



Broadcast IP Products

Transition Seamlessly to IP

IP Products

Powerful and Flexible Video over IP

IP Solutions for Creatives. Bridges for Baseband to IP and Back.

The broadcast industry is steadily migrating to IP technologies with its built-in advantages for scaling, routing, simpler embedding, disembedding, remote management and the ability to scale services as required to the size and complexity a project may demand. AJA is here to help you cross the bridge to this new world with the least disruption possible.

Creative users can simply bridge to IP and both transmit and receive with KONA IP for desktop needs and lo IP for Thunderbolt™ 3 connectivity, on macOS® or Windows®, in the all the ways they are used to, with the same creative tools they know and love.

For transmission, reception and conversion of baseband video to and from IP, add AJA's growing range of IP Mini Converters to the mix and you have tremendous versatility for ingest, playout and monitoring, including remote editing session monitoring*

From SMPTE ST 2110 to ST 2022-6/7 and TR-01 JPEG 2000 workflows, AJA offers you the flexibility of choice for the particular IP workflow you need to address, and AJA's firmware updates ensure you stay current with the evolving strands of the IP migration.



IP Products

Feature Comparison Chart

AJA IP devices are available in five models to meet your workflow needs, all built with AJA's reputation for quality, reliability and support.



	KONA IP	Io IP	IPR-10G2-SDI / HDMI	IPT-1G-SDI / HDMI	IPR-1G-SDI / HDMI
HDR10	yes	yes	-	-	-
HLG*	yes	yes	-	-	-
2K	yes**	yes	-	yes	yes
HD	yes	yes	yes	yes	yes
SD	yes	yes	yes	yes	yes
Adobe®, Apple® and Avid® NLE support	macOS® and Windows®	macOS and Windows	-	-	-
Media Transport Interface	SMPTE ST 2110, 2022-6, 2022-7 and optional VSF TR-01 JPEG 2000	SMPTE 2022-6, 2022-7	SMPTE 2110	VSF TR-01 JPEG 2000	VSF TR-01 JPEG 2000
Hitless Switching support (redundant networks)	yes	yes	yes	-	-
Media Transport Connectivity	2x SFP+ Cages*** 10GigE	2x SFP+ Cages*** 10GigE	2x SFP+ Cages*** 10GigE	1x RJ-45 for 10/100/1000 Base-T Ethernet	1 x RJ-45 for 10/100/1000 Base-T Ethernet
SDI	-	3G-SDI Out (monitor)	3G-SDI Out (IPR-10G2-SDI Only)	3G-SDI In (IPT-1G-SDI only)	3G-SDI Out (IPR-1G-SDI only)
HDMI	HDMI 1.4b Out (with HDR)	HDMI 2.0 Out (with HDR)	HDMI 1.4b Out (IPR-10G2-HDMI only)	HDMI 1.4b In (IPT-1G-HDMI only)	HDMI 1.4b Out (IPR-1G-HDMI only)
SDI Embedded Audio	-	16-Channel Out	16-Channel Out (IPR-10G2-SDI only)	2-Channel In (IPT-1G-SDI only)	2-Channel Out (IPR-1G-SDI only)
HDMI Embedded Audio	8-Channel Out	8-Channel Out	8-Channel Out (IPR-10G2-HDMI only)	2-Channel In (IPT-1G-HDMI only)	2-Channel Out (IPR-1G-HDMI only)
Control Connectivity	-	-	1x RJ-45 for 10/100/1000 Base-T Ethernet	1x RJ-45 for 10/100/1000 Base-T Ethernet	1x RJ-45 for 10/100/1000 Base-T Ethernet
Analog Audio I/O (balanced XLR over Tascam DB-25 connector)	-	8-Channel configurable: 8 In, 8 Out, 4 In/4 Out	-	-	-
Analog Audio (Unbalanced)	-	2-Channel headphone output	2-Channel RCA Output	2-Channel RCA Output	2-Channel RCA Output
Host Computer Interface	PCIe Gen2 x8 lane	Thunderbolt™ 3	1 x USB 2.0 Mini-B (set up only)	1 x USB 2.0 Mini-B (set up only)	1 x USB 2.0 Mini-B (set up only)
Setup Interface	AJA Desktop Software	AJA Desktop Software	AJA eMini-Setup	AJA eMini-Setup	AJA eMini-Setup
Control interface	Supported application(s) of choice	Supported application(s) of choice	Web Browser NMOS, Ember +	Web Browser	Web Browser

* HLG support is application dependent. Check with your software manufacturer for compatibility.

** Up to p60 with SMPTE 2110

*** SFPs not included

IP Products

Software Compatibility

Our IP products are cross-platform and compatible with a wide range of professional macOS and Windows software applications.

AJA hardware is compatible with a wide range of professional software applications on macOS, Windows and in the case of the KONA IP, Linux too.

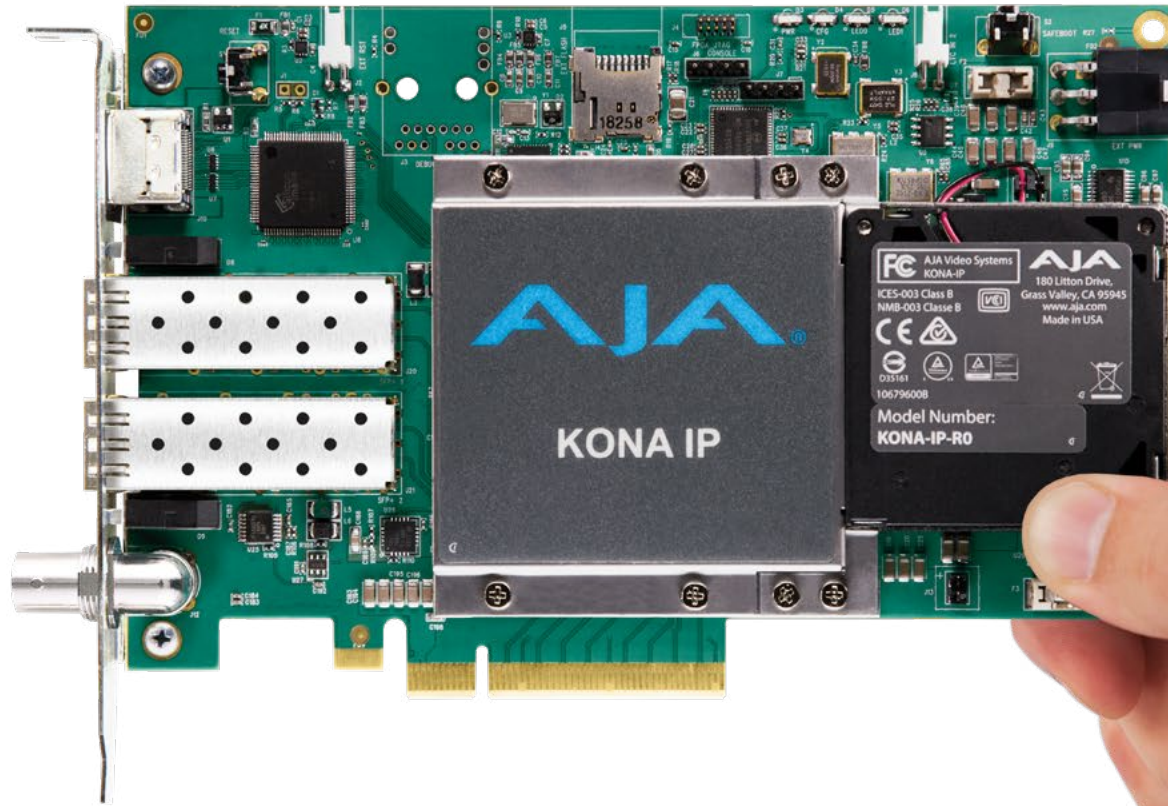
AJA drivers and plug-ins create a seamless integration between the native software and AJA's high quality hardware that lets you focus on the work, not the technology.

