HDMI Fiber Optic Extender via Single MPO Fiber

MPO Connector and Extends HDMI 4K2K at 60Hz Link up to 200 Meters

DESCRIPTION

Our optical extender provides a high quality and uncompressed HDMI data link between source and sink devices. With optical fiber technologies, this extender can enable transmission of 4K2k@60Hz video/Audio signals up to 200m in MPO multimode fibers. Where radio frequency interference phenomenon is literally ruled out, which shows the advantage of high performance and good signal quality as well as low cost.
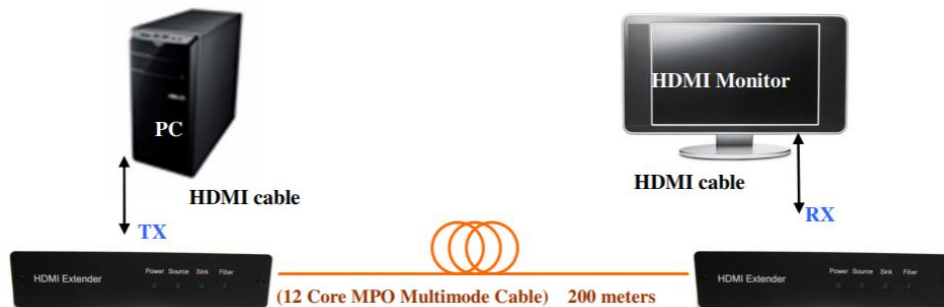
FEATURES

- Extend the distances up to 200m (660 feet) with high resolution 3840*2160@60Hz.
- HDCP fully compliant without copper wire.
- Data transmission fully compliant without copper wire
- No RF interference by optical fiber
- Class 1 laser product complies with EN 60825-1

APPLICATIONS

- Remote monitor for medical, industrial, military control
- Far-end LCD monitor, projector, and plasma display connection
- Large video wall system

APPLICATION NOTE

ORDERING INFORMATION

PART NUMBER	PLUG FOR AC ADAPTER	Package includes:
HDMI-TXRX-1MPO-200	US Plug	• TX module x 1
HDMI-TXRX-1MPO-201	EU Plug	• RX module x 1
HDMI-TXRX-1MPO-202	BS Plug	• 5V adapter x 2
HDMI-TXRX-1MPO-203	AU Plug	Optional: US/EU/BS/AU Plug change kit of 5V adapter

** This product does not include optical fibers.

SPECIFICATION

PARAMETER	SPECIFICATION	NOTE
Max length	200M	
Max resolution	3840 x 2160	
Max video bandwidth	6 Gbps per channel	
HDCP compliant	Yes	
Optical connector	MPO	
Recommended fiber	50/125 um MMF	
Optical property	850nm	
Optical link power budget	10dB (min)	
Operating voltage	DC 5V	
Electrical power consumption	TX: 4W	5V/800mA
	RX: 4W	5V/800mA
Operating temperature	-10ºC to 50ºC	
Storage temperature	-20ºC to 75ºC	
Dimensions	141 x 72.4 x 30	L x W x H (mm)
Weight	255g	Tx unit or RX unit

REQUIREMENTS

- HDMI Source (PC/NB/MAC graphic card HDMI output)
- HDMI Sink (HDMI monitor or projector)
- 100-240VAC 50-60Hz 0.2A electricity

ADAPTER SPECIFICATION

PARAMETER	SPECIFICATION	NOTE
Input	100-240VAC	US/EU/BS/AU plug is optional.
Output	DC 5V	2.0A
DC Jack	Inside 5V / Outside ground	

US Plug   EU Plug   BS Plug   AU Plug

MPO CABLE FIBER ASSIGNMENT

Female connector   Female connector

TX side   12 channel MM MPO cable   RX side

HDCP COMPLIANCE

HDCP (High-bandwidth Digital Content Protection) is one kind of copy protection by digital signal handshake. It is required for HDMI device. The Extender plays the role of a cable to communicate all of HDMI functions, such as all TMDS, DDC, CEC and HPD signal.

INSTALLATION

Step 1. Install TX box close to HDMI signal source, such as PC or NB.

Step 2. Install RX box close to HDMI sink, such as HDMI monitor or projectors.

Step 3. Connect TX box and RX box through optical fiber cable (MPO).

Step 4. Apply 5V adaptor power to TX box and RX box.

Step 5. Connect HDMI cable from TX box to Source.
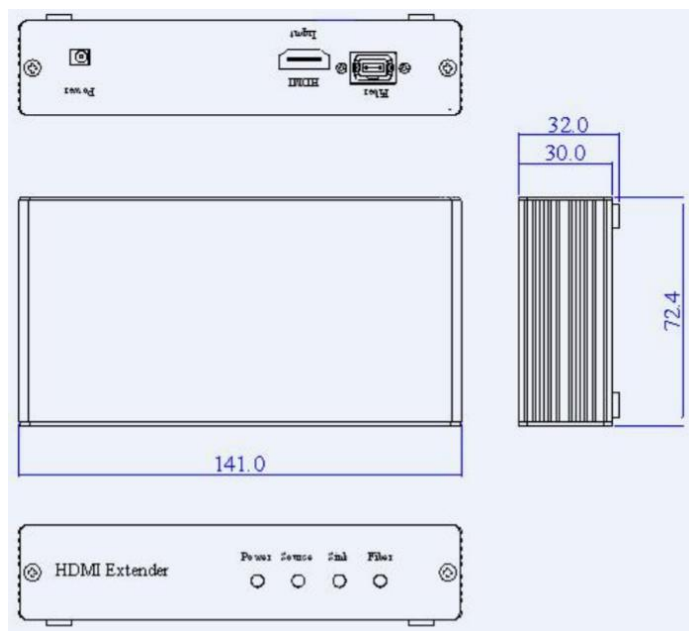
Step 6. Connect HDMI cable from RX box to Sink.

Notes:

(1) Clean fiber connector before plugging in. The dust will impact fiber communication performance.
(2) The length of HDMI cable should be NOT longer than 2 meters.
(3) These four indicators in front of TX/RX box represent working status. These 4 LEDs emerged green if all setup is complete and correct. The left one stands for the connection of power supply. The second light stands for the connection of HDMI source. The third light stands for the connection of HDMI sink. The right one stands for the connection of fiber between the TX box and RX box.

DIMENSIONS (unit: mm)

All dimensions are all in ±0.3mm tolerance if not specified.

SAFETY REGULATION

CE and FCC approved.

Note: The specifications subject to change without notice.

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