

# HDMI over Fiber KVM Extender (KFH101S)

## **User Manual**

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#### **Product Description**

The KFH101S USB HDMI over fiber KVM extender integrates the latest HDBaseT™ technology and delivers HD HDMI video, USB and stereo audio signals up to 300m by using fiber optics; if the cable type is single mode, the transmitting distance is up to 10km.

A complete set of KFH101S including Transmitter (KFH101S-TX) and Receiver (KFH101\_RX). The Transmitter is connected to a computer or server, and the receiver is connected to a display, keyboard, audio player and other USB devices.

The KFH101S enables remote high-speed access to a single computer at HD display resolution, while improving workplace ergonomics and separating employees from a noisy working environment.

\*Note: The bandwidth of the optical module must reach 10Gbit/sec.

#### **Features**

- Uses one fiber optic cable to connect the transmitter and receiver units
- Allows access to your computer from a remote console up to 300m by using multimode type cable, if the cable type is single mode, transmitting distance is up to 10km.
- Superior HDMI video quality of up to 3840 x 2160 @60Hz.
- Transparent USB 2.0 Supports a wide range of USB devices including keyboards, mice, mass storage devices and printers.
   It provides 4 USB ports on the Receiver and 1 USB on the Transmitter.
- Support individual 2-channel stereo audio, 1 LINEIN + 1 LINEOUT.
- RS232 serial port support connection to a serial terminal.
- Support local HDMI output
- Easy to install no software required connecting cables to the devices is all it takes
- Plug and play

### KFH101S\_RX (Front View)



| No. | Components | Description   |  |
|-----|------------|---|--|
| 1   | RXLOS      | SFP+ module signal receiving  |  |
| 2   | TXLFT      | The LED indicator that shows the SFP+ module has been connected, when the light is on, the SFP+ module is recognized. |  |
| 3   | LINKRX     | Flashing: data is being transferred Off: The connection is unsuccessful   |  |
| 4   | LINKTX     | Flashing: data is being transferred Off: The connection is unsuccessful   |  |
| 5   | HDCP1      | HDMI device video status  |  |
| 6   | FW1        | HDMI device running indicator   |  |
| 7   | PWR        | Power indicator, indicate power status  |  |

### KFH101S\_RX (Rear View)



| No. | Components | Description                                      |  |
|-----|------------|--|--|
| 1   | 9-12V      | 9-12V power connection port                      |  |
| 2   | RS232      | Serial port                                      |  |
| 3   | AOUT       | Audio output                                     |  |
| 4   | AIN        | MIC input  |  |
| 5   | HDMI OUT   | Connect to HDMI monitor                          |  |
| 6   | USB        | Connect to USB peripherals or keyboard and mouse |  |
| 7   | SFP+       | Connect to TX with fiber cable                   |  |

### KFH101S\_TX (Front View)



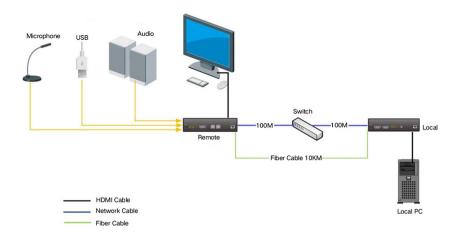
| No. | Components | Description   |  |
|-----|------------|---|--|
| 1   | RXLOS      | SFP+ module signal receiving  |  |
| 2   | TXLFT      | The LED indicator that shows the SFP+ module has been connected, when the light is on, the SFP+ module is recognized. |  |
| 3   | LINKRX     | Flashing: data is being transferred Off: The connection is unsuccessful   |  |
| 4   | LINKTX     | Flashing: data is being transferred Off: The connection is unsuccessful   |  |
| 5   | HDCP1      | HDMI device video status  |  |
| 6   | FW1        | HDMI device running indicator   |  |
| 7   | PWR        | Power indicator, indicate power status  |  |

### KFH101S\_TX (Rear View)



| No. | Components | Description                           |  |
|-----|------------|---------------------------------------|--|
| 1   | 9-12V      | 9-12V power connection port           |  |
| 2   | HDMI OUT   | Connect to HDMI out display           |  |
| 3   | HDMI IN    | HDMI video input                      |  |
| 4   | RS232      | Serial port                           |  |
| 5   | AOUT       | Audio output                          |  |
| 6   | AIN        | MIC input                             |  |
| 7   | USB        | Connect to the USB port of a computer |  |
| 8   | SFP+       | Connect to RX with fiber cable        |  |

#### **Connection Diagram**



## **Specifications**

| Function                                  |                | KFH101S_TX                | KFH101S_RX                  |
|---|----------------|---------------------------|-----------------------------|
|   | HDMI Input     | 1                         | NA                          |
|   | HDMI<br>Output | 1                         | 1                           |
|   | Power          | 12V                       | 12V                         |
| Connector                                 | Fiber Module   | SFP+ x 1                  | SFP+ x 1                    |
| Commedia                                  | Microphone     | 3.5MM Stereo Jack (Pink)  | 3.5MM Stereo Jack<br>(Pink) |
|   | Speaker        | 3.5MM Stereo Jack (Green) | 3.5MM Stereo Jack (Green)   |
|   | USB Type B     | 1                         | N/A                         |
|   | USB 2.0        | N/A                       | USB x 4                     |
| Resolution                                |                | 4K@60Hz (YCbCr 4:2:0)     |                             |
| Connection Cable                          |                | Fiber cable               |                             |
| Power Input                               |                | 9-12VDC                   | 9-12VDC                     |
| Power Consumption                         |                | 12W                       | 12W                         |
| Operating Temperature                     |                | 0—50 ℃                    |                             |
| Storage Temperature                       |                | -20 <b>−</b> 60 °C        |                             |
| Humidity                                  |                | 0—80% RH, Non-condensing  |                             |
| Material                                  |                | Metal                     |                             |
| Net Weight (                              | kg)            | 0.63kg                    | 0.63kg                      |
| Product Dimension $(W \times D \times H)$ |                | 218 mm x 115 mm x 40mm    |                             |