[KONA Compatibility Chart](#)

[Io Compatibility Chart](#)



KONA[®] IP



\$2,495 US MSRP*

[Find a Reseller](#)

Easy, Compatible I/O for IP Pipelines

KONA IP offers users a powerful 8-lane PCIe 2.0 video and audio desktop I/O card with flexible IP connectivity. Two SFP+ cages provide multi-stream 3G-SDI 2K/HD support for easy routing of video over 10 GigE IP networks.

KONA IP is a proven, flexible and continuously evolving platform that supports multiple standardized approaches to Video over IP with out of the box support for SMPTE ST 2110 or SMPTE 2022-6/7 for transmission and distribution of uncompressed 3G/1.5G-SDI with sixteen channels of audio, allowing for simultaneous delivery of data across dual network paths for redundant signal support crucial for broadcast needs.

KONA IP also supports optional JPEG 2000 workflows for HD video via encode and decode to/from an MPEG 2 Transport stream. Future firmware updates will continue to expand KONA IP capabilities to keep you ahead of the Video over IP curve, ensuring the highest degree of interoperability between your infrastructure and other vendors / partners.



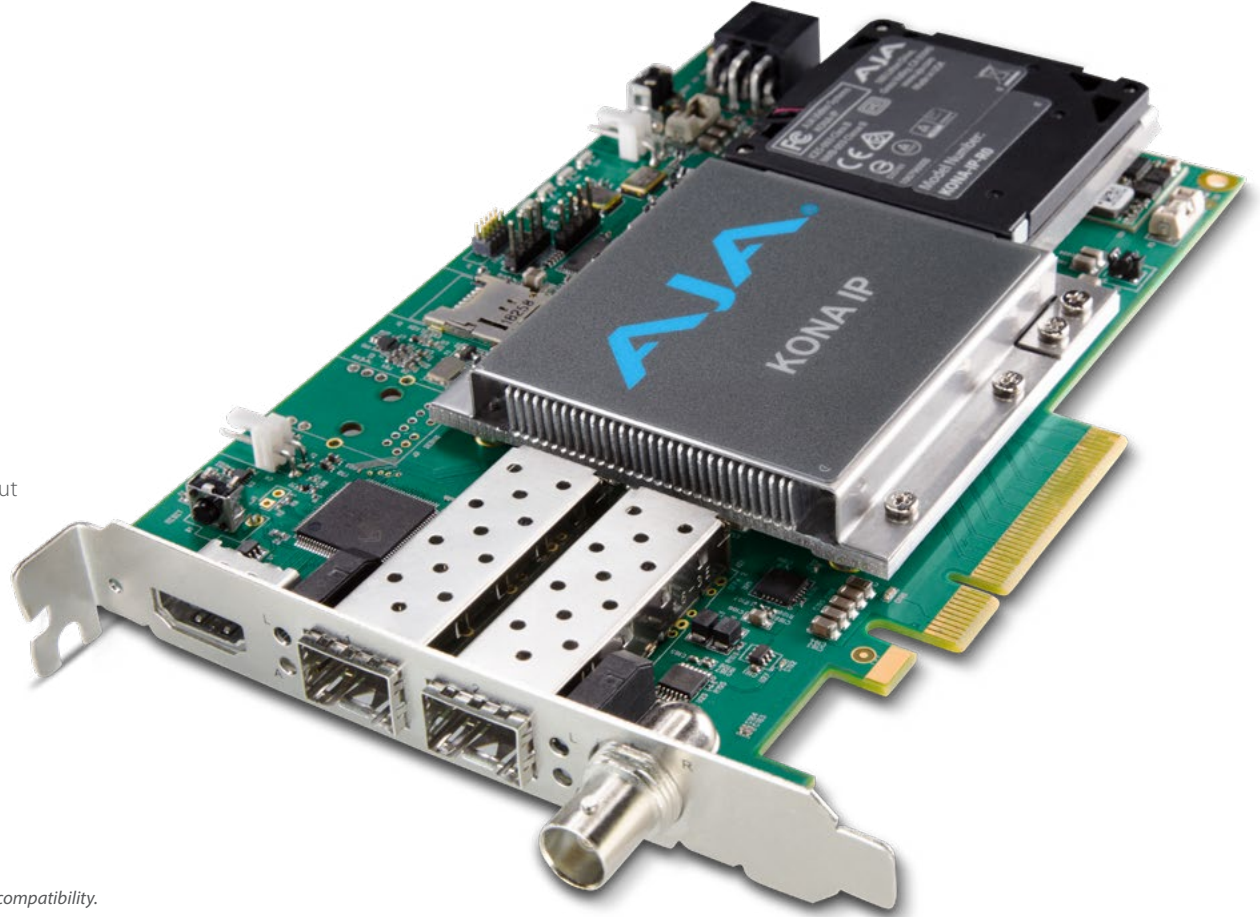
KONA[®] IP

KONA IP Features Include:

- macOS[®], Windows[®] and Linux[®] support
- Supports 2K/HD ingest and output at frame rates up to 50/60 fps
- 2x 10 GigE SFP+ connections for Multi-Channel input and/or output
- HDMI 1.4b output for local monitoring with 8-Channel audio
- HDR10 Support - HDR Infoframe metadata along HDMI
- HLG support
- SMPTE ST 2110 with hitless switching support
- SMPTE 2022-6/7 support
- JPEG 2000 workflows over 1 GigE*
- 16-Channel 48kHz 16-bit or 24-bit embedded SDI audio
- 8-lane PCIe 2.0 video and audio desktop I/O card
- Supports 4:4:4 and 4:2:2 workflows
- Reference/LTC Input
- Software support within AJA Control Room and Control Panel
- Developer friendly via AJA's cross-platform SDK

*Optional Purchase

**HLG support is application dependent. Check with your software manufacturer for compatibility.



Standards

KONA IP is a flexible platform supporting industry IP standards including SMPTE ST 2110, SMPTE 2022-6/7 and JPEG 2000 workflows, plus discovery and control protocols such as NMOS and Ember Plus.

Use PTP for timing, or with SMPTE 2022 analog reference.



Compatibility

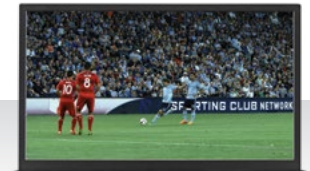
Your transition to IP pipelines with KONA IP is supported by leading NLE, VFX and Streaming applications including, but not limited to, Adobe[®] Premiere[®] and Avid[®] Media Composer[®]. KONA IP operates virtually identically to AJA SDI and HDMI products with support for your favorite AJA software such as AJA Control Room™ and AJA Control Panel.



10 GigE Connectivity

KONA IP provides two SFP+ cages compatible with 10 GigE SFP transceiver modules from leading third party* providers for easy integration into IP pipelines.

