Simply Better Connections

VE3912T

DisplayPort / HDMI / VGA Switch with HDBaseT Transmitter (PoH PD)

The ATEN VE3912T is an HDBaseT transmitter that extends 4K DisplayPort, HDMI, or VGA video signals up to 100 m over a single Cat 6/6a or ATEN 2L-2910 Cat 6 cable. Featuring multiple video input formats and output resolutions up to 4K, it ensures a superior video quality for applications that require digital/analog sources conversion and extension.

This HDCP 2.2 compliant transmitter meets the HDMI specification, including 3D, Deep Color, and 4Kx2K video quality. The Auto Switch Mode allows the VE3912T to automatically switch to a newly plugged-in source. With its built-in PoH (Power over HDBaseT) function, it can receive power from the HDBaseT output port on the connected device, eliminating the need for a power adapter. As a combination of extension and switch for both digital and analog inputs, VE3912T is recommended to be deployed in settings with multiple source inputs, such as conference rooms, digital educational environment or wherever integration and simplification are required.

Features

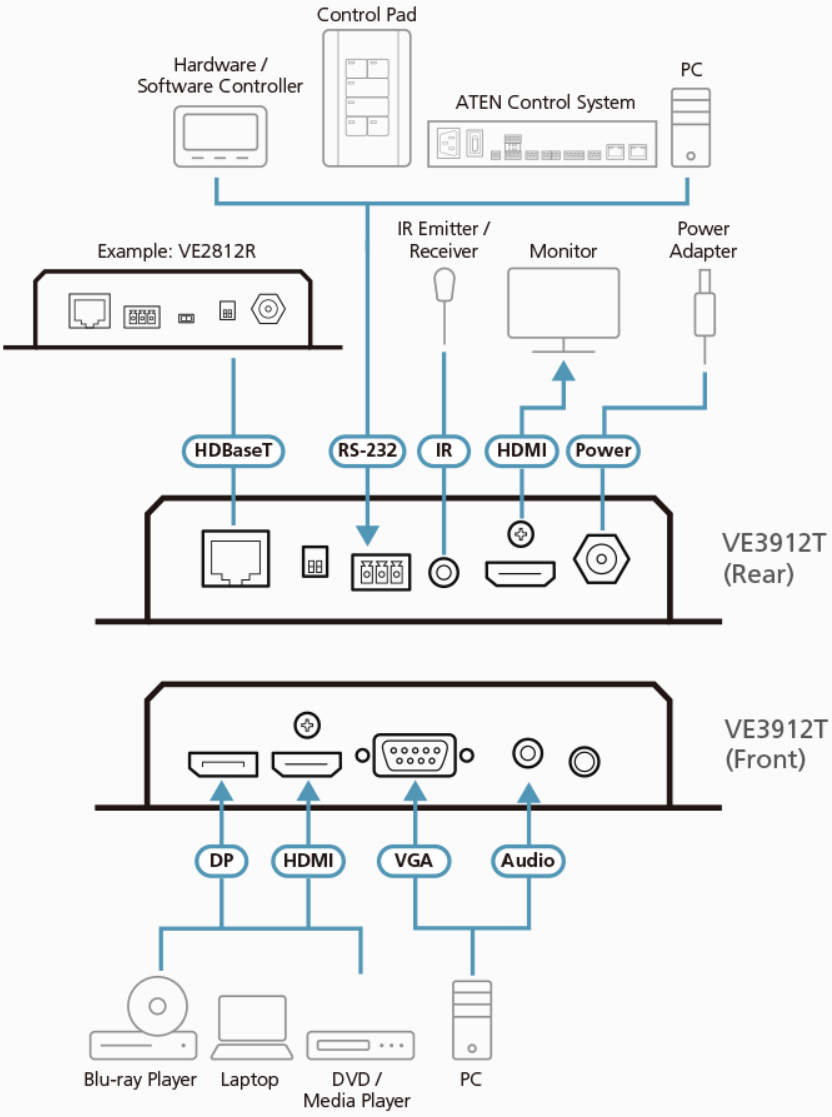
- Extends DisplayPort, HDMI or VGA signals up to 100 m over a single Cat 6/6a or ATEN 2L-2910 Cat 6 cable
- Supports multiple source inputs (DisplayPort/HDMI/VGA) – easily switching among sources via a pushbutton
- Auto Switch Mode – allows the VE3912T to automatically switch to a newly plugged-in source
- HDMI (3D, Deep Color, 4k); HDCP 2.2 compliant
- Superior video quality:
  • HDMI/Displayport: 4K at distance up to 100 m via a Cat 6a or ATEN 2L-2910 Cat 6 cable
  • VGA: 1600 x 1200 and 1920 x 1200 up to 100 m via a Cat 6a or ATEN 2L-2910 Cat 6 cable
- HDBaseT Long Reach Mode – up to 150 m via a single Cat 5e/6 cable at resolutions up to 1080p
- Mirrored Video Output – supports 4K@30Hz, 4:4:4 over the HDBaseT output, and a local HDMI output
- PoH (Power over HDBaseT) – with its built-in PoH function, it receives power from the HDBaseT output port on the connected device
- Perfect HDBaseT Compatibility – compatible with ATEN HDBaseT receivers, available to deliver crystal video and audio signals to Displayport/HDMI/VGA output port
- Features RS-232 Serial Communication Switch – Command mode and Bypass mode to meet application requirements; users can command input port switch through RS-232 of receiver, such as VE2812R
- EDID Expert™ – selects optimum EDID settings for high-quality display and use HDBaseT output as priority of optimum video resolution
- Plug-and-play with no software installation required
- Rack-mountable
- Built-in 8KV/15KV ESD protection

Specifications

Video Input	
Interfaces	1 x HDMI Type A Female (Black) 1 x HDB-15 (VGA) Female (Blue) 1 x DisplayPort Female (Black)
Impedance	HDMI: 100 Ω HDB-15 (VGA): 75 Ω DisplayPort: 100 Ω
Max. Distance	HDMI: 5m at 4K@30Hz HDB-15(VGA): 10m at 1920x1600 DisplayPort: 3m at 4K@30Hz
Video Output	
Interfaces	1 x HDMI Type A Female (Black)

Impedance	100 Ω
Max. Distance	HDMI: 5m at 4K@30Hz; 3m at 4K@60Hz (4:4:4)
Video	
Max. Data Rate	10.2Gbps (3.4Gbps per lane)
Max. Pixel Clock	340 MHz
Compliance	HDMI (3D, Deep Color, 4K) HDCP2.2 Compatible; Consumer Electronics Control (CEC)
Max. Resolutions / Distance	HDMI/DisplayPort: 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) 1 x DisplayPort Female (Black)
Connectors	
Unit To Unit	1 x RJ-45 Female (Silver), HDBaseT
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: 115200, 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 Push Button - AUTO, DisplayPort, HDMI and VGA
Long Reach Mode Switch	1 x Slide Switch - ON/OFF ON: Up to 150m at 1080p (max.) OFF: Up to 100m at 4K@30Hz (max.)
Firmware Upgrade	1 x Slide Switch - ON/OFF
Power Consumption	DC5V:7.02W:40BTU/h POH:8.77W:48BTU/h 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.
Environmental	
Operating Temperature	0 - 40°C
Storage Temperature	-20 - 60°C
Humidity	0 - 80% RH, Non-Condensing
Physical Properties	
Housing	Metal
Weight	0.65 kg (1.43 lb)
Dimensions (L x W x H) with bracket	17.29 x 14.69 x 3.00 cm (6.81 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

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