

## VE2812AT

HDMI & VGA HDBaseT Transmitter with PoH (4K@100m) (HDBaseT Class A) (PoH PD)



ATEN VE2812AT is a transmitter for sending VGA (with audio) and HDMI signals up to 100 m over a single Cat 5e/6/6a or ATEN [2L-2910](#) Cat 6 cable. Featuring built-in PoH (Power over HDBaseT) function, the VE2812AT receives power supply from the HDBaseT output port on the connected device. This eliminates the need for a power adapter and reduces the hassle of power line deployment behind the wall. The VE2812AT guarantees reliable transmission of HDMI signals, supporting 3D, deep color, and embedded HD lossless audio formats. It also ensures transmission of VGA (with audio) at distance up to 100 m. In addition, it supports Long Reach Mode up to 150 m via a single Cat 5e/6 cable at resolutions up to 1080p.

For utility flexibility, the VE2812AT can serve as a video switch by connecting two sources and distribute them to an identical output. The VE2812AT is recommended to be deployed in paired with the [VE2812R](#). The [VE2812R](#) can carry on IR/RS-232 from the [VE2812R](#) to the VE2812AT, allowing users to remotely control the VE2812AT unit through RS-232 command mode via input port switching. The solution is ideal for a variety of settings, such as meeting rooms, digital educational environment or wherever high video quality is required.



### Features

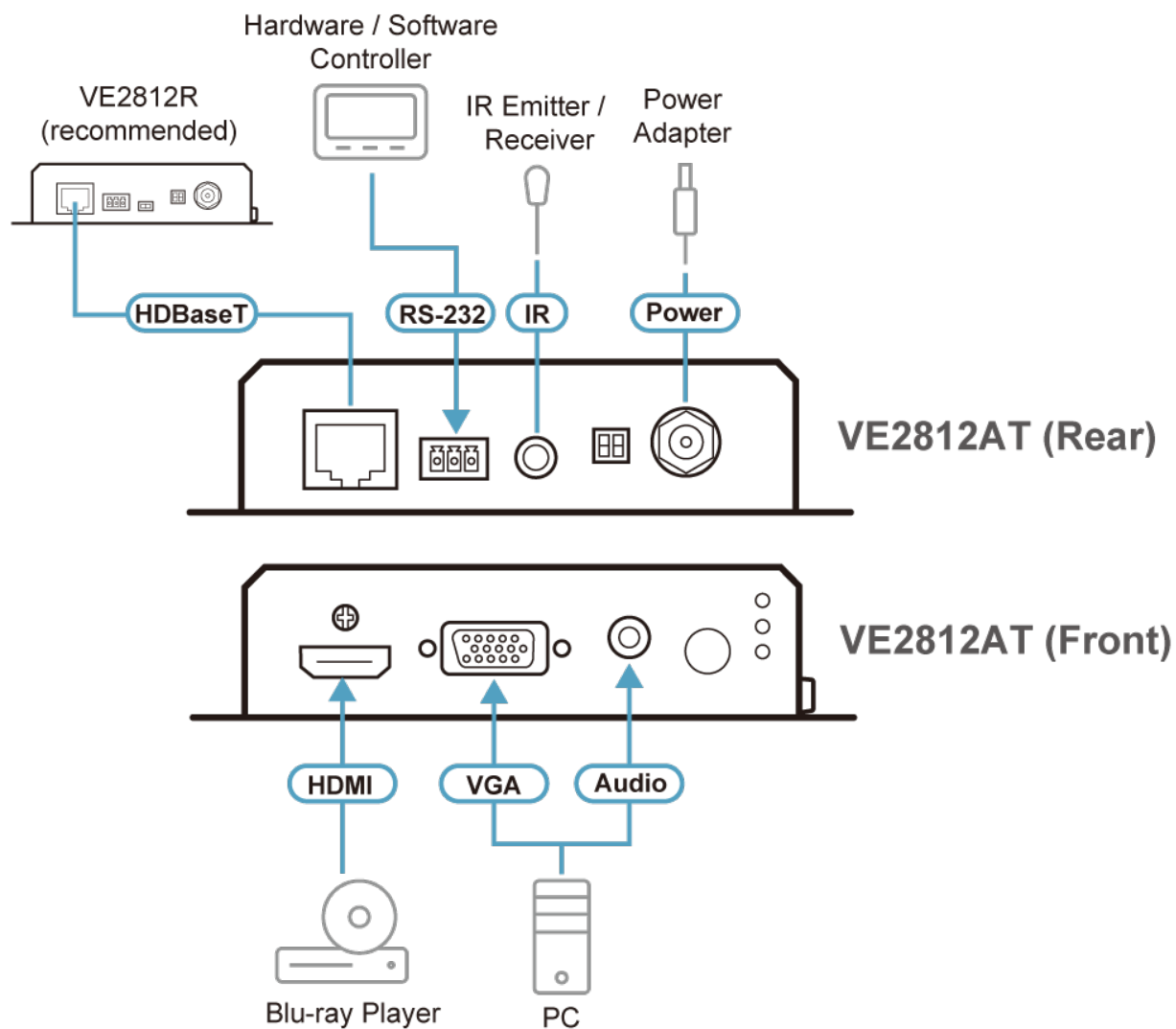
- Extends HDMI or VGA signals, providing superior video quality:
  - HDMI: 4K / 1080p at distance up to 100 m via a Cat 5e/6/6a or ATEN [2L-2910](#) Cat 6 cable
  - VGA: 1600 x 1200 and 1920 x 1200 up to 100 m via a Cat 5e/6/6a or ATEN [2L-2910](#) Cat 6 cable
- HDMI (3D, Deep color, 4K): HDCP compatible
- Supports HDBaseT Long Reach Mode – up to 150 m via a single Cat 5e/6 cable at resolutions up to 1080p
- Built-in PoH (Power over HDBaseT) function – the VE2812AT receives power supply from the HDBaseT output port on the connected device
- Supports Auto Switch – allows the VE2812AT to automatically switch to a newly plugged-in source
- Functions as a switch or a converter:
  - A Switch: Connects two sources (HDMI or VGA)
  - A converter: Applies receivers with different interface (DVI, DisplayPort, or HDMI)
- RS-232 Channel Transmission – allows you to connect to serial terminals or serial devices, such as touch screens and barcode scanners
- Compatible Receivers – [VE2812R](#), [VE1812R](#), [VE811R](#), [VE814AR](#), [VE801R](#), [VE802R](#), [VE601R](#), [VE901R](#), or future ATEN HDBaseT Receivers
- Plug-and-play with no software installation required
- Rack mountable
- Built-in 8KV / 15 KV ESD protection

