



OG-4K2HD

OG-4K2HD is an openGear card that down-converts professional 3G-SDI 4K/UltraHD signals to HD resolution using AJA's high-quality scaling for cost-effective monitoring and conversion. OG-4K2HD's HD-SDI and HDMI outputs are live simultaneously, producing fantastic-looking HD images for on set monitoring or direct-to-air broadcast.

OG-4K2HD supports high frame rate (HFR) 4K/UltraHD inputs at 50 and 60fps and converts to HD outputs at 50 and 60fps for accurate viewing. OG-4K2HD's configuration options allow extraction of an HD resolution image from the 4K input to provide a one-to-one pixel image for 4K focus checks on HD displays.

Designed for use in high density openGear 2RU frames including AJA's OG-X-FR frame, new DashBoard Software support on Windows®, macOS® and Linux® offers remote control and monitoring of the openGear architecture and provides convenient and industry-standard configuration, monitoring and control options over a PC or local network.

<https://www.aja.com/products/og-4k2hd>

Video Formats

- (4K) 4096 x 2160p
- (4K) 4096 x 2160PsF
- (UltraHD) 3840 x 2160p
- (Ultra HD) 3840 x 2160PsF
- (2K) 2048 x 1080p
- (2K) 2048 x 1080PsF
- (HD) 1920 x 1080p
- (HD) 1920 x 1080PsF
- (HD) 1920 x 1080i
- (HD) 1280 x 720p
- (SD) 720x576i
- (SD) 720x480i
- (UltraHD) 3840 x 2160p 23.98, 24, 25, 29.97, 30
- (UltraHD) 3840 x 2160PsF 23.98, 24, 25, 29.97, 30
- 2x 3 Gb SDI (Level B-Dual Stream)
 - (4K) 4096 x 2160p 23.98, 24, 25, 29.97, 30
 - (4K) 4096 x 2160PsF 23.98, 24, 25, 29.97, 30
 - (UltraHD) 3840 x 2160p 23.98, 24, 25, 29.97, 30
 - (UltraHD) 3840 x 2160PsF 23.98, 24, 25, 29.97, 30
- 1x 3 Gb SDI (Level A or B-Dual Link)
 - (2K) 2048 x 1080p 23.98, 24, 25, 29.97, 30, 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
- 2x 1.5 Gb SDI
 - (HD) 1920 x 1080p 50, 59.94, 60
- 1x 1.5 Gb SDI
 - (2K) 2048 x 1080p 23.98, 24, 25, 29.97, 30
 - (2K) 2048 x 1080PsF 23.98, 24, 25, 29.97, 30
 - (HD) 1920 x 1080p 23.98, 24, 25, 29.97, 30
 - (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
- 1x 270 Mb SDI
 - (SD) 625i 50
 - (SD) 525i 59.94

Video Input Digital

- 4x 3G-SDI BNC, SMPTE-259/292/372/424
- YCbCr 4:2:2/4:4:4
- RGB 4:4:4, SMPTE or Full level
- 8 or 10-bit
- Two Sample Interleave (2SI) or Square Division (Quadrant) source mapping
- 4x 3 Gb SDI (Level A or B-Dual Link)
 - (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
 - (Ultra HD) 3840 x 2160PsF* 23.98, 24, 25, 29.97, 30
- 4x 1.5 Gb SDI
 - (4K) 4096 x 2160p 23.98, 24, 25, 29.97, 30
 - (4K) 4096 x 2160PsF 23.98, 24, 25, 29.97, 30

*PsF is Level B-Dual Link

**1280 x 720p is Level A Only

Video Output Digital

- 1x 3G-SDI BNC, SMPTE-259/292/372/424
- Color space and sampling match input signal
- 1x 3 Gb SDI (Level A or B-Dual Link)
 - (2K) 2048 x 1080p 23.98, 24, 25, 29.97, 30, 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
- 1x 1.5 Gb SDI
 - (2K) 2048 x 1080p 23.98, 24, 25, 29.97, 30
 - (2K) 2048 x 1080PsF 23.98, 24, 25, 29.97, 30
 - (HD) 1920 x 1080p 23.98, 24, 25, 29.97, 30
 - (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
- 1x 270 Mb SDI
 - (SD) 625i 50
 - (SD) 525i 59.94
- 1x HDMI Type A connector, HDMI v1.4
- YCbCr 4:2:2/4:4:4
- RGB 4:4:4, SMPTE or Full level
- 8 or 10-bit (4:4:4 limited to 8 bit)
- (2K) 2048 x 1080p 23.98, 24, 25, 29.97, 30, 50, 59.94, 60
- (HD) 1920 x 1080p 23.98, 24, 25, 29.97, 30, 50, 59.94, 60
- (HD) 1920 x 1080i 50, 59.94, 60
- (HD) 1280 x 720p 50, 59.94, 60
- (SD) 720 x 576i 50
- (SD) 720 x 480i 59.94

*1280 x 720p is Level A Only

Audio Input Digital

- SDI embedded audio, 24-bit, 16-channel

Audio Output Digital

- SDI embedded audio, 24-bit, 8-channel
- HDMI embedded audio, 24-bit, 8-channel

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, 11.0 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)