*Please see technical specifications for recommended SFPs.
(SFPs not included)

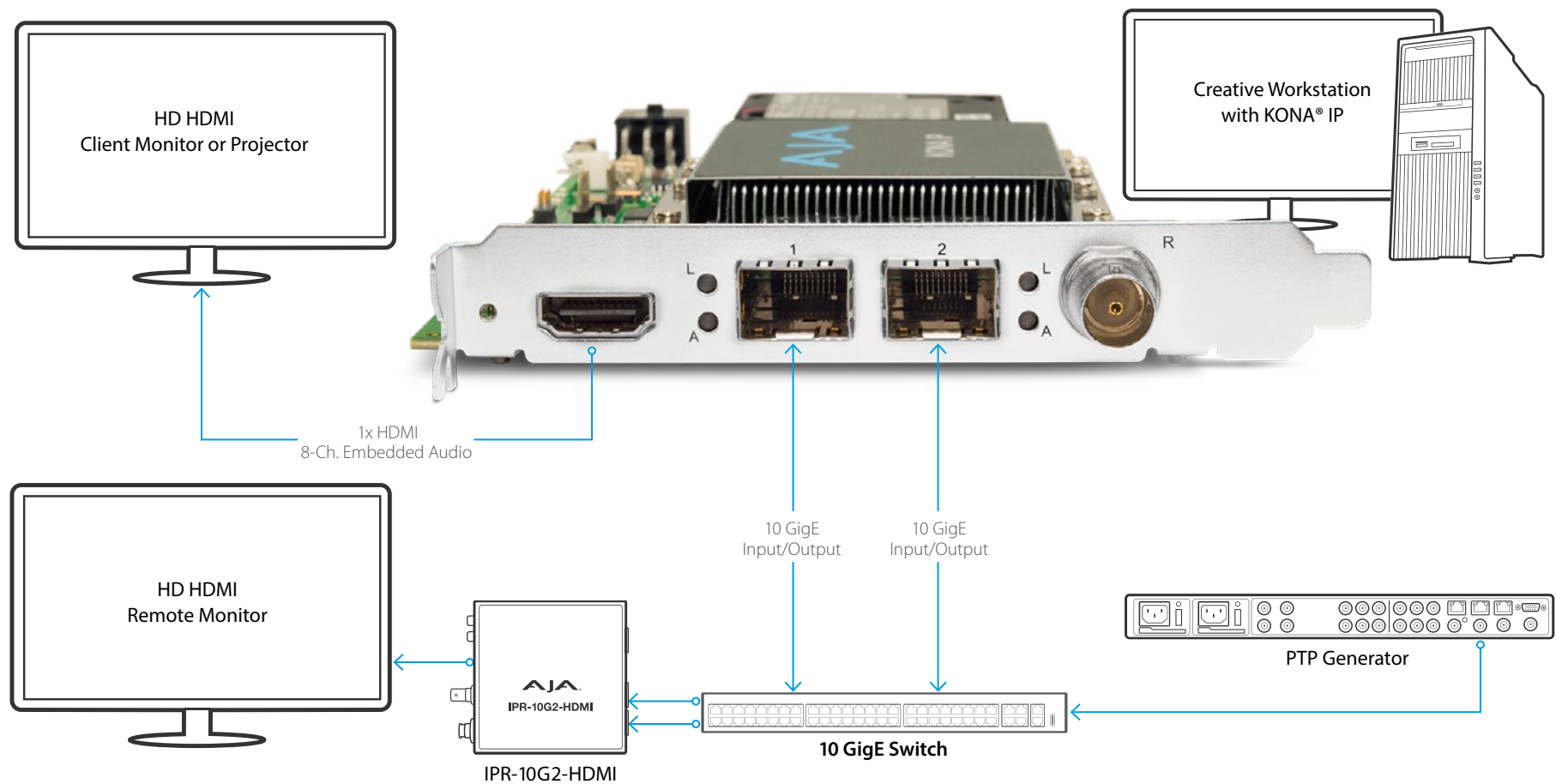


HDMI Monitoring

KONA IP's HDMI output ensures that whether you are working with SDR or HDR material, you can always monitor your projects locally, accurately and efficiently.

KONA® IP

KONA® IP SMPTE ST 2110 Workflow



Connect your HD digital video devices via 10 GigE to KONA IP for capture, editing and delivery.

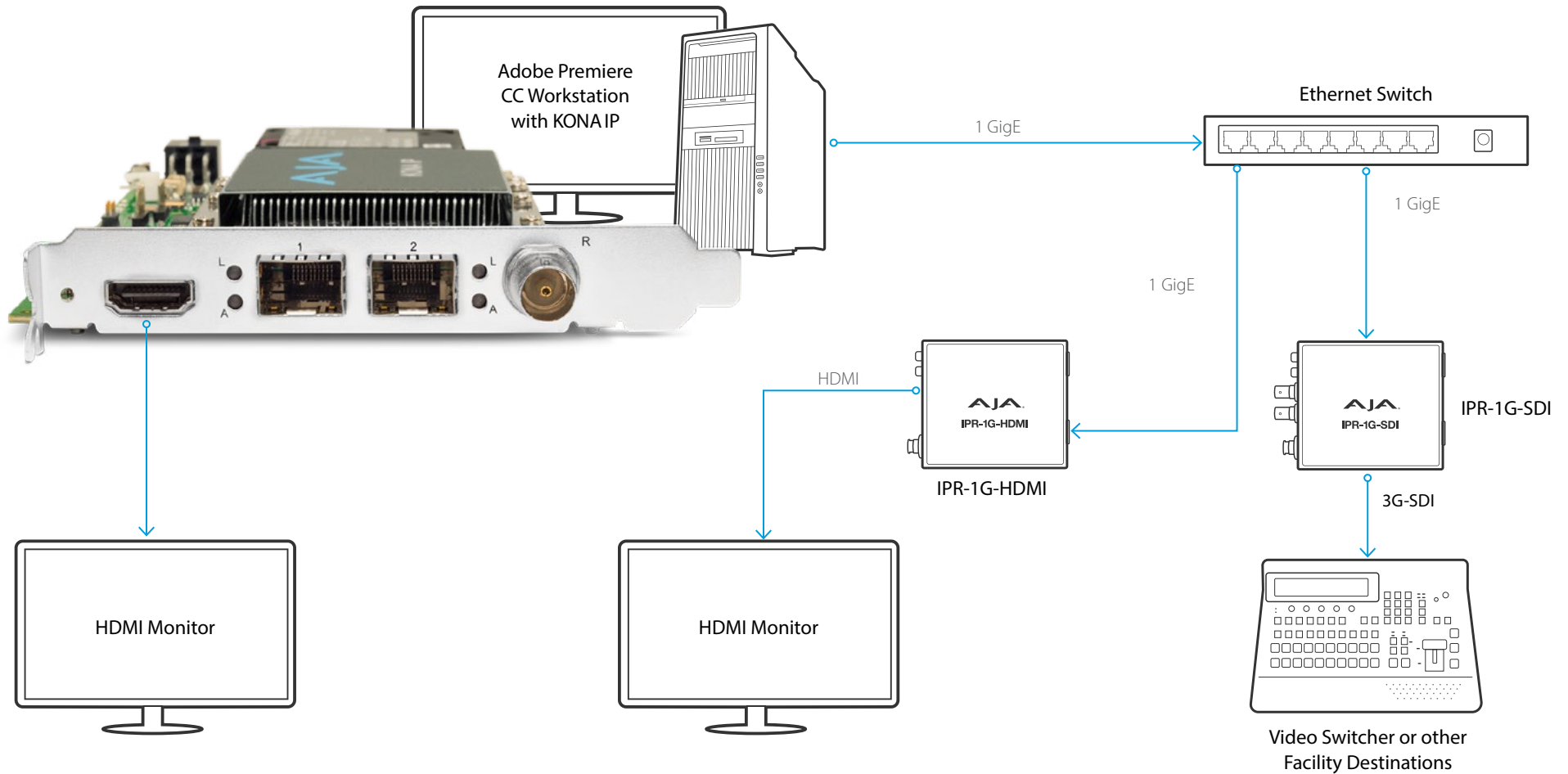
[Click here](#)

