

VE1833

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



The Latest in Signal Convergence,
The Next Level in True 4K Performance



VE1833

True 4K HDMI / USB HDBaseT 3.0 -
Lite Transceiver with PoH

TRUE 4K
UNCOMPRESSED



The VE1833 is a compact True 4K HDMI and USB HDBaseT 3.0 Lite transceiver that can function as either a transmitter or receiver, offering flexible deployment across diverse AV setups. Delivering uncompressed True 4K HDMI transmission up to 40 m via a single Cat 6a U/FTP cable with zero latency, it features a user-friendly design and PoH power redundancy for simple, reliable installation in spaces such as conference halls, auditoriums, and exhibition areas.

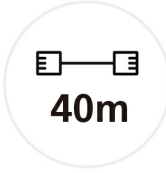
*Cat 6A U/FTP is the recommended setting. The skewless nature and inter-pair shielding of FTP provides the better near-end crosstalk (NEXT, source end) and far-end crosstalk (FEXT, receiver end) parameters required to achieve the maximum performance and distance.



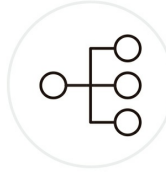
Uncompressed True 4K



HDBaseT 3.0



Up to 40m Transmission over a Cat 6A U/FTP



Multiple Control Signals (AV, RS-232, IR, USB)



Audio Embedding & De-embedding



Easy Installation



Transmitter

Rceiver



One Unit, Two Configurations

The VE1833 integrates the functions of a transmitter and a receiver into one unit for users to easily set it to the direction (Tx / Rx) required and enjoy more flexible deployment with video matrix switches, splitters, and more.

