



# XVD™ Enterprise SD-TX150 SD Video and Audio Encoder

**Achieve economical, high-quality video over IP networks or satellite links at low encoded data rates**

**Proven to outperform all other comparable systems.**



The SD-TX150 delivers high-performance real-time digital video content over IP-based network, providing the highest quality for any given bandwidth. It captures, encodes and compresses audio and video from any analog source via its BNC composite video input (NTSC or PAL). The audio/video stream may be sent to a variety of XVD decoders directly, or through XVD Enterprise Streaming Server, where one or more encoded streams can be retransmitted to multiple decoders. For point-to-point connections, streams can either be pushed by the encoder to a decoder using Directed Mode, or the connection can be initiated by the decoder (SD-RX150) using Stream Server Mode. This flexibility allows the SD-TX150 to accommodate various firewall policy and system configurations.

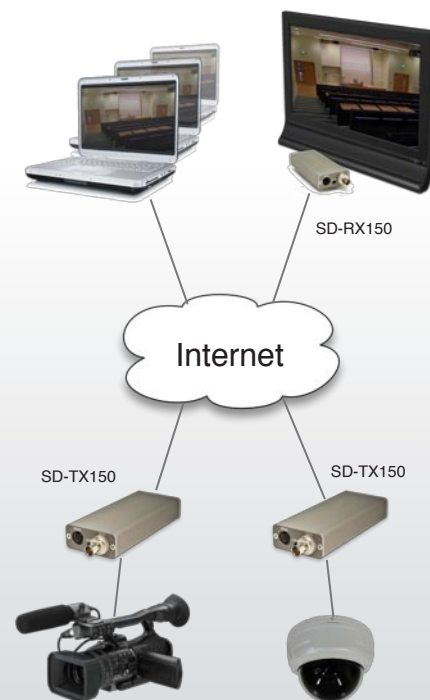
**A professional video encoder that's small enough to fit in the palm of your hand.**

Encoded data streams can be transmitted efficiently using TCP/IP or RTP/IP. Both Unicast and Multicast are supported in RTP. The ProXVD(tm) Network Analysis Tool and Forward Error Correction (FEC) may be used to adjust connection settings for available bandwidth and prevailing network conditions using RTP streaming protocol.

A serial port is available for remote camera control. A corresponding serial port is available on the SD-RX150, providing a serial link over IP to support bidirectional communication.

The SD-TX150 can resume transmission automatically if a connection is lost and restored, making it especially useful when remotely located. Configuration and control is via an easy-to-use, password-protected Web-based GUI. Using popular internet browsers, an approved user can log on and change settings with ease.

## Application Overview



## XVD SD-TX150 Encoder At-A-Glance

- Realtime SDTV encoding
- All resolutions up to full D1
- Analog NTSC and PAL input
- Serial port over IP for camera control
- TCP/IP and RTP with FEC
- Easy configuration via web browser
- Network Analysis Tools
- Low power consumption (3W) with Power-over-Ethernet (PoE) support
- Light weight (160g/5.5 oz)
- Small Size (4.9" x 2.2" x 0.9")

### SPECIFICATIONS

General				
<b>Video Inputs</b>	Composite video (75 ohm, BNC)			
<b>Video Pre-processing</b>	Noise reduction, adaptive spatial filtering, adaptive motion-compensated temporal filtering			
<b>Video Encoding</b>	Proprietary XVD video codec; automatic scene change detection; object motion estimation, CBR/VBR bit-rate control			
<b>Audio Input</b>	Analog (2 ch, +4dBu, 3.5mm jack)			
<b>Audio Encoding</b>	Proprietary XVD audio codec			
<b>Audio Data-Rate</b>	16 Kbps to 64 Kbps			
<b>Network Interface</b>	One 10/100 Mbps Ethernet port with Auto-MDIX (RJ45) , PoE support (802.3af)			
<b>Network Protocol</b>	IPv4, TCP, RTP, Unicast and Multicast support			
<b>Serial port</b>	8-pin MiniDIN (VISCA compatible)			
<b>Advanced Features</b>	User-selectable decoder buffer size (100 ms-2000 ms) ProXVD™ FEC and Network Analysis Tool			
<b>Power Input</b>	12 VDC or Power-over-Ethernet (PoE)			
<b>Power (AC adaptor)</b>	100-240 VAC @ 50/60 Hz, auto-sensing, 12 VDC output			
<b>Power Consumption</b>	3 Watts (typical)			
User Interface				
<b>Status Indicator</b>	multi-color LED			
<b>LAN Indicator</b>	2 x LED, indicates activity and link status			
<b>Web-Browser Control</b>	Interface to a set of HTML pages for all control parameters, status and firmware update			
<b>Reset Button</b>	Recessed microswitch (restore factory default)			
Video Performance				
	Source Format	Encoding		Data-rate Range
		Resolution	Frame Rate	
Standard Definition (SD)	NTSC	720 x 480 (D1) 640 x 480 480 x 480 352 x 480 (1/2 D1) 352 x 240 (CIF) 320 x 240 (QVGA) 256 x 192 224 x 160 192 x 144 192 x 120 160 x 120 160 x 112	1 - 30 fps	100 Kbps – 2.2 Mbps
	PAL	720 x 576 (D1) 640 x 576 480 x 576 352 x 576 (1/2 D1) 352 x 288 (CIF) 320 x 240 (QVGA) 256 x 192 224x160 192 x 144 192 x 120 160 x 120 160 x 112	1 - 30 fps	100 Kbps – 2.2 Mbps
Environmental/Physical				
<b>Operating Temperature</b>	0°C to 50°C (32°F to 122°F)			
<b>Operating Humidity</b>	0–95%, RHG non-condensing			
<b>Storage Temperature</b>	–20°C to 70°C (–4°F to 158°F)			
<b>Weight (Installed)</b>	160 g (5.5 oz)			
<b>Dimensions (W x D x H)</b>	54 x 124 x 23 mm (2.2 x 4.9 x 0.9 in)			
<b>Warranty</b>	1 year limited warranty			

XVD is the world's most advanced real-time video compression technology. Years of development and field testing supports the XVD codec design, providing much higher performance and efficiency than other block-based real-time video compression systems. XVD's patented video codec is optimized for the human visual system, and adds several unique features including: Automatic Scene Change Detection; Object Motion Estimation; plus CBR/VBR data rate control to improve video quality at dramatically lower data rates. The XVD audio codec also provides high performance at significantly lower data rates, allowing more audio channels to be carried in any chosen bandwidth.

**LOW LATENCY**  
*Enjoy both high performance and encode-decode system latency of only 150-200 milliseconds.*

**BANDWIDTH EFFICIENT**  
*Provides a competitive alternative to VC1 and AVC at a more affordable price*

**NO ROYALTIES**  
*Unlike other compression standards, users of XVD products never pay a royalty of any kind.*

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