DMNG StreamHub

RECEIVER, DECODER & DISTRIBUTION PLATFORM

The AVIWEST's DMNG StreamHub is the DMNG system receiver, decoder and distribution platform that is compatible with all the AVIWEST live video encoders and transmitters: DMNG PRO series, DMNG Rack series, DMNG HE series and DMNG APP.

The AVIWEST DMNG StreamHub is a Linux-based feature-rich high performance receiver, decoder and distribution platform that has been designed to meet the demanding requirements of Broadcasters deploying video contribution systems over IP networks. The platform can be operated in virtualized mode to enable quick and cost effective launch of new video services while reducing CAPEX and OPEX.

KEY FEATURES

Fully integrated into the DMNG ecosystem, the DMNG StreamHub application supports a large set of functionalities:

Video Receiver and Decoder: The DMNG StreamHub packs a rich set of input IP protocols and the platform can receive up to 16 concurrent incoming streams from remote AVIWEST encoders or transmitters (DMNG PRO, DMNG RACK, DMNG HE and DMNG APP) or third party systems, such as IP cameras. Up to 4 videos can be simultaneously decoded thanks to 4 SDI outputs with a Genlock input.

Point to point and point to multipoint distribution: The DMNG StreamHub offers multiples output streaming protocols (RTMP, RTSP/RTP, HLS, TS/IP) 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 CDNs, Media Servers, Streaming Platforms, IRDs or other DMNG StreamHubs.

Video Recorder and Server: The DMNG StreamHub combines the functions of a video recorder and a video server on each of its 16 inputs.

Intuitive web user interface: The DMNG StreamHub application features an intuitive web user interface that enables to easily control and manage a fleet of remote transmitters and encoders, optimize and monitor the video transmissions thanks to a large panel of features, such as video thumbnails and statistics.

IFB and Tally: The DMNG StreamHub includes an IFB application that enables broadcasters to communicate with remote transmitter operators over up to 16 independent two-way audio channels. It also includes a tally light function with an optional GPI or IP input.

Flexible hardware and software configurations: Designed to fit customers' unique needs and head-end constraints, the DMNG StreamHub application can be hosted on a 1U or a 2U server platform with various software configurations. The DMNG StreamHub also operates in virtualized mode to deliver all of the economic benefits of the cloud without compromising the performances required by today's media environments.





DMNG STREAMHUB SYSTEM OVERVIEW



MAIN FUNCTIONS

MANAGE UP TO 16 INCOMING STREAMS FROM:

- DMNG PRO series transmitters
- DMNG RACK series encoders
- DMNG HE series encoders
- DMNG APP smartphone app
- IP cameras (see input formats)

MANAGE UP TO 32 IP OUTPUT STREAMS TO:

- other DMNG StreamHubs
- IRDs
- CDNs
- Streaming platforms
- Smartphones, PC, software players

MAIN FUNCTIONS

- Decode incoming streams
- Record and play back files
- Stream out incoming streams
- Transmission and networks statistics
- Encoders and transmitters full remote control & command
- Video thumbnails

OTHER FUNCTIONS

- IFB return channel - Tally Light

- AAC-HE v2 - MPEG-1 L2

DMNG STREAMHUB MAIN SPECIFICATIONS

PLATFORM	 1-RU or 2-RU server platform Internal storage: 1TB Redundant power supply Up to 4 SDI outputs Dual Gig-E network interfaces 	INPUT FORMATS	INPUT FORMATS • Base-band video (HD-SDI/HDMI) • Streaming protocols - TS/IP (SPTS) - RTSP/RTP - RTMP - HLS - IP Bonding (AVIWEST SafeStreams) • Video - H.264 - H.265/HEVC • Audio - AAC-LC - AAC-HE v2 - MPEG-1 L2
GIG-E INTERFACE	 Dual port NIC adapter Up to 1 Gbps in Up to 1 Gbps out Unicast and multicast 		
OS	• Linux 64-bit Server		
MANAGEMENT	 Web-based GUI Integrated with DMNG Manager 		
VIDEO PROCESSING	 Video Down-scaling & Upscaling Deinterlacing 	OUTPUT FORMATS	 Base-band video (HD-SDI/HDMI) Streaming protocols TS/IP (SPTS) RTSP/RTP
STREAM PROCESSING	• Transmuxing		- RTSHAT - RTMP push - HLS • Video - H.264 - H.265/HEVC • Audio - AAC-LC