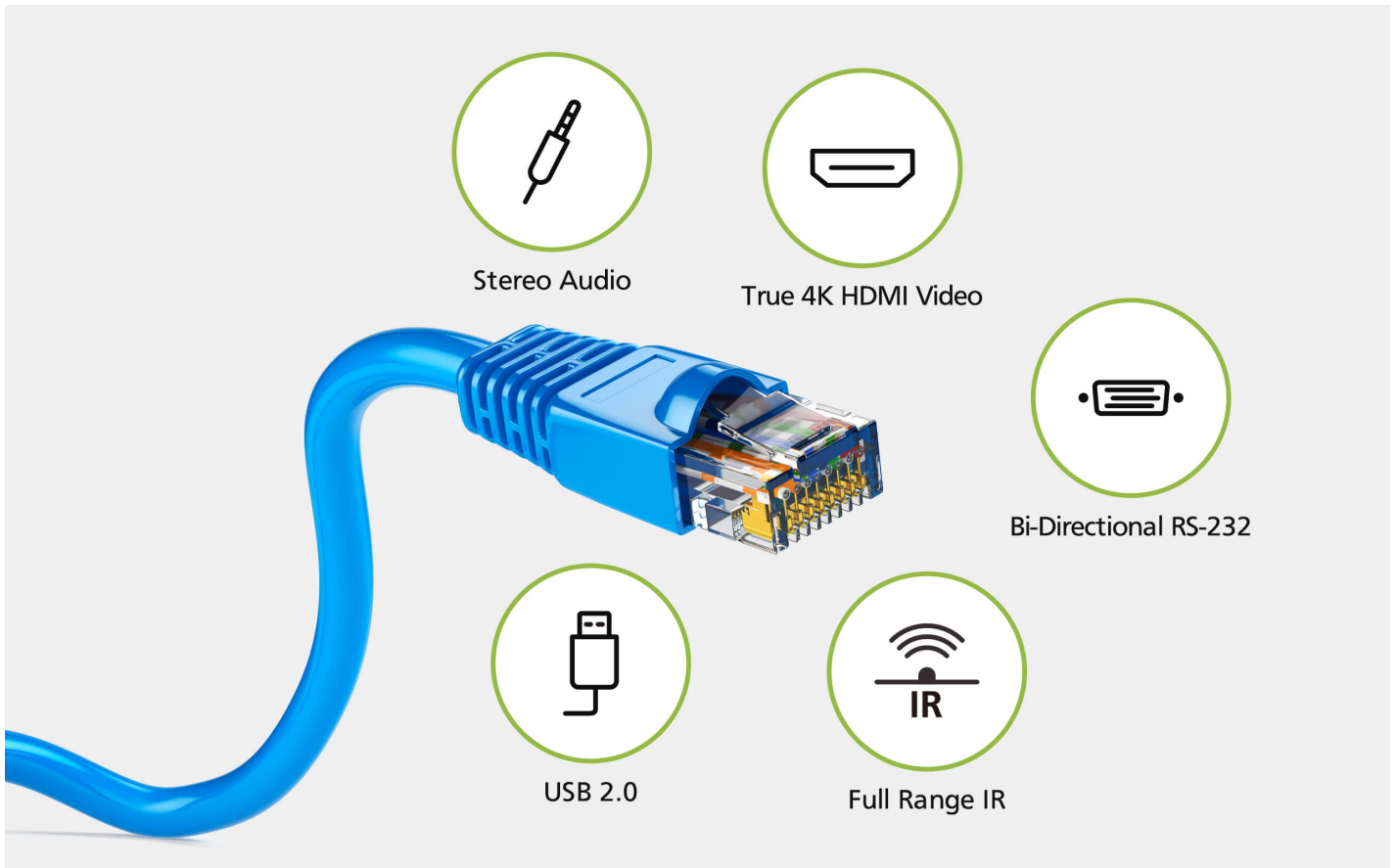
Uncompressed True 4K HDMI with HDR @40m

Delivering uncompressed True 4K @ 60Hz 4:4:4 HDMI with HDR up to 40m/131ft over a Cat 6A U/FTP cable with no latency, The VE1833 offers superior video quality even when output devices are located far away.



One Cable to Transmit It All

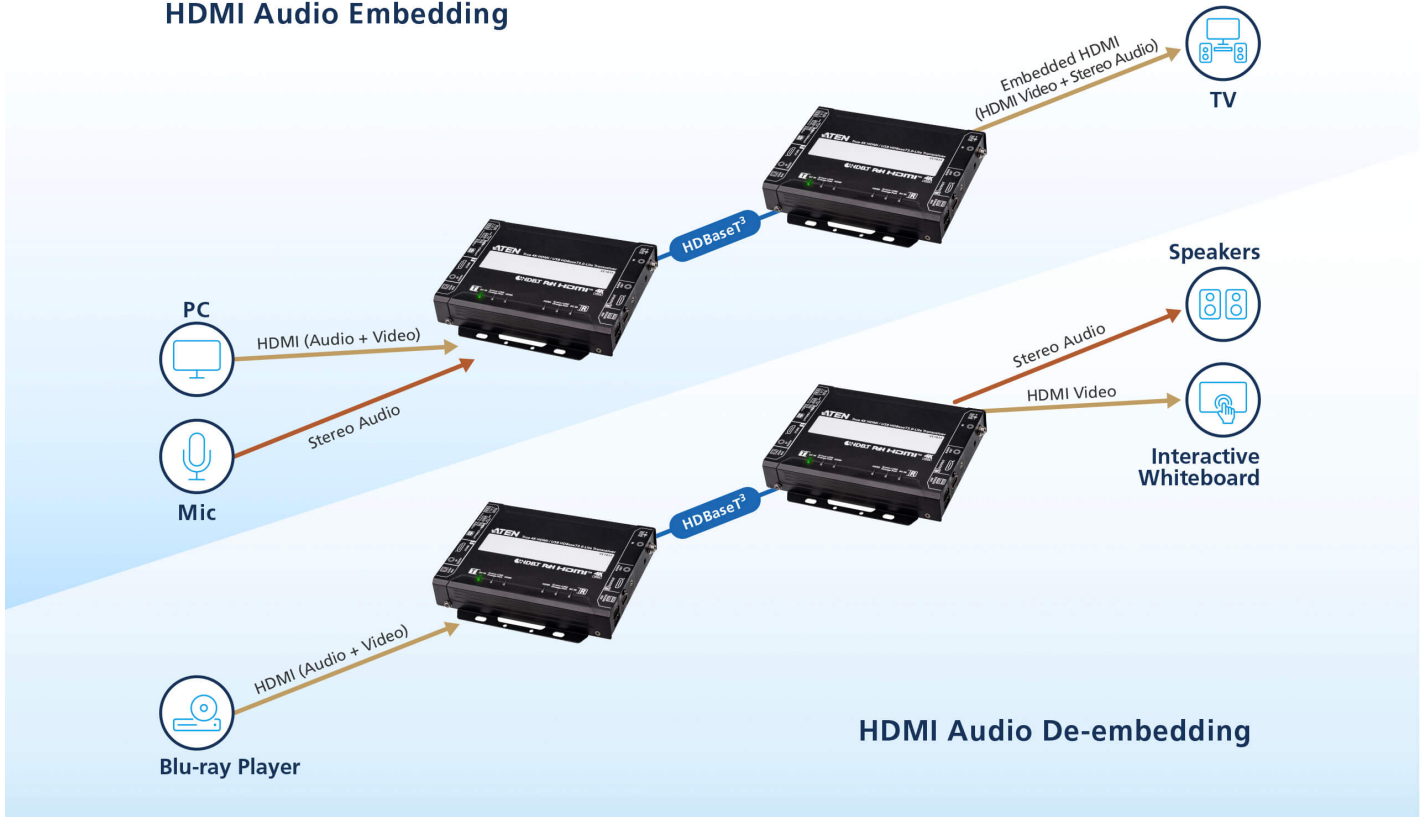
Streamline complex installation and enjoy multi-signal control by using a Cat 6A U/FTP cable to extend signals including high-quality video, audio, IR, RS-232, and USB 2.0 for remotely located equipment management.



