VE882

HDMI Optical Extender (1080p@600m)

The VE882 is an Optical HDMI Extender that overcomes the length restriction of standard HDMI cables by using optical fiber to send high definition audio and video signals over large distances.

The VE882 accepts an audio-video stream from a local source and serializes the data to pass it over a single 3.125 Gbps optical link (for resolutions up to 1080p@60Hz at 24-bits).

The VE882 can also extend the IR remote control and transfer RS-232 (up to 115kbps) in both directions, allows you to connect serial devices such as touch screens and barcode scanners.
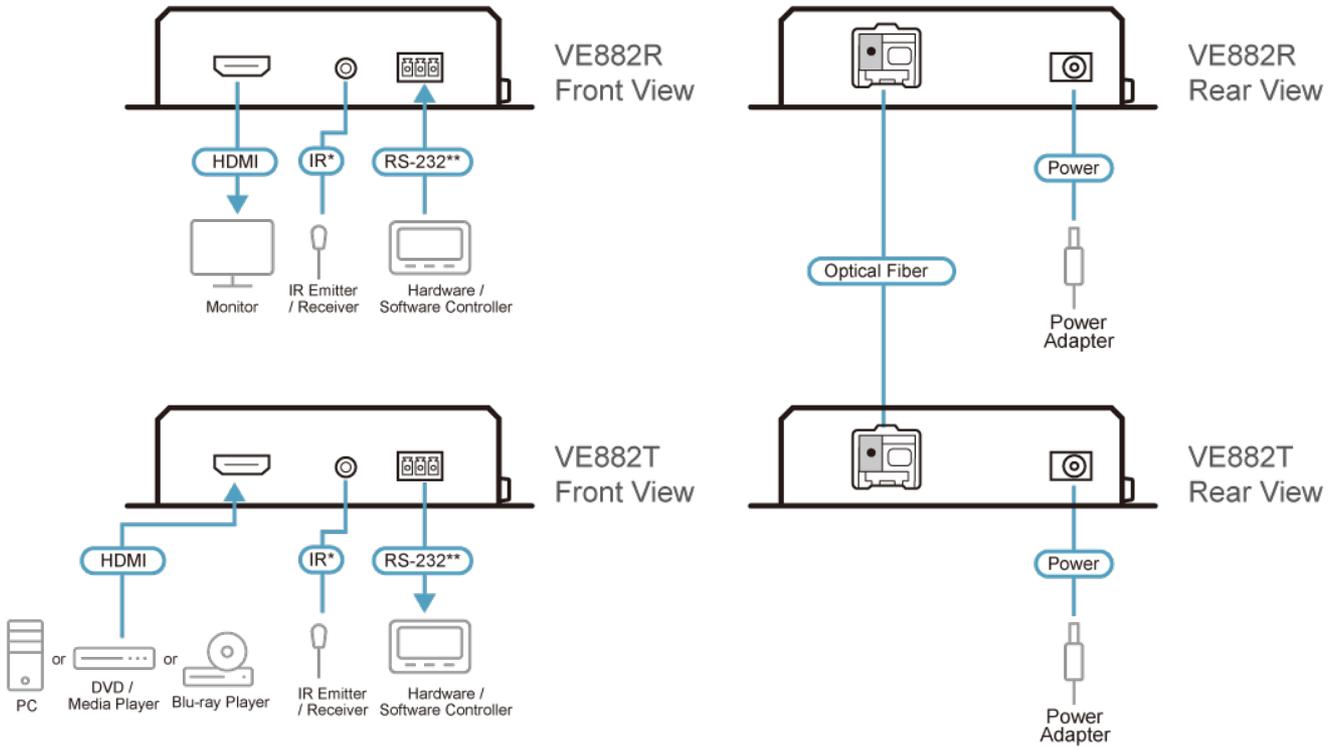
Features

- Extends the transmission range of HDMI, IR and RS-232 signals using one fiber optic cable
- Very long distance transmission – up to 600m
- HDMI (3D, Deep Color), HDCP compatible – signaling rates up to 3.125 Gbits
- Superior video quality – up to 1080p@60Hz
- Supports full frequency IR signal from 30KHz to 60KHz
  (The IR receiver cable included with the package only supports 30 KHz to 56 KHz)
- Uses one fiber optic cable to connect the local and remote units
- Supports wide screen formats
- Built-in 8KV/15KV ESD protection
- Features RS-232 serial port for connecting peripherals such as touch screens, barcode scanners, etc.
- Supports bi-directional IR signal transmission, one way at a time
- Rack-mountable
- Hot-pluggable

