

4K HDMI Cat 6 Extender

VE1821

As a complete end-to-end solution, the VE1821 comes as a kit that contains a transmitter and a receiver, extending HDMI signals at 4096 x 2160 / 3840 x 2160 @ 30 Hz (4 : 4 : 4) up to 40 m via a Cat 6 cable (ATEN 2L-2910 recommended). Crystal-clear video presentation is guaranteed thanks to its capability of transmitting 4K sources without latency. Meanwhile, it supports lossless audio formats, such as LPCM 7.1CH, Dolby TrueHD, Dolby Digital Plus, and DTS-HD Master Audio, to add superior sound to the video content, enhancing the experience for the viewers.

Designed to optimize installation flexibility, the VE1821 features an ultra lightweight, palm-sized enclosure, perfect for mounting or placement in tight spaces. The transmitter includes a local HDMI output port, allowing for cascading purposes or for users to monitor the UHD signal being extended to the receiver. With the built-in EDID switch, users can control which EDID is taken from either display. Plus, the HDMI source can be displayed at the optimal resolution based on the capabilities of the connected display through the EDID Copying Mode. As a result of the IR transmission functionality, the source device connected to the transmitter can be seamlessly controlled from the receiver side, assuring easy and complete control for the user. The VE1821 adopts PoC (Power over Cable) technology, which enables the transmitter to provide power to the receiver via a Cat 6 cable, eliminating the need for a bulky external power supply.

With such a rich set of features, the VE1821 delivers excellent AV transmission quality and flexibility within different installation scenarios, such as meeting facilities, retail settings, entertainment systems, and more.