HDMI Audio Embedding & De-embedding

The VE1833 comes with HDMI audio embedding / de-embedding functions, enabling users to easily embed a separate audio source to video content for applications such as training and education, or de-embed an audio signal from HDMI input source and output to an amplifier or speaker for enhanced sound quality.

HDMI Audio Embedding



User-Focused Design in Every Detail

The design of VE1833 elevates its ease-of-use, including the self-explanatory labeling for intuitive port recognition, the built-in brackets for easy mounting, the LED lights for quick diagnosis, and a dedicated space on the front for writing labels to help device recognition / management.

Built-in brackets

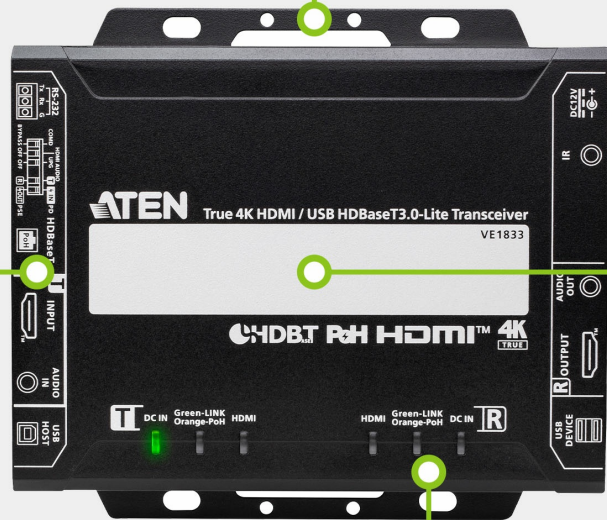
Allow for flexible mounting and also work with ATEN's VE-RMK1U Rack Mount Kit

Intuitive labeling

Enables easy port recognition and cable installation when glancing at the side or even the front of VE1833

Space for writing labels

Helps device recognition and management



LED lights

Ensure quick Tx / Rx operation status diagnosis

Applications

VE1833 is ideal for small / mid-sized video presentation in conference halls, auditorium, and other applications where high-quality signal transmission across up to 40m/131ft is needed.

Public Area



Conference Room



Banquet Hall



Exhibition Room



Talk to Our Experts

If you prefer to have ATEN contact you, please complete the form and a representative will be in touch with you shortly

First Name *

Last Name *

- Country *

Company *

Email *

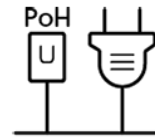
Phone Number *

- Customer Type *

Job Title *



AV Transceiver



Redundancy

Features

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.

