

Hi5-12G

The Hi5-12G converts 12G-SDI to HDMI 2.0, with pristine image fidelity and HFR support up to 60p for 4K/UltraHD, with single cable simplicity. Hi5-12G provides an easy to deploy monitoring connection from professional 4K 12G-SDI devices to new displays with HDMI 2.0 inputs, for cost-effective monitoring in professional workflows. The Hi5-12G can also generate HDR metadata in accordance with HDMI v2.0 and CTA-861-G.

$1118 US MSRP

It features a 12G-SDI single link input with a reclocked SDI loop out for simpler SDI confidence monitoring or pass on for SDI pipelines.

Fiber SFP equipped Hi5-12G models are available including the Hi5-12G-R receiver, which can receive 4K signals over long distances from a Fiber connected source, and the Hi5-12G-TR transceiver, which delivers a 4K/UltraHD SDI or Fiber source signal to an HDMI destination with pass on of the source through SDI or Fiber to a secondary destination. The Video Source Auto Switch Over feature (SDI and Optical Inputs) in Hi5-12G-R and Hi5-12G-TR provides automatic input changeover with configurable Switch Over Priority selection (Last Valid Input, Priority SDI, and Priority Optical).

https://www.aja.com/products/hi5-12g

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 Hi5-12G Video Formats in the Download / Documents section of the website product page.

Video Input Digital

- 1x 12G-SDI BNC, SMPTE-259/292/424/2081/2082
- YCbCr 4:2:2/4:4:4
- RGB 4:4:4, SMPTE or Full level
- 8, 10, 12-bit
- Two Sample Interleave (2SI) 4K/UltraHD source mapping
- 1x 12 Gb SDI
  - (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
- 1x 6 Gb SDI
  - (4K) 4096x2160p 23.98, 24, 25, 29.97, 30
  - (UltraHD) 3840x2160p 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
- 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

*1280x720p is Level A Only

Input Signal Selection -Hi5-12G-R and Hi5-12G-TR Only

- 1x 12G-SDI BNC, SMPTE-259/292/424/2081/2082
- 1x 12G-SDI Fiber LC connector, SMPTE 297/259/292/424/2081/2082
  - Nominal Wavelength: Rx 1260 nm (min), 1620 nm (max)

- Optical Sensitivity: -10 dBm (min 12 Gbps), -14 dBm (min 3 Gbps)
- Overload Power: -2 dBm (min)

Input Signal Selection - Hi5-12G-R-ST Only

- 1x 12G-SDI BNC, SMPTE-259/292/424/2081/2082
- 1x 12G-SDI Fiber ST connector, SMPTE 297/259/292/424/2081/2082
  - Nominal Wavelength: Rx 1260 nm (min), 1620 nm (max)
  - Optical Sensitivity: -10 dBm (min 12 Gbps), -14 dBm (min 3 Gbps)
  - Overload Power: -2 dBm (min)

Video Output Digital

- 1x HDMI 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, 47.95, 48, 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)

Video Output Digital - Additional for Hi5-12G-TR Only

- 1x 12G-SDI Fiber LC connector, SMPTE 297/259/292/424/2081/2082
  - Nominal Wavelength: Tx 1260 nm (min), 1310 nm (typ), 1360 nm (max)
  - Optical Power: -5 dBm (min), 0.5 dBm (max)
  - Extinction Ratio: 5.4 dB (min)

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

Audio Output Analog

- 2x RCA style connector, 2-channel -10dBu (nominal)

User Interface

- USB port used with supplied cable and Mini-Config software application to configure and view device status via Mac or Windows

Size (w x d x h)

- 4.6" x 4.02" x 0.9" (116.84 x 102.11 x 22.86 mm)

Weight

- 0.5 lb (0.3 kg)

Power

- 5-16VDC regulated, 11 watts, power supply required included with purchase
- AC Adapter: 100-240VAC, 50/60 Hz, universal input

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)

*Hi5-12G devices use approximately 11 watts of power and convection cooling. It will be very warm to the touch, which is normal. When installing a unit, mount in a location where the device has access to air for proper cooling. Do not stack a Hi5-12G device with other Mini-Converters.