## **HAIVISION**

## streamHub



## 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, 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, and NDI 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.

### **TECH**SPECS

# streamHub

PLATFORM

Physical 1 RU server platform Software

Linux 64-bit server Virtualized Available as a virtual machine or Docker Instance Deployable on AWS, Azure, Google or other cloud platforms

#### VIDEO

Resolutions 4K/UHD: 25/29.97/30/50/59.94/60 HD: 1080p 25/29.97/30/50/59.94/60 1080i 50/59.94/60 720p 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 Regulation mode: VBR and CBR Up to 8x HD or 1x 4K decoding Encoding Codec: h.264/AVC 4:2:0 8bits Bitrates: 100 kbps up to 20 Mbps Regulation mode: CBR Up to 8 HD live encoding Processing Video Down-scaling & Upscaling Deinterlacing AUDIO Decoding

AAC-LC, AAC-HE v2, MPEG-1 L2, OPUS Encoding AAC-LC, MPEG1-L2, OPUS

### STREAMING PROTOCOLS

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

TS/IP (SPTS), RTSP/RTP, RTMP, RTMPS push and pull HLS, SRT, SST (IP and cellular bonding), NDI

#### ADVANCED FEATURES

Metadata support for Live and Forward Time Code Ancillary Data passthrough SIP-based and legacy intercom SST protocol IP Data Bridge Gateway Video return AES encryption MPEG2-TS and MP4 recording Transmuxing stream processing Streaming to social media platforms including YouTube, Facebook, and Twitch Multi-view output Video Return Management

#### PHYSICAL 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 StreamHub Ultra Dual GigE network interfaces Up to 8 x 3G-SDI outputs or 4 x 12G-SDI outputs with genlock

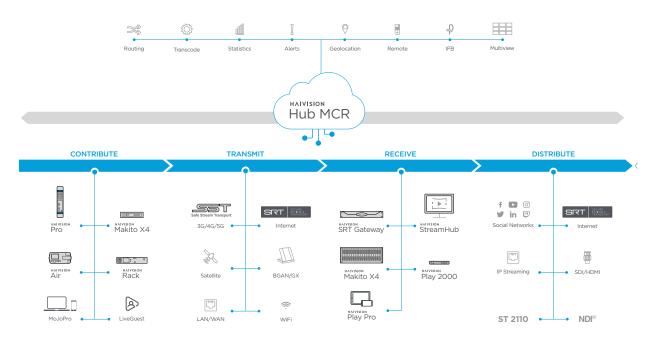
#### MONITORING Web-based GUI

Comprehensive REST API for third-party management system integration Integrated with Haivision Manager

#### POWER

Redundant power supply

## System Overview



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