



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 receive and 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 streams from the Haivision MoJoPro mobile application, LiveGuest browsed-based interviews, and SRT streams from Haivision 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 supports a rich set of IP protocols and can receive up to 16 concurrent incoming SST streams from remote Haivision mobile encoders and transmitters or third party sources through RTMP, RTSP/RTP, SRT, NDI, HLS, TS/IP streaming protocols. Up to 8 videos 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 DataBridge 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 or Docker Instance
Running on AWS, Google Cloud, or any public/private cloud

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 8bits), H.265/HEVC (up to 4:2:2 10bits)
Bitrates: 100 kbps up to 160 Mbps
Regulation mode: VBR and CBR
Up to 8x HD or 1x 4K decoding (StreamHub Ultra)

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 (StreamHub Ultra)

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, IP Bonding (AVIWEST SST), NDI

Outputs

TS/IP (SPTS), RTSP/RTP, RTMP, RTMPS push and pull
HLS, SRT, IP Bonding (AVIWEST SST), NDI
SMPTE ST 2110 (up to 2 x 25Gbs)

ADVANCED FEATURES

Metadata support for Live and Forward
SIP-based and legacy intercom
AVIWEST SST protocol
IP Data Bridge Gateway
MPEG2-TS and MP4 recording
Transmuxing stream processing
Streaming to all major 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 RESTfull API for third-party Management System integration
Integrated with AVIWEST MANAGER

POWER

Redundant power supply

System Overview

