Simply Better Connections

VE1833

True 4K HDMI / USB HDBaseT 3.0 - Lite Transceiver with PoH (True 4K@40 m)

The ATEN VE1833 True 4K HDMI / USB HDBaseT 3.0 - Lite Transceiver with PoH integrates both transmitter and receiver functions in one compact unit, allowing users to flexibly configure it through a DIP switch according to diverse AV setup. Leveraging HDBaseT 3.0 technology, the VE1833 delivers uncompressed True 4K HDMI signals over distances up to 40 m via a single Cat 6a cable (HDBaseT 3 Certified Cat 6a U/FTP / ATEN's tailor-made HDBaseT cable*).

Designed for professional AV environments, the VE1833 supports resolutions up to 4096 x 2160 @ 60Hz (4:4:4) and advanced video formats including HDR, HDR10+, and Dolby Vision, along with HDCP 2.2/2.3, 3D, and Deep Color, ensuring superior video quality. The VE1833 features bi-directional PoH with power redundancy, ensuring continuous operation for critical missions.

The VE1833 extends not only HDMI video but also independent stereo audio, USB 2.0, IR, and bi-directional RS-232 signals all over a Cat 6a cable. It also provides HDMI audio embedding and de-embedding, making it easy to route audio separately when needed, and ideal for setups involving external speakers or audio processors. This all-in-one design streamlines complex installations and allows for seamless integration with video matrix switches, splitters, and more.

Empowered by its versatile feature set and flexible deployment options, the VE1833 is an ideal solution for conference halls, auditoriums, lecture theaters, museums, exhibition spaces, and any environment that demands high-performance AV transmission with simplified setup.

Note: Please refer to the Compatible Cables section on the product page.

Features

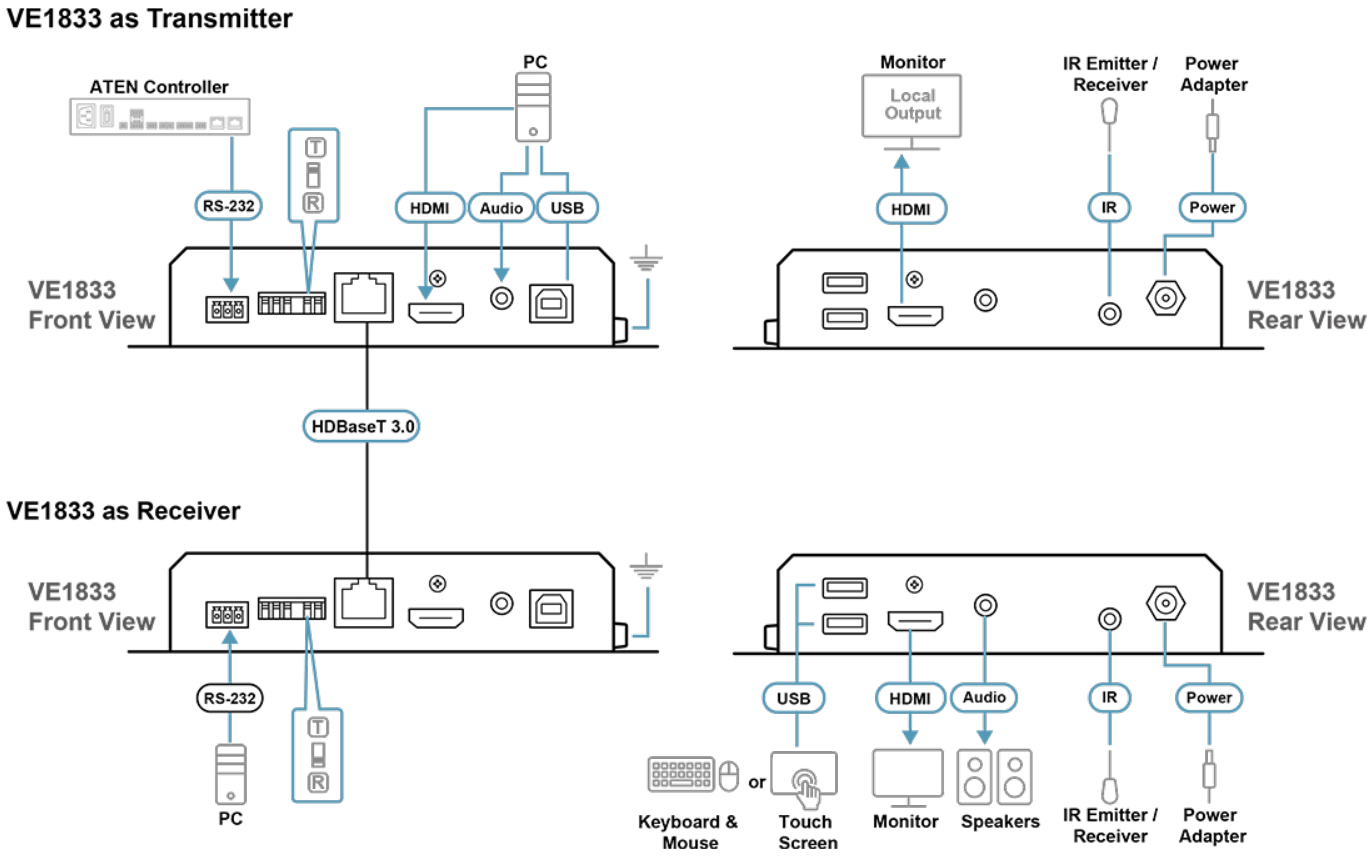
- Extends uncompressed True 4K HDMI signals up to 40 m over a single Cat 6a cable
- Compliant with HDBaseT 3.0 standards – transmits high-quality video, full range IR, bi-directional RS-232, independent stereo audio and USB 2.0 signals channel bypass
- Superior video quality – up to 4096 x 2160 @ 60 Hz (4:4:4); HDR, HDR+, Dolby Vision supported
- Supports HDMI audio embedding / de-embedding functions
- Bi-directional PoH with power redundancy for continuous operation
- Flexible for deployment – can be configured as a transmitter or receiver depending on the AV solution
- HDMI (3D, Deep Color, 4K/60Hz); HDCP2.2/2.3 compliant
- Supports HDMI local output
- Compliant with the USB 2.0 standard for a wide range of USB peripherals compatibility
- LED indication of HDBaseT and HDMI signal status for easier recognition
- Supports extremely high refresh rates up to 240Hz for the connected display
- Firmware upgradable
- Built-in 8KV / 15KV ESD protection
- Plug-and-play
- Rack-mountable