### Specifications

|                  |                                                                  |
|------------------|------------------------------------------------------------------|
| Video Input      |                                                                  |
| Interfaces       | 1 x HDMI Type A Female (Black)<br>1 x HDB-15 (VGA) Female (Blue) |
| Impedance        | HDMI: 100 Ω<br>HDB-15 (VGA): 75 Ω                                |
| Max. Distance    | HDMI: 3 m<br>HDB-15(VGA): 10m                                    |
| Video            |                                                                  |
| Max. Data Rate   | 10.2Gbps (3.4Gbps per lane)                                      |
| Max. Pixel Clock | 340 MHz                                                          |

|                                        |                                                                                                                                                                                                                                                                                                                                 |
|----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Compliance                             | HDMI (3D, Deep Color, 4K)<br>HDCP2.2 Compatible<br>Consumer Electronics Control (CEC)                                                                                                                                                                                                                                           |
| Max. Resolutions / Distance            | HDMI: Up to 4K@70m (Cat 5e/6) / 100m (Cat 6a/ATEN 2L-2910 Cat6); 1080p@100m (Cat 5e/6/6a)<br>VGA: Up to 1920x1200 & 1600x1200@70m (Cat 5e/6) / 100m (Cat 6a/ATEN 2L-2910 Cat6); 1920x1080@100m (Cat 5e/6/6a)<br>*4K supported:<br>4096 x 2160 / 3840 x 2160 @ 60Hz (4:2:0);<br>4096 x 2160 / 3840 x 2160 @ 30Hz (4:4:4)         |
| Audio                                  |                                                                                                                                                                                                                                                                                                                                 |
| Input                                  | 1 x HDMI Type A Female (Black)<br>1 x Mini Stereo Jack Female (Green)                                                                                                                                                                                                                                                           |
| Control                                |                                                                                                                                                                                                                                                                                                                                 |
| RS-232                                 | Connector: 1 x Terminal Block, 3 pole; Type: DTE<br>Baud Rate: 19200, Data Bits:8,<br>Stop Bits:1, no parity and flow control                                                                                                                                                                                                   |
| IR                                     | 1 x Mini Stereo Jack Female (Black)                                                                                                                                                                                                                                                                                             |
| Switches                               |                                                                                                                                                                                                                                                                                                                                 |
| Video Input Port Selection             | 1 x Push Button - HDMI, VGA and AUTO                                                                                                                                                                                                                                                                                            |
| Long Reach Mode Switch                 | 1 x Slide Switch - ON/OFF                                                                                                                                                                                                                                                                                                       |
| Firmware Upgrade                       | 1 x Slide Switch - ON/OFF                                                                                                                                                                                                                                                                                                       |
| Connectors                             |                                                                                                                                                                                                                                                                                                                                 |
| Unit To Unit                           | 1 x RJ-45 Female                                                                                                                                                                                                                                                                                                                |
| Power                                  | 1 x DC Jack (Black) with locking or<br>1 x RJ-45 Female (POH)                                                                                                                                                                                                                                                                   |
| Power Consumption                      | DC5V:3.14W:15BTU/h<br>POH:3.93W:18BTU/h<br><br>Note:<br><ul style="list-style-type: none"> <li>● The measurement in Watts indicates the typical power consumption of the device with no external loading.</li> <li>● The measurement in BTU/h indicates the power consumption of the device when it is fully loaded.</li> </ul> |
| Environmental                          |                                                                                                                                                                                                                                                                                                                                 |
| Operating Temperature                  | 0 - 40°C                                                                                                                                                                                                                                                                                                                        |
| Storage Temperature                    | -20 - 60°C                                                                                                                                                                                                                                                                                                                      |
| Humidity                               | 0 - 80% RH, Non-Condensing                                                                                                                                                                                                                                                                                                      |
| Physical Properties                    |                                                                                                                                                                                                                                                                                                                                 |
| Housing                                | Metal                                                                                                                                                                                                                                                                                                                           |
| Weight                                 | 0.47 kg ( 1.04 lb )                                                                                                                                                                                                                                                                                                             |
| Dimensions (L x W x H) with bracket    | 14.32 x 12.30 x 3.00 cm<br>(5.64 x 4.84 x 1.18 in.)                                                                                                                                                                                                                                                                             |
| Dimensions (L x W x H) without bracket | 13.60 x 10.10 x 2.90 cm<br>(5.35 x 3.98 x 1.14 in.)                                                                                                                                                                                                                                                                             |

Diagram



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