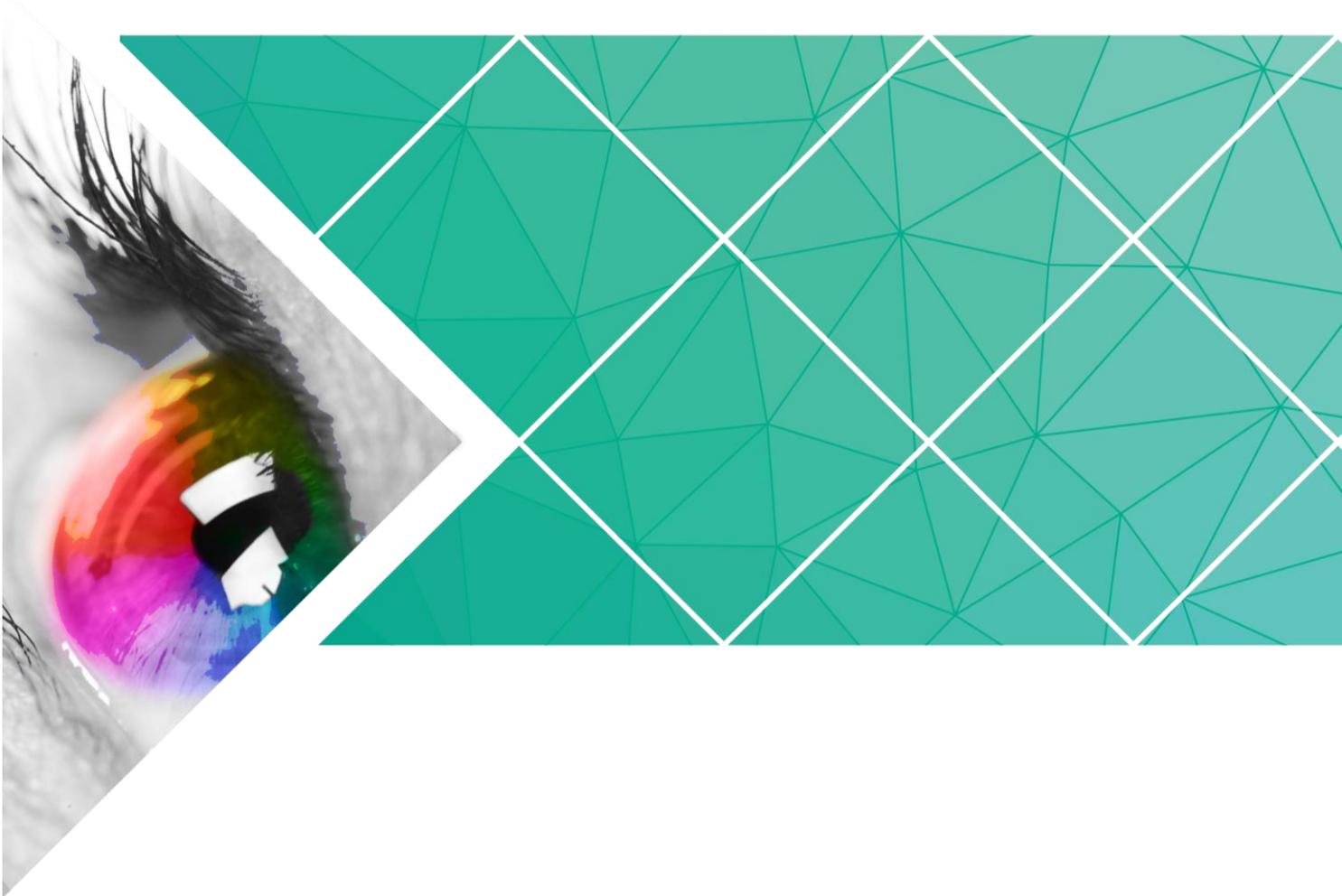


# UVP Series Video Wall Splicers



## Specifications

# 1 Introduction

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The UVP Series is the newest generation of video wall splicers, featuring excellent image quality and designed especially for fine-pitch LED screens. The UVP Series can work as splicing processors that integrate both video processing and video control capabilities, or work as pure splicing processors. The whole unit adopts a modular and plug-in design, and allows for flexible configuration and hot swapping of input and output cards. Thanks to excellent features and stable performance, the UVP Series can be widely used in a variety of applications, such as energy and power, judicial departments and prisons, military command, water conservancy and hydrology, meteorologic earthquake prediction, enterprise management, metallurgy of steel, banking and finance, national defense, public security traffic management, exhibitions and presentations, production scheduling, radio and television, educational and scientific research, as well as stage rental applications.

Based on the powerful hardware FPGA system architecture, with a modular and plug-in design, the UVP Series features a stable and highly efficient pure hardware architecture, and provides a variety of connector modules for flexible and personalized configuration, allowing for easy maintenance and low failure rate. The UVP Series provides industry-standard input connectors, including HDMI, DVI, DP, VGA, CVBS, SDI and IP, and supports 10-bit video source input and processing, as well as 4K high-definition inputs and outputs. The UVP Series also provides two kinds of LED 4K sending cards, allowing for the backup between the OPT ports and Ethernet ports as well as ultra-long distance transmission. Moreover, the UVP Series supports multi-screen and multi-layer management, input and output EDID management and monitoring, input source renaming, BKG and OSD settings and more, bringing you a rich image construction experience.

In addition, the UVP Series adopts the B/S architecture and supports cross-platform, cross-system access and control without the need to install an application program. On a Windows, Mac, iOS, Android or Linux platform, online collaboration of multiple users is supported and the Web page response speed is very fast, which greatly improves on-site setup efficiency. What's more, the UVP Series supports online firmware update, allowing for easy hardware update on a PC.

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# 2 Features

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## Modular and plug-in design, free combination at your will

- Two kinds of LED 4K sending cards
  - H\_20xRJ45 sending card loads up to 13,000,000 pixels.
  - H\_16xRJ45+2xfiber sending card loads up to 10,400,000 pixels and provides two OPT ports that copy the outputs on Ethernet ports.
- Multi-capacity configuration on a single card slot
  - 4x 1920x1080@60Hz
  - 2x 3840x1080@60Hz
  - 1x 4096x2160@60Hz
- Simple screen configuration using a single card and connector
- Online status monitoring of all input and output cards
- Hot-swappable input and output cards
- IP camera inputs with the maximum resolution of 3840x2160@30Hz and input mosaic.
- Auto decryption of HDCP-encrypted sources
- Decimal frame rates supported
- HDR10 and HLG processing

## Multi-screen management for centralized control

- Each screen can have its output resolution.
- Output mosaic  
Adopts the frame synchronization technology, ensuring all the output connectors output the image synchronously. The image is complete and played smoothly, without any stuck, frame loss, tearing or piecing.
- Irregular screen configuration  
Supports irregular rectangle mosaic without any limitations.
- Input source grouping management
- Eye saver mode  
Display the image in a warmer but less bright way to relieve eye strain.
- LCD bezel compensation