VE1821T



VE1821R



Front View



Rear View

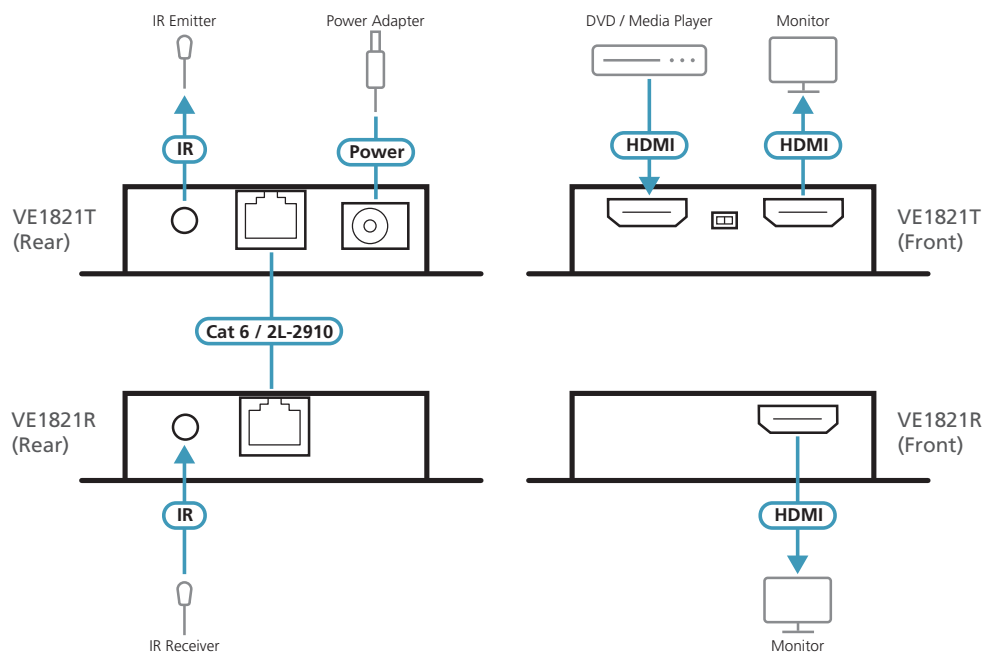




Ultra Lightweight, Palm-sized Casing

Features

- Includes a transmitter and a receiver to work in tandem to extend 4K HDMI signals over a Cat 5e / 6 cable
- Ultra lightweight, palm-sized enclosure for easy mounting or placement in tight spaces
- Crystal clear 4K HDMI transmission with zero latency across up to 40 m via a Cat 6 cable (ATEN 2L-2910 recommended) / 30 m via a Cat 5e cable
- Local HDMI output port on the transmitter unit — enables cascading or users to monitor the UHD signal being extended to the receiver
- Built-in EDID switch — users can control which EDID is taken from either display
- EDID Copying Mode — HDMI source can be displayed at the optimal resolution based on the capabilities of the connected display
- IR signal transmission — the source device connected to the transmitter can be seamlessly controlled from the receiver side
- PoC (Power over Cable) technology — power can be delivered from the transmitter to the receiver via a Cat 5e / 6 cable to eliminate the need for a bulky external power supply
- HDMI (3D, Deep Color, 4K); HDCP 1.4 compliant
- Built-in ESD protection
- Plug-and-play — no additional software needed



Only connect VE1821T with VE1821R.
Connecting VE1821T with other receiver models or third-party receivers may cause physical damage to the receiver.

Specifications

| | VE1821R | VE1821T |
|---|--|--|
| 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) | 1 x HDMI Type A Female (Black) |
| Impedance | 100 Ω | 100 Ω |
| Max. Distance | 3 m | 3 m |
| Video | | |
| Max. Data Rate | 10.2 Gbps (3.4 Gbps Per Lane) | 10.2 Gbps (3.4 Gbps Per Lane) |
| Max. Pixel Clock | 340 MHz | 340 MHz |
| Compliance | HDMI (3D, Deep Color, 4K) HDCP 1.4 Compatible | HDMI (3D, Deep Color, 4K) HDCP 1.4 Compatible |
| Max. Resolutions / Distance | Up to 4K @ 30 m (Cat5e), 40 m (Cat 6 / ATEN 2L-2910) *4K supported: 4096 x 2160 / 3840 x 2160 @ 30 Hz (4 : 4 : 4) | Up to 4K @ 30 m (Cat5e), 40 m (Cat 6 / ATEN 2L-2910) *4K supported: 4096 x 2160 / 3840 x 2160 @ 30 Hz (4 : 4 : 4) |
| Audio | | |
| Input | N/A | 1 x HDMI Type A Female (Black) |
| Output | 1 x HDMI Type A Female (Black) | N/A |
| Control | | |
| IR Channel | 1 x Mini Stereo Jack Female (Black); Single Way Bypass Channel from Receiver to Transmitter | 1 x Mini Stereo Jack Female (Black); Single Way Bypass Channel from Receiver to Transmitter |
| Switches | | |
| Mode Switch | N/A | EDID Mode Selection (Read EDID from Transmitter HDMI Output or Receiver HDMI Output) |
| Connectors | | |
| Power | 1 x RJ-45 Female (Power over Cable; Power Supply from VE1821T) | 1 x DC Jack (Black) with locking |
| Unit To Unit | 1 x RJ-45 Female | 1 x RJ-45 Female |
| Power Consumption | PoC:0.87W:4BTU | DC 12V:1.86W:9BTU |
| Environmental | | |
| Operating Temperature | 0 – 40 °C | 0 – 40 °C |
| Storage Temperature | -20 – 60 °C | -20 – 60 °C |
| Humidity | 20 – 90 % RH, Non-condensing | 20 – 90 % RH, Non-condensing |
| Physical Properties | | |
| Housing | Metal | Metal |
| Weight | 0.12 kg (0.28 lb) | 0.12 kg (0.28 lb) |
| Dimensions (L x W x H) with bracket | 7.95 x 6.80 x 1.65 cm (3.13 x 2.68 x 0.65 in.) | 7.95 x 6.80 x 1.65 cm (3.13 x 2.68 x 0.65 in.) |
| Dimensions (L x W x H) without bracket | 5.75 x 6.80 x 1.65 cm (2.26 x 2.68 x 0.65 in.) | 5.75 x 6.80 x 1.65 cm (2.26 x 2.68 x 0.65 in.) |

ATEN International Co., Ltd.

3F, No.125, Sec. 2, Datung Rd., Sijhih District., New Taipei City 221, Taiwan
 Phone: 886-2-8692-6789 Fax: 886-2-8692-6767
 www.aten.com E-mail: marketing@aten.com

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