

# DVTEL Dual-Stream MPEG-4 Video Encoder

## 7801EA Ethernet based MPEG-4, Dual Video Stream Solution for Retrofitting Analog Surveillance Systems

**D**VTEL's 7801EA video and audio encoders are a best-in-class solution for the most demanding security and surveillance application requiring the conversion of a single analog video input to digital IP video at the edge. Utilizing advanced video and audio compression technology, the 7801 series provides high-frame rate, high-resolution video and high-fidelity audio, while maintaining a significantly lower file size providing improved network and storage management.

The 7801EA is a High Resolution model, providing dual streaming technology at 30fps NTSC/25 PAL at 4CIF (704x480/704x576) video resolution. The 7801EA Video Encoder provides more than just high-resolution video, it also provides bi-directional audio, data, serial communications and dry contact alarms both in and out. The dual video streaming technology allows independent settings for live video and recorded streams. This combined with the Latitude Network Video Management System (NVMS)<sup>™</sup> advanced Digital Virtual Matrix features, presents the ability to replace an analog system with a completely digital solution.

The 7801EA series of encoders are compatible with the 7400 and 7500 networked MPEG-4 Decoders. The monitor decoders provides the ability to view live and recorded video on traditional analog monitor, or for recording to a VCR or DVR. In addition it is fully compatible with the Adaptive Visualization Technology (AVT<sup>™</sup>) SceneTracker<sup>™</sup> application. SceneTracker permits multiple video streams from separate cameras to be "stitched" together.

This addition to the Intelligent Security Operations Center (iSOC<sup>™</sup>) is designed to provide high flexibility for existing analog cameras, while maintaining a smaller footprint for retrofitting an existing security system in a communication room, electrical closet or at the edge.



- ◆ Multi video resolution settings up to 4CIF
- ◆ Up to 30fps NTSC/25fps PAL at 4CIF resolution
- ◆ Dual MPEG-4 video streams for independent viewing and recording settings
- ◆ Bi-directional full duplex audio in/out
- ◆ Serial communication port for PTZ operations
- ◆ Two (2) dry contact alarm inputs
- ◆ One (1) relay output
- ◆ Firmware upgrades via the network
- ◆ Remote access for configuration, viewing and control via Latitude NVMS or standard web browser
- ◆ IGMP Multicast network protocol enabled
- ◆ 12VDC and 802.3af Power options
  - ◆ 12VDC (5W) output with PoE unit



# 7801EA Product Specifications

## General Specifications

Network	
Interface	Ethernet 10/100 Base
Connector	RJ-45
Protocols	Transport: RTP (Unicast/multicast), UDP (Unicast/multicast), TCP Others: DNS, NTP, HTTP server, IGMP V1/V2, FTP client, Telnet client and DHCP client
Video	
Input	Single (1) composite
Connectors	1 BNC female
Compression	MPEG-4, ISO standard (SP), Dual Stream;
Resolution	CIF, 2CIF and 4CIF NTSC and PAL
Frame Rate	1-30 FPS Programmable NTSC ; 1-25 FPS PAL at 4CIF resolution
Bandwidth	Configurable between 30 Kbps and 6 Mbps
Alarm	
Input	2 dry contacts
Output	1 Relay Contact, 60V AC/DC at 500 mA max.
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	Via Terminal Block
Serial Port	
Electrical Levels	RS-232, RS422/485 2/4 Wires (maximum of 115.2 Kbps)
Connectors	7-position terminal block
Operating Mode	Transparent serial port supports any asynchronous serial protocol
Management	
Configuration	Remote: via Latitude NVMS, web interface or Telnet
Firmware Upgrade	Flash memory for upgrade of video codec and application firmware over the network
Regulatory	
USA	FCC Part 15 (subpart B, Class A)
Canada	ICES-003/NMB-003
Europe	CE marked, EN 55022:1998 Class A; EN 55024
Warranty	
	2-year limited warranty, covering parts



## Physical, Electrical and Environmental

Physical	
Enclosure	Aluminum case with flange mount (Wall mount)
Finish	Black (Anodized)
Dimensions (LxWxH)	4.1" x 3.35" x 1.63" (104 x 85.5 x 41.5mm)
Unit Weight	9.2 oz. (0.26Kg)
Unit Shipping Weight	1.2 Lbs. (0.54Kg)
Electrical	
Input Voltage	12V DC +/- 10%
Power Consumption	4.3W
Power Connector	Terminal Block (12VDC) or RJ45 (802.3af PoE)
Power Output (PoE model)	12VDC, 5 W 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	95% non-condensing at 122° F (50°C)
Ordering Information	
Ordering Options	
DVT-7801EA	Single Port Encoder w/ Audio Std.
DVT-7801PEA	Single Port Encoder, w/ Audio Std., 802.3af PoE
Rack Mount Kit	
DVT-7800RACK	Five (5) units rack mount panel - 1 RU
Power Supply	
DVT-PWR-200W	200W Power Supply for up to 25 units
DVT-PWR-19W	19W Power Supply for a single unit
Hardware Compatibility	
Decoders	DVT-7401DA, DVT-7504D
Software Compatibly	
Latitude NVMS 5.0	Version 5.2 SP1 and later

