)	3/1	RS-232/422/485
Four port (30fps Encoder)	DVT-(L)7504E(A)	4	640x480	640x576	30/25	30/25	ક્ત	ઠ	1 (opt)	8/2	RS-232/422/485
Eight port Encoder	DVT-(L)7508M(A)	8	352x480	352x576	15/12.5	15/12.5		6	1 (opt)	8/2	RS-232/422/485
Web Based Encoder	DVT-7501W(A)	1	640x480	640x576	30/25	30/25	ક્ત	ક્ત		3/1	RS-232/422/485
Single Port Decoder	DVT-(L)7501D (A)	1	640x480	640x576	30/25	N/A		ક્ત	1 (opt) 1 (opt)	1/1	RS-232/422/485

Encoders and Decoders with an optional (L) version should be used when ordering with the Latitude Network Video Management (NVMS) series of products. Point-to-point applications do not require the (L) version. Audio is optional for all encoders and decoders.

7500 Series Accessories

Name	Part #	Description
Power Supply (220W)	DVT-PWR-200W	200W Power Supply for up to 30 7501E/D, 7502M or for up to 8 7504E, 7508M. Requires DVT-WH-10U per 10 units
Power Supply (40W)	DVT-PWR-40W	39.6W Power Supply for a single 4 or 8 port encoder (7504E, 7508M)
10 Unit Power Cable	DVT-WH-10U	8A fused wiring harness for up to 10 Encoders/Decoders (7501E/D, 7502M)
4 Unit Power Cable	DVT-WH-4U	8A fused wiring harness for up to 4 Encoders (7504E, 7508M)
Rackmount Kit	DVT-7500RM-10	10 unit rack-mount kit for 7501E/D and 7502M
POE Adaptor	DVT-ETH-PWR12	Pair of 12V Power Over Ethernet Adaptors (7501E/D, 7502M)

7500 Series Configuration Example



^{*}Available in Extended temperature version with a range of temperature from 0°C - 32°F to 60°C - 140°F

Technical Specifications

Serial Port **Network** Interface: Ethernet 10/100Base-T Electrical Levels: Port 1: RS-232 (maximum 230 Kbps) Port 2: RS-422/485 2/4 wires Connector: RJ-45 Protocols: Transport: RTP/IP, UDP/IP, TCP/IP with (maximum of 230 Kbps) full Multi-Cast Support Port 1: DB-9 Others: DNS and DHCP Client Connectors: Port 2: Pluggable screw-terminal SSL-Based Authentication strip Transparent serial port supporting Operating Mode: Security: any asynchronous serial protocol 7501E/W: 1 composite (specific protocol emulation may Video <u>7502M</u>: 2 Composite be supported on request) Input: 7504E: 4 Composite 7508M: 8 Composite 1 Vpp into 75 ohms (NTSC/PAL) 12V DC +/- 10% 7501D: 1 composite 7501E/W, 7502M, 7501D 1 Vpp into 75 ohms (NTSC/PAL) <u>Power</u> 7.5W, 625 mA Supply Voltage: 7504E, 7508M BNC Female Output: MPEG-4 Consumption: 31W (up to 2.6A @ 12V DC) 7501E/W, 7504E, 7501D Scalable from 352 x 240 to 640 x Connectors: 480 NTSC (352 x 288 to 640 x 576 7501E/W, 7502M, 7501D Physical Dimensions Compression: PAL) Metal case with flange mount Resolution: 7502M, 7508M (black color) Scalable from 352 x 240 to 352 x 4.52L x 5.6W x 1.25H in (115L x 142W 480 NTSC (352 x 288 to 352 x 576 Enclosure: x 32H mm) PAL) 0.84 lbs (0.38 kg) Size: 32°F to 122°F (0°Cto 50°C) 95% non-condensing at 122°F 7501E/W, 7504E, 7501D 1 - 30 FPS programmable NTSC Weight: (50°C) (full motion) **Environment** (1 - 25 FPS PAL) Humidity: 7501XT Frame Rate: 7502M, 7508M Metal case with flange mount 1 - 15 FPS Programmable NTSC (1 (black color) - 12.5 FPS PAL) 4.52L x 5.6W x 2.75H in (115L x 142W Enclosure: x 70H mm) Configurable between 30 Kbps 0.84 lbs (0.38 kg) Size: 32°F to 140°F (0°C to 60°C) and 4 Mbps 95% non-condensing at 122°F Weight: (50°C) 7501D Bandwidth: **Environment** Output: 1 Relay Contact (48V 7504E, 7508M Humidity: AC/DC at 100 mA maximum) Metal case with flange mount Alarm and Audio 7501E/W, 7502M (black color) Alarm: Input: 3 Dry Contacts 17L x 6.1W x 1.7H in. (431.8L x Output: 1 Relay Contact (48V 154.9W x 43.2H mm) Enclosure: 5.6 lbs (2.6 kg) AC/DC at 100 mA maximum) 7504E, 7508M 32°F to 122°F (0°C to 50°C) Size: 95% non-condensing at 122°F Input: 8 Dry Contacts Output: 2 Relay Contacts (48V (50°C) AC/DC at 100 mA maximum) Weight Input: -46 to -3 dBV into 1 kOHM **Environment**: Output: -46 to -3 dBV into 16 Remote: via SecureLink Humidity: ohms minimum Encoder/Decoder Configurator or 0.14 in (3.5 mm) input and output Telnet stereo jacks Local: via Serial Port using any ASCII **Management** terminal Configuration: Flash memory for upgrade of video Bi-Directional Audio: 1-year limited warranty encoder and application firmware over the network Firmware Upgrade FCC Part 15 (subpart B, Class A), **Audio Connectors:**