For full product specifications visit www.aja.com/en/products/kona-ip/#techspecs



KONA® IP

KONA® IP JPEG 2000 Workflows



[Click here](#)

For full product specifications visit www.aja.com/en/products/kona-ip/#techspecs



KONA® IP

Tech Specs

Video Formats

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

*SMPTE ST 2110 only

Note: High Frame Rate capabilities are dependent on host system attributes. Not all systems and configurations will support all frame rates.

Media Transport Interfaces

- SMPTE ST 2110, 2022-6, 2022-7
 - 2x SFP+ Cages - SFPs not included
- Recommended 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
- TR-01 compliant JPEG 2000 Workflows*
 - 1x SFP+ Cage - SFP not included
- Recommended SFP modules:
 - Aruba Networks SFP-TX Compatible 1000BASE-T SFP Copper RJ-45 100m Transceiver - NETCNA
 - 10Gtek Cisco Compatible GLC-T/ SFP-GE-T Gigabit RJ-45 Copper SFP Transceiver Module, 1000Base-T
- Fiberstore SFP-GB-GE-T

*Optional Purchase

Video Input IP

- SMPTE ST 2110, 2022-6, 2022-7
 - Single Channel input for NLE applications
 - Up to 4-Channels input available
- TR-01 compliant JPEG 2000* encoded within an MPEG-2 transport stream
 - HD video over 1 Gige
 - Single channel input

*Optional Purchase

Video Output IP

- SMPTE ST 2110, 2022-6, 2022-7
 - Single Channel output for NLE applications
 - Up to 4 channels output available
- TR-01 compliant JPEG 2000* encoded within an MPEG-2 transport stream
 - HD video over 1 Gige
 - Single channel output

*Optional Purchase

Video Output Digital

- HDMI v1.4b
 - 30/36-bits/pixel, RGB or YUV, 2.25 Gbps
 - 2K/HD/SD
 - HDR10 Support - HDR Infoframe metadata, in accordance with HDMI 2.0a/CTA-861.3
 - HLG Support - in accordance with HDMI 2.0b/CTA-861-G*

*HLG support is application dependent. Check with your software manufacturer for compatibility.

Note: Bit depth support is application dependent. Check with your software manufacturer for compatibility.

Audio Input IP

- Up to 16-Channel embedded audio, 24-bit per channel, 48 kHz synchronous

Audio Output IP

- Up to 16-Channel embedded audio, 24-bit per channel, 48 kHz synchronous

Audio Output Digital

- 8-Channel HDMI embedded audio, 48 kHz sample rate, synchronous

Downstream Keyer

- Supports graphics with alpha channel over video, matte or framebuffer, or framebuffer content over incoming video or matte

Reference and LTC I/O

- 1x BNC assignable to reference video or LTC input

Reference

- Analog Color Black (1V) or Composite Sync (2 or 4V)
- Reference input is terminated into 75 ohms when GenLock is set to Ref In

Electrical Interface

- 8-lane PCIe 2.0

Size (w x d x h)

- 0.75" x 8.25" x 5.0" (19.05 x 209.55 x 127.00 mm)

Weight

- 0.7 lb (0.4 kg)

Power

- 25W typical, 27W maximum

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)

[Click here](#)

For full product specifications visit www.aja.com/en/products/kona-ip/#techspecs



Io[®] IP



\$2,495 US MSRP*

[Find a Reseller](#)

Io IP revolutionizes and simplifies your portable or desktop high quality I/O capabilities with the speed and bandwidth of Thunderbolt 3.

Explore new IP workflows with the reliability, quality and support that defines AJA's Io products.

Transition Seamlessly to Desktop and Mobile IP

Io IP delivers tremendous performance and flexibility for your multi-stream HD video and audio I/O requirements over IP. Ingest and output across a 10 GigE IP network with superb local monitoring over 3G-SDI and HDMI 2.0. Power any creative project using a rich professional feature set with support for High Frame Rate, Deep Color, and HDR.

The power and performance of Thunderbolt 3 enables Io IP to transfer 2K, HD or SD video and audio from your Thunderbolt 3 equipped Mac or PC to anywhere over the network you choose. Io IP also has dual Thunderbolt 3 ports enabling daisy chaining for configuration flexibility.

Io IP hides immense power under its elegant exterior. Aluminum construction provides a solid shield from the rigors of life in the field while looking beautiful in your edit or broadcast suite. Io IP seamlessly integrates with leading production, post, mastering and streaming tools from Apple®, Adobe®, Avid®, Autodesk®, Telestream® and many more.



Feature Rich and Portable I/O for IP Pipelines

AJA's Io IP takes full advantage of Thunderbolt 3 throughput and power to enable capture and output of video signals from and to IP networks.

Two SFP+ cages provide multi-stream SMPTE standard 2K/HD/SD support for easy routing of video with audio over 10 GigE IP networks. Io IP is designed as a flexible platform that supports today's SMPTE 2022-6 video, audio and VANC data over IP as well as offering SMPTE 2022-7 support for redundant signal support, crucial for broadcast needs.

Future firmware updates will also support additional codecs and advanced IP protocols including SMPTE ST 2110 and more.



Real World Workflows

Io IP provides your connection to the emerging world of broadcast video over IP, while still giving you the ability to utilize your existing infrastructure and preserve existing creative workflows.

For video monitoring, simultaneous dedicated 3G-SDI and HDMI 2.0 outputs provide instant high quality local monitoring.

For audio voice overs, capturing other analog audio from mixer sources, and monitoring, Io IP has sophisticated configuration flexibility on the multi-channel DB-25 connector (breakout cable not included). Choose between using Ch 1-8, Ch 1-4, or Ch 5-8 as your inputs or outputs.

For audio monitoring, you can choose from either eight embedded HDMI, sixteen embedded SDI, or multiple configurations for analog audio output on the DB-25 connector.



Small, Yet Powerful

Connect to a Thunderbolt 3 laptop or desktop workstation anywhere and power your performance while dual Thunderbolt 3 ports enable daisy chaining for configuration flexibility.

Io IP makes full use of Thunderbolt 3 speed, power and bandwidth, to enable outstanding capabilities and performance for all your 2K, HD or SD IP production, post, streaming or live event needs and all at a size that's small and rugged enough to easily put in a truck, take on-set or use in the field.



Integrate Seamlessly

Use Io IP to capture, monitor and work directly within your application of choice, on macOS[®] or Windows[®].

AJA's proven driver and plug-in technology provides seamless compatibility with a wide range of production, editing, graphics, and broadcast software packages including Adobe Premiere[®] Pro, Apple Final Cut Pro X[®], Avid Media Composer[®], FilmLight products, AJA Control Room and more.

The user experience is virtually identical to driving an AJA SDI or HDMI based solution.

