Versatile Broadcast Contribution Receiver and Decoder Solution

Haivision StreamHub is a versatile solution for receiving IP video streams over mobile networks and the internet. StreamHub can decode live video from Haivision Pro and Air mobile transmitters, and Haivision Rack encoders using the two-time Emmy award winning SST technology for network aggregation. StreamHub can also receive live video from the Haivision MoJoPro mobile application, LiveGuest browser-based interviews, and SRT streams from Haivision Makito encoders as well as from third party sources. Its intuitive web user interface enables users to easily control and manage remote field units, optimize configurations, and monitor video transmissions with video thumbnails and advanced statistics.

StreamHub has been designed to meet the demanding requirements of broadcasters deploying video contribution systems over mobile and IP networks. Supporting both H.264 and HEVC with resolutions up to 4K UHD, StreamHub can be deployed on-premise or in the cloud for low latency transcoding and decoding to SDI, NDI, ST 2110, SRT and other IP outputs.

Key Features

Mobile Video Receiver and Decoder StreamHub can receive up to 16 concurrent incoming SST streams from remote Haivision mobile encoders and transmitters or third-party sources and supports a rich set of IP protocols including RTMP, RTSP/RTP, SRT, NDI, HLS, and TS/IP. Up to 8 live video streams can be simultaneously decoded to 8 SDI outputs with genlock for multi-camera synchronization. StreamHub also features video transcoding capabilities for adapting incoming feeds to desired output formats.

IP Distribution StreamHub supports multiple streaming protocols including SST, RTMP, RTMPS, RTSP/RTP, HLS, TS/IP, SRT, NDI, and ST 2110 so that video content can be easily distributed over IP networks for all types of destinations. Up to 32 outputs are supported, included duplicate streams, for sharing live content over LANs, WANs, CDNs, cloud platforms, Social Networks, and to other StreamHub receivers.

Video Recording And File-based Transcoding StreamHub combines video recording functions with a file-based video transcoder that enables media professionals to adapt content formats and resolutions for each destination.

Story Centric Workflows & Metadata StreamHub can be used to manually or automatically manage projects & metadata for smooth integration with news production workflows. Using the highly intuitive user interface, broadcasters and media producers can quickly and easily identify recorded content and live sources.

IP Data Bridge The StreamHub Data Bridge feature provides direct access to the Internet from a field unit. Optimized for remote production workflows, it also allows for remote control of IP based devices such as PTZ cameras.

IFB and Video Returns StreamHub includes a two-way IFB or audio intercom that enables broadcasters to communicate in real-time with up to 16 remote field unit operators. StreamHub can also manage video returns for providing remote operators with studio feeds, confidence monitoring, and teleprompters.

Multiviewer Monitoring The grid view includes preview thumbnails of video sources that can be assigned to a multiviewer output displaying up to 16 video sources on a single monitor. Broadcast professionals can define audio sources, output standards, and add information overlays for each source.

PLATFORM
Physical
1 RU server platform
Software
Linux 64-bit server
Virtualized
Available as a virtual machine deployable on AWS, Azure, Google or other cloud platforms

VIDEO
Resolutions
4K/UHD: 23.98/24/25/29.97/30/50/59.94/60
HD: 1080p 23.98/24/25/29.97/30/50/59.94/60
1080i 50/59.94/60
720p 23.98/24/25/29.97/30/50/59.94/60
SD: PAL, NTSC, 480p, 576p
Decoding
Codec: H.264/AVC (4:2:0 8-bit), H.265/HEVC (up to 4:2:2 10-bit)
Bitrates: 100 Kbps up to 160 Mbps
Rate control: VBR and CBR
Up to 16x HD or 4x 4K decoding
Transcoding
Codec: h.264/AVC 4:2:0 8bits
Bitrates: 100 kbps up to 20 Mbps
Rate control: CBR
Up to 8 HD live encoding
Processing
Video Down-scaling & Upscaling
Interlacing and deinterlacing

AUDIO
Decoding
MPEG-2 AAC-LC ISO/IEC 13818-7
MPEG-4 AAC-LC ISO/IEC 14496-3
AAC-HE v2
MPEG-1 L2
OPUS
Encoding
MPEG-2 AAC-LC ISO/IEC 13818-7
MPEG1-L2
OPUS

STREAMING PROTOCOLS
Inputs
TS/IP (SPTS, UDP and RTP), RTSP/RTP, RTMP push and pull, HLS, SRT, SST (IP and cellular bonding), NDI
IGMPv3 & SSM for TS multicast input
Outputs
TS/IP (SPTS, UDP and RTP), RTSP/RTP, RTMP, RTMPS push and pull
HLS, SRT, SST (IP and cellular bonding), NDI, ST 2110

ADVANCED FEATURES
Metadata support for Live and Forward
Time Code and ST 2038 ancillary data passthrough
AES-67 and legacy intercom
SST protocol
IP Data Bridge Gateway
AES encryption of SST contribution streams, video-returns and intercom audio
MPEG2-TS and MP4 recording
Transmuxing stream processing
Streaming to social media platforms including YouTube, Facebook, and Twitch
Multi-view output
Video return management

INTERFACES
StreamHub Lite
Dual GigE network interfaces
1x 3G-SDI or 1x HDMI output
StreamHub Standard
Dual GigE network interfaces
4 x 3G-SDI outputs (SD/HD) with genlock or 25GbE dual-port SFP28
StreamHub Ultra
Dual 10GbE network interfaces
Up to 8 x 3G-SDI outputs or 4 x 12G-SDI outputs with genlock or 25GbE dual-port SFP28

MONITORING
Web-based GUI
Comprehensive REST API for third-party management system integration
Integrated with Haivision Manager
NMOS IS-04, IS-05 and IS-09 for ST 2110

POWER
Dual Power 400W

PHYSICAL
Dimensions (W x H x D)
43.7 cm x 4.3 cm x 42.9 cm (17.2” x 1.7” x 16.9”)
Weight
11.43 Kg / 25.2 lbs
Operating Temperature
5°C to 35°C (41°F to 95°F)

Software Version: 4.4