## Diverse display possibilities for flexible configuration

- Multi-layer display
  - A single card supports 16x 2K layers, 8x DL layers or 4x 4K layers.
  - All layers support cross-connector output and the layer quantity is not reduced for cross-connector output.
- High-definition scrolling text

Customize the scrolling text content, such as slogans or notification messages, and set the text style, scrolling direction and speed.
- Up to 2,000 presets

Fade effect and seamless switching supported, less than 60ms preset switching duration
- Scheduled playback of preset playlist

Set whether to add the presets to playlist, which is ideal for monitoring, exhibitions, presentations, and other applications.
- OSD settings on a single screen and adjustable OSD transparency
- BKG settings

BKG images do not occupy the layer resources.  
The max. width and height of a BKG image is up to 15K and 8K respectively.
- Channel logo management

Set a text or image logo for identifying the input source.
- Input source cropping and renaming after cropping

Crop any input source image and form a new input source after cropping.
- HDR and 10-bit video processing, allowing for a more exquisite and clear image
- Color adjustment

Output connector color and screen color adjustable, including the brightness, contrast, saturation, hue and Gamma
- XR scenario control
- 3D function

Work with the 3D emitter - EMT200 to enjoy the 3D visual effect.
- Low latency

Reduce the latency from the input source to the receiving card to as low as 1 frame.

## Web-page control, easy, friendly and convenient

- Web control

Real-time response and 1000M/100M self-adaptive network control, allowing for multi-user collaboration
- Monitoring of inputs and outputs on Web page
- Firmware update on Web page
- Ark Visualized Management and Control Platform app control on pad device

## Status monitoring and redundant power supply for better stability and reliability

- Self-test for fault detection
- Auto monitoring and alarms

Supports hardware monitoring, such as fan rotation speed, module temperature and voltage, running status, and sends fault alarms if necessary.

- Supports an optional power supply for higher system reliability.
- Backup design
  - Backup between devices
  - Backup between LED 4K sending cards

# 3 Appearance

## Front Panel



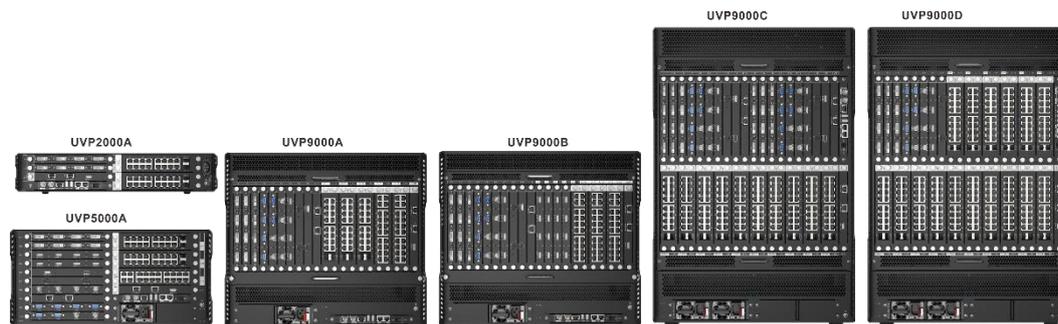
\*The picture shown is for illustration purpose only. Actual product may vary due to product enhancement.

### Notes:

- This product can only be placed horizontally. Do not mount vertically or upside-down.
- The product can be mounted in a standard 19-inch rack capable of withstanding at least four times the total weight of the mounted equipment. Twelve M5 screws should be used to fix the product.

Name	Description
LCD screen	<p>Touchscreen displays the menus, submenus and messages, device status and monitoring information, and allows you to perform all the operations at your fingertips.</p> <p><b>Note:</b> The LCD screen of the UVP 2000A does not support touchscreen operations and menu settings. It is used for device status display only.</p>

## Rear Panel

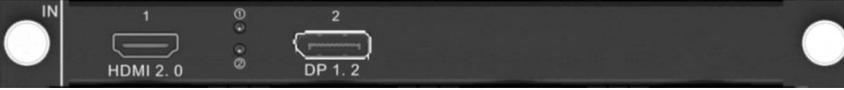


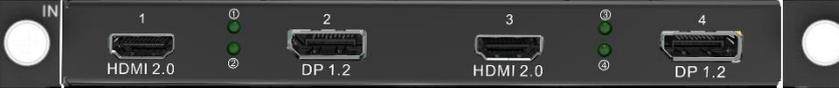
\*The picture shown is for illustration purpose only. Actual product may vary due to product enhancement.

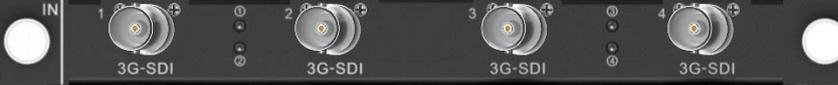
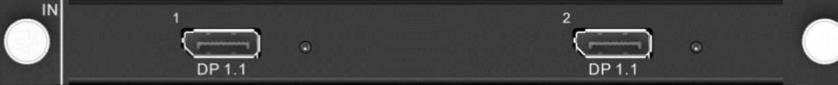
### Notes:

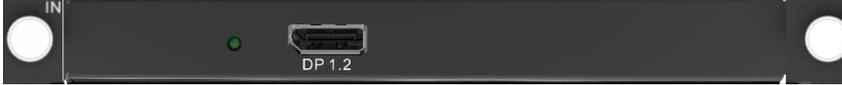
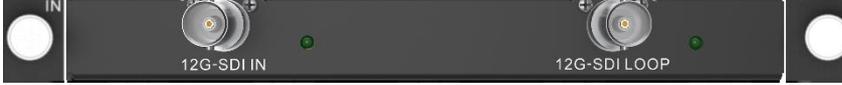
- The silkscreen marking "I-x" indicates the slot is dedicated to the input card. "I" stands for input and "x" stands for the slot number. For example, "I-1" indicates this slot is the 1st input slot and for installing an input card only.
- The silkscreen marking "O-x" indicates the slot is dedicated to the output card. "O" stands for output and "x" stands for the slot number. For example, "O-10" indicates this slot is the 10th output slot and for installing an output card only.
- The silkscreen marking "I/O-x" indicates the slot accepts both input and output cards.
- The silkscreen marking "MVR" indicates the slot is dedicated to the preview card only.