Io IP offers the flexibility to use the software appropriate for your workflow while maintaining consistent, high quality hardware ingest and output across your 10 GigE IP network.



Dual 10 GigE Connectivity

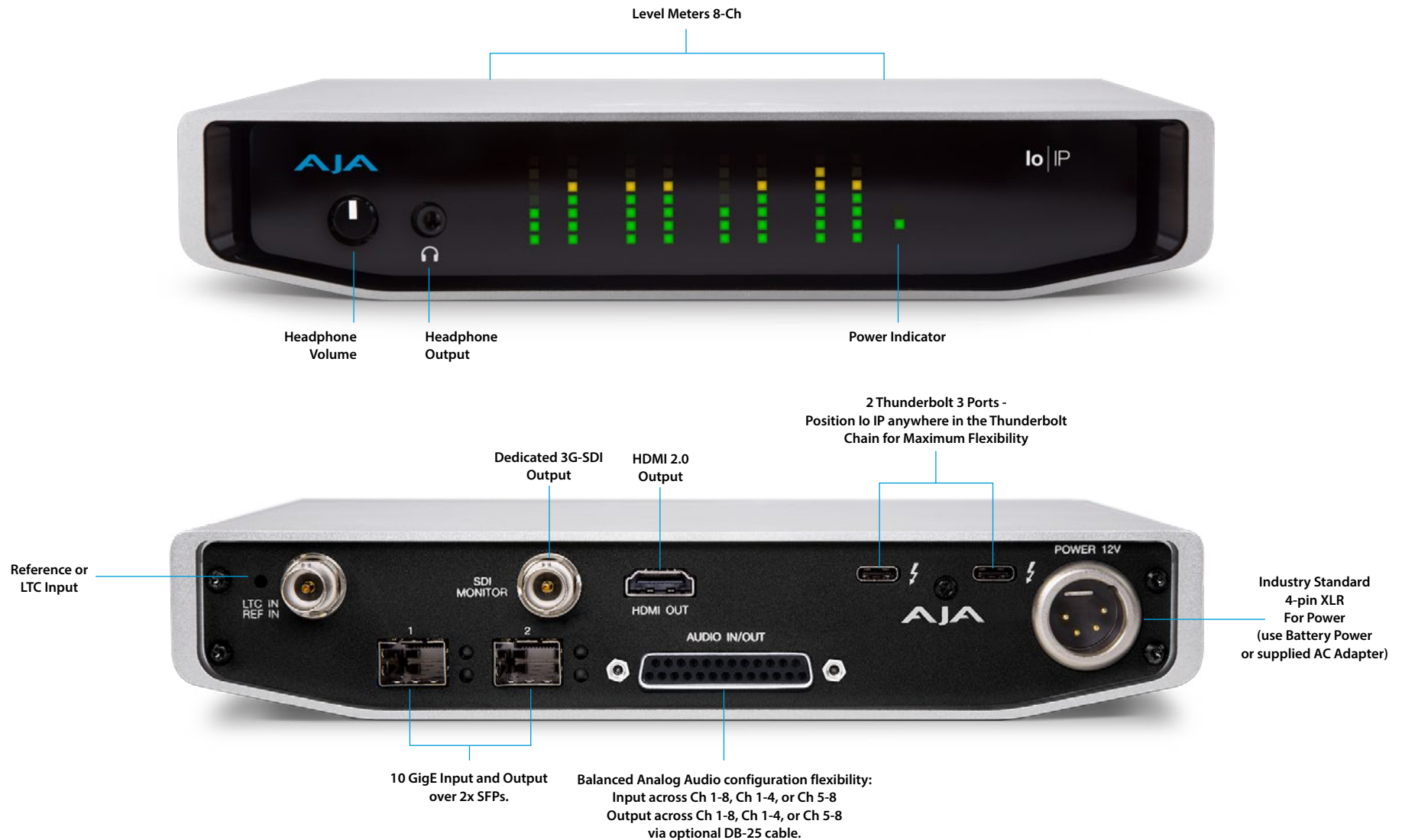
KONA IP provides two SFP cages compatible with 10 GigE SFP+ transceiver modules from leading third party* providers for easy integration into IP pipelines.

**SFP's are 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

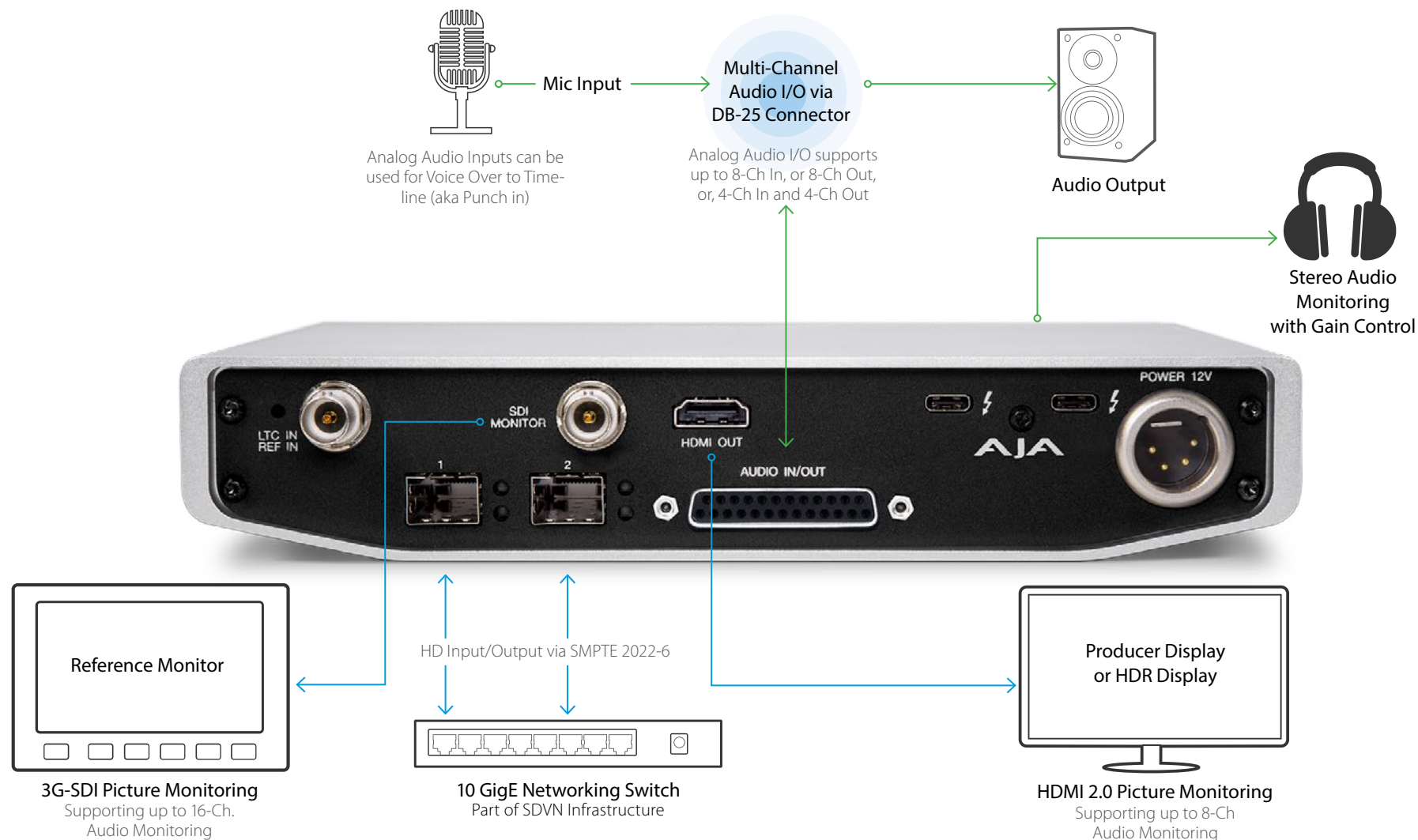
Connections



[Click here](#)

For the most recent product specifications visit www.aja.com/products/io-ip/#techspecs

SMPTE 2022-6/7 Workflow



SFP Ports can also be configured for SMPTE 2022-7, allowing for redundant network paths.



