

HDMI+USB+RS-232+Audio 4K/2K Extender over SM Fiber (3KM)



Tx



Rx

LAN-F040

HDMI+USB+RS-232+Audio, 4K/2K 3KM Transmission over Single-mode Fiber

The **LAN-F040** HDMI+USB+RS-232+Audio extender lets you control a HDMI enabled computer from up to 3KM away over a duplex single mode fiber, with uncompressed 4K/2K HDMI video plus bidirectional high-quality audio and RS-232 signals.

It features the in/out audio port on the host and remote site, allowing you to transfer audio not just one way. The system is ideal for remote control of secured, physically inaccessible server room PC and client terminal connection. Brilliant picture quality with support for high-definition TV resolutions up to 4K/2K makes this solution to display your content exactly as you need on the remote site.

LAN-F040 is a plug-and-play solution, requiring no additional drivers or software to provide a hassle-free setup. Since the system uses fiber optic cable, this rules out the possibility of any electrical interference on the extended signal and makes it also the perfect solution for sensitive environments such as medical equipment in hospital.

● **Features**

- 3KM long distance uncompressed HDMI, high resolution audio and RS232 extension.
- Bidirectional audio extension.
- No RF interference by optical fiber cable.
- High ESD and surge protection for industrial environment use.
- Class 1 laser product complies with EN 60825-1.

● **Applications**

- UHD video & Audio extension.
- Remote monitor for medical or military control.
- Digital Signage & Industrial Displays.
- Server room PC and client terminal connection.

● Application Diagram



● Specifications

LAN-F040	
Key Parameters	
Maximum Distance	3KM, 2xSMF
Optical Power Budget	10dB
Maximum Video Resolution	3840*2160 (16:9)
Video Bandwidth	3.4 Gbps per channel, HDMI D0~D2
EDID Support	Pseudo DDC
Audio interface	✓ TX: 3.5mm*2, Sampling Rate: 24bit/>64kHz ✓ RX: 3.5mm*2
RS-232 Baud Rate	9600 bps, N, 8, 1
Operation Voltage	DC 5V
Power Consumption	*TX: 15W, 5V/3A; *RX: 5W, 5V/1A
Operation Temperature	-10°C ~ 50°C
Storage Temperature	-20°C ~ 75°C
Outline (W*D*H, mm)	TX: 76.4*164*29; RX: 76.4*164*29
Weight	*TX: 300g; *RX: 300g
Input Voltage	100~240VAC, 50~60 Hz
Output Voltage	DC 5V
Current Rating	3A Max
DC Jack	Inside +5V, outside ground
Transmitter Operation Specification (Tx)	
Input: PC HDMI *1, RS-232*1, 3.5mm Audio*1	Output: 2LC (Single-mode Fiber) *1, 3.5mm Audio*1
UART support 9600bps, 19200bps, 57600bps, 115200bps, full duplex communication	PC HDMI connectivity, LED indicator
C-EDID LED will flash when clone EDID	LINK LED indicators for path link.
Receiver Operation Specification (Rx)	
Input: 2LC (Single Mode Fiber) *1, 3.5mm Audio*1	Output: HDMI*1, RS-232*1, 3.5mm Audio*1
UART support 9600bps, N, 8, 1	Display HDMI connectivity LED indicator
LINK LED indicators for path link.	

◆ Ordering Information

LAN-F040 (Transmitter + Receiver, does not include Optical cables)

● System Requirement

*PC with HDMI source. * HDMI display or projector. *100~240 VAC, 50~60Hz, 0.3A electricity.