

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 <u>2L-2910</u> 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

Specifications

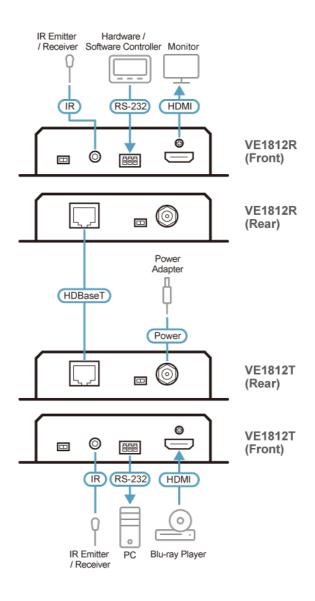
| Function | VE1812R | VE1812T |
|----------------|--------------------------------|--------------------------------|
| Video Input | | |
| Interfaces | N/A | 1 x HDMl Type A Female (Black) |
| Impedance | N/A | 100 Ω |
| Max. Distance | N/A | 3 m |
| Video Output | | |
| Interfaces | 1 x HDMI Type A 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 | | 1 |
| Input | N/A | 1 x HDMl 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.) |

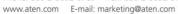


Diagram



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