BE-96F02b

HDMI 2.0 with USB KVM Extender over Optical Fiber

The BE-96F02b is a HDMI 2.0b with USB over single core of SM or MM (50/125um/OM3) Optical Fiber cable KVM Extender.

The system supports HDMI 2.0b with resolution up to 4K2K@50/60Hz (YUV 4:4:4) as well as fully HDCP 2.2/1.4 and DVI compliant in non-compressed, lossless extension. It also supports bi-directional EDID, Hot Plug, IR and add-on USB for the TV screen, Set-top box as well as remote PC control.

Compared to similar copper-based solutions, optical signal transmission provides inherent galvanic isolation and excellent immunity to electromagnetic interference. The units also feature metal enclosures, providing further protection against radiated noise. Locking power connector ensure trouble-free installation and long-lasting, reliable operation.

Features

❖ Support HDMI 2.0b (18Gbps), HDCP 2.2, DVI, USB 1.1/2.0 compliant.

❖ Video resolutions up to 4K2K@50/60Hz (YUV 4:4:4).

❖ Audio supports LPCM 2/5.1/7.1 CH, Dolby Digital, DTS, Dolby True HD, DTS-HD Master Audio

❖ Support transparent EDID, Hot-Plug as well as bi-directional wideband IR control.

❖ Support USB 1.1/2.0 for the keyboard, mouse as well as USB Touch screen.

❖ TX support local Console, TX user can Lock/Unlock RX user.

❖ RX support remote PC, RX user can switch/access TX or RX PC.

❖ Support single-core of SM up to 3300 feet/1000 meters, or single core of MM (50/125um/OM3) up to 1000 feet/300 meters.

❖ Plug-and-play, no any additional software installation is required.

❖ Firmware upgradable.

❖ FCC, CE, RoHS.

