Streambox

Streambox 4K
Encoder / Decoder

Compact Rackmount for 4K Ultra HD Video

The Streambox 4K rackmount system encodes, transmits, and plays either live or file-based Ultra High Definition (UHD) video streams.

Streambox® 4K ULTRAHD

Deployment

The Streambox 4K provides a scalable solution for growing organizations: use a pair of units for a simple point-to-point application or add an Enterprise Server or Cloud Services to stream from multiple encoders to multiple decoders.

Infrastructure

The Streambox 4K works seamlessly with other Streambox products including Streambox solutions for video management and playback such as the Streambox Enterprise Server and the globally deployed Streambox Cloud Services for scalable local, national, and global usage.

First / Last Mile

The Streambox 4K system provides broadcasters and video-centric organizations with a reliable way to stream high quality live video over any Internet connection.

· Streambox 4K Features

· Adaptive bitrate encoder capable of encoding 3840 x 2160 UHD at 23.98, 24, 29.97 and 30 fps

· Bitrates from 4 to 50 Mbps

· Simplified 4K workflow from capture to playback on either hardware decoder or 4K media player

· Works with Enterprise Server (ES) and Live Server (LS) for video routing and archiving of live UHD streams

· Records UHD video to a file for Store and Forward applications

· Supports file-based UHD streaming from ES or LS to 4K Decoder or 4K Player

· UHD-optimized 1-Click presets

Advanced Streaming Codec & Streambox LDMP Technology

LDMP | ACT-L3

Powered by *ACT-L3* Codec + *LDMP* Reliable Video Transport

All Streambox products are powered by our proprietary codec: Advanced Compression Technology – Level 3 (ACT-L3). Streambox ACT-L3 compression allows for faster encoding with lower latency and is optimized for video transmission over any low-bandwidth IP connection. Our proprietary codec is capable of compressing higher motion, complex video at lower data rates using the new advanced motion search feature.

All Streambox products come equipped with Streambox exclusive Low Delay Multi-Path technology (LDMP). Streambox LDMP protocol allows for low latency adaptive bit-rate streaming over public and private networks. Streambox Encoders will automatically select the best possible bandwidth, latency, and resolution over multiple IP networks, thus allowing Streambox products to gracefully handle network bandwidth fluctuations and dropouts, which are often seen over public or shared network environments.

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Streambox 4K Tehcnical Specifications

VIDEO

Video Formats	3840 x 2160 UHD
Encoding Latency	Adjustable from .2 seconds to 8 seconds
Framerates	23.98, 24, 29.97, 30
Color Profile	4:2:0, 4:2:2
Video Post Filtering	Advanced interlaced/progressive post filtering, including de-blocking, de-mosquito, and anti-aliasing
Forward Error Correction	Adjustable, 0% to 50%; Reed-Solomon, Parity, Shuffle
Jitter	Packets order and timing correction (Decoder Mode)
Presets	Store Network, Video/Audio input, quality settings

AUDIO

Audio Encoding	8-ch, 6-ch, 4-ch, 2-ch, 1-ch. AAC, GSM or CELP; 48 or 44.1 kHz
IFB	3.5mm (1/8in) Stereo (optional)

IN/OUT

Video In	Single-link 6G-SDI 4K, 3G-SDI x 2, or HDMI
Video Out	Single-link 6G-SDI 4K, 3G-SDI x 2, or HDMI
Audio In	8 Channel embedded SDI audio, Analog XLR (Channel 1)
Audio Out	8 Channel embedded SDI audio, Analog XLR (Channel 1)
Genlock In	Decoder: Reference/Black burst
Utility	VGA, USB 2.0 (1 back, 2 front)

NETWORK

Networking	LAN 2 RJ-45, Ethernet 10/100/1000 Mbps, IEEE 802.3ab, 802.3u, 802.3
Network Protocols	LDMP, Multicast, Unicast UDP for IP, one-way broadcast and multiplex modes
Bandwith	Adjustable from 4 Mbps to 50 Mbps

OS	Linux (SSD)

STORAGE	2.5in SATA drive bay (second Solid State Drive optional)

INTERFACE

Remote Control	Web interface and Remote Desktop
Front Panel	Text LCD, Keypad

POWER	100-240 V AC, 180 W

DIMENSIONS

Case	1 RU 1.77"H x 18.9"W x 20.67"D + connections; 4.5cm H x 48cm W x 52.5cm D

Streambox delivers mobile video everywhere, allowing companies to broadcast from anywhere with unlimited scalability and lower costs. Using the Streambox mobile app or compact mobile encoders coupled with cloud-based streaming, broadcasters, educators, congregations and enterprise organizations can deliver live, HD video to viewers immediately.

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