



Enterprise Video Transport over IP-based Networks

Streambox® ACT-L3™ encoders and decoders excel over low bandwidth networks while providing unrivaled video compression and quality. All solutions are specifically developed to meet the performance, compression, and quality requirements of our diverse customers, including broadcasters, government agencies, and enterprises.

The Streambox® SBT3-2100 Video Transport system is ideally suited for confidence monitoring, enterprise streaming, and for use in remote or unmanned camera platforms. The system is capable of delivering full D1 resolution video transport over T1/E1 or IP-based networks.

Streambox® customers can expect highly reliable and flexible video transport solutions, as well as an accelerated return on investment due to efficient bandwidth use.

Solution Overview

The SBT3-2100 Transport system provides best-of-class performance and reliability due to its unrivaled video compression and error correction technologies. The system also enables users to leverage the store and forward option which provides enhanced storage, management, and transmission of video over packet-based networks.

Streambox® ACT-L3™ Codec

The ACT-L3™ Codec features an advanced video compression technology optimized for interlaced and progressive display systems. ACT-L3™ matches MPEG-2 video quality up to a 75% lower data rate and it is up to 50% more efficient than MPEG-4. The ACT-L3™ Codec is adaptable to differing data rate requirements with constant bit rate and variable bit rate modes.

The robust family of ACT-L3™ Video Transport solutions features innovative error correction and bandwidth shaping technologies which enable users to manage, control, and mitigate packet loss and correct irregularities inherent in video delivery over satellite and IP/T1/E1 networks.

System Reliability

The SBT3-2100 solution is designed for 24/7 unattended use. Features include:

- Immediate system restore upon power outage or system reset
- Solid state memory for increased longevity and reduced maintenance
- Automatic stream resumption upon extended signal or packet loss

Solution Features

- Unrivaled video compression and quality at low data rates
- Best-of-class performance and reliability with advanced networking features
- Advanced forward error correction and burst error protection
- Low end-to-end latency
- Seamless local or remote system management
- Live encoding at up to full D1 resolution (720 by 480i NTSC, 720 by 576i PAL)
- Optional store and forward feature for enhanced storage, management, and transmission of video over packet-based networks

Target Markets and Applications

- Confidence monitoring
- Enterprise and government streaming
- Factory automation and monitoring
- Telemedicine
- Distance learning
- Event broadcasting
- Video conferencing
- Multi-site video worship

Solution Package and Options

- ACT-L3™ Encoder(s) and Decoder(s)
- Streambox® Broadcast Server
- Streambox® Distribution Server
- ACT-L3™ Full Duplex
- Streambox® Store and Forward and Payout
- Single network port for Ethernet or optional T1/E1
- Half duplex mode is provided for easy switching between encoder and decoder modes
- Low total cost of ownership
- User configurable presets for quick and flexible setup

Technical Specifications

Video Formats:	NTSC/60i, PAL/50i
Video Encoding:	Resolution: DI, 3/4, 2/3, 1/2, CIF, QVGA Frame rate: full, 3/4, 1/2, 1/3, 1/4, 1/5, 1/10
Audio Encoding:	AAC, GSM, and CELP Up to 64 Kbps per channel 44.1 or 48 KHz sampling rate
Streaming Rate:	User selectable from 64 kbps to 5 Mbps Single TI at 1.5 Mbps, Single EI at 2 Mbps
Audio Inputs:	Balanced XLR, 2 channels
Audio Outputs:	Balanced XLR, 2 channels
Video Inputs:	Composite
Video Outputs:	Composite
Encoding Latency:	Adjustable from 200 ms to 5 seconds
Video Post Filtering:	Advanced interlaced/progressive post filtering, including de-blocking, de-mosquito, and anti-aliasing
Video Pre-filtering:	Noise pre-filter, adjustable de-interlacing
Network Interfaces:	Ethernet, optional TI/EI
Network Protocol:	HDLC for TI/EI, multicast/unicast UDP for IP
Setup & Control:	Front access LCD panel and keypad. Solid-state Compact Flash storage for reliability and upgrades. VGA output, USB ports
Forward Error Correction:	Adjustable, Off or On from 1% to 50% Reed-Solomon, Parity, Shuffle
Options:	Store and Forward, TI/EI interface
Dimensions:	2 RU 3.5"H x 16.75"W x 16.25"D 8.9cm H x 42.5cm W x 41.3cm D
Weight:	25 lbs, 11.3 kg

About Streambox, Inc.

Streambox manufactures a complete line of video transport and newsgathering solutions used by broadcasters, government agencies, and enterprises worldwide.

We provide best-of-class encoding, decoding, and transmission over IP and satellite networks for all real-time and store and forward applications.

Learn more about our products and solutions at www.streambox.com.

Customers Include:

AOL
American Red Cross
Bell Canada
BELO
British Sky Broadcasting
CBS
CNN
Comcast
Department of Homeland Security
DIRECTV
Gannett
Japan Leisure Channel
Media General
MBC Korea
NASA
NBC Universal
NOAA
PCCW
PBS
Time Warner
Tribune
Turner Broadcasting
Univision