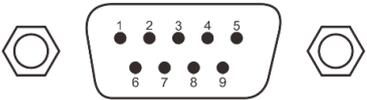
Input Card	
H_4xDVI input card	 <p>Support for single link and dual link input modes, and 10-bit input source HDCP 1.4 compliant Does not support interlaced signal input.</p> <ul style="list-style-type: none"> <li>• Single link mode: <ul style="list-style-type: none"> <li>– Four DVI connectors are all used for input.</li> <li>– Each connector supports the maximum resolution of 2048×1152@60Hz and the minimum resolution of 800×600@60Hz.</li> <li>– Custom resolutions: <ul style="list-style-type: none"> <li>Max. width: 2560 pixels (2560×972@60Hz)</li> <li>Max. height: 2560 pixels (884×2560@60Hz)</li> </ul> </li> </ul> </li> <li>• Dual link mode: <ul style="list-style-type: none"> <li>– Connectors 2 and 4 are used for input, and connectors 1 and 3 are unavailable.</li> <li>– Each connector supports the maximum resolution of 3840×1080@60Hz and the minimum resolution of 800×600@60Hz.</li> <li>– Custom resolutions: <ul style="list-style-type: none"> <li>Max. width: 3840 pixels (3840×1124@60Hz)</li> </ul> </li> </ul> </li> </ul>

	<p>Max. height: 4095 pixels (1014x4095@60Hz)</p> <p>Status LEDs:</p> <ul style="list-style-type: none"> <li>• On: The input source is accessed normally.</li> <li>• Off: No input source is accessed or the input source is abnormal.</li> </ul>
<p>H_4xHDMI input card</p>	 <p>Support for 10-bit input source Does not support interlaced signal input.</p> <p>For HDMI 1.3 inputs:</p> <ul style="list-style-type: none"> <li>• Four connectors are all used for input.</li> <li>• Each connector supports the maximum resolution of 2048x1152@60Hz, and the minimum resolution of 800x600@60Hz.</li> <li>• Custom resolutions: Max. width: 2560 pixels (2560x972@60Hz) Max. height: 2560 pixels (884x2560@60Hz)</li> <li>• HDCP 1.4 compliant</li> </ul> <p>For HDMI 1.4 inputs:</p> <ul style="list-style-type: none"> <li>• Two HDMI 1.4 connectors are used for input, but two HDMI 1.3 connectors are unavailable.</li> <li>• Each connector supports the maximum resolution of 3840x1080@60Hz.</li> <li>• Custom resolutions: Max. width: 3840 pixels (3840x1124@60Hz) Max. height: 4095 pixels (1014x4095@60Hz)</li> <li>• HDCP 1.4 compliant</li> </ul> <p>Status LEDs:</p> <ul style="list-style-type: none"> <li>• On: The input source is accessed normally.</li> <li>• Off: No input source is accessed or the input source is abnormal.</li> </ul>
<p>H_1xHDMI2.0 +1xDP1.2 input card</p>	 <p>Only one connector can be used each time. Set to use which connector on the Web page. The default option is HDMI 2.0 connector.</p> <p>Does not support interlaced signal input.</p> <ul style="list-style-type: none"> <li>• 1x HDMI 2.0 <ul style="list-style-type: none"> <li>- Backward compatible with HDMI 1.4 and HDMI 1.3</li> <li>- Supports the maximum resolution of 3840x2160@60Hz.</li> <li>- HDCP 2.2 compliant</li> <li>- Custom resolutions Max. width: 4092 pixels (4092x2261@60Hz) Max. height: 4095 pixels (2188x4095@60Hz)</li> </ul> </li> <li>• 1x DP 1.2 <ul style="list-style-type: none"> <li>- Backward compatible with DP 1.1</li> </ul> </li> </ul>

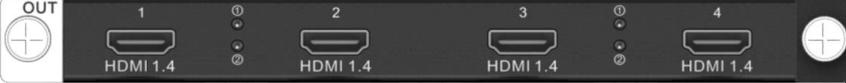
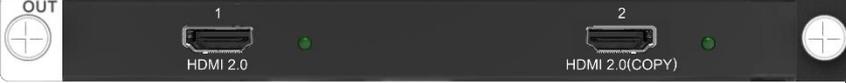
	<ul style="list-style-type: none"> <li>- Supports the maximum resolution of 4096x2160@60Hz or 8192x1080@60Hz.</li> <li>- HDCP 2.2 compliant</li> <li>- Custom resolutions: Max. width: 8192 pixels (8192x1146@60Hz) Max. height: 4095 pixels (2188x4095@60Hz)</li> </ul> <p>Status LEDs:</p> <ul style="list-style-type: none"> <li>● On: The input source is accessed normally.</li> <li>● Off: No input source is accessed or the input source is abnormal.</li> </ul>
<p>H_2xHDMI2.0 +2xDP1.2 input card</p>	 <p>This card can be installed into the slots from I-1 to I-8 of the UVP9000 and UVP9000D only.</p> <p>Two group inputs, each group with 1x HDMI 2.0 and 1x DP1.2 connector</p> <p>Only one connector of each group can be used each time.</p> <p>Set to use which connector on the Web page. The default option is HDMI 2.0 connector.</p> <p>Does not support interlaced signal input.</p> <ul style="list-style-type: none"> <li>● 2x HDMI 2.0             <ul style="list-style-type: none"> <li>- Backward compatible with HDMI 1.4 and HDMI 1.3</li> <li>- Supports the maximum resolution of 3840x2160@60Hz.</li> <li>- HDCP 2.2 compliant</li> <li>- Custom resolutions: Max. width: 4092 pixels (4092x2261@60Hz) Max. height: 4095 pixels (2188x4095@60Hz)</li> </ul> </li> <li>● 2x DP 1.2             <ul style="list-style-type: none"> <li>- Backward compatible with DP 1.1</li> <li>- Supports the maximum resolution of 4096x2160@60Hz or 8192x1080@60Hz.</li> <li>- HDCP 2.2 compliant</li> <li>- Custom resolutions: Max. width: 8192 pixels (8192x1146@60Hz) Max. height: 4095 pixels (2188x4095@60Hz)</li> </ul> </li> </ul> <p>Status LEDs:</p> <ul style="list-style-type: none"> <li>● On: The input source is accessed normally.</li> <li>● Off: No input source is accessed or the input source is abnormal.</li> </ul>
<p>H_2xRJ45 IP input card</p>	 <p>2x RJ45 Gigabit Ethernet ports</p> <p>Support for interlaced signal input</p> <ul style="list-style-type: none"> <li>● Supported protocols: RTSP, GB28181 and ONVIF</li> <li>● Supported coding formats: H.264 and H.265</li> </ul>

