



IPR-10G2-SDI

IPR-10G2-SDI provides monitoring of HD SMPTE ST 2110 signals across 10 GigE to two 3G-SDI outputs.

\$1295 US MSRP

It receives SMPTE 2110 over 10 GigE connectivity, formats the data for output over 3G-SDI, and the associated audio from the video stream is extracted, synchronized, and embedded into the 3G-SDI signal and also output on an analog RCA interface.

The IPR-10G2-SDI features 2x 10 GbE SFP+ cages allowing “hitless switching”, providing redundancy protection for critical distribution and monitoring applications.

<https://www.aja.com/products/ipr-10g2-sdi>

Video Formats

- (HD) 1920 x 1080p 23.98, 24, 25, 29.97, 30, 50, 59.94, 60
- (HD) 1920 x 1080i 50, 59.94
- (HD) 1280 x 720p 50, 59.94, 60
- (SD) 625i 50
- (SD) 525i 59.94

Video Quality

- 10-bit, 4:2:2, uncompressed

Media Transport Interface

- SMPTE ST 2110 (-10, -20, -21, -30)
 - 2x SFP+ Cages - SFPs not included
- Recommended 10 GigE SFP+ modules:
 - Arista Networks SFP-10G-SR Compatible 10GBASE-SR
 - Fiberstore SFP-10GSR-85 10G SFP+ 850nm
 - Finisar FTLX1471D3BCL (for single mode 1310nm)
 - Mellanox MFM1T02A-SR 850nm 10G

Note: Maximum supported SFP+ power is 500 mW per SFP+ cage

Video Input IP

- SMPTE ST 2110
 - Single channel video input

- SMPTE ST 2022-7 dual stream input for hitless switching
- Rx support for Narrow/Wide, Gapped/Linear Modes

Audio Input IP

- SMPTE ST 2110
 - Up to 16 channels audio, 24-bit per channel, 48 kHz synchronous
 - 1 ms or 125 μs packet interval
 - SMPTE ST 2022-7 dual stream input for hitless switching

*Streams with up to 16-channels are received but only the first 8 are output

Video Output Digital

- 2x 3G SDI BNC (single source, mirrored output)
 - Up to 1080 60p, 4:2:2, 10-bits/pixel, YCbCr

Audio Output Digital

- Up to 8-Channel, SDI embedded audio, 24-bit per channel, 48 kHz synchronous

Audio Output Analog

- 2x RCA analog audio
 - Levels at -10 dBu (nominal)

Reference

- 1x BNC
 - Reserved for Future Potential Features

Discovery, Registration and Control

- NMOS Rx discovery and control according to standards IS-04 v1.2 and IS-05 v1.0
- Ember+ control (no discovery, control only)
- AJA REST API control (discovery via SSDP or MDNS)
- Supported over dedicated management Ethernet port and in-band over media ports

IP Clock

- PTP support compliant with PTP PTPv2 / IEEE 1588-2008
- SMPTE ST 2059-1 compliant

User Controls

- 1x RJ-45 for 10/100/1000 Base-T Ethernet
 - Web and REST clients supported for remote network setup and configuration
- 1x USB 2.0 Mini-B connector
 - AJA eMini-Setup supported for network setup and configuration via local desktop computer
- Web and REST configuration is also supported in-band over media ports

Size (w x d x h)

- 5.07" x 0.94" x 5.06" (128.78 x 23.88 x 128.52 mm)

Weight

- 0.6 lb (0.3 kg)

Power

- 5-20VDC Regulated, 13 Watts, Power supply required (DWP-U-R1 included with purchase)

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)