- 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

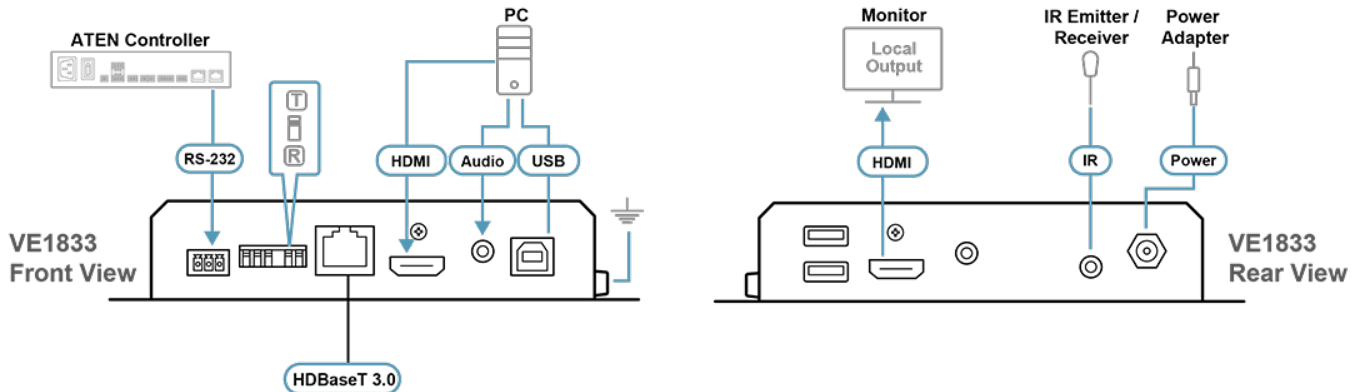
| | |
|-------------|--------------------------------|
| Video Input | |
| Interfaces | 1 x HDMI Type A Female (Black) |
| Impedance | 100 Ω |

| | |
|-----------------------------|---|
| 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) |

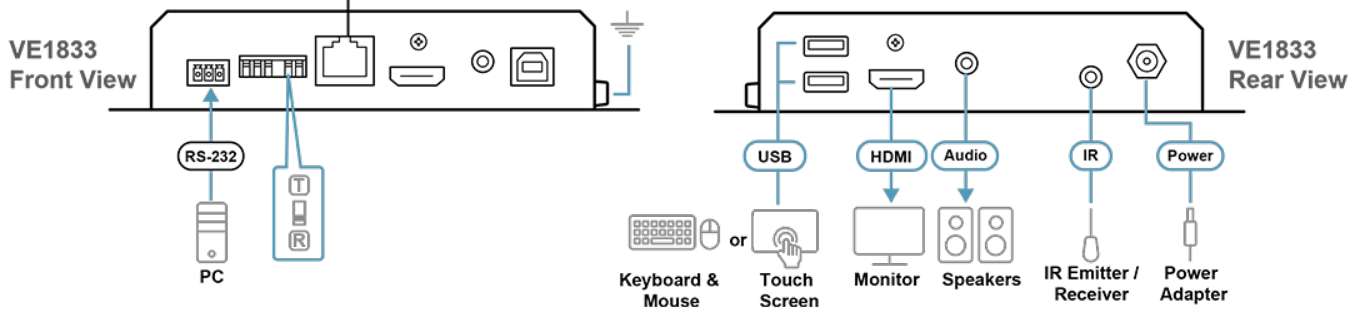
| | |
|--|---|
| Video Output | 1 x RX HDMI OUT status (Receiver, Orange) |
| Video Input | 1 x Tx HDMI IN status (Transmitter, Orange) |
| Environmental | |
| Operating Temperature | 0 - 40°C |
| Storage Temperature | -20 - 60°C |
| Humidity | 0 - 80% RH, Non-Condensing |
| Physical Properties | |
| 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

VE1833 as Transmitter



VE1833 as Receiver





Simply Better Connections

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



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