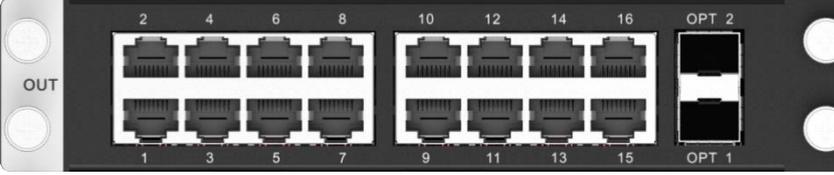
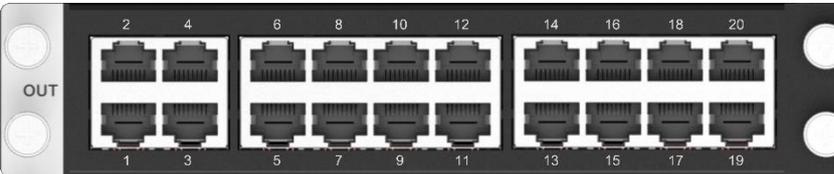
	<ul style="list-style-type: none"> <li>• Single card decoding capability: <ul style="list-style-type: none"> <li>- 4x 800 W</li> <li>- 8x 400 W</li> <li>- 16x 200 W</li> </ul> </li> <li>• DHCP compliant</li> </ul>
<p>H_4x3G SDI input card</p>	 <ul style="list-style-type: none"> <li>• 4x 3G-SDI <ul style="list-style-type: none"> <li>- Backward compatible with HD-SDI and SD-SDI</li> <li>- Supports ST-424 (3G), ST-292 (HD) and SMPTE 259 SD.</li> <li>- Each connector supports the maximum resolution of 1920x1080@60Hz.</li> <li>- Supports 1080i/576i/480i de-interlacing processing</li> <li>- Does not support input resolution and bit depth settings.</li> </ul> </li> <li>• Status LEDs: <ul style="list-style-type: none"> <li>- On: The input source is accessed normally.</li> <li>- Off: No input source is accessed or the input source is abnormal.</li> </ul> </li> </ul>
<p>H_2xCVBS+2xVGA input card</p>	 <ul style="list-style-type: none"> <li>• 2x VGA <ul style="list-style-type: none"> <li>Each connector supports the maximum resolution of 1920x1200@60Hz.</li> </ul> </li> <li>• 2x CVBS <ul style="list-style-type: none"> <li>Supports PAL and NTSC.</li> </ul> </li> <li>• Status LEDs: <ul style="list-style-type: none"> <li>- On: The input source is accessed normally.</li> <li>- Off: No input source is accessed or the input source is abnormal.</li> </ul> </li> </ul>
<p>H_4xVGA input card</p>	 <p>4x VGA</p> <p>Each connector supports the maximum resolution of 1920x1200@60Hz.</p> <p>Status LEDs:</p> <ul style="list-style-type: none"> <li>• On: The input source is accessed normally.</li> <li>• Off: No input source is accessed or the input source is abnormal.</li> </ul>
<p>H_2xDP1.1 input card</p>	 <p>2x DP1.1</p> <ul style="list-style-type: none"> <li>• Each connector supports the maximum resolution of 3840x1080@60Hz or 3840x2160@30Hz.</li> <li>• Custom resolutions:</li> </ul>

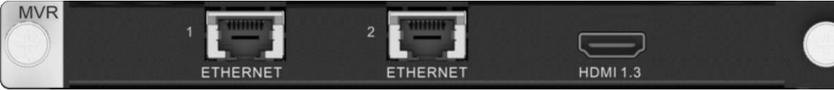
	<p>Max. width: 3840 pixels (3840×1124@60Hz) Max. height: 4095 pixels (1014×4095@60Hz)</p> <ul style="list-style-type: none"> <li>• Supports 8-bit and 10-bit inputs.</li> <li>• HDCP 1.3 compliant</li> <li>• Does not support interlaced signal input.</li> </ul> <p>Status LEDs:</p> <ul style="list-style-type: none"> <li>• On: The input source is accessed normally.</li> <li>• Off: No input source is accessed or the input source is abnormal.</li> </ul>
<p>H_1xDP1.2 input card</p>	 <p>1x DP 1.2</p> <ul style="list-style-type: none"> <li>• Backward compatible with DP 1.1</li> <li>• Each connector supports the maximum resolution of 4096×2160@60Hz or 8192×1080@60Hz.</li> <li>• Custom resolutions: Max. width: 8192 pixels (8192×1146@60Hz) Max. height: 4095 pixels (2188×4095@60Hz)</li> <li>• HDCP 2.2 compliant</li> </ul> <p>Status LEDs:</p> <ul style="list-style-type: none"> <li>• On: The input source is accessed normally.</li> <li>• Off: No input source is accessed or the input source is abnormal.</li> </ul>
<p>H_1x12G SDI input card</p>	 <ul style="list-style-type: none"> <li>• 1x 12G-SDI IN <ul style="list-style-type: none"> <li>– Backward compatible with 6G-SDI, 3G-SDI, HD-SDI and SD-SDI</li> <li>– Supports ST-2082-1 (12G), ST-2081-1 (6G), ST-424 (3G), ST-292 (HD) and SMPTE 259 SD.</li> <li>– Each connector supports the maximum resolution of 4096×2160@60Hz.</li> <li>– Supports 1080i/576i/480i de-interlacing processing.</li> <li>– Does not support input resolution and bit depth settings.</li> </ul> </li> <li>• 1x 12G-SDI LOOP Loop out the 12G-SDI signal.</li> <li>• Status LEDs: <ul style="list-style-type: none"> <li>– On: The input or loop output is connected normally.</li> <li>– Off: No input or loop output is connected or the input or loop output is abnormal.</li> </ul> </li> </ul>
<p>H_2xHDMI2.0 input card</p>	 <p>This card can be installed into the slots from I-1 to I-8 of the UVP9000C and UVP9000D only.</p> <p>2x HDMI 2.0</p> <ul style="list-style-type: none"> <li>• Backward compatible with HDMI 1.4 and HDMI 1.3</li> </ul>

	<ul style="list-style-type: none"> <li>• Each connector supports the maximum resolution of 3840x2160@60Hz.</li> <li>• Two 4K inputs can be connected at the same time.</li> <li>• HDCP 2.2 compliant</li> <li>• Custom resolutions: Max. width: 4092 pixels (4092x2261 @60Hz) Max. height: 4095 pixels (2188x4095 @60Hz)</li> <li>• Status LEDs:             <ul style="list-style-type: none"> <li>- On: The input source is accessed normally.</li> <li>- Off: No input source is accessed or the input source is abnormal.</li> </ul> </li> </ul>																																							
<p>H_1xHDMI2.0 input card</p>	 <p>1x HDMI 2.0</p> <ul style="list-style-type: none"> <li>• Backward compatible with HDMI 1.4 and HDMI 1.3</li> <li>• Each connector supports the maximum resolution of 3840x2160@60Hz.</li> <li>• HDCP 2.2 compliant</li> <li>• Custom resolutions: Max. width: 4092 pixels (4092x2261 @60Hz) Max. height: 4095 pixels (2188x4095 @60Hz)</li> <li>• Status LEDs:             <ul style="list-style-type: none"> <li>- On: The input source is accessed normally.</li> <li>- Off: No input source is accessed or the input source is abnormal.</li> </ul> </li> </ul>																																							
<p>H_STD I/O card</p>	 <p>This card can be installed into the input card slots.</p> <ul style="list-style-type: none"> <li>• 2x COM Programmable RS422/RS485/RS232 ports that are used to control the devices that adopt RS422/RS485/RS232 protocol             <ul style="list-style-type: none"> <li>- COM port pins are shown as below:</li> </ul> </li> </ul>  <ul style="list-style-type: none"> <li>- Pin wirings are shown as below:</li> </ul> <table border="1" data-bbox="683 1729 1273 1998"> <thead> <tr> <th>PIN</th> <th>1</th> <th>2</th> <th>3</th> <th>4</th> <th>5</th> <th>6</th> <th>7</th> <th>8</th> <th>9</th> </tr> </thead> <tbody> <tr> <td>RS-232</td> <td colspan="2">—RXD—TXD—</td> <td colspan="3">GND</td> <td colspan="4"></td> </tr> <tr> <td>RS-422</td> <td>RXD-</td> <td colspan="2">—TXD+</td> <td>GND</td> <td>RXD+</td> <td colspan="3">—TXD-</td> </tr> <tr> <td>RS-485</td> <td colspan="4">—A—</td> <td colspan="5">—B</td> </tr> </tbody> </table> <ul style="list-style-type: none"> <li>• 1x ETHERNET</li> </ul>	PIN	1	2	3	4	5	6	7	8	9	RS-232	—RXD—TXD—		GND							RS-422	RXD-	—TXD+		GND	RXD+	—TXD-			RS-485	—A—				—B				
PIN	1	2	3	4	5	6	7	8	9																															
RS-232	—RXD—TXD—		GND																																					
RS-422	RXD-	—TXD+		GND	RXD+	—TXD-																																		
RS-485	—A—				—B																																			

