

VE1812

HDMI HDBaseT Extender with PoH (4K@100m) (HDBaseT Class A)



The VE1812 HDMI HDBaseT Extender with PoH is the ideal solution for connecting equipment in remote locations up to 100m over a single Cat 5e / 6 / 6a cable. With Long Reach Mode enabled, the VE1812 can extend HDMI signal up to 150m @1080p.

The VE1812 supports RS-232 and IR signaling pass-through, allowing users to control the HDMI source device from the receiver unit (VE1812R) while also accessing the HDMI display device from the transmitter unit (VE1812T). The IR signals can also be extended in both directions.

The VE1812 features Power over HDBaseT (PoH) which sends power from Tx to Rx over Cat 5e / 6 / 6a cable without any additional power supply. The VE1812 is HDMI (3D, Deep Color, 4K) and HDCP compatible. When transmitting HDMI / 4K with a Cat 6a or ATEN [2L-2910](#) Cat 6 cable, the maximum distance can reach up to 100 meters. The VE1812 is perfect for digital classrooms, video conference rooms, gaming or any installation that requires superior video quality.



Features

- HDBaseT Connectivity – extends an HDMI connection over a long distance via one Cat 5e / 6 / 6a cable
- Superior video quality:
 - 4K up to 100 m over a Cat 6a or ATEN [2L-2910](#) Cat 6 cable
 - 1080p up to 150 m when in HDBaseT Long Reach Mode
- HDBaseT Anti-jamming – resists signal interference during high-quality video transmission using HDBaseT technology
- PoH (Power over HDBaseT) – supplies power from Transmitter to Receiver over a long distance via one Cat 5e / 6 / 6a cable
- Bi-directional RS-232 channel – allows you to connect to serial terminals or serial devices, such as touch screens and barcode scanners
- Bi-directional IR channel – Two way IR protocol delivery by one IR port; IR transmission is processed one direction at a time
- Rack- Mountable

Specification

Function	VE1812R	VE1812T
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	10.2Gbps (3.4Gbps per lane)	10.2Gbps (3.4Gbps per lane)

Max. Pixel Clock	340 MHz	340 MHz
Compliance	HDMI (3D, Deep Color, 4K) HDCP2.2 Compatible Consumer Electronics Control (CEC)	HDMI (3D, Deep Color, 4K) HDCP2.2 Compatible Consumer Electronics Control (CEC)
Max. Resolutions / Distance	Up to 4K@70m (Cat 5e/6) / 100m (Cat 6a/ATEN 2L-2910 Cat6); 1080p@100m (Cat 5e/6/6a) *4K supported: 4096 x 2160 / 3840 x 2160 @ 60Hz (4:2:0); 4096 x 2160 / 3840 x 2160 @ 30Hz (4:4:4)	Up to 4K@70m (Cat 5e/6) / 100m (Cat 6a/ATEN 2L-2910 Cat6); 1080p@100m (Cat 5e/6/6a) *4K supported: 4096 x 2160 / 3840 x 2160 @ 60Hz (4:2:0); 4096 x 2160 / 3840 x 2160 @ 30Hz (4:4:4)
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 RJ-45 Female	1 x RJ-45 Female
Power	1 x DC Jack (Black) with locking or 1 x RJ-45 (Power Over HDBaseT, POH)	1 x DC Jack (Black) with locking
Control		
RS-232	Connector: 1 x Terminal Block, 3 pole Baud Rate: 19200, Data Bits:8, Stop Bits:1, no parity and flow control	Connector: 1 x Terminal Block, 3 pole Baud Rate: 19200, Data Bits:8, Stop Bits:1, no parity and flow control
IR	1 x Mini Stereo Jack Female (Black)	1 x Mini Stereo Jack Female (Black)
Switches		
Long Reach Mode Switch	1 x Slide Switch - ON/OFF	1 x Slide Switch - ON/OFF
Firmware Upgrade	1 x Slide Switch - ON/OFF	1 x Slide Switch - ON/OFF
Power Consumption	DC5V:4.26W:20BTU POH:5.33W:25BTU 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.	DC5V:3.2W:15BTU 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	0.45 kg (0.99 lb)	0.47 kg (1.04 lb)
Dimensions (L x W x H) with bracket	14.04 x 12.30 x 3.00 cm (5.53 x 4.84 x 1.18 in.)	14.04 x 12.30 x 3.00 cm (5.53 x 4.84 x 1.18 in.)
Dimensions (L x W x H) without bracket	13.60 x 10.10 x 2.90 cm (5.35 x 3.98 x 1.14 in.)	13.60 x 10.10 x 2.90 cm (5.35 x 3.98 x 1.14 in.)

Diagram



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