Video Formats

- (2K) 2048 x 1080p 23.98, 24, 25, 29.97, 30
- (2K) 2048 x 1080PsF 23.98, 24, 25, 29.97, 30
- (HD) 1080p 23.98, 24, 25, 29.97, 30, 50, 59.94, 60
- (HD) 1080PsF 23.98, 24, 25, 29.97, 30
- (HD) 1080i 50, 59.94, 60
- (HD) 720P 50, 59.94, 60
- (SD) 625i 50
- (SD) 525i 59.94

Note: High Frame Rate capabilities are dependent on host system attributes. Not all systems and configurations will support all frame rates.

Media Transport Interfaces

- SMPTE 2022-6, 2022-7
 - 2x SFP+ Cages - SFPs not included
- Recommended 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

Video Input IP

- SMPTE 2022-6, 2022-7
 - Single Channel input for NLE applications*
 - Up to 4 channels input available

*Capture and simultaneous monitoring is supported

Video Output IP

- SMPTE 2022-6, 2022-7
 - Single Channel output for NLE applications*
 - Up to 4 channels output available

*Capture and simultaneous monitoring is supported

Video Output Digital

- HDMI v2.0
 - 30/36-bits/pixel, RGB or YUV, 6 Gbps per color component
 - HDR10 Support - HDR Infoframe metadata, compatible with HDMI 2.0a/CTA-861.3
 - HLG Support - compatible with HDMI 2.0b/CTA-861-G*

*HLG support is application dependent. Check with your software manufacturer for compatibility.

Note: Bit depth support is application dependent. Check with your software manufacturer for compatibility.

Audio Input IP

- Up to 16-Channel embedded audio, 24-bit per channel, 48 kHz synchronous

Audio Inputs Analog

- 8-Channel, 24 and 16-bit A/D analog audio, 48 kHz sample rate, balanced, using industry standard 8x XLR on DB-25 breakout cable (cable not included)
- +24 dBu full scale digital (0 dBFS)
- +/- 0.2 dB 20 to 20 kHz frequency response
 - Input supported across Ch 1-8, Ch 1-4, or Ch 5-8 depending on configuration chosen

Audio Output IP

- Up to 16-Channel embedded audio, 24-bit per channel, 48 kHz synchronous

Audio Output Digital

- 8-Channel HDMI embedded audio, 48 kHz sample rate, synchronous

Audio Outputs Analog

- 8-Channel, 24-bit D/A analog audio, 48 kHz sample rate, balanced, using industry standard 8x XLR on DB-25 breakout cable (cable not included)
- +24 dBu full scale digital (0dBFS)
- +/- 0.2 dB 20 to 20 kHz frequency response
 - Output supported across Ch 1-8, Ch 1-4, or Ch 5-8 depending on configuration chosen

Downstream Keyer

- Supports graphics with alpha channel over video, matte or framebuffer, or framebuffer content over incoming video or matte

Reference and LTC I/O

- 1x BNC assignable to Reference video or LTC input

Reference

- Analog Color Black (1V) or Composite Sync (2 or 4V) or HD Tri-Level Sync (1V)
- Reference input is terminated into 75 ohms when Genlock is set to Ref In

Electrical Interface

- Thunderbolt 3 (2x)

Machine Control

- RS-422, Sony 9-pin protocol
- 9-pin D-connector pinout is as follows:

1	GND
2	RX-
3	TX+
4	GND
5	No Connection
6	GND
7	RX+
8	TX-
9	GND
Shell	GND

Size (w x d x h)

- 8.74" x 8.11" x 1.65" (222.0 x 206.0 x 41.91 mm)

Weight

- 3.3 lbs (1.5 kg)

Power (device only)

- 10-20W, 33W typical, 38W max, 72W max with USB-C power delivery to external devices

Environment

- Safe Operating Temperature Range: 0 to 40C (32 F 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)

[Click here](#)

For the most recent product specifications visit www.aja.com/products/io-ip/#techspecs

HDR



IPR-10G2-HDMI



SMPTE ST 2110 IP Video and Audio to HDMI Converter

The IPR-10G-HDMI is SMPTE ST 2110 to HDMI converter, with two 10 GigE ports to support hitless switching.

Suited for point-of-use applications including HD source monitoring, digital signage and video walls, the IPR-10G-HDMI decodes SMPTE ST 2110 streams and then formats the data for output on a full-size HDMI 1.4 interface. The audio associated with the video stream is extracted, synchronized, and then embedded into the HDMI signal as well as output on an analog RCA audio interface.

\$1,295 US MSRP

[Find a Reseller](#)

Features:

- Essence support: SMPTE ST 2110
- Supports HD
- 2x 10 GigE SFP+ Cages supporting hitless switching (SFPs not included)
- Network (LAN) control and status including Link/Activity light
- Quick network setup with AJA eMini-Setup software
- Full-size HDMI 1.4 video output
- Audio out available via embedded HDMI and analog RCA
- Full 10-bit pixel processing pipeline
- Rugged, fanless, portable design

IPR-10G2-SDI



SMPTE ST 2110 IP Video and Audio to SDI Converter

The IPR-10G2-SDI is SMPTE ST 2110 to SDI converter supporting with two 10 GigE ports to support hitless switching.

Suited for point-of-use applications including HD source monitoring, digital signage and video walls, the IPR-10G2-SDI decodes SMPTE ST 2110 streams and formats the data for 3G-SDI output. The audio associated with the video stream is extracted, synchronized, and then embedded into the SDI signal as well as output on an analog RCA audio interface.

\$1,295 US MSRP

[Find a Reseller](#)

Features:

- Essence support: SMPTE ST 2110
- Supports HD
- 2x 10 GigE SFP+ Cages supporting hitless switching (SFPs not included)
- Network (LAN) control and status including Link/Activity light
- Quick network setup with AJA eMini-Setup software
- 2 x 3G SDI BNC outputs 4:2:2 10-bits/pixel (single source mirrored)
- Audio out available via embedded SDI and analog RCA
- Full 10-bit pixel processing pipeline
- Rugged, fanless, portable design

IPR-10G2-HDMI

Tech Specs

Video Formats

- (HD) 1920x1080p 23.98, 24, 25, 29.97, 30, 50, 59.94, 60
- (HD) 1920x1080i 50, 59.94
- (HD) 1280x720p 50, 59.94, 60
- (SD) 625i 50
- (SD) 525i 59.94

Video Quality

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

Discovery, Registration and Control

- NMOS
- Ember Plus (no discovery, control only)

Media Transport Interfaces

- SMPTE ST 2110
 - 2 x 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 input
 - Dual channel input for hitless switching (based on SMPTE 2022-7)