ICES-003/NMB-003



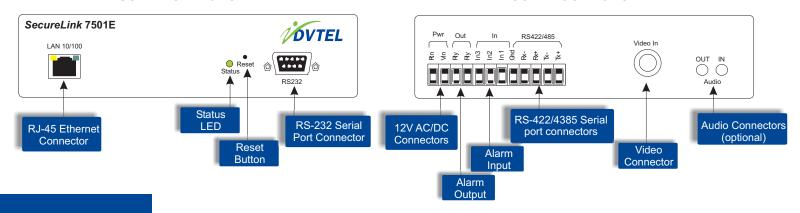
SecureLink 7501E Single Port Real-Time Encoder

The SecureLink 7501E Encoder transmits high-quality MPEG-4 video at 30 frames per second NTSC (25 fps PAL) from any analog CCTV camera or video source. The 7501E encoders can also generate two MPEG4 video streams simultaneously, at different resolutions and image rates, allowing for high quality monitoring while recording at a different image rate maximizing storage and transmission efficiency.

The SecureLink 7501E is a single port video encoder which is connected directly to any analog NTSC or PAL video source via a BNC connector. Audio in and out is available via 3.5mm stereo jacks. The analog video and audio signals are digitized and compressed at the source, thus reducing the "noise" common to analog transmission that degrades data quality and increases storage requirements. The combined, digitized stream of video, audio, and data is then transmitted using the TCP/IP standard protocol over an existing or dedicated security network to be viewed and/or recorded on a PC or other output device.

7501E Front Panel

7501E Back Panel



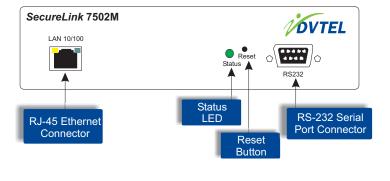
SecureLink 7502M Dual Port Multiplexed Encoder

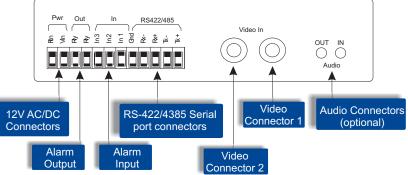
The SecureLink 7502M Multiplexed Encoder transmits high-quality MPEG-4 video at 15 frames per second NTSC (12.5 fps PAL) from any analog CCTV camera or video source. The 7502M encoders can also generate two MPEG-4 video streams simultaneously, at different resolutions and image rates, allowing for high quality monitoring while recording at a different image rate maximizing storage and transmission efficiency.

The SecureLink 7502M is a dual port multiplexed video encoder which is connected directly to any analog NTSC or PAL video source via a BNC connector. Audio in and out is available via 3.5mm stereo jacks. The analog video and audio signals are digitized and compressed at the source, thus reducing the "noise" common to analog transmission that degrades data quality and increases storage requirements. The combined, digitized stream of video, audio, and data is then transmitted using the TCP/IP standard protocol over an existing or dedicated security network to be viewed and/or recorded on a PC or other output device.

7502M Front Panel

7502M Back Panel





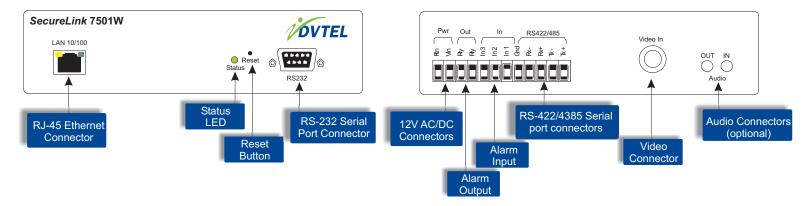
SecureLink 7501W Web-Based Encoder

The SecureLink 7501W Encoder transmits high-quality MPEG-4 video at 30 frames per second NTSC (25 fps PAL) from any analog CCTV camera or video source. The 7501W is used for point-to-point applications and provides secure configuration, video view and PTZ control from a web-browser for up to five (5) simultaneous users.