	<ul style="list-style-type: none"> <li>- Control the device connected to this card.</li> <li>- 10/100Mbps self-adaptive</li> <li>- TCP/IP protocol and UDP/IP protocol supported</li> <li>• 3x I/O             <ul style="list-style-type: none"> <li>- Trigger the execution of the function requirements via programming.</li> <li>- Input and output modes supported</li> <li>- Pins 1, 2 and 3 can be set to either the input or output, and pin G is the common grounding pin for pins 1, 2 and 3.</li> </ul> </li> <li>• 3x RELAY OUT             <ul style="list-style-type: none"> <li>- Connect to the relay to control the power on and off the connected device.</li> <li>- Voltage: 30 VDC, current: 3A at maximum</li> <li>- Six pins are divided into three groups, which can be connected or disconnected via programming.</li> </ul> </li> <li>• 3x IR OUT             <ul style="list-style-type: none"> <li>- Programmable infrared control supported</li> <li>- Pins 1, 2 and 3 are used for infrared emission, and pin G is the common grounding pin for pins 1, 2 and 3.</li> </ul> </li> </ul>
<b>Output Card</b>	
<p>H_4xDVI output card</p>	 <p>4x SL-DVI</p> <p>Support for single output and dual link output</p> <ul style="list-style-type: none"> <li>• Single link output:             <ul style="list-style-type: none"> <li>- Four connectors are all available for output.</li> <li>- Each connector supports the maximum resolution of 2048x1152@60Hz.</li> <li>- Custom resolutions:                 <ul style="list-style-type: none"> <li>Max. width: 2560 pixels (2560x972@60Hz)</li> <li>Max. height: 2560 pixels (884x2560@60Hz)</li> </ul> </li> <li>- Supports 8-bit RGB 4:4:4/YCbCr 4:4:4/YCbCr 4:2:2 output.</li> <li>- Supports 10-bit YCbCr 4:4:4 output.</li> </ul> </li> <li>• Dual link output:             <ul style="list-style-type: none"> <li>- Connectors 2 and 4 are available for output.</li> <li>Connector 1 copies the output on connector 2, and connector 3 copies the output on connector 4.</li> <li>- Adopts HDMI 1.4 protocol.</li> <li>- Each connector supports the maximum resolution of 4096x2160@30Hz/3840x1080@60Hz.</li> <li>- Custom resolutions:                 <ul style="list-style-type: none"> <li>Max. width: 4096 pixels (4096x1124@60Hz)</li> <li>Max. height: 4096 pixels (1014x4096@60Hz)</li> </ul> </li> <li>- Supports 8-bit RGB 4:4:4/YCbCr 4:4:4/YCbCr 4:2:2 output.</li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>- Supports 10-bit YCbCr 4:4:4 output.</li> </ul> <p>Status LEDs:</p> <ul style="list-style-type: none"> <li>• On: The output connector is connected normally.</li> <li>• Off: The output connector is not connected.</li> </ul>
<p>H_4xHDMI output card</p>	 <p>4x HDMI 1.4</p> <p>Support for single output and dual link output</p> <ul style="list-style-type: none"> <li>• Single link output: <ul style="list-style-type: none"> <li>- Four connectors are all available for output.</li> <li>- Each connector supports the maximum resolution of 2048x1152@60Hz.</li> <li>- Custom resolutions: <ul style="list-style-type: none"> <li>Max. width: 2560 pixels (2560x972@60Hz)</li> <li>Max. height: 2560 pixels (884x2560@60Hz)</li> </ul> </li> <li>- Supports 8-bit RGB 4:4:4/YCbCr 4:4:4/YCbCr 4:2:2 output.</li> <li>- Supports 10-bit RGB 4:4:4/YCbCr 4:4:4 output.</li> </ul> </li> <li>• Dual link output: <ul style="list-style-type: none"> <li>- Connectors 2 and 4 are available for output.</li> <li>- Connector 1 copies the output on connector 2, and connector 3 copies the output on connector 4.</li> <li>- Each connector supports the maximum resolution of 4096x2160@30Hz/3840x1080@60Hz.</li> <li>- Custom resolutions: <ul style="list-style-type: none"> <li>Max. width: 4096 pixels (4096x1124@60Hz)</li> <li>Max. height: 4096 pixels (1014x4096@60Hz)</li> </ul> </li> <li>- Supports 8-bit RGB 4:4:4/YCbCr 4:4:4/YCbCr 4:2:2 output.</li> <li>- Supports 10-bit RGB 4:4:4/YCbCr 4:4:4 output.</li> </ul> </li> </ul> <p>Status LEDs:</p> <ul style="list-style-type: none"> <li>• On: The output connector is connected normally.</li> <li>• Off: The output connector is not connected.</li> </ul>
<p>H_1xHDMI2.0 output card</p>	 <ul style="list-style-type: none"> <li>• 2x HDMI 2.0 <ul style="list-style-type: none"> <li>- Connector 2 copies the output on connector 1.</li> <li>- The connector supports the maximum resolution of 8192x1080@60Hz/4096x2160@60Hz.</li> <li>- Custom resolutions: <ul style="list-style-type: none"> <li>Max. width: 8192 pixels (8192x1146@60Hz)</li> <li>Max. height: 7680 pixels (1092x7680@60Hz)</li> </ul> </li> <li>- Supports 8-bit or 10-bit RGB 4:4:4/YCbCr 4:4:4/YCbCr 4:2:2 output.</li> </ul> </li> <li>• Status LEDs:</li> </ul>

