

## AVP 2K Series

1080P HDMI over IP with KVM Encoder/Decoder/IP Controller/VideoWall Processor

### ● Product Overview

aegis 1080P over IP includes H.264 IP encoder (AVP-EN2K-101), decoder (AVP-DE2K-101), IP controller (AVP-CBS2K-101) and Video Wall Processor (AVP-CBS2VW-100) work together to provide complete end-to-end streaming systems. Video, audio, IR, USB and RS232 signals can be routed together or separately throughout the matrix system. They can also function video wall up to the dimensions of 16 x 16 with input and output HDMI resolutions supported up to 1920 x 1080@60Hz. This system required 1G switch and powered through PoE. The system offers flexibility of purchasing or adding functions as the encoder and decoder can perform simple matrix, adding IP controller for Web-control and adding VideoWall IP processor for video wall and multiview. They provides simple, flexible control options, including RS232, IP control box (AVP-CBS2-101), Windows software HDMIOverIPConsole (for system configuration), iPad software AGS-i Touch and Windows software MaintainTool (for firmware upgrade). Moreover, the decoder supports CEC/RS232 control to realize power on and off control on displays. These systems provide the best solutions for conference rooms, shopping malls, hotels, monitoring centers, schools and corporate training environments, etc.

### ● Features

#### Hardware

- Stream HDMI/RS232/IR/USB/ HID signal over IP networks.
- Encoder supports resolutions up to 1920 x 1080@60Hz.
- Decoder offers auto scaler with output resolutions supported from 480p@60Hz to 1920 x 1080@60Hz scaling based on the EDID of display.
- Able to output two IP streams.
  - One large IP stream supports streaming resolution from 480p@60Hz to 1920 x 1080@60Hz to view a video on the decoder side.
  - The other small one supports streaming resolution 360 x 240@15Hz to easily preview a video on a third party device (e.g. tablet).
- Support video wall up to the dimensions of 16 x 16.
- Available API interface for third party control system integration, offering control through IP control box (AVP-CBS2-101), PC configurator (HDMIOverIPConsole) and AGS-i Touch on iPad.
- Support audio de-embedding output.
- Support RS232 pass-through between encoder and decoder, or between IP control box and encoder/decoder.
- Support IR pass-through between encoder and decoder, as well as IR pass-through from IP control box to encoder/decoder in global cache IR format.
- Support USB (keyboard/mouse only) pass-through from decoder to encoder.
- Allow video, audio, IR, USB and RS232 signals to be routed together or separately.
- Can work at multicast mode or unicast mode (configuration on network switch is not required in unicast mode).
- Support EDID import to encoder and EDID export from display to decoder.
- Support CEC one-touch-play and standby commands to power on and off the display.
- Decoder can turn off the output through API when no source is detected.
- Decoder can receive CEC commands from the display and report them to IP control box.
- Support HDCP.
- Configurable encoding bit rate up to 30 Mbps.
- Support fast and seamless switching.
- Support firmware upgrade through Maintain Tool.
- Supports PoE to be powered by power source equipment.
- Support Auto IP (zeroconf) -- automatically generates a dynamic IP address at startup in the absence of a DHCP server.
- Support communications protocols such as HTTP, TCP/IP, Telnet, UDP and IGMP.

#### Management

- IP control via LAN (Web GUI & Telnet) and a third party controller
- Features two Ethernet ports and two RS232 ports
- Discover encoders and decoders automatically
- Supports matrix switching between encoders and decoders






- Compatible with the configuration file from PC configurator to quickly perform operations on encoders and decoders, such as matrix and video wall
- Web configuration page


## IP Video Wall Processor / Windowing

- Decodes up to 6 video streams from multiple encoders and supports window roaming to H.264 decoders and a single display.
- Supports input streaming resolutions up to 1920x1080P@60Hz.
- 2-way RS-232 between the display and the controller system.
- Supports CEC one-touch-play and standby commands to power on/off the display.
- Supports auto IP/DHCP/Static IP.
- Supports Telnet/Multicast/HTTP/FTP.
- Ease to use with aegis IP Touch.
- Supports one HDMI output.
- Built-in Auto Scaler.
- Supports PoE