Video Output Digital

- 1x HDMI Standard Type A connector
 - HDMI v1.4b 24/30-bits per pixel, RGB/YUV

Audio Output Digital

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

Audio Output Analog

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

Reference

- 1x BNC
 - Analog Color Black or HD tri-level sync
 - Reference input is terminated into 75 ohms

User Controls

- 1 x RJ-45 for 10/100/1000 Base-T Ethernet
 - Web and REST clients supported
- 1 x USB 2.0 Mini-B connector
 - AJA eMini-Setup of network parameters via local desktop computer

Size (w x d x h)

- 5.07" x 0.94" x 5.06" (128.8mm x 23.9mm x 128.4mm)

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% non-condensing
- Operating Altitude: <3,000 meters (<10,000 feet)

IPR-10G2-SDI

Tech Specs

Video Formats

- (HD) 1920x1080p 23.98, 24, 25, 29.97, 30, 50, 59.94, 60
- (HD) 1920x1080i 50, 59.94
- (HD) 1280x720p 50, 59.94, 60
- (SD) 625i 50
- (SD) 525i 59.94

Video Quality

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

Discovery, Registration and Control

- NMOS
- Ember Plus (no discovery, control only)

Media Transport Interfaces

- SMPTE ST 2110
 - 2 x 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 mWs per SFP+ cage

Video Input IP

- SMPTE ST 2110
 - Single channel input
 - Dual channel input for hitless switching (based on SMPTE 2022-7)

Video Output Digital

- 2 x 3G SDI BNC (single source, mirrored output)
 - 4:2:2 10-bits/pixel (embedded audio)

Audio Output Digital

- Up to 16-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
 - Analog Color Black or HD tri-level sync
 - Reference input is terminated into 75 ohms

User Controls

- 1 x RJ-45 for 10/100/1000 Base-T Ethernet
 - Web and REST clients supported
- 1 x USB 2.0 Mini-B connector
 - AJA eMini-Setup of network parameters via local desktop computer

Size (w x d x h)

- 5.07" x 0.94" x 5.06" (128.8mm x 23.9mm x 128.4mm)

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% non-condensing
- Operating Altitude: <3,000 meters (<10,000 feet)

[Click here](#)

For the most recent product specifications visit:
www.aja.com/products/ipr-10g2-sdi/#techspecs

[Click here](#)

For the most recent product specifications visit:
www.aja.com/products/ipr-10g2-sdi/#techspecs

HDR



IPT-1G-HDMI



HDMI Video and Audio to JPEG 2000 Converter

The IPT-1G-HDMI is HDMI to VSF TR-01 (and other JPEG 2000 formats) converter suited for video ingest from HDMI based cameras, routers and digital recorders and players and distribution across an IP network for feeding to IPR-1G-SDI, IPR-1G-HDMI, KONA IP or other VSF TR-01 compatible receivers.

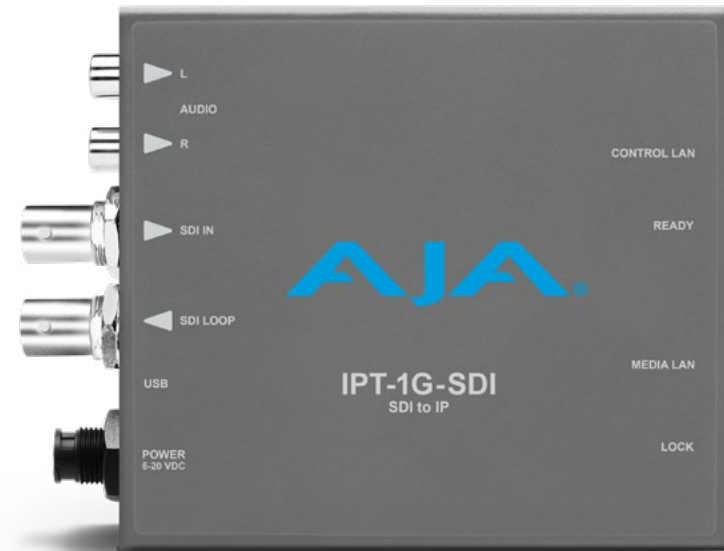
\$995 US MSRP

[Find a Reseller](#)

Features:

- 1x RJ-45 (IEC 60603-7) for 10/100/1000 Base-T Ethernet media input
- Essence support: VSF TR-01 and other JPEG 2000 MPEG-2 workflows
- Rugged, fanless, portable design
- Full-size HDMI 1.4 video input
- Audio input via embedded HDMI or analog RCA (selectable)
- Full 10-bit pixel processing pipeline
- Network (LAN) control and status
- Quick network setup with AJA eMini-Setup software

IPT-1G-SDI



3G-SDI Video and Audio to JPEG 2000 Converter

The IPT-1G-SDI is a 3G-SDI to VSF TR-01 (and other JPEG 2000 formats) converter suited for video ingest from SDI based cameras, routers and digital recorders and players and distribution across an IP network for feeding to IPR-1G-SDI, IPR-1G-HDMI, KONA IP or other VSF TR-01 compatible receivers.

\$995 US MSRP

[Find a Reseller](#)

Features:

- 1x RJ-45 (IEC 60603-7) for 10/100/1000 Base-T Ethernet media input
- Essence support: VSF TR-01 and other JPEG 2000 MPEG-2 workflows
- Rugged, fanless design
- 2x 3G-SDI BNC input with 4:2:2 10-bits/pixel
- Audio input via embedded 3G-SDI or analog RCA (selectable)
- Full 10-bit pixel processing pipeline
- Network (LAN) control and status
- Quick network setup with AJA eMini-Setup software

IPT-1G-HDMI

Tech Specs

Video Formats

- (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
- (HD) 1280 x 720p 50, 59.94, 60
- (SD) 625i 50
- (SD) 525i 59.94

Video Input Digital

- 1 x HDMI Standard Type A connector
 - HDMI v1.4a 24/30 bits per pixel, RGB/YUV

Audio Input Digital (user selectable)

- 2-Channel HDMI embedded audio, 24-bit per channel, 48 kHz synchronous

Audio Input Analog (user selectable)

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

Essence Output

- 1 x RJ-45 (IEC 60603-7) for 10/100/1000 Base-T Ethernet (IEEE 802.3-2012)
- VSF TR-01 and other JPEG 2000 MPEG-2 TS workflows

User Controls

- 1 x RJ-45 (IEC 60603-7) for 10/100/1000 Base-T Ethernet (IEEE 802.3-2012)
 - HTTP/1.1 (RFCs 7230, 7231, 7232, 7233, 7234, 7235)
 - Web and REST clients supported
- 1 x USB 2.0 Mini-B (IEC 62680-1) connector
 - AJA eMini-Setup of network parameters

Size (w x d x h)

- 5.53 x 4.48 x 0.954 (140.46 x 113.79 x 24.23 mm)

Weight

- 0.6 lb (0.3 kg)

Power

- Uses AJA power supply model DWP-U-R1, included with purchase
- 100-240V, 50/60 Hz Universal input
- +5 to 20V DC regulated, 12 watts max

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)

IPT-1G-SDI

Tech Specs

Video Formats

- (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
- (HD) 1280 x 720p 50, 59.94, 60
- (SD) 625i 50
- (SD) 525i 59.94

Video Input Digital

- 1 x 3G SDI BNC
 - 4:2:2 10-bits/pixel
- 1 x 3G SDI BNC loop through

Audio Input Digital (user selectable)

