



OG-12GM

OG-12GM is a state of the art, openGear compatible card that enables 12G-SDI to quad link 3G-SDI and quad link 3G-SDI to 12G-SDI conversion. The muxer/demuxer supports 4K, UltraHD, 2K, HD and SD workflows and conversions from quad link SDI signals to single link SDI signals, and vice versa at 12G, 6G, 3G and 1.5G bit rates. Both Square Division (Quadrant) and Two Sample Interleave (2SI) input and output mappings are supported.

<https://www.aja.com/products/og-12gm>

Video Formats

- (4K) 4096 x 2160p 23.98, 24, 25, 29.97, 30, 50, 59.94, 60
- (4K) 4096 x 2160PsF 23.98, 24, 25, 29.97, 30
- (UltraHD) 3840 x 2160p 23.98, 24, 25, 29.97, 30, 50, 59.94, 60
- (UltraHD) 3840 x 2160PsF 23.98, 24, 25, 29.97, 30
- (2K) 2048 x 1080p 50, 59.94, 60
- (2K) 2048 x 1080PsF 23.98, 24, 25, 29.97, 30
- (HD) 1920 x 1080p 23.98, 24, 25, 29.97, 30, 50, 59.94, 60
- (HD) 1920 x 1080PsF 23.98, 24, 25, 29.97, 30
- (HD) 1920 x 1080i 50, 59.94, 60
- (HD) 1280 x 720p 50, 59.94, 60
- (SD) 625i 50
- (SD) 525i 59.94
- RGB and YCbCr, 4:4:4/2:2, 10, 12-bit

Note: Raster and Frame Rate Dependent, please see OG-12GM Video Formats in Documents and Manual

Video Input Digital

- 4x 12G-SDI BNC, SMPTE 259/292/424/2081/2082
 - Single Link 12G/6G/3G/1.5G/SD-SDI
 - Quad Link 3G-SDI Level A or B-DL (4x 3G), SMPTE-425-5
 - Single Link 3G-SDI Level A, B-DL, SMPTE 425
 - Quad Link HD-SDI (4x 1.5G)
 - Single Link 4K/UltraHD/HD/SD

Video Output Digital

- 4x 12G-SDI BNC, SMPTE 259/292/424/2081/2082
 - Single Link 12G/6G/3G/1.5G/SD-SDI
 - Quad Link 3G-SDI Level A or B-DL (4x 3G), SMPTE-425-5
 - Single Link 3G-SDI Level A, B-DL, SMPTE 425
 - Quad Link HD-SDI (4x 1.5G)

Supported Conversions and Functions

- Quad 3G-SDI Level A to Single 12G-SDI
- Quad 3G-SDI Level B-DL to Single 12G-SDI
- Single 12G-SDI to Quad 3G-SDI Level A

- Single 12G-SDI to Quad 3G-SDI Level B-DL
- Quad 1.5G-SDI to Single 6G-SDI
- Single 6G-SDI to Quad 1.5G-SDI
- Quad 3G-SDI Level A to Quad 3G-SDI Level B-DL
- Quad 3G-SDI Level B-DL to Quad 3G-SDI Level A
- Two Sample Interleave (2SI) to Square Division (Quadrant) pixel mapping
- Square Division (Quadrant) to Two Sample Interleave (2SI) pixel mapping
- Pass through of Single Link 12G, 6G, 3G, 1.5G and 270M SDI video
- Distribution Amplifier support (1x4)
- Input signal diagnostics
- Input timing analyzer for quad link signals

Cable Equalization

(Belden 1694A coax)

- 12 Gbps, 70m
- 6 Gbps, 100m
- 3 Gbps, 140m
- 1.5 Gbps, 200m
- 270 Mbps, 300m

Audio Input/Output Digital

- Passes SDI embedded audio, 24-bit, up to 16-channels

User Interface

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

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, 13 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)