



HDMI Fiber Optic Extender via Single SC Fiber

Supports 3D/4K2K and up to 200 Meters in one Single-Mode Fiber



DESCRIPTION

HDMI (High-Definition Multimedia Interface) recently has become increasingly popular in the application of video and audio transmission system. In view of the extreme of electrical performances, however, the traditional copper wire cable imposes limits on signal transmission distance and signal quality. Optical fiber is of low dispersion, which in turn has the strength of longer signal transmission distance and better signal transmission quality in comparison to the traditional copper wire cable. Lasermate's HDMI extender uses single fiber without any copper wire inside, 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.

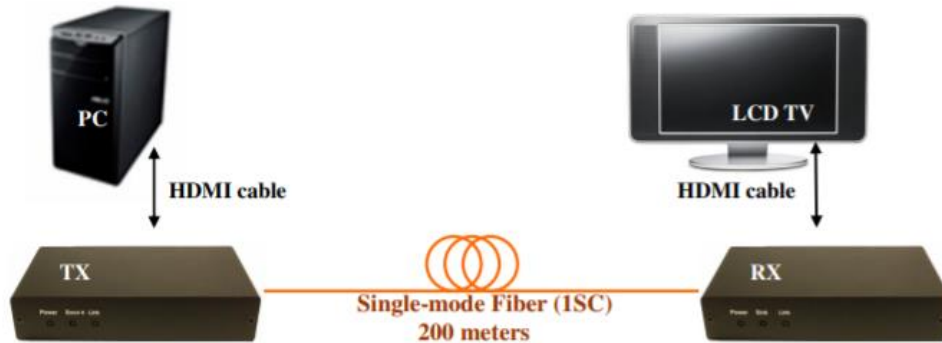
FEATURES

- Extend digital HDTV data with HDCP up to 200m (660 feet).
- Comply with HDMI standard for support 3D and 4K2K.
- HDCP fully compliant without copper wire
- No RF interference by optical fiber
- Class 1 laser product complies with EN 60825-1

APPLICATIONS

- Remote monitor for traffic, industrial, military control
- LCD, Projector, Plasma display connection
- Large video wall system

APPLICATION NOTE



ORDERING INFORMATION

Part Number	Plug for AC Adapter	Package includes: <ul style="list-style-type: none"> • TX module x 1 • RX module x 1 • 5V adapter x 2 Optional: EU/BS/AU Plug converter of 5V adapter
HDMI-TXRX-1SC-200	US Plug	
HDMI-TXRX-1SC-201	EU Plug	
HDMI-TXRX-1SC-202	BS Plug	
HDMI-TXRX-1SC-203	AU Plug	

** This product does not include optical fibers.

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SPECIFICATION

PARAMETER	SPECIFICATION	NOTE
Max length	200M	
Max resolution	4096 x 2160	HDMI 1.4
Max video bandwidth	3.4 Gbps per channel	
HDCP compliant	Yes	
CEC compliant	Yes	
Optical connector	Single SC	
Recommended fiber	9/125 um Single-mode fiber	
Optical property	1270nm / 1330nm	
Optical link power budget	+1.5 dB (min)	
Operating voltage	DC 5V	
Electrical power consumption	TX: 3W RX: 3W	5V/600mA 5V/600mA
Operating temperature	-10°C to 50°C	
Storage temperature	-20°C to 75°C	
Dimensions	141 x 72.4 x 30	L x W x H (mm)
Weight	255g	Tx unit or RX unit

REQUIREMENTS

- HDMI Source (DVD player or PC)
- HDMI Sink (LCD TV or Projector)
- 100-240VAC 50-60Hz 0.2A electricity

ADAPTER SPECIFICATION

PARAMETER	SPECIFICATION	NOTE
Input	100-240VAC	US plug
Output	DC 5V	2.0A
DC Jack	Inside 5V / Outside ground	



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: Put 'TX' module near to HDMI signal source, such as computers.

Step 2: Put 'RX' module is near to HDMI sink, such as LCD TVs or Projectors.

Step 3: Connect HDMI cable from TX to Source, and RX to Sink.

Step 4: Plug in the optical fibers from TX to RX.

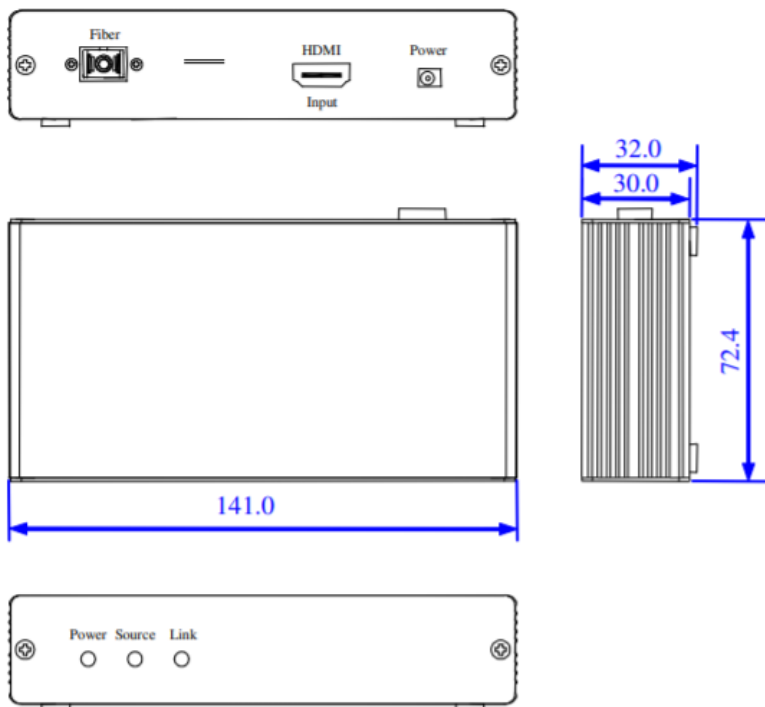
Step 5: Apply 5V adaptor to TX/RX modules.

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 the modules represent linking status. These 3 LEDs blaze green if all setup is complete and correct. The left one stands for the connection of power. The second light stands for the connection of HDMI Source/Sink. The third light stands for the connection of fiber between the TX and RX module.

DIMENSIONS (unit: mm)

All dimensions are all in $\pm 0.3\text{mm}$ tolerance if not specified.



SAFETY REGULATION

CE and FCC approved.



Note: The specifications subject to change without notice.

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