

AVIP-J1G-EN-WP

JPEG2000 4K60 AV over IP 1GbE Encoder (Wall-plate) with KVM Function

FEATURE:

- HDCP 2.2 and DP 1.2 compliant
- Support 18Gbps video bandwidth
- Input and output video resolution is up to 4K60 4:4:4, as specified in HDMI 2.0b
- Signal transmission distance can be extended up to 328ft/100m via CAT6/6A/7 cable
- Transmit video, analog audio, RS-232, CEC and USB signal over
- Ethernet
- Support USB 2.0 and KVM function
- US 2-Gang wall-plate
- With HDMI and USB-C dual inputs, supporting auto switching (switch to the corresponding signal input channel automatically when the signal source is connected and detected) and manual switching modes
- The USB-C 1 port supports video/audio/USB data transmission and power charging to USB-C source device by USB-C adapter connected to the USB-C 2 port
- Audio embedding and de-embedding are supported
- Dante AV-A mode is supported if license activated
- Support unicast and multicast functions
- Support point-to-point, video matrix and video wall functions (video wall supports up to 9x9)
- Intelligent video wall class management
- Built-in MJPEG Substream for video real-time preview on portable devices
- Support 1G Ethernet Switch, router and hub devices transmission
- Standard PoE (802.3at PD device) or local 12V power supply
- Built-in web page configuration and control, Telnet and SSH as well
- Support HDR10, Dolby Vision, HLG bypass
- Audio formats: LPCM 2.0/5.1/7.1CH, Dolby Digital/Plus/EX, Dolby True HD, Dolby Atmos, DTS, DTS-96/24, DTS-EX DSD, DTS High Res, DTS-HD Master, DTS:X
- Flexible control via Web GUI/TCP/RS-232 and third-party central control
- Smart networking design for easy and flexible installation



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This 4K60 AV over IP 1GbE Encoder (Wall-plate) is based on JPEG2000 technology, and uses ASPEED AST1530 for image codec and low-latency KVM applications. It features HDMI and USB-C dual input, with a video resolution of up to 4K60 4:4:4. This product supports audio embedding and de-embedding function, as well as USB 2.0/KVM/Camera, 1G Ethernet, bi-directional RS-232 (pass-through & Guest mode) and PoE function. Guest mode controls of RS-232 and CEC are supported. Dante AV-A mode is supported if the product is license activated.

Built-in MJPEG Sub stream which supports plenty API commands to achieve flexible configurations is useful for 3rd party control Apps to preview video content.

The system is based on Linux for software development, provides flexible control methods, and can realize intelligent networking based on Gigabit Ethernet Switch.



AV over IP

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SPECIFICATIONS:

Technical

HDMI Compliant	HDMI 2.0b	
HDCP Compliant	HDCP 2.2	
Video Bandwidth	18Gbps	
USB Bandwidth	480Mbps	
Video Compression Standard	JPEG2000	
Video Network Bandwidth	1G	
Input Video Resolution	640x480p60Hz, 800x600p60Hz, 1024x768p60Hz, 1280x1024p60Hz, 1360x768p60Hz, 1440x900p60Hz, 1440x1050p60Hz, 1600x1200p60Hz, 720x480i59.94Hz(480i59), 720x480p59.94Hz(480p59), 720x576i50Hz(576i50), 720x576p50Hz(576p50), 1280x720p50Hz(720p50), 1280x720p59.94Hz(720p59), 1280x720p60Hz(720p60), 1920x1080i50Hz(1080i50), 1920x1080i59.94Hz(1080i59), 1920x1080i60Hz(1080i60), 1920x1080p23.98Hz(1080p23), 1920x1080p24Hz(1080p24), 1920x1080p25Hz(1080p25), 1920x1080p29.97Hz(1080p29), 1920x1080p30Hz(1080p30), 1920x1080p50Hz(1080p50), 1920x1080p59.94Hz(1080p59), 1920x1080p60Hz(1080p60), 3840x2160p23.98Hz(2160p23), 3840x2160p24Hz(2160p24), 3840x2160p25Hz(2160p25), 3840x2160p29.97Hz(2160p29), 3840x2160p30Hz(2160p30), 3840x2160p50Hz(2160p50), 3840x2160p59.94Hz(2160p59), 3840x2160p60Hz(2160p60), 4096x2160p23.98Hz, 4096x2160p24Hz, 4096x2160p25Hz, 4096x2160p29.97Hz, 4096x2160p30Hz, 4096x2160p50Hz, 4096x2160p59.94Hz, 4096x2160p60Hz	
Output Video Resolution	Depends on the optional decoder	
Color Depth	Input: 8/10/12-bit, 8-bit (4K60Hz 4:4:4) Output: 8-bit	
Color Space	RGB, YCbCr 4:4:4 / 4:2:2. YUV 4:2:0	
Transmission Distance	100M (CAT6/6A/7)	
Audio Formats	LPCM 2.0/5.1/7.1CH, Dolby Digital/Plus/EX, Dolby True HD, Dolby Atmos, DTS, DTS-96/24, DTS-EX DSD, DTS High Res, DTS-HD Master, DTS:X	
Analog Input/Output Audio Parameters	Input / Output Impedance	>=10k ohms/330 ohms
	Line Input / Output Level (Maximum)	1Vrms/1Vrms
	Frequency Response	(+0.5dB, -1dB) 20Hz ~ 20kHz
	Audio Output Sync Delay	TBD
	Audio S/N Ratio	>90dB@ HDMI 0dB, 1kHz A-weighted
Audio THD+N	<0.05%@ HDMI 0dB, 1kHz	
ESD Protection	IEC 61000-4-2: ±15kV (Air-gap discharge) & ±8kV (Contact discharge)	

Connection

Encoder	Input: 1x HDMI IN[HDMI Type A, 19-pin female] 2x USB-C IN [USB Type C, 24-pin female] 1x AUDIO IN [3pin-3.5mm Phoenix connector] Output: 1x AUDIO OUT [3pin-3.5mm Phoenix connector] Control: 1x RS-232 [3pin-3.5mm Phoenix connector] 1x LAN (PoE) [RJ45 jack] 1x USB 2.0 HOST [USB Type B, 4-pin female] 2x USB 2.0 DEVICE [USB Type-A, 4-pin female]
Decoder (Can work with any decoder of the same series)	Input: 1x SPDIF IN[Optical audio connector] 1x L/R AUDIO IN [3-pin 3.81mm Phoenix connector] Output: 1x HDMI OUT [Type A, 19-pin female] 1x L/R AUDIO OUT [3-pin 3.81mm Phoenix connector] Control: 1x RS-232 [3.81mm Phoenix connector] 1x LAN (POE) [RJ45 jack] 1x FIBER [Optical fiber slot] 2x USB 1.1 DEVICE [Type-A, 4-pin female] 2x USB 2.0 DEVICE [Type-A, 4-pin female] 2x RELAYS [3.81mm Phoenix connector] 2x DIGITAL IO [3.81mm Phoenix connector] 1x IR IN [3.5mm audio Jack] 1x IR OUT [3.5mm audio Jack]

Mechanical

Housing	Encoder: Aluminum panel + Iron case Decoder: Metal enclosure
Color	Encoder: White panel + Black case Decoder: Black
Dimensions	Encoder: 115.9mm [W] x 114.3mm [H] x 44.25mm [D] Decoder: 204mm [W] x 136mm [D] x 25.5mm [H]
Weight	Encoder: 350g Decoder: 626g
Power Supply	Input: AC100 - 240V 50/60Hz, Output: DC 12V/2.5A (US/EU standards, CE/FCC/UL certified)
Power Consumption	Encoder: 12W (Max.) Decoder: 7.08W (Max.)
Operating Temperature	32 - 104°F / 0 - 40°C
Storage Temperature	-4 - 140°F / -20 - 60°C
Operating Humidity	20% - 80% (relative humidity, no condensing)
Storage Humidity	10% - 90% (relative humidity, no condensing)

Video Resolution

HDMI Cable Length (HDMI IN/OUT)	4K60 16ft/5M	4K30 32ft/10M	1080P60 50ft/15M
The use of "Premium High Speed HDMI" cable is highly recommended.			