The SecureLink 7501W is a single port video encoder which is connected directly to any analog NTSC or PAL video source via a BNC connector. Audio in and out is available via 3.5mm stereo jacks. The analog video and audio signals are digitized and compressed at the source, thus reducing the "noise" common to analog transmission that degrades data quality and increases storage requirements. The combined, digitized stream of video, audio, and data is then transmitted using the TCP/IP standard protocol over an existing or dedicated security network to be viewed and/or recorded on a PC or other output device.

7501W Front Panel

7501W Back Panel



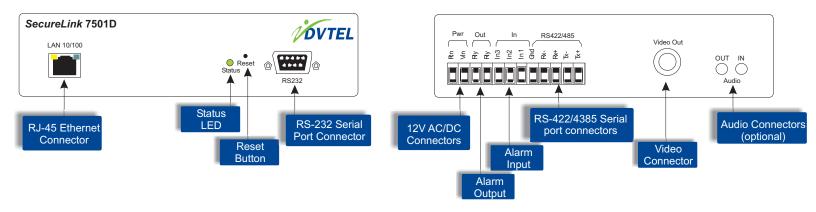
SecureLink 7501D Single Port Real-Time Decoder

The SecureLink 7501D Decoder receives video, data and audio over Ethernet – delivering true, matrix-quality video streams at 30 Images Per Second (IPS) NTSC (25 IPS PAL) for display on an analog CCTV monitor.

The SecureLink 7501D Decoder has one video port which is connected directly to an analog CCTV device via a BNC connector. The analog signal is received over the existing IP network to be viewed on a CCTV monitor or connected to a matrix switch, VCR or DVR.

7501D Front Panel

7501D Back Panel



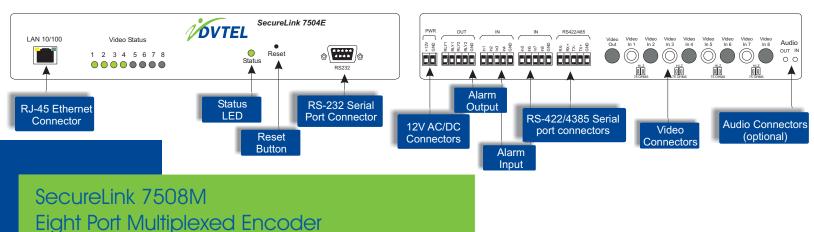


The SecureLink 7504E Encoder transmits four streams of high-quality MPEG-4 video at 30 frames per second NTSC (25 fps PAL) from any analog CCTV camera or video source. The 7504E encoders can also generate two MPEG-4 video streams simultaneously, at different resolutions and image rates, allowing for high quality monitoring while recording at a different image rate maximizing storage and transmission efficiency.

The SecureLink 7504E is a four port video encoder which is connected directly to any analog NTSC or PAL video source via a BNC connector. Audio in and out is available via 3.5mm stereo jacks. The analog video and audio signals are digitized and compressed at the source, thus reducing the "noise" common to analog transmission that degrades data quality and increases storage requirements. The combined, digitized stream of video, audio, and data is then transmitted using the TCP/IP standard protocol over an existing or dedicated security network to be viewed and/or recorded on a PC or other output device.

7504E Front Panel

7504E Back Panel



The SecureLink 7508M Multiplexed Encoder transmits eight high-quality MPEG-4 video at 15 frames per second NTSC (12.5 fps PAL) from any analog CCTV camera or video source. The 7504M encoders can also generate two MPEG-4 video streams simultaneously, at different resolutions and image rates, allowing for high quality monitoring while recording at a different image rate maximizing storage and transmission efficiency.

The SecureLink 7504M is an eight port multiplexed video encoder which is connected directly to any analog NTSC or PAL video source via a BNC connector. Audio in and out is available via 3.5mm stereo jacks. The analog video and audio signals are digitized and compressed at the source, thus reducing the "noise" common to analog transmission that degrades data quality and increases storage requirements. The combined, digitized stream of video, audio, and data is then transmitted using the TCP/IP standard protocol over an existing or dedicated security network to be viewed and/or recorded on a PC or other output device.

7508M Front Panel

7508M Back Panel