	<ul style="list-style-type: none"> <li>- On: The output connector is connected normally.</li> <li>- Off: The output connector is not connected.</li> </ul>
<p>H_16xRJ45+2xfiber sending card</p>	 <p>LED 4K sending card can load up to 10,400,000 pixels (max. width: 10,240 pixels, max. height: 10,240 pixels). This card occupies two slots.</p> <ul style="list-style-type: none"> <li>• 16x RJ45 Gigabit Ethernet outputs             <ul style="list-style-type: none"> <li>- Bit depth: 8-bit A single Ethernet port loads up to 650,000 pixels.</li> <li>- Bit depth: 10-bit A single Ethernet port loads up to 320,000 pixels.</li> <li>- Backup between Ethernet ports</li> </ul> </li> <li>• 2x OPT outputs             <ul style="list-style-type: none"> <li>- Support both SMF and MMF transmission.</li> <li>- OPT 1 copies and outputs the data on Ethernet ports 1–8.</li> <li>- OPT 2 copies and outputs the data on Ethernet ports 9–16.</li> </ul> </li> </ul> <p><b>Note:</b> For the optical module connected to the OPT port, you need to order or purchase separately.</p>
<p>H_20xRJ45 sending card</p>	 <p>LED 4K sending card can load up to 13,000,000 pixels (max. width: 10,752 pixels, max. height: 10,752 pixels). This card occupies two slots.</p> <ul style="list-style-type: none"> <li>• 20x RJ45 Gigabit Ethernet outputs             <ul style="list-style-type: none"> <li>- Bit depth: 8-bit A single Ethernet port loads up to 650,000 pixels.</li> <li>- Bit depth: 10-bit A single Ethernet port loads up to 320,000 pixels.</li> <li>- Backup between Ethernet ports</li> </ul> </li> </ul>
<p>H_4xfiber sending card</p>	 <p>4x 10G OPT ports</p> <p>This card can load up to 20,800,000 pixels (max. width: 16,384 pixels, max. height: 16,384 pixels)</p> <ul style="list-style-type: none"> <li>• Independent, copy and backup modes are supported.</li> <li>• SM and MM optical modules are both supported, with a</li> </ul>

	<p>transmission distance of up to 10 km.</p> <ul style="list-style-type: none"> <li>• Supports 8-bit and 10-bit outputs.</li> <li>• The optical module supports SFP+ encapsulation. The supported module specifications include the followings: <ul style="list-style-type: none"> <li>- 10G SFP+ SR optical module</li> <li>- 10G SFP+ LRM optical module</li> <li>- 10G SFP+ LR optical module</li> <li>- 10G SFP+ ER optical module</li> <li>- 10G SFP+ ZR optical module</li> <li>- SFP+ CWDM optical module</li> <li>- SFP+ DWDM optical module</li> <li>- SFP+ BIDI optical module</li> </ul> </li> </ul> <p><b>Independent</b></p> <p>Four OPT ports are all used for output and have the same loading capacity. The loading capacity of one port is equal to that of 8 Ethernet ports.</p> <p><b>Copy</b></p> <p>OPT 1 and OPT 2 are used for main output. OPT 3 copies the output on OPT 1, while OPT 4 copies the output on OPT 2.</p> <p><b>Backup</b></p> <p>OPT 1 and OPT 2 are used for main output. OPT 3 serves as the backup of OPT 1, while OPT 4 serves as the backup of OPT 2.</p> <p><b>Note:</b></p> <p>Four 10G SFP+ LR optical modules are included with the card and are already installed into the OPT ports.</p>
<p>H_2xRJ45+1x HDMI1.3 preview card</p>	 <ul style="list-style-type: none"> <li>• 2x RJ45 Gigabit Ethernet outputs Connect to the network for monitoring the inputs and outputs.</li> <li>• 1x HDMI 1.3 Connect to a monitor for displaying the monitoring information.</li> </ul> <p><b>Note:</b></p> <p>The first output card of the UVP9000D does not support output monitoring.</p>
<p><b>H_Control Card</b></p>	
	
<p>GENLOCK</p>	<p>Supports bi-level and tri-level.</p> <ul style="list-style-type: none"> <li>• IN: Accept the Genlock signal.</li> <li>• LOOP: Loop the Genlock signal.</li> </ul>
<p>ETHERNET</p>	<p>A Gigabit Ethernet port</p> <ul style="list-style-type: none"> <li>• Connect to the control PC for communication.</li> <li>• Connect to the router, switch or PC.</li> </ul>

	<ul style="list-style-type: none"> <li>• For Web control and LCT screen configuration</li> </ul>
USB1&USB2	<p>2x USB 2.0</p> <ul style="list-style-type: none"> <li>• Update the device program.</li> <li>• Import or export the device configuration parameters.</li> </ul> <p><b>Note:</b></p> <p>The USB connectors cannot provide power for the connected devices.</p>
COM	<p>A serial port that adopts RS232 serial protocol</p> <p>Support for central control system</p> <ul style="list-style-type: none"> <li>• IN: Accept the signal from the central control system.</li> <li>• OUT: Loop the signal.</li> </ul> <p><b>Note:</b></p> <p>The COM port cannot be connected to the network (router or switch) or LED cabinet (receiving card).</p>
Power switch	<ul style="list-style-type: none"> <li>• - / ON: Power on the device.</li> <li>• O / OFF: Power off the device.</li> </ul>

