



# 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.

**\$1,079 US MSRP**

<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
- YCbCr 4:2:2/4:4:4
- RGB 4:4:4, SMPTE or Full level
- 10 or 12-bit

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

## Video Input and Output Digital

- 4x 12G-SDI BNC, SMPTE 259/292/424/2081/2082
  - Single Link 12G/6G/3G/1.5G-SDI
  - Dual Link 2x6G/2x3G/2x1.5G-SDI
  - Quad Link 4x3G Level A or B Dual Link/4x1.5G-SDI

## Supported Conversions and Functions

- Quad 3G-SDI Level A to Single 12G-SDI
- Quad 3G-SDI Level B Dual Link to Single 12G-SDI
- Single 12G-SDI to Quad 3G-SDI Level A
- Single 12G-SDI to Quad 3G-SDI Level B Dual Link
- Quad 3G-SDI Level A to Dual 6G-SDI
- Quad 3G-SDI Level B Dual Link to Dual 6G-SDI
- Dual 6G-SDI to Quad 3G-SDI Level A
- Dual 6G-SDI to Quad 3G-SDI Level B Dual Link
- Dual 3G-SDI Level A to Single 6G-SDI
- Dual 3G-SDI Level B Dual Link to Single 6G-SDI
- Single 6G-SDI to Dual 3G-SDI Level A

- Single 6G-SDI to Dual 3G-SDI Level B Dual Link
- Quad 1.5G-SDI to Single 6G-SDI
- Single 6G-SDI to Quad 1.5G-SDI
- Dual 1.5G-SDI to Single 3G-SDI Level A
- Dual 1.5G-SDI to Single 3G-SDI Level B Dual Link
- Single 3G-SDI Level A to Dual 1.5G-SDI
- Single 3G-SDI Level B Dual Link to Dual 1.5G-SDI
- Quad 3G-SDI Level A to Quad 3G-SDI Level B Dual Link
- Quad 3G-SDI Level B Dual Link 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
- HDR VPID pass-through or override for Colorimetry and Transfer Characteristic
- Pass-through of Single Link 12 Gbps, 6 Gbps, 3 Gbps, 1.5 Gbps, and 270 Mbps 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

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- 0.5 lb (0.3 kg)

## Power

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- openGear frame compatible, 13.0 watts max per card

## Environment

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- 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)