# HDMI HDBaseT Extender with Dual Output

## VE814A

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 specifications, 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 users 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 1080p HDMI signals up to 150 m via a single Cat 5e / 6 cable.

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

4K | HDMI HIGH-DEFINITION MULTIMEDIA INTERFACE | HDBT | Long Reach Mode | HDCP 2.2 | Remote Dual Display | RS-232 Channel | IR Channel | Ethernet (VE814A-AT)

VE814A-AT

VE814A-ATA

### Front View

VE814AT

VE814AR

* VE814A-AT supports Ethernet function, and VE814A-ATA does not.
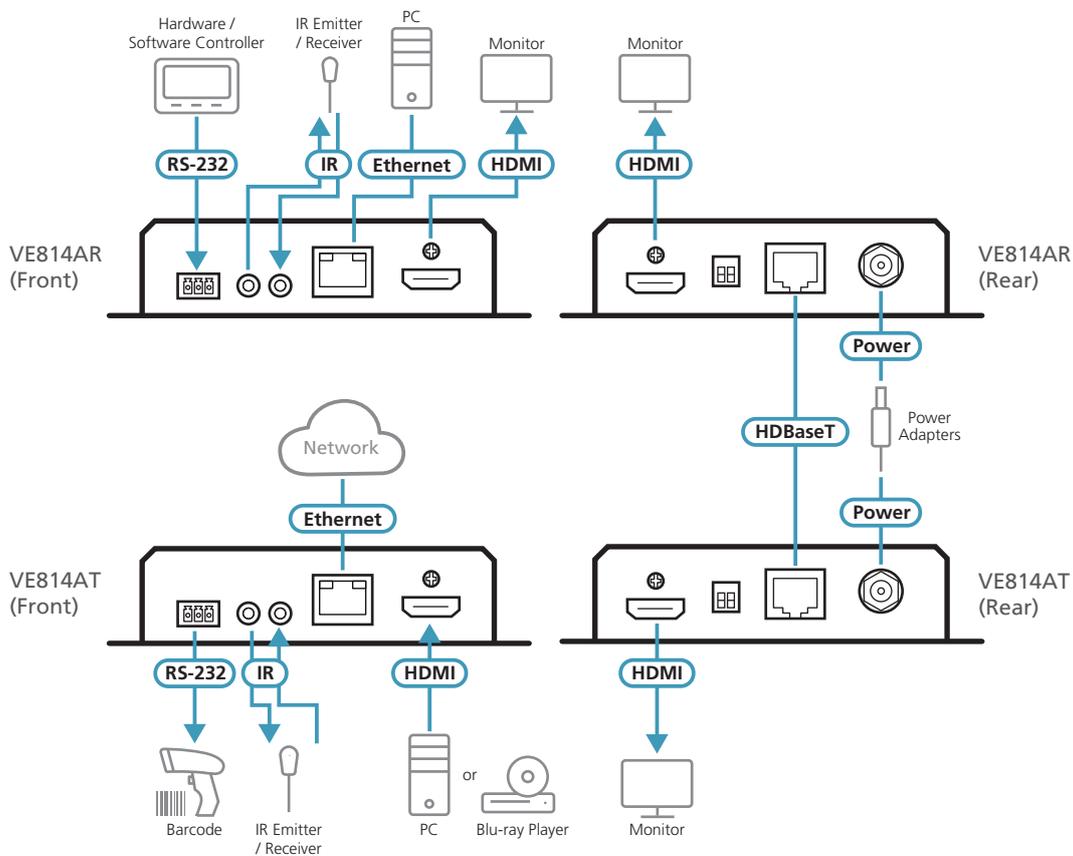
### Rear View

VE814AT

VE814AR

# 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 users 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.



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

# Specifications

| | 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 | |
| Max. Distance | 3 m | |
| **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 | Up to 4K @ 70 m (Cat 5e / 6) / 100 m (Cat 6a / ATEN 2L-2910 Cat6); 1080p @ 100 m (Cat 5e / 6 / 6a) *4K supported: 4096 x 2160 / 3840 x 2160 @ 60 Hz (4 : 2 : 0); 4096 x 2160 / 3840 x 2160 @ 30 Hz (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 | |
| Power | 1 x DC Jack (Black) with locking | |
| **Control** | | |
| RS-232 | Connector: 1 x Terminal Block, 3 pole; Baud Rate: 57600 bps, Data Bits:8, Stop Bits:1, no parity and flow control | |
| IR | 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 | |
| **Switches** | | |
| Long Reach Mode Switch | 1 x Slide Switch - ON/OFF | |
| Firmware Upgrade | 1 x Slide Switch - ON/OFF | |
| **Power Consumption** | DC5V:7.87W | DC5V:5.09W |
| **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 | 0.45 kg |
| Dimensions (L x W x H) with bracket | 14.04 x 12.30 x 3.00 cm | |
| Dimensions (L x W x H) without bracket | 13.60 x 10.10 x 2.90 cm | |

**Note:** 1. ATEN 2L-2910 Cat 6 cable is highly recommended for the best product performance.
2. VE814A-AT supports Ethernet function, and VE814A-ATA does not.