Simply Better Connections

VE814A

HDMI HDBaseT Extender with Dual Output (4K@100m) (HDBaseT Class A)

ATEN VE814A is an HDBaseT Video Extender that is capable of sending HDMI signals up to 100 m over a single Cat 5e/6/6a or ATEN 2L-2910 Cat 6 cable. Featuring dual synchronous outputs, the VE814A can transmit video signal to two remote displays and one at the local side. This HDCP 2.2-compliant extender meets the HDMI Specification, including 3D, Deep Color, the maximum data rate of (10.2 Gbps), and 4K video quality up to 100 m.

The VE814A supports RS-232 and IR signaling pass-through, allowing you to control the HDMI source device from the remote unit (VE814AR) while granting access to the HDMI display device from the local unit (VE814AT). In addition, it supports Long Reach Mode that extends HDMI signals up to 150 m, 1080p, via a single Cat 5e/6 cable.

The VE814A is a powerful solution for where digital signage is required, such as bars, educational spaces, and public transportation stations, allowing display of identical contents at different spots.

Features

- Extends HDMI signals to one local and two remote displays up to 100 m over a single Cat 5e/6/6a or ATEN 2L-2910 Cat 6 cable
- HDMI (3D, Deep Color, 4K); HDCP 2.2 compatible
- Superior video quality:
  • 4K up to 100 m
  • 1080p up to 150 m when in HDBaseT Long Reach Mode
- Extends Ethernet communication using the Ethernet pass-through port*
- Supports two IR channels for simultaneous IR signal transmissions, ranged from 30 KHz to 56 KHz
- ATEN EDID Technology -- when both transmitter and receiver sides are connected, VE814A adopts the EDID values of the display connected to the VE814AT for high-quality output
- RS-232 channel – allows you to connect to serial terminals or serial devices, such as touch screens and barcode scanners
- Supports wide screen format
- Built-in 8 kV/15 kV ESD protection
- Plug-and-play
- Rack-mountable

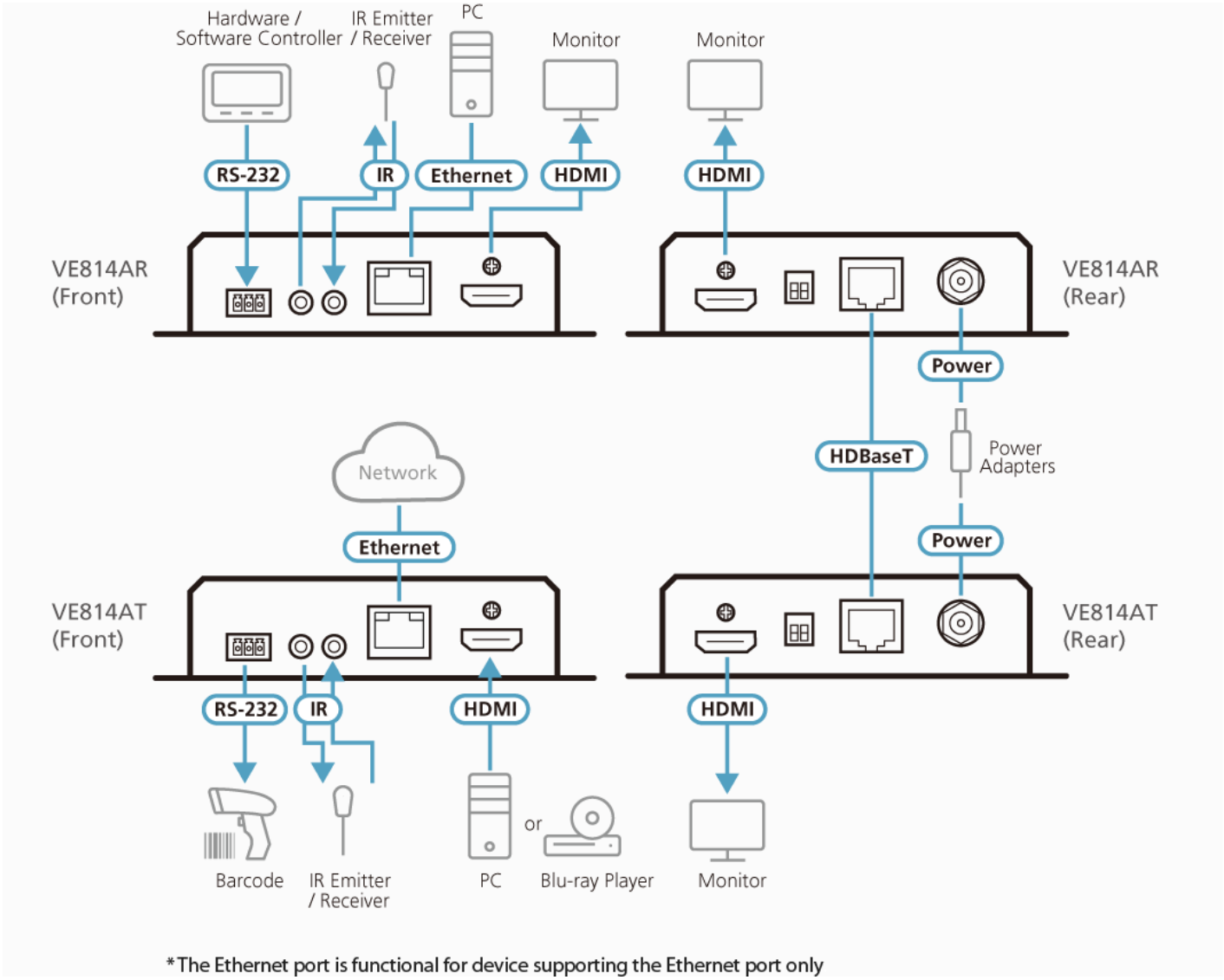
  Note: The function is supported by VE814A-AT only.