Specifications

Function	VE882R	VE882T
Video Input		
Interfaces	N/A	1 x HDMI Type A Female (Black)
Impedance	N/A	100 Ω
Max. Distance	N/A	3 m
Video Output		
Interfaces	1 x HDMI Type A Female (Black)	N/A
Impedance	100 Ω	N/A
Max. Distance	3 m	N/A
Video		

Max. Data Rate	6.75 Gbps (2.25 Gbps Per Lane)	6.75 Gbps (2.25 Gbps Per Lane)
Max. Pixel Clock	225 MHz	225 MHz
Compliance	HDMI (3D, Deep Color) HDCP 1.4 Compatible	HDMI (3D, Deep Color) HDCP 1.4 Compatible
Max. Resolution	Up to 1080p	Up to 1080p
Max. Distance	1 x SFP Module (*Note) 600m @ Single mode (SM) fiber 300m @ OM3 Multi mode (MM) filber	1 x SFP Module (*Note) 600m @ Single mode (SM) fiber 300m @ OM3 Multi mode (MM) filber
Audio		
Input	N/A	1 x HDMI Type A Female (Black)
Output	1 x HDMI Type A Female (Black)	N/A
Connectors		
Unit To Unit	1 x bi-directional SFP (LC)	1 x bi-directional SFP (LC)
Power	1 x DC Jack	1 x DC Jack
Control		
IR Channel	1 x Mini Stereo Jack Female (Black); 30~56 KHz full range transmission	1 x Mini Stereo Jack Female (Black); 30~56 KHz full range transmission
RS-232 Channel	1 x Terminal Block, 3 pole (Green)	1 x Terminal Block, 3 pole (Green)
Power Consumption	DC5.3V:4.69W:22BTU/h Note: ● The measurement in Watts indicates the typical power consumption of the device with no external loading. ● The measurement in BTU/h indicates the power consumption of the device when it is fully loaded.	DC5.3V:5.80W:27BTU/h Note: ● The measurement in Watts indicates the typical power consumption of the device with no external loading. ● The measurement in BTU/h indicates the power consumption of the device when it is fully loaded.
Environmental		
Operating Temperature	0-40°C	0-40°C
Storage Temperature	-20 - 60°C	-20 - 60°C
Humidity	0 - 80% RH, Non-Condensing	0 - 80% RH, Non-Condensing
Physical Properties		
Housing	Metal	Metal
Weight	0.44 kg (0.97 lb)	0.44 kg (0.97 lb)
Dimensions (L x W x H)	14.17 x 10.30 x 3.00 cm (5.58 x 4.06 x 1.18 in.)	14.17 x 10.30 x 3.00 cm (5.58 x 4.06 x 1.18 in.)
Carton Lot	5 pcs	5 pcs
Note	1. Operating distance is approximate. A typical maximum distance may vary depending on factors such as fi ber type, bandwidth, connector splicing, losses, modal or chromatic dispersion, environmental factors, and kinks. 2. It is recommended that you use a Single Mode optical fi ber cable that conforms to IEC 60793- 2-50 B1.1 or ITU-T G.652.B specifi cations. 3. The VE882 supports OM3 optical fiber which can extend the transmission distance up to 300 meters	1. Operating distance is approximate. A typical maximum distance may vary depending on factors such as fi ber type, bandwidth, connector splicing, losses, modal or chromatic dispersion, environmental factors, and kinks. 2. It is recommended that you use a Single Mode optical fi ber cable that conforms to IEC 60793- 2-50 B1.1 or ITU-T G.652.B specifi cations. 3. The VE882 supports OM3 optical fiber which can extend the transmission distance up to 300 meters
Note	For some of rack mount products, please note that the standard physical dimensions of WxDxH are expressed using a LxWxH format.	

Diagram

VE882R Front View

HDMI → Monitor

IR* → IR Emitter / Receiver

RS-232** → Hardware / Software Controller

VE882R Rear View

Power → Power Adapter

Optical Fiber

VE882T Front View

HDMI → PC or DVD / Media Player or Blu-ray Player

IR* → IR Emitter / Receiver

RS-232** → Hardware / Software Controller

VE882T Rear View

Power → Power Adapter

* The IR bypass channel is bi-directional. The IR transmitter and IR receiver can be plugged either into the VE882T or VE882R unit depending on the device you want to control remotely.
** The unit supports bi-directional RS-232 bypass transmission. To remotely control a PC through serial controller, connect the RS-232 port of the receiver to a serial controller, and then connect the RS-232 port of the transmitter to a PC, and vice versa.