

HDMI & VGA HDBaseT Transmitter with PoH

VE2812AT

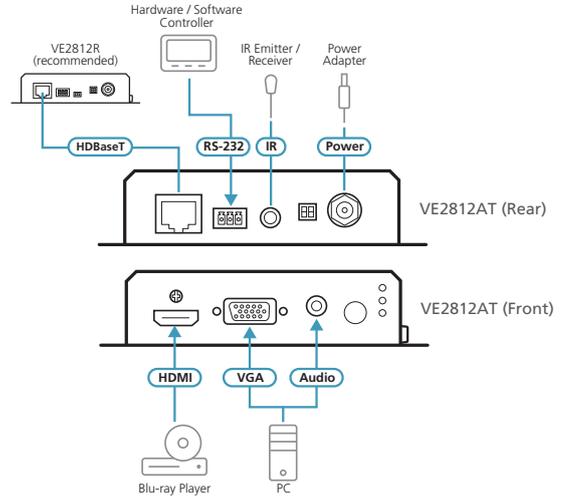
ATEN VE2812AT is a transmitter for sending VGA (with audio) and HDMI signals up to 100 m over a single Cat 5e/6a or ATEN 2L-2910 Cat 6 cable. Featuring built-in PoH (Power over HDBaseT) function, the VE2812AT receives power supply from the HDBaseT output port on the connected device. This eliminates 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/6a or ATEN 2L-2910 Cat 6 cable
 - VGA: 1600 x 1200 and 1920 x 1200 up to 100 m via a Cat 5e/6a or ATEN 2L-2910 Cat 6 cable
- HDMI (3D, Deep color, 4K); HDCP 2.2 compliant
- 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

VE2812AT	
Video Input	
Interfaces	1 x HDMI Type A Female (Black); 1 x HDB-15 (VGA) Female (Blue)
Impedance	HDMI: 100 Ω; HDB-15 (VGA): 75 Ω
Max. Distance	HDMI: 3 m; HDB-15 (VGA): 10 m
Video	
Max. Data Rate	10.2Gbps (3.4Gbps per lane)
Max. Pixel Clock	340 MHz
Compliance	HDMI (3D, Deep Color, 4K); HDCP 2.2 Compliant; 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) VGA: Up to 1920x1200 & 1600x1200@70m (Cat 5e/6) / 100m (Cat 6a/ATEN 2L-2910 Cat6); 1920x1080@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	
Input	1 x HDMI Type A Female (Black); 1 x Mini Stereo Jack Female (Green)
Connectors	
Unit To Unit	1 x RJ-45 Female
Power	1 x DC Jack (Black) with locking or 1 x RJ-45 Female (PoH)
Control	
RS-232	Connector: 1 x Terminal Block, 3 pole; Type: DTE Baud Rate: 19200, Data Bits:8, Stop Bits:1, no parity and flow control
IR	1 x Mini Stereo Jack Female (Black)
Switches	
Video Input Port Selection	1 x Pushbutton - HDMI, VGA and AUTO
Long Reach Mode Switch	1 x Slide Switch - ON/OFF
Firmware Upgrade	1 x Slide Switch - ON/OFF
Power Consumption	
	DC5V:3.14W; PoH: 3.93W
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
Dimensions (L x W x H) with bracket	14.32 x 12.30 x 3.00 cm
Dimensions (L x W x H) without bracket	13.60 x 10.10 x 2.90 cm

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Product information is subject to change without prior notice.

Released: 03/2024 V3.0

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