OG-12G-AM

The OG-12G-AM is an 16-channel AES/EBU audio embedder/disembedder openGear card with support for 12G-SDI input and output up to 4K/UltraHD.

AES/EBU Audio embedding and disembedding is user selectable, on a channel pair basis, to either disembed 12G-SDI input audio or to embed input AES/EBU audio. It uses BNC connectors that can be set to perform audio input or output functionality.

The OG-12G-AM automatically detects and configures the input video standard.

Designed for use in high density openGear 2RU frames, including AJA's OG-X-FR frame. Ross DashBoard Software supports Windows®, macOS®, and Linux® and provides convenient, configuration, monitoring, and control options for openGear cards and frames via a connected computer or over local network with DashBoard's web UI.

https://www.aja.com/products/og-12g-am

Video Formats

- (4K) 4096x2160p 23.98, 24, 25, 29.97, 30, 47.95, 48, 50, 59.94, 60
- (UltraHD) 3840x2160p 23.98, 24, 25, 29.97, 30, 50, 59.94, 60
- (2K) 2048x1080p 23.98, 24, 25, 29.97, 30, 47.95, 48, 50, 59.94, 60
- (HD) 1920x1080p 23.98, 24, 25, 29.97, 30, 50, 59.94, 60
- (HD) 1920x1080i 50, 59.94, 60
- (HD) 1280x720p 50, 59.94, 60
- (SD) 625i 50
- (SD) 525i 59.94
- RGB and YCbCr, 4:4:4/4:2:2, 10-bit

Note: Raster and frame rate dependent. Please see OG-12G-AM Video Formats in Documents and Manual.

Video Input Digital

- 1x 12G-SDI BNC, SMPTE 259/292/424/2081/2082
    - Single Link SD/HD/2K/UltraHD/4K
    - Single Link 3G-SDI Level A or B DL, SMPTE 425

Video Output Digital

- 1x 12G-SDI BNC, SMPTE 259/292/424/2081/2082
    - Single Link SD/HD/2K/UltraHD/4K
    - Single Link 3G-SDI Level A or B DL, SMPTE 425

Video Path Delay

Video Out is a delayed, reclocked version of Video In, at same frame rate, etc. Video Out is undefined when no input.
- Video Latency, time measured between video input and video output connector:

- 12G = 3.2 µsec
- 6G = 3.2 µsec
- 3G level A = 3.2 µsec
- 3G level B-DL = 6.3 µsec
- HD (1.5 Gb) = 6.3 µsec
- SD (270 Mb) = 17.2 µsec

Audio Inputs and Outputs Digital

- AES PCM audio, 8x BNC, up to 16-channels in, 16-channels out, selectable in pairs

Audio Data Formats

- AES3-2003

Embedded Audio

- SMPTE 272M (SD): 20-bit, 48 kHz synchronous
- SMPTE 299M (3G/HD): 24-bit, 48 kHz synchronous
- Incoming embedded audio can be passed, removed, or overridden
- Up to 16-channels supported

Note: 2048x1080p/PsF 29.97 and 30 formats support a maximum of 8-channels embedded audio.

Embed Path Audio Latency

(Time measured between audio input and video output connector):
- 1500 µsec (SRC ON)
- 400 µsec (SRC OFF)

Disembed Path Audio Latency

(Time measured between video input and audio output connector):

- 210 µsec

User Interface

- openGear DashBoard network control software via Windows, macOS, or Linux

Size (w x d x h)

- openGear standard form factor, front slot, and rear card
- Two slots required for each card

Weight

- 0.5 lb (0.3 kg)

Power

- openGear frame compatible, 6.0 watts max per card

Environment

- Safe Operating Temperature: 0 to 40 C (32 to 104 F)
- Safe Storage Temperature (Power OFF): -40 to 60 C (-40 to 140 F)
- Operating Relative Humidity: 10-90% noncondensing
- Operating Altitude: <3,000 meters (<10,000 feet)