18Gbps HDMI Extender (70m) with KVM



User Manual

VER 1.1

Thank you for purchasing this product

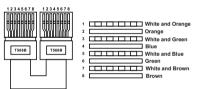
For optimum performance and safety, please read these instructions carefully before connecting, operating or adjusting this product. Please keep this manual for future reference.

Surge protection device recommended

This product contains sensitive electrical components that may be damaged by electrical spikes, surges, electric shock, lighting strikes, etc. Use of surge protection systems is highly recommended in order to protect and extend the life of your equipment.

Caution

The product requires the use of UTP connectors. Please connect in direct interconnection method and do not cross connect.



Direct Interconnection Method

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1. Introduction

This 18Gbps HDMI Extender can extend HDMI HD signal to a distance up to 230ft/70m via a single CAT6/6a cable, which can achieve zero-delay, uncompressed long-distance transmission between the transmitter and receiver. Video resolution is up to 4K2K@60Hz. The Extender supports KVM signal pass-through, which can remote control source device at display device. It supports EDID copy pass-through function between the source device and display device. It supports POC function.

This Extender can be widely used in multi-media conference halls, TV teaching and large-screen displays.

2. Features

- ☆ HDMI2.0b and HDCP 2.2 compliant
- ☆ Support 18Gbps video bandwidth
- ☆ Support video resolution up to 4K2K@60Hz RGB/YCBCR 4:4:4
- ☆ The transmission distance can be extended up to 230ft/70m via a single CAT6/6a cable
- ☆ Support HDR, HDR10, HDR10+, Dolby Vision, HLG
- ☆ Audio formats: LPCM 2.0/2.1/5.1/6.1/7.1, Dolby Digital, Dolby TrueHD, Dolby Digital Plus(DD+)
- ☆ Support 3.5mm analog audio de-embedding, audio is output through the L/R OUT port of the receiver
- ☆ EDID copy pass-through function between the source device and display device
- ☆ Support bi-directional POC (Power over Cable) function
- ☆ With USB KVM pass-through function, USB1.1 compliant, support remote-control by keyboard and mouse
- ☆ Compact design for easy and flexible installation

3. Package Contents

- ① 1 × 18Gbps HDMI Extender (Transmitter)
- ② 1 × 18Gbps HDMI Extender (Receiver)
- 3 1 × USB-A to USB-B Cable (1.5 meters)
- 4 4 × Mounting Ears
- ⑤ 8 × Machine Screws (KM3*4)
- 6 1 × 12V/1A Locking Power Adapter
- (7) 1 × User Manual

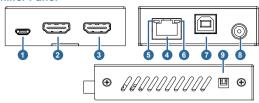
4. Specifications

| Technical | | |
|--------------------------|--|--|
| HDMI Compliance | HDMI 2.0b | |
| HDCP Compliance | HDCP 2.2 | |
| Video Bandwidth | 18Gbps | |
| Video Resolution | Up to 4K2K@60Hz RGB/YCBCR 4:4:4 | |
| Transmission Distance | 4K2K@60Hz 4:4:470m, 1080P70m (CAT6 cable) | |
| Color Space | RGB 4:4:4, YCbCr 4:4:4, YCbCr 4:2:2, YCbCr 4:2:0 | |
| Color Depth | 8/10/12bit | |
| HDR | HDR, HDR10, HDR10+, Dolby Vision, HLG | |
| Audio Formats | LPCM 2.0/2.1/5.1/6.1/7.1, Dolby Digital, Dolby TrueHD, Dolby Digital Plus(DD+) | |