# 4 OSD Remote Control Accessories

## Remote Control



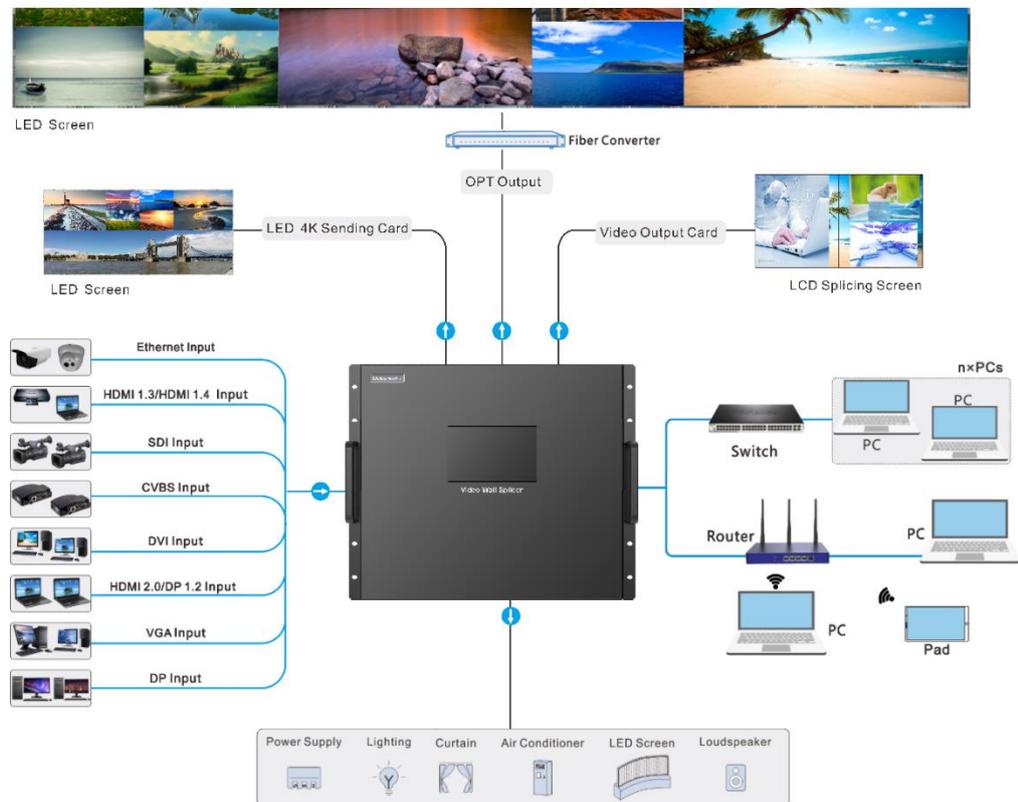
## IR to RS485 Converter



## USB to RS485 Converter



# 5 Applications

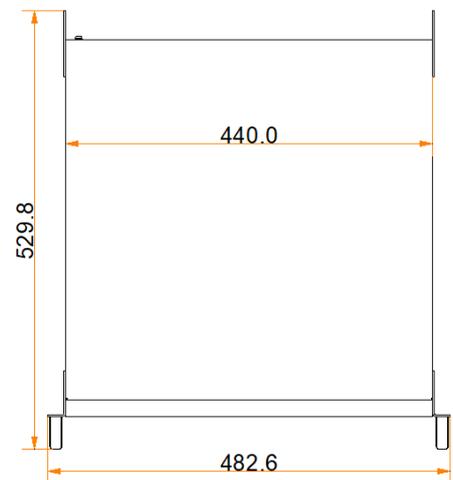
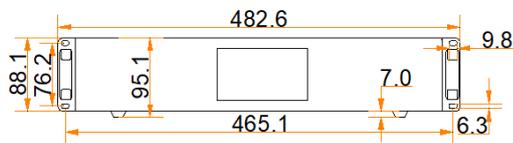


**Note:**

The figure takes the UVP9000A as an example to illustrate.

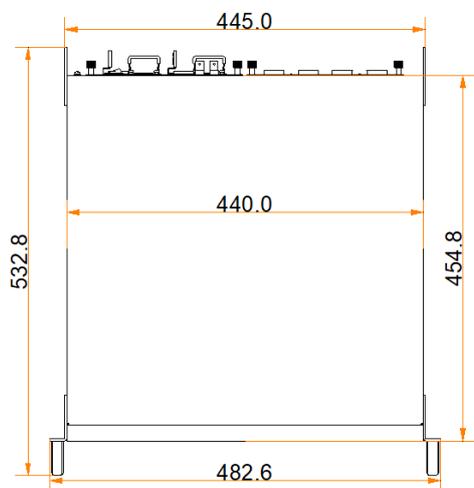
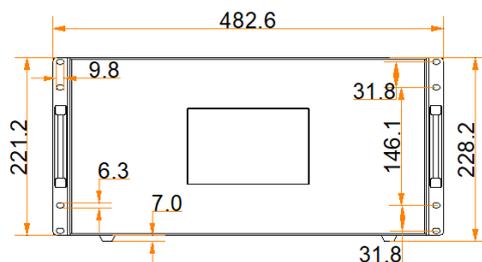
# 6 Dimensions

