The AVIWEST’s STREAMHUB is the iconic transceiver platform that is compatible with all the AVIWEST live video encoders and transmitters: PRO series, RACK series, AIR Series, HE series, MOJOPRO Series as well as third party systems, such as IP cameras, especially through its RESTfull API. Its intuitive web user interface enables to easily control and manage a fleet of remote units, optimize and monitor the video transmissions thanks to a large panel of features, such as a video thumbnails, and statistics.

The AVIWEST’s STREAMHUB is a Linux-based feature-rich high performance transceiver that has been designed to meet the demanding requirements of broadcasters deploying video contribution systems over unmanaged IP networks. The HEVC / 4K (UHD)-compliant platform can be deployed on-premises or operated as a cloud-based solution to enable quick and cost effective launch of new video services while reducing CAPEX and OPEX.

**KEY FEATURES**

**VIDEO RECEIVER, ENCODER AND DECODER**

The STREAMHUB packs a rich set of input IP protocols and can receive up to 16 concurrent incoming streams from remote AVIWEST encoders or transmitters (PRO, RACK, AIR, HE, MOJOPRO) or third party systems through RTMP, RTSP/RTP, SRT, NDI, HLS, TS/IP streaming protocols. Up to 8 videos can be simultaneously decoded thanks to 8 SDI outputs with a Genlock input. It also features video encoding and transcoding capability, allowing to adapt incoming feeds to the desired output format.

**POINT TO POINT AND POINT TO MULTIPOINT DISTRIBUTION**

The STREAMHUB offers multiple output streaming protocols (AVIWEST’s S5T, RTMP, RTMPS, RTSP/RTP, HLS, TS/IP, NDI) allowing video contents to be freely distributed over virtually any IP networks. Up to 32 IP outputs are supported to re-stream the video contents over LAN or WAN to CDN’s, Media Servers, Streaming Platforms, Social Networks, IRDs or other STREAMHUBs.

**VIDEO RECORDER AND TRANSCODER**

The STREAMHUB combines the functions of a video recorder and implements a file transcoder that enables video professionals to efficiently adapt video formats and resolutions according to each outputs constraints.

**STORY CENTRIC & METADATA**

The STREAMHUB application is able to automatically manage missions & metadata to guaranteeing the perfect integration with news production workflow. In this way, broadcasters can quickly and efficiently identify their contents.

**IP DATA BRIDGE**

The STREAMHUB is the Gateway for IP Data Bridge that provide access to public Internet from the field. Optimized for Remote Production workflows, it also allows remote control of IP based devices such as PTZ cameras.

**IFB APPLICATION**

The STREAMHUB includes an IFB application that enables broadcasters to communicate with remote transmitter operators over up to 16 independent two-way audio channels.

**MULTI-VIEW**

The STREAMHUB application function a grid of video thumbnails that allow broadcasters to play out up to 16 incoming streams (4 x 4 with a custom layout) on a single monitor. Video professionals can define audio sources and output standards and add information overlay for each sources.
### STREAMHUB MAIN SPECIFICATIONS

#### 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/4:4:4:4, 4:2:0 8bits, H.265/HEVC [up to 6.2 10bits]
- **BITRATE**: 100 kbps up to 160 Mbps
- **REGULATION MODE**: VBR and CBR
  - Up to 8 x HD or 1 x 4K decoding (StreamHub ULTRA)

#### ADVANCED FEATURES
- **METADATA SUPPORT**: For Live and Forward
- **SIP-BASED AND LEGACY INTERCOM**
- **AVIWEST SST PROTOCOL**
- **IP DATA BRIDGE GATEWAY**
- **MPEG2-TS and MPA RECORDING**
- **TRANSMUXING STREAM PROCESSING**
- **STREAMING TO ALL MAJOR SOCIAL MEDIA PLATFORMS** ([Youtube, Facebook, Twitch,...])
- **MULTI-VIEW OUTPUT**
- **VIDEO RETURN MANAGEMENT**

#### PHYSICAL INTERFACES
- **STREAMHUB LITE**: Dual GigE network interfaces
- **STREAMHUB STANDARD**: 6 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 RESTFUL API** for third-party Management System integration
- **INTEGRATED WITH AVIWEST MANAGER**

#### POWER
- **REDUNDANT POWER SUPPLY**

### SYSTEM OVERVIEW

**CAPTURE**
- **PRO Series**
- **RACK Series**
- **HE Series**
- **AIR Series**
- **MOJOPRO Series**
- **QUAD Series**
- **IP SOURCES**

**TRANSMIT**
- **30/60/56**
- **Wi-Fi**
- **Satellite**
- **BSAN/EX**
- **LAN/WAN**

**RECEIVE**
- **STREAMHUB Cloud/MCR**
- **1 to N Streamhub**
- **Social Networks**
- **IP Streaming**
- **SDI/HDMI**

**DISTRIBUTE**
- **GEOLOCATION**
- **MULTI-VIEW**
- **REMOTE CONTROL**
- **ROUTING**
- **IFB**
- **STATISTICS**