| Connection | | | | |
|-----------------------|--|--|--|--|
| Transmitter | Input: 1 × HDMI IN [Type A, 19-pin female] Output: 1 × HDMI OUT [Type A, 19-pin female] 1 × CAT OUT [RJ45] Control: 1 × SERVICE [Micro-USB jack] 1 × USB port [USB Type B] | | | |
| Receiver | Input: 1 × CAT IN [RJ45] Output: 1 × HDMI OUT [Type A, 19-pin female] 1 × L/R OUT [3.5mm Stereo Mini-jack] Control: 1 × SERVICE [Micro-USB jack] 2 × USB port [USB Type A] | | | |
| Mechanical | | | | |
| Housing | Metal Enclosure | | | |
| Color | Black | | | |
| Dimensions | Transmitter / Receiver: 90mm (W)×68mm (D)×22mm (H) | | | |
| Weight | Transmitter: 170g, Receiver: 169g | | | |
| Power Supply | DC 12V/1A; Support bi-directional POC function | | | |
| Power Consumption | 4.2 W (max) | | | |
| Operating Temperature | 0°C ~ 40°C / 32°F ~ 104°F | | | |
| Storage Temperature | -20°C ~ 60°C / -4°F ~ 140°F | | | |
| Relative Humidity | 20~90% RH (non-condensing) | | | |

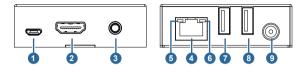
5. Operation Controls and Functions

5.1 Transmitter Panel



| No. | Name | Function Description |
|-----|--------------------------------------|--|
| 1 | SERVICE | Firmware update port. |
| 2 | HDMI OUT | HDMI signal loop output port, connected to HDMI display device with HDMI cable. |
| 3 | HDMI IN | HDMI signal input port, connected to HDMI source device with HDMI cable. |
| 4 | CAT OUT | RJ45 connector for connecting the CAT IN port of the Receiver with CAT6/6a cable. |
| 5 | Link Signal Indicator (Green) | Light on: Transmitter and Receiver are in good connection status. Light flashing: Transmitter and Receiver are in poor connection status. Light off: Transmitter and Receiver are not connected. |
| 6 | Data Signal Indicator (Yellow) | Light on: There is HDMI signal transmission with HDCP encryption. Light flashing: There is HDMI signal transmission without HDCP encryption. Light off: There is no HDMI signal transmission. |
| 7 | PC | Connect to PC. The computer can be accessed and controlled remotely through the USB port of the receiver (KVM function). |
| 8 | DC 12V | DC 12V/1A power input port. Note that the extender supports POC function, it means that either Transmitter or Receiver is connected to 12V/1A power supply, the other doesn't need power supply. |
| 9 | EDID DIP switch | Use the DIP switch to set EDID. (Switching to the upper end indicates 1; switching to the lower end indicates 0.) 11 - EDID information is copied from the display at the RX. 10 - EDID is preset to 4K@60Hz 2.0CH 01 - EDID is preset to 1080p 2.0CH 00 - EDID information is copied from the HDMI OUT at the TX. |

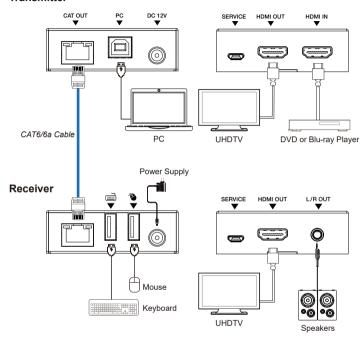
5.2 Receiver Panel



| No. | Name | Function Description |
|-----|--------------------------------------|--|
| 1 | SERVICE | Firmware update port. |
| 2 | HDMI OUT | HDMI signal output port, connected to HDMI display device with HDMI cable. |
| 3 | L/R OUT | Analog audio output port, used for audio de-embedding output. |
| 4 | CAT IN | RJ45 connector for connecting the CAT OUT port of the Transmitter with CAT6/6a cable. |
| 5 | Link Signal Indicator (Green) | Light on: Transmitter and Receiver are in good connection status. Light flashing: Transmitter and Receiver are in poor connection status. Light off: Transmitter and Receiver are not connected. |
| 6 | Data Signal Indicator (Yellow) | Light on: There is HDMI signal transmission with HDCP encryption. Light flashing: There is HDMI signal transmission without HDCP encryption. Light off: There is no HDMI signal transmission. |
| 7 | Keyboard port | Connect to the keyboard. |
| 8 | Mouse port | Connect to the mouse. |
| 9 | DC 12V | DC 12V/1A power input port. Note that the extender supports POC function, it means that either Transmitter or Receiver is connected to 12V/1A power supply, the other doesn't need power supply. |

6. Application Example

Transmitter





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