OG-Hi5-4K-Plus

OG-Hi5-4K-Plus is an openGear card that offers 3G-SDI to HDMI 2.0 conversion for 4K/UltraHD/2K/HD/SD sources, supporting up to 60p from professional 4K/UltraHD devices when monitoring to HDMI 2.0 displays. OG-Hi5-4K-Plus generates HDR metadata in accordance with HDMI v2.0a/CTA-861.3 and offers a simple monitoring connection from 4K devices with Quad 3G-SDI or Dual 3G-SDI outputs to compatible HDMI 2.0 displays, with two sample interleave (2SI) or square division (Quadrant) source mapping.

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-hi5-4k-plus

$865 US MSRP

Video Formats

- (4K) 4096x2160p
- (UltraHD) 3840x2160p
- (2K) 2048x1080p
- (HD) 1920x1080p
- (HD) 1920x1080i
- (HD) 1280x720p
- (SD) 720x576i
- (SD) 720x480i

Note: Raster and Frame Rate Dependent, please see OG-Hi5-4K-Plus Video Formats in the Download / Documents section of the website product page.

Video Input Digital

- 4x 3G-SDI BNC, SMPTE-259/292/424
  - YCbCr 4:2:2/4:4:4
  - RGB 4:4:4, SMPTE or Full level
  - 8, 10, or 12-bit
  - Two Sample Interleave (2SI) or Square Division (Quadrant) pixel mapping
- 4x 3 Gb SDI (Level A or B Dual Link)
  - (4K) 4096x2160p 23.98, 24, 25, 29.97, 30, 47.95, 48, 50, 59.94, 60
  - (4K) 4096x2160PsF* 23.98, 24, 25, 29.97, 30
  - (UltraHD) 3840x2160p 23.98, 24, 25, 29.97, 30, 50, 59.94, 60
  - (Ultra HD) 3840x2160PsF* 23.98, 24, 25, 29.97, 30
- 4x 1.5 Gb SDI
  - (4K) 4096x2160p 23.98, 24, 25, 29.97, 30
  - (4K) 4096x2160PsF 23.98, 24, 25, 29.97, 30
  - (UltraHD) 3840x2160p 23.98, 24, 25, 29.97, 30
  - (UltraHD) 3840x2160PsF 23.98, 24, 25, 29.97, 30
- 2x 3 Gb SDI (Level B Dual Stream)
  - (4K) 4096x2160p 23.98, 24, 25, 29.97, 30

- (4K) 4096x2160PsF 23.98, 24, 25, 29.97, 30
  - (UltraHD) 3840x2160p 23.98, 24, 25, 29.97, 30
  - (UltraHD) 3840x2160PsF 23.98, 24, 25, 29.97, 30
- 1x 3 Gb SDI (Level A or B Dual Link)
  - (2K) 2048x1080p 23.98, 24, 25, 29.97, 30, 47.95, 48, 50, 59.94, 60
  - (2K) 2048x1080PsF 23.98, 24, 25, 29.97, 30
  - (HD) 1920x1080p 23.98, 24, 25, 29.97, 30, 50, 59.94, 60
  - (HD) 1920x1080PsF 23.98, 24, 25, 29.97, 30
  - (HD) 1920x1080i 50, 59.94, 60
  - (HD) 1280x720p** 50, 59.94, 60
- 2x 1.5 Gb SDI (Dual Link HD-SDI), SMPTE-372
  - (HD) 1920x1080p 50, 59.94, 60
- 1x 1.5 Gb SDI
  - (2K) 2048x1080p 23.98, 24, 25, 29.97, 30
  - (2K) 2048x1080PsF 23.98, 24, 25, 29.97, 30
  - (HD) 1920x1080p 23.98, 24, 25, 29.97, 30
  - (HD) 1920x1080PsF 23.98, 24, 25, 29.97, 30
  - (HD) 1920x1080i 50, 59.94, 60
  - (HD) 1280x720p 50, 59.94, 60
- 1x 270 Mb SDI
  - (SD) 625i 50
  - (SD) 525i 59.94

*PsF is Level B Dual Link
**1280x720p is Level A Only

Video Output Digital

- 1xHDMI Type A connector*, HDMI v2.0b
  - HDR infoframe generation with pass-through or override for Colorimetry and Transfer Characteristic
  - YCbCr 4:2:2/4:4:4/4:2:0
  - RGB 4:4:4, SMPTE or Full level
  - 24, 30, or 36-bits Per Pixel (HFR 4K/UltraHD 4:4:4 limited to 24 BPP)
  - (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) 720x576i 50
- (SD) 720x480i 59.94

*If a connected monitor doesn't support HDMI protocol the unit automatically switches to DVI protocol (which does not pass audio)

Audio Pass-Through Formats

- PCM
- Dolby Digital (AC-3)
- Dolby Digital Plus (E-AC-3), including Atmos Immersive Sound (JOC)

Audio Input Digital

- SDI embedded audio, 24-bit (SD limited to 20-bit), 16-channel

Audio Output Digital

- 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, 12.0 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)