Video Formats

- (4K) 4096x2160p 23.98, 24, 25, 29.97, 30, 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, 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-Dante-12GAM Video Formats in Documents and Manual.

Video Input Digital

- 2-channel independent 12G-SDI BNC connectors, SMPTE 259/292/424/2081/2082
- Single Link SD/HD/2K/UltraHD/4K

Video Output Digital

- 2-channel independent 12G-SDI BNC connectors, SMPTE 259/292/424/2081/2082
- Single Link SD/HD/2K/UltraHD/4K

Cable Equalization

(Belden 1694A coax)
- 12 Gbps, 65m
- 6 Gbps, 120m
- 3 Gbps, 180m
- 1.5 Gbps, 200m
- 270 Mbps, 405m

Video Path Delay

Video Out is a delayed, reclocked version of Video In, at the same format and frame rate. 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 B-DL = 6.3 µsec
- 3G level A = 3.2 µsec
- HD (1.5 Gb) = 6.3 µsec
- SD (270 Mb) = 17.2 µsec

Audio Input Digital

- SDI: Two independent 12G-SDI BNC connectors, 16 embedded channels each
- Dante: 1x Primary Ethernet port and 1x Secondary Ethernet port, 32-channels

Audio Output Digital

- SDI: Two independent 12G-SDI BNC connectors, 16 embedded channels each
- Dante: 1x Primary and 1x Secondary Gigabit Ethernet ports, 32-channels

SDI Embedded Audio

- SMPTE 299M (12G/6G/3G/1.5G): 24-bit, 48 kHz synchronous
- SMPTE 272M (SD): 20-bit, 48 kHz synchronous
- Incoming embedded audio can be passed, removed, or overridden
- 4 groups (16-channels) of audio supported per SDI path

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

Dante Audio

- Sample Rates: 44.1kHz, 48kHz, 88.2kHz, 96kHz
- Encoding: PCM 16, PCM 24, PCM 32

Audio Latency

- Embed Path   1500 µsec
- Disembed Path 1410 µsec

User Interface

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

- Dante Controller

Size

- 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, 15 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)