## UVP2000A



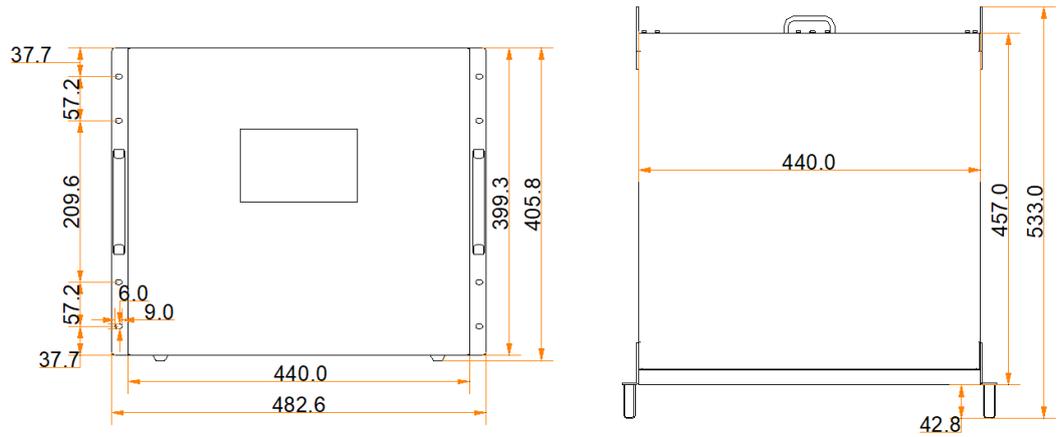
Tolerance:  $\pm 0.5$  Unit: mm

## UVP5000A



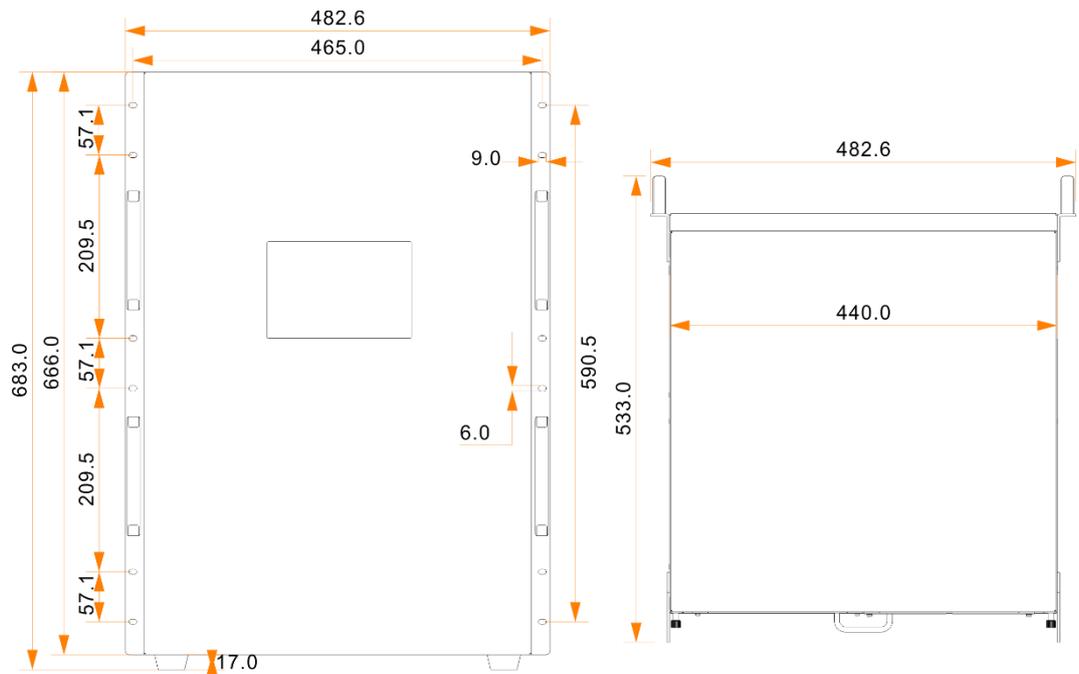
Tolerance:  $\pm 0.5$  Unit: mm

UVP9000A/UVP9000B



Tolerance:  $\pm 0.5$  Unit: mm

UVP9000C/UVP9000D



Tolerance:  $\pm 0.5$  Unit: mm

# 7 Specifications

Model		UVP2000 A	UVP5000 A	UVP9000 A	UVP9000 B	UVP9000C	UVP9000D
Rack Unit		2U	5U	9U		15U	
Max. Input Cards		4	10	15		30	
Max. Input Channels		16	40	60		120	
Max. Output Cards		2	3	5	10	10	16
Max. Output Channels		8	12	20	40	40	64
Max. Loading Capacity (LED 4K sending card)		260 million pixels	390 million pixels	650 million pixels		1300 million pixels	2080 million pixels
Max. Layers		32	48	80	160	160	
Electrical Specifications	Power connector	100–240V~, 50/60Hz, 10A–5A <b>Notes:</b> <ul style="list-style-type: none"> <li>The UVP2000A comes with one power supply (100–240V~, 50/60Hz, 4.0A).</li> <li>The UVP5000A, UVP9000A and UVP9000B come with one power supply. One redundant power supply is optional.</li> <li>The UVP9000C and UVP9000D come with two power supplies. Both powers need to be connected when you use them. Two redundant power supplies are optional.</li> </ul>					
	Power consumption	210W	400W	450W		900W	
Operating Environment	Temperature	0° C to 45° C					
	Humidity	0% RH to 80% RH, non-condensing					
Storage	Temperature	-10° C to +60° C					

Model		UVP2000 A	UVP5000 A	UVP9000 A	UVP9000 B	UVP900 0C	UVP900 0D
<b>Environment</b>	<b>Humidity</b>	0% RH to 95% RH, non-condensing					
<b>Physical Specifications</b>	<b>Dimensions</b>	482.6mm × 88.1mm × 455mm	482.6mm × 532.8mm × 228.2mm	482.6mm × 533.0mm × 405.8mm		482.6mm × 683.0mm × 533.0mm	
	<b>Net weight</b>	15.6 kg	25 kg	35 kg		61.8 kg	
	<b>Gross weight</b>	18 kg	28 kg	49 kg		75.5 kg	
<b>Packing Information</b>	<b>Packing box</b>	660mm × 570mm × 210mm	780mm × 615mm × 345mm	780mm × 680mm × 590mm		775mm × 675mm × 845mm	
	<b>Accessories</b>	1x Power cord 1x RJ45 Ethernet cable 1x Grounding cable 1x HDMI cable				2x Power cords 1x RJ45 Ethernet cable 1x Grounding cable 1x HDMI cable	

# 8 Video Source Features

Input Connector	Color Depth		Max. Input Resolution
HDMI 2.0	8bit	RGB4:4:4	4096x2160@60Hz
		YCbCr4:4:4	8192x1080@60Hz
		YCbCr4:2:2	
		YCbCr4:2:0	4096x2160@60Hz
	10bit	RGB4:4:4	4096x2160@30Hz
		YCbCr4:4:4	4096x1080@60Hz
		YCbCr4:2:2	4096x2160@60Hz
		YCbCr4:2:0	
	12bit	RGB4:4:4	4096x2160@30Hz
		YCbCr4:4:4	4096x1080@60Hz
		YCbCr4:2:2	4096x2160@60Hz
		YCbCr4:2:0	
DP 1.2	8bit	RGB4:4:4	4096x2160@60Hz
		YCbCr4:4:4	8192x1080@60Hz
		YCbCr4:2:2	
		YCbCr4:2:0	Not supported
	10bit	RGB4:4:4	4096x2160@30Hz
		YCbCr4:4:4	4096x1080@60Hz
		YCbCr4:2:2	4096x2160@60Hz
		YCbCr4:2:0	Not supported
		RGB4:4:4	4096x2160@30Hz

Input Connector	Color Depth		Max. Input Resolution
	12bit	YCbCr4:4:4	4096x1080@60Hz
		YCbCr4:2:2	4096x2160@60Hz
		YCbCr4:2:0	Not supported
HDMI 1.4 DP 1.1	8bit	RGB4:4:4	4096x1080@60Hz
		YCbCr4:4:4	
		YCbCr4:2:2	
		YCbCr4:2:0	Not supported
	10bit	RGB4:4:4	2048x1152@60Hz
		YCbCr4:4:4	
		YCbCr4:2:2	4096x1080@60Hz
		YCbCr4:2:0	Not supported
	12bit	RGB4:4:4	2048x1152@60Hz
		YCbCr4:4:4	
		YCbCr4:2:2	4096x1080@60Hz
		YCbCr4:2:0	Not supported
HDMI 1.3	8bit	RGB4:4:4	2048x1152@60Hz
		YCbCr4:4:4	
		YCbCr4:2:2	
		YCbCr4:2:0	Not supported
	10bit	RGB4:4:4	2048x1152@60Hz
		YCbCr4:4:4	
		YCbCr4:2:2	
		YCbCr4:2:0	Not supported
	12bit	RGB4:4:4	2048x1152@60Hz
		YCbCr4:4:4	
		YCbCr4:2:2	
		YCbCr4:2:0	Not supported
SL-DVI	8bit	RGB4:4:4	2048x1152@60Hz
DL-DVI	8bit	RGB4:4:4	3840x1080@60Hz

Input Connector	Color Depth		Max. Input Resolution
VGA CVBS	-	RGB4:4:4	1920x1080@60Hz
3G-SDI	<ul style="list-style-type: none"> <li>• Supports up to 1920x1080@60Hz video inputs.</li> <li>• Input resolution and bit depth settings are not allowed.</li> <li>• Supports ST-424 (3G) and ST-292 (HD).</li> </ul>		
12G-SDI	<ul style="list-style-type: none"> <li>• Supports up to 4096x2160@60Hz video inputs.</li> <li>• Input resolution and bit depth settings are not allowed.</li> <li>• Supports ST-2082-1 (12G), ST-2081-1 (6G), ST-424 (3G) and ST-292 (HD).</li> </ul>		