Specifications

Video Input	
Interfaces	1 x HDMI Type A Female (Black)
Impedance	100 Ω
Max. Distance	5 m
Video Output	
Interfaces	1 x HDMI Type A Female (Black)
Impedance	100 Ω
Max. Distance	5 m
Video	
Max. Data Rate	18Gbps (6Gbps per lane)
Max. Pixel Clock	600 MHz
Compliance	HDMI (3D, Deep Color, 4K/60Hz); 4K HDR HDCP2.2/2.3 Compatible Consumer Electronics Control (CEC)* *The CEC signals are only bypassed from the transmitter unit to the receiver unit and do not support local output.
Max. Resolution	4096 x 2160 @ 60Hz (4:4:4) 3840 x 2160 @ 60Hz (4:4:4)
Max. Resolutions / Distance	Up to 4K x 2K @ 60Hz (4:4:4) @40m (HDBaseT3 Certified Cat 6a U/FTP cable / ATEN's tailor-made HDBaseT cable)
Audio	
Input	1 x HDMI Type A Female (Black) 1 x Stereo Audio (mini stereo Jack female , Green)
Output	1 x HDMI Type A Female (Black) 1 x Stereo Audio (mini stereo Jack female , Green)
Connectors	
Unit To Unit	1 x RJ-45 Female (HDBaseT)
Power	1 x DC Jack (Black) with locking 1 x RJ-45 Female, POH PD & PSE supported
Control	
RS-232 Channel	Connector: 1 x Terminal Block, 3 pole Baud Rate: 19200, Data Bits:8, Stop Bits:1, no parity and flow control
IR Channel	1 x Mini Stereo Jack Female, (Bi-directional, Black) 30K ~56KHz full range transmission
USB Channel	1 x USB2.0 Type B Female (White, Host) 2 x USB2.0 Type A Female (White, Device) Transmission data bandwidth: Up to 300Mbps

Power Consumption	DC12V:6.01W:92BTU/h (Tx) DC12V:7.09W:118BTU/h (Rx) 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.
Switches	
Selection	1 x Slide Switch - T (Be a Transmitter) / R (Be a Receiver) selection
Mode Selection	1 x Slide Switch - HDMI Audio embed or De-embed ON/OFF selection 1 x Slide Switch - POH PD or PSE selection 1 x Slide Switch - RS232 Command or Bypass mode selection
Firmware Upgrade	1 x Slide Switch - ON/OFF
LEDs	
Power	TX: 1 x DC in Power supplied (Green) & 1 x POH Power supplied (Orange) RX: 1 x DC in Power supplied (Green) & 1 x POH Power supplied (Orange) NOTE: The TX or RX LED lights to indicate which role the VE1833 is set to by DC Power or POH.
Link	1 x TX Link status (Transmitter, Yellow Green) 1 x RX Link status (Receiver, Yellow Green)
Video Output	1 x RX HDMI OUT status (Receiver, Orange)
Video Input	1 x Tx HDMI IN status (Transmitter, Orange)
Environmental	
Operating Temperature	0 - 40°C
Storage Temperature	-20 - 60°C
Humidity	0 - 80% RH, Non-Condensing
Physical Properties	
Housing	Metal
Weight	0.64 kg (1.41 lb)
Dimensions (L x W x H) with bracket	16.94 x 14.69 x 3.00 cm (6.67 x 5.78 x 1.18 in.)
Dimensions (L x W x H) without bracket	16.60 x 12.49 x 2.90 cm (6.54 x 4.92 x 1.14 in.)

Diagram



ATEN International Co., Ltd.
3F., No.125, Sec. 2, Datong 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