



# AV OVER IP 4K30 DECODER

## AVP-DE4K-101 Datasheet

### INTRODUCTION

Aegis' 4K over IP series includes JPEG2000 encoder (AVP-EN4K-101), decoder (AVP-DE4K-101), and IP controller (AVP-Controller Box), which can provide complete point-to-point streaming system functions. In the matrix system, audio, video, IR, USB and RS232 can be transmitted via the network; the video wall size is up to 16 x 16 with a maximum resolution of 4K @60Hz 4:2:0 or 4K@30Hz 4:4:4. The system uses a 1G managed switch with PoE power supply. This solution allows for easy system expansion and flexibility in future planning. 4K over IP provides a variety of control options, including RS232, IP controller (AVP-CBS2K-101), Console (for system settings), DIP switch control, Web, and iPad application AGS-i Touch. The necessary equipment can be purchased according to the project needs and budget control, so there is also flexibility in cost control. In addition, the decoder supports CEC/RS232 control, which can directly control the power on and off of the display or screen. Aegis' 4K over IP has become the best audio and video transmission solution for many conference rooms, shopping malls, hotels, monitoring centers, schools and corporate training environments.

### FEATURES

- ✔ Supports HDMI 1.4; HDCP 2.2
- ✔ Transmit HDMI/RS232/IR(Far Infrared)/USB signals through IP network
- ✔ Decoder supports resolution up to 4K Range from 480p@60Hz to 4K @30Hz
- ✔ Supports a video wall up to 16 x 16
- ✔ Supports USB 2.0 KVM function from decoder to encoder (keyboard/mouse/touch screen only) and achieve cross-host roaming
- ✔ Support Audio output (Analog Audio)
- ✔ Support EDID Export
- ✔ Support DIP switch control
- ✔ Supports CEC one-touch-play and standby commands to power on and off the display
- ✔ Supports seamless switching
- ✔ Supports PoE power supply function
- ✔ Supports Auto IP (zero configuration) - this product can automatically generate an IP address when not connected to a DHCP server
- ✔ Supports HTTP, TCP/IP, Telnet, UDP, IGMP and other communication protocols
- ✔ Provides API Command to facilitate the integrated management of third-party control systems and supports IP controller (AVP-CBS2K-101) and PC configurator (Console). ) and the application AGS-i Touch on iPad and other control methods
- ✔ Support Dual IP Stream
  - Main Stream output from 480p@60Hz to 4K@30Hz resolution
  - Sub Stream output to Console or third-party device pre-view , Resolution of 360x240@15Hz



## AVP-DE4K-101 Specification

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Video Input Port        | 1 x RJ45                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| HDMI Input              | HDMI 1.4, HDCP2.2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Video Input Resolution  | 3840 x 2160p@24Hz 4:4:4, 3840 x 2160p@30Hz 4:4:4, 3840 x 2160p@50Hz 4:2:0, 3840 x 2160p@60Hz 4:2:0, 640 x 480p@60Hz, 720 x 480p@60Hz, 1280 x 720p@60Hz, 1920 x 1080i@60Hz, 1920 x 1080p@60Hz, 720 x 576p@50Hz, 1280 x 720p@50Hz, 1920 x 1080i@50Hz, 1920 x 1080p@50Hz, 1920 x 1080p@24Hz, 1920 x 1080p@25Hz, 640 x 480@60Hz, 800 x 600@60Hz, 1024 x 768@60Hz, 1280 x 720@60Hz, 1280 x 768@60Hz, 1280 x 800@60Hz, 1280 x 960@60Hz, 1280 x 1024@60Hz, 1360 x 768@60Hz, 1366 x 768@60Hz, 1400 x 1050@60Hz, 1440 x 900@60Hz, 1600 x 900@60Hz, 1600 x 1200@60Hz, 1680 x 1050@60Hz, 1920 x 1080@60Hz, 1920 x 1200@60Hz |
| Video Output Port       | 1 x HDMI                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Video Output Resolution | 3840 x 2160p@24Hz 4:4:4, 3840 x 2160p@30Hz 4:4:4, 3840 x 2160p@50Hz 4:2:0, 3840 x 2160p@60Hz 4:2:0, 640 x 480p@60Hz, 720 x 480p@60Hz, 1280 x 720p@60Hz, 1920 x 1080i@60Hz, 1920 x 1080p@60Hz, 720 x 576p@50Hz, 1280 x 720p@50Hz, 1920 x 1080i@50Hz, 1920 x 1080p@50Hz, 1920 x 1080p@24Hz, 1920 x 1080p@25Hz, 640 x 480@60Hz, 800 x 600@60Hz, 1024 x 768@60Hz, 1280 x 720@60Hz, 1280 x 768@60Hz, 1280 x 800@60Hz, 1280 x 960@60Hz, 1280 x 1024@60Hz, 1360 x 768@60Hz, 1366 x 768@60Hz, 1400 x 1050@60Hz, 1440 x 900@60Hz, 1600 x 900@60Hz, 1600 x 1200@60Hz, 1680 x 1050@60Hz, 1920 x 1080@60Hz, 1920 x 1200@60Hz |
| Audio Input             | 1 x RJ45                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Audio Output            | 1 x HDMI, 1 x 3.5 mm stereo jack,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Data Rate               | 3840 x 2160@30Hz: 250Mbps (avg) / 300Mbps (max)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| End-to-End Time Latency | 1 ~ 2fps                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Impedence               | 100Ω                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Input DDC Signal        | 5V p-p(TTL)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| IR function             | 20-60KHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| RS232 function          | Up to 115200                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Power Supply            | DC 12V1A / PoE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Power Consumption       | 7 W - Max.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| ESD Protection          | Human body model:<br>±8kV (air-gap discharge)<br>±4kV (contact discharge)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Surge Protection        | Voltage: ±1kV                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Operating Temperature   | 0°C ~ 45°C / 32°F ~ 104°F                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Storage Temperature     | -20°C ~ 70°C / -4°F ~ 140°F                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Humidity                | 10~90% RH (non-condensing)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Dimension               | 130.2 x 220 x 25mm (W x L x D)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Weight                  | 740g                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

