

Genesis 500™ AV-over-IP Streaming and Recording G501RH/G502RH



Overview

G501RH/G502RH are the latest Genesis AVover-IP streaming encoders/decoders, which offers multiple operation modes including encoding, decoding, transcoding, video mixing and recording of video/audio sources up to 4K using H264/H65 video codecs. Both units support multiple streaming protocols such as RTMP and RTSP, giving user the chance of easy streaming on live platforms like YouTube or decoding using any 3rd party device that the corresponding G501RH/G502RH also support simultaneous external recording via USB stick or SD card while streaming.

In addition, G502RH supports simultaneously encoding and decoding, making it possible to mix up 6 signals from 2 HDMI inputs and 4 transcoded streams in a dual live stream with one customised layout. G501RH/G502RH is a perfect solution for online training and lecture/meeting recording.

Key Features

- Support multiple operation modes including encoding, decoding, transcoding, video mixing and recording
- Support multiple streaming protocols, including RTMP, HTTP, HLS, SRT, RTP, ONVIF, UDP Unicast/Multicast and RTSP over UDP/TCP
- Support encoding up to 2 HDMI inputs or transcoding up to 4 streams in dual stream channels with a resolution up to 4K
- Support decoding up to 8 streams and output via HDMI with an up to a 3x3 multiview for display
- Support mixing of 4 streams and 2 HDMI inputs in a dual encoding channel with one customised layout
- Support selectable audio input and output between 3.5mm mini jack and embedded audio or a mix of all
- External video storage on USB stick or MicroSD cards
- · Support automatic replacement of old files during continuous recording
- Support uploading of recordings to FTP servers
- · User-friendly WebUI for configuration
- Flexible power supply: POE or AC adapters



Specifications

Model Name	G501RH	G502RH
Video Port Interface	Input: HDMI x1	Input: HDMI x2
	Output: HDMI x1	Output: HDMI x1
HDMI Input Resolution	Up to 1920x1080	Up to 3840x2160
HDMI Output Resolution	Up to 1920x1080	Up to 1920x1080 (Max 8 windows)
Encoding Resolution	Up to 1920x1080	Up to 3840x2160
Encoding Format	H264/H265	H264/H265
Encoding Bitrate	160-20000	16-20000
Key Frame Interval	30-180	5-200
Simultaneous Encoding and Decoding	No	Yes
Decoding Resolution	Up to 1920x1080	Up to 1920x1080
Simultaneous Streaming	Up to 4	Up to 2 per Transcoded Stream/HDMI Input
Simultaneous Decoding	Up to 1	Up to 8
Support Operation Mode	Encoding, Decoding, and Recording	Encoding, Decoding, Transcoding, Video Mixing and Recording
Support Protocol	RTMP, HTTP, HLS, SRT, RTP, ONVIF, NDI, UDP Unicast/Multicast and RTSP over UDP/TCP	RTMP, HTTP, HLS, SRT, RTP, ONVIF, UDP Unicast/Multicast and RTSP over UDP/TCP
Audio Input	Embedded HDMI or 3.5mm Jack	Embedded HDMI or 3.5mm Jack or mix of all
Audio Output	Embedded HDMI or 3.5mm Jack	Embedded HDMI or 3.5mm Jack or mix of all
Audio Codec	AAC/MP3	AAC/MP3/OPUS
Storage	MicroSD, USB Stick	USB Stick
USB Interface	USB 2.0 Type A	USB 3.0 Type A
Recording Format	MPEG2-TS	MPEG2-TS
User Interface	WebUI	WebUI
Upload To FTP Server	Yes	No
IP Configuration	DHCP, Static (Default)	DHCP, Static (Default)
Dimension (W x D x H)	180x100x30mm	220x150x25mm
Weight	0.46kg	0.70kg
Operating Temperature	-4° ~ +140° F (-20° ~ +60° C)	-4° ~ +140° F (-20° ~ +60° C)
POE Standard	Yes	No
Power Supply	12V3A or POE	12V3A
Power Consumption	2.8W	6.3W

System Diagram