- 2-Channel SDI embedded audio, 24-bit per channel, 48 kHz synchronous

Audio Input Analog (user selectable)

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

Essence Output

- 1 x RJ-45 (IEC 60603-7) for 10/100/1000 Base-T Ethernet (IEEE 802.3-2012)
- VSF TR-01 and other JPEG 2000 MPEG-2 TS workflows

User Controls

- 1 x RJ-45 (IEC 60603-7) for 10/100/1000 Base-T Ethernet (IEEE 802.3-2012)
 - HTTP/1.1 (RFCs 7230, 7231, 7232, 7233, 7234, 7235)
 - Web and REST clients supported
- 1 x USB 2.0 Mini-B (IEC 62680-1) connector
 - AJA eMini-Setup of network parameters

Size (w x d x h)

- 5.53" x 4.48" x 0.954" (140.46 x 113.79 x 24.23 mm)

Weight

- 0.6 lb (0.3 kg)

Power

- Uses AJA power supply model DWP-U-R1, included with purchase
- 100-240V, 50/60 Hz Universal input
- +5 to 20V DC regulated, 12 watts max

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)

[Click here](#)

For the most recent product specifications visit:
www.aja.com/products/ipt-1g-hdmi/#techspecs

[Click here](#)

For the most recent product specifications visit:
www.aja.com/products/ipt-1g-sdi/#techspecs



IPR-1G-HDMI



JPEG 2000 IP Video and Audio to HDMI Converter

The IPR-1G-HDMI is a VSF TR-01 (and other JPEG 2000 formats) to HDMI converter suited for point-of-use applications including source monitoring, digital signage, and video walls. The IPR-1G-HDMI decodes VSF TR-01 JPEG 2000 streams then formats the data for output on a full-size HDMI 1.4 interface. The audio associated with the video stream is extracted, synchronized, and then embedded into the HDMI signal as well as output on an analog RCA audio interface.

\$795 US MSRP*

[Find a Reseller](#)

Features:

- 1x RJ-45 (IEC 60603-7) for 10/100/1000 Base-T Ethernet media input
- Essence support: VSF TR-01 and other JPEG 2000 MPEG-2 workflows
- Rugged, fanless, portable design
- Full-size HDMI 1.4 video output
- Audio out available via embedded HDMI and analog RCA
- Full 10-bit pixel processing pipeline
- Network (LAN) control and status
- Quick network setup with AJA eMini-Setup software

IPR-1G-SDI



JPEG 2000 IP Video and Audio to 3G-SDI Converter

The IPR-1G-SDI is a VSF TR-01 (and other JPEG 2000 formats) to 3G-SDI converter suited for point-of-use applications including source monitoring, digital signage, and video walls. The IPR-1G-SDI decodes VSF TR-01 streams then formats the data for 3G-SDI output. The audio associated with the video stream is extracted, synchronized, and then embedded into the SDI stream as well as output on an analog RCA stereo interface.

\$795 US MSRP*

[Find a Reseller](#)

Features:

- 1x RJ-45 (IEC 60603-7) for 10/100/1000 Base-T Ethernet media input
- Essence support: VSF TR-01 and other JPEG 2000 MPEG-2 workflows
- Rugged, fanless design
- 2x 3G-SDI BNC output with 4:2:2 10-bits/pixel
- Audio out available via embedded 3G-SDI and analog RCA
- Full 10-bit pixel processing pipeline
- Network (LAN) control and status
- Quick network setup with AJA eMini-Setup software

IPR-1G-HDMI

Tech Specs

Video Formats

- (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
- (HD) 1280 x 720p 50, 59.94, 60
- (SD) 625i 50
- (SD) 525i 59.94

Essence Input

- 1 x RJ-45 (IEC 60603-7) for 10/100/1000 Base-T Ethernet (IEEE 802.3-2012)
- VSF TR-01 and other JPEG 2000 MPEG-2 Workflows

Outputs

- 1 x HDMI Standard Type A connector
 - HDMI v1.4a 24/30 bits per pixel, RGB/YUV
- 2 x RCA analog audio
 - Levels at -10 dBu (nominal)

User Controls

- 1 x RJ-45 (IEC 60603-7) for 10/100/1000 Base-T Ethernet (IEEE 802.3-2012)
 - HTTP/1.1 (RFCs 7230, 7231, 7232, 7233, 7234, 7235)
 - Web and REST clients supported
- 1 x USB 2.0 Mini-B (IEC 62680-1) connector
 - AJA eMini-Setup of network parameters

Size (w x d x h)

- 5.53" x 4.48" x 0.954" (140.46 x 113.79 x 24.23 mm)

Weight

- 0.6 lb (0.3 kg)

Power

- Uses AJA power supply model DWP-U-R1, included with purchase
- 100-240V, 50/60 Hz Universal input
- +5 to 20V DC regulated, 12 watts max

Environment

- Safe Operating Temperature: 0 to 40 degrees C (32 to 104 degrees F)
- Safe Storage Temperature (Power OFF): -40 to 60 degrees C (-40 to 140 degrees F)
- Operating Relative Humidity: 10-90% noncondensing
- Operating Altitude: <3,000 meters (<10,000 feet)

IPR-1G-SDI

Tech Specs

Video Formats

- (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
- (HD) 1280 x 720p 50, 59.94, 60
- (SD) 625i 50
- (SD) 525i 59.94

Essence Input

- 1 x RJ-45 (IEC 60603-7) for 10/100/1000Base-T Ethernet (IEEE 802.3-2012)
- VSF TR-01 and other JPEG 2000 MPEG-2 TS workflows

Outputs

- 2 x 3G SDI BNC
 - 4:2:2 10-bits/pixel (embedded audio)
- 2 x RCA analog audio
 - Levels at -10 dBu (nominal)

User Controls

- 1 x RJ-45 (IEC 60603-7) for 10/100/1000Base-T Ethernet (IEEE 802.3-2012)
 - HTTP/1.1 (RFCs 7230, 7231, 7232, 7233, 7234, 7235)
 - Web and REST clients supported
- 1 x USB 2.0 Mini-B (IEC 62680-1) connector
 - AJA eMini-Setup of network parameters

Size (w x d x h)

- 5.53" x 4.48" x 0.954" (140.46 x 113.79 x 24.23 mm)

Weight

- 0.6 lb (0.3 kg)

Power

- Uses AJA power supply model DWP-U-R1, included with purchase
- 100-240V, 50/60 Hz Universal input
- +5 to 20V DC regulated, 12 watts max

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)

[Click here](#)

For the most recent product specifications visit:
www.aja.com/products/ipr-1g-hdmi/#techspecs

[Click here](#)

For the most recent product specifications visit:
www.aja.com/products/ipr-1g-sdi/#techspecs

HDR



Three Year Warranty

AJA Video warrants that KONA IP and Io IP will be free from defects in materials and workmanship for a period of three years from the date of purchase.

Five Year Warranty

AJA Video warrants that Converter products will be free from defects in materials and workmanship for a period of Five years from the date of purchase.

About AJA Video Systems, Inc.

Since 1993, AJA Video has been a leading manufacturer of video interface and conversion solutions, bringing high quality, cost effective digital video products to the professional, broadcast and postproduction markets.

AJA products are designed and manufactured at our facilities in Grass Valley, California, and sold through an extensive sales channel of resellers and systems integrators around the world. For further information, please see our website at www.aja.com