Front, Rear View

AV-96F02bT　　Front

Power　　Optical　　HDMI

Rear

DC 5V　SFP +　HDMI In　IR In　IR Out　RS-232　Update

AV-96F02bR　　Front

Power　　Optical　　HDMI

Rear

DC 5V　SFP +　HDMI Out　IR In　IR Out　RS-232　Update

BE-401T　　Front

1/2 — 3/4

Power/Status

Keyboard/Mouse/Touch

Rear

USB to PC　RS-232

BE-401R　　Front

1/2 — 3/4

Power/Status

Keyboard/Mouse/Touch

Rear

USB to PC　RS-232
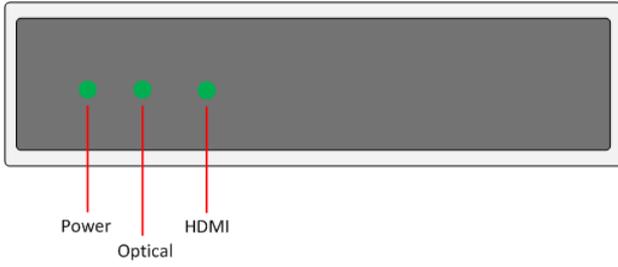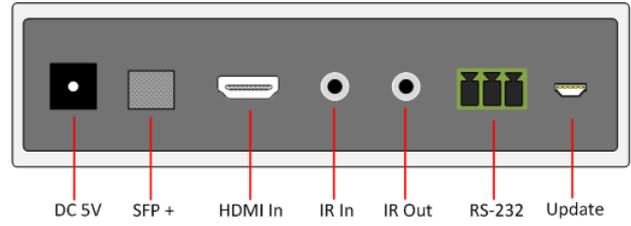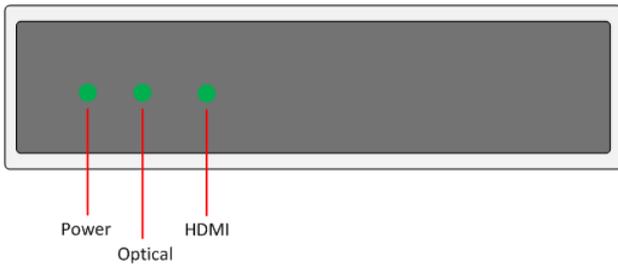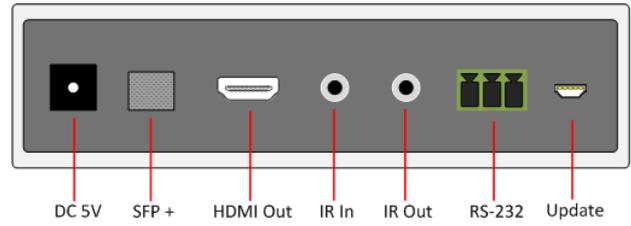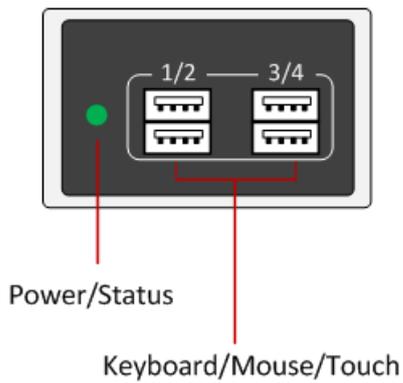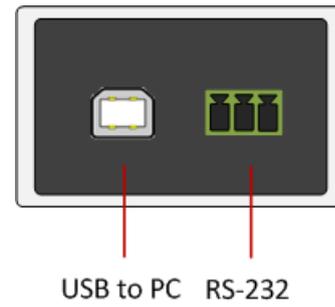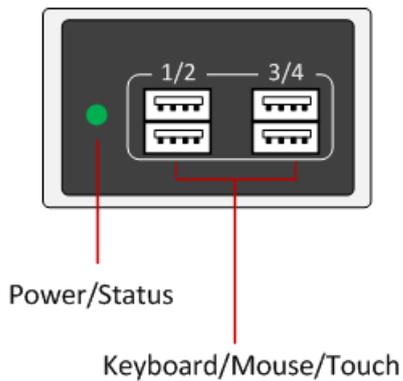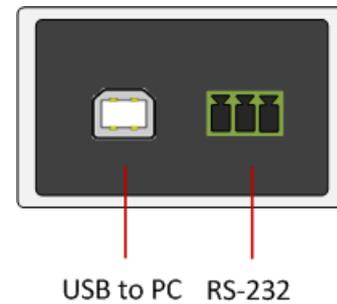
Specification

Model No.		AV-96F02bT	BE-401T	AV-96F02bR	BE-401R
Connectors	HDMI Input	1	N/A	N/A	N/A
	HDMI Output	N/A	N/A	1	N/A
	IR	1 x IR In (3.5 mm)	N/A	1 x IR Out (3.5 mm)	N/A
	Phoenix RS-232	inter-connect		inter-connect	
	USB Upstream	N/A	1 x USB-B	N/A	1 x USB-B
	USB Downstream	N/A	4 x USB-A	N/A	2 x USB-A
HDMI Compliance		HDMI 2.0b			
HDCP Compliance		HDCP 2.2 and HDCP 1.4			
Video Bandwidth		18Gbps			
Color Space		RGB, YCbCr 4:4:4, YCbCr 4:2:2			
Resolution		Up to 4K2K@50/60Hz(YUV 4:4:4), 4K2K@30Hz, 1080p@120Hz, and 1080p 3d@60Hz			
Color Depth		8-bit, 10-bit, 12-bit			
HDMI Audio Formats		LPCM 2/5.1/7.1 CH, Dolby Digital, DTS 5.1, Dolby Digital+, Dolby TrueHD, DTS-HD Master Audio, Dolby Atmos, DTS:X			
Operation Range		Up to 3300 feet/1000meters over single-mode fiber cable. Up to 1000feet/300 meters over multi-mode fiber cable.			
IR Frequency		20kHz-60KHz			
RS-232		4800-115200bps			
ESD Protection		Human body-Model: ±8KV(air-gap discharge) & ±4KV(contact discharge)			
Power		DC 5V 1A/3W	From USB	DC 5V 1A/3W	From USB
Environment	Operating Temp.	0 to 40℃			
	Storage Temp.	-40 to 60℃			
	Humidity	20 ~ 90% Non-condensing			
Physical Properties	Material	Metal			
	Weight	256g	150g	256g	150g
	Dimension	100Lx65Wx25.6H (mm)	55Lx95Wx25H(mm)	100Lx65Wx25.6H (mm)	55Lx95Wx25H(mm)

BE-96F02b Diagram

Cable Color
- HDMI
- USB
- RS-232
- Fiber

Splitter

Local Console

Local PC

AV-96F02bT

To PC

BE-401T

Fiber

AV-96F02bR

BE-401R

Remote PC

Remote Console