## Product Specifications

Product Model		AVP-EN2K-101	AVP-DE2K-101	AVP-CBS2VW-100
Product Name		1080P over IP Encoder	1080P over IP Decoder	IP VideoWall Processor
Product Image				
<b>Video</b>	Input Port	1 x HDMI	1 x LAN	1 x LAN
	Input Type	HDMI 1.3, HDCP 1.4	H.264	H.264/MPEG-4 AVC
	Input Resolutions	From 480p@60Hz to 1920x1080@60Hz	From 480p@60Hz to 1920x1080@60Hz	up to 1080p@60Hz
	Input Signal	0.5~1.2V p-p		
	Output Port	1 x LAN	1 x HDMI	1 x HDMI
	Output Type	H.264, MJPEG	HDMI 1.3, HDCP 1.4	HDMI
	Output Resolution	*Large IP stream: from 480p@60Hz to 1920x1080@60Hz *Small IP stream: 360x240@15Hz	from 480p@60Hz to 1920x1200@60Hz	HDMI: Up to 1080P@60Hz IP Stream: Up to 1080P@60Hz
	Encoding Data Rate	*Large IP stream: Up to 30 Mbps, configurable *Small IP stream: 512 Kbps by default, configurable		
	End-to-End Time Latency	When works with the decoder: *About 80 ms (Low latency mode, from TX to RX) *About 250 ms (High quality mode, from TX to RX)	When works with encoder: *About 80 ms (Low latency mode, from TX to RX) *About 250 ms (High quality mode, from TX to RX)	
	Impedance	100Ω	100Ω	
	Input DDC Signal	5V p-p(TTL)		
<b>Audio</b>	Input Port	1 x HDMI	1 x LAN	
	Input Format	LPCM/MPEG4 AAC stereo	LPCM/MPEG4 AAC stereo	
	Output Port	1 x Phoenix connector; 1 x LAN	1 x Phoenix connector; 1 x HDMI	3-Pin Phoenix Female Connector
	Output Format	Stereo	Stereo	Stereo, unbalanced
<b>KVM</b>	Port	USB Host-B type x 1	USB A type x 2	
<b>General</b>	Control Method	IP Control Box , PC configurator (HDMI over IP Console), iPad software	Front panel button, IP Control Box, PC configurator (HDMI over IP Console), iPad software	Windows PC configurator, AGS-i Touch on iPad and IP control box
	ESD Protection	Human body model: *±8kV (air-gap discharge) / *±4kV (contact discharge)	Human body model: ±8kV (air-gap discharge) / ±4kV (contact discharge)	Human-body Model: ±8kV (Air-gap discharge)/ ±4kV (Contact discharge)
	Surge Protection	Voltage: ±1kV	Voltage: ±1kV	
	Power Supply	12 V 1A DC	12 V 1A DC	DC 12V 1A
	Power Consumption	6W (Max.)	6W (Max.)	8.3W
<b>Physical</b>	Product Dimension	(L) 6.9in X (W) 0.98in X (H) 3.94in (175mm X 25mm X 100.2mm)	(L) 6.9in X (W) 0.98in X (H) 3.94in (175mm X 25mm X 100.2mm)	(L)8.7in X (W) 1in X (H) 5.1in (220mm X 25mm X 130.2mm)
	Product Weight	0.50kg / 1.1lbs	0.50kg / 1.1lbs	0.78kg/1.72lb
<b>Environmental</b>	Operation Temperature	+32°F ~ - 113°F (0°C - 45°C)	32°F - 113°F (0°C - 45°C)	32°F - 113°F (0°C - 45°C)
	Storage Temperature	-4°F ~ - 140°F (-20°C - 70°C)	-4°F - 140°F (-20°C - 70°C)	-4°F - 158°F (-20°C - 70°C)
	Humidity	10% - 90% (Non-Condensing)	10% - 90% (Non-Condensing)	10% to 90%, non-condensing



<b>Product Number</b>		<b>AVP-CBS2K-101</b>
<b>Product Name</b>		<b>IP Controller</b>
<b>Product Image</b>		
<b>Technical</b>	I/O Connections	1 x LAN1 (AV/POE)(10/100Mbps) 1 x LAN2 (C)(10/100Mbps) 2 x RS232
	LED	1 x STATUS LED 1 x POWER LED
	Button	1 x RESET Button
	Control Method	LAN (Web GUI & Telnet), RS232 and a third party controller
<b>General</b>	Power Supply	12 VDC 1A
	Power Consumption	4.5W Max. (without outputting 12 V 0.5 A using RS232port) 10.5W Mas. (with outputting 12 V 0.5 A using RS232 port)
	Surge Protection	Voltage: ±1000V
	ESD Protection	Human body model: ±8kV (air-gap discharge) / ±4kV (contact discharge)
<b>Physical</b>	Product Dimension	(L) 3.67in X (W) 1.02in X (H) 5.4in (93.2mm X 26mm X 138.7mm)
	Product Weight	0.38kg/0.84lbs (without accessories)
	Package Dimension	(L)6.69in X (W)3.15in X (H) 9.84in (170mm X 80mm X 250mm)
<b>Environmental</b>	Operation Temperature	32°F - 113°F (0°C - 45°C)
	Storage Temperature	-4°F - 140°F (20°C - 70°C)
	Humidity	20% - 90% (Non-Condensing)