Specifications

Function	VE814AR	VE814AT
Video Input		
Interfaces	N/A	1 x HDMI Type A Female (Black)
Impedance	N/A	100 Ω
Max. Distance	N/A	3 m
Video Output		
Interfaces	2 x HDMI Type A Female (Black)	1 x HDMI Type A Female (Black)

Impedance	100 Ω	100 Ω
Max. Distance	3 m	3 m
Video		
Max. Data Rate	10.2Gbps (3.4Gbps per lane)	10.2Gbps (3.4Gbps per lane)
Max. Pixel Clock	340 MHz	340 MHz
Compliance	HDMI (3D, Deep Color, 4K) HDCP2.2 Compatible Consumer Electronics Control (CEC)	HDMI (3D, Deep Color, 4K) HDCP2.2 Compatible Consumer Electronics Control (CEC)
Max. Resolutions / Distance	Up to 4K@70m (Cat 5e/6) / 100m (Cat 6a/ATEN 2L-2910 Cat6); 1080p@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)	Up to 4K@70m (Cat 5e/6) / 100m (Cat 6a/ATEN 2L-2910 Cat6); 1080p@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	N/A	1 x HDMI Type A Female (Black)
Output	2 x HDMI Type A Female (Black)	1 x HDMI Type A Female (Black)
Connectors		
Unit To Unit	1 x RJ-45 Female	1 x RJ-45 Female
Power	1 x DC Jack (Black) with locking	1 x DC Jack (Black) with locking
Control		
RS-232	Connector: 1 x Terminal Block, 3 pole Baud Rate: 57600, Data Bits:8, Stop Bits:1, no parity and flow control	Connector: 1 x Terminal Block, 3 pole Baud Rate: 57600, Data Bits:8, Stop Bits:1, no parity and flow control
IR	2 x Mini Stereo Jack Female (Black)	2 x Mini Stereo Jack Female (Black)
Ethernet	1 x RJ-45 Female Note: The RJ-45 ports is functional for device supporting the Ethernet port only	1 x RJ-45 Female Note: The RJ-45 ports is functional for device supporting the Ethernet port only
Switches		
Long Reach Mode Switch	1 x Slide Switch - ON/OFF	1 x Slide Switch - ON/OFF
Firmware Upgrade	1 x Slide Switch - ON/OFF	1 x Slide Switch - ON/OFF
Power Consumption	DC5V:7.87W:37BTU	DC5V:5.09W:24BTU
Environmental		
Operating Temperature	0 - 40°C	0 - 40°C
Storage Temperature	-20 - 60°C	-20 - 60°C
Humidity	0 - 80% RH, Non-Condensing	0 - 80% RH, Non-Condensing
Physical Properties		
Housing	Metal	Metal
Weight	0.47 kg (1.04 lb)	0.45 kg (0.99 lb)
Dimensions (L x W x H) with bracket	14.02 x 12.30 x 3.00 cm (5.52 x 4.84 x 1.18 in.)	14.02 x 12.30 x 3.00 cm (5.52 x 4.84 x 1.18 in.)
Dimensions (L x W x H) without bracket	13.60 x 10.10 x 2.90 cm (5.35 x 3.98 x 1.14 in.)	13.60 x 10.10 x 2.90 cm (5.35 x 3.98 x 1.14 in.)
Note	The VE814A-AT supports Ethernet function and the VE814A-ATA does not.	The VE814A-AT supports Ethernet function and the VE814A-ATA does not.

Diagram



*The Ethernet port is functional for device supporting the Ethernet port only

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