HDMI over IP Extender
VE8900T / VE8900R

4K HDMI over IP Extender
VE8950T / VE8950R

● The ATEN VE8900/VE8950 Video over IP Extenders deliver visually lossless 1080p / 4K AV signals with low latency over long distance via a standard Gigabit network.

The VE8900/VE8950 provides an effective, easy-to-use, and economical digital signage solution with the following features and advantages that directly address the challenges system integrators encounter when implementing AV over IP systems:
• Limitless scalability and flexibility
• No complicated IP setup
• No additional server PCs or software required
• Go further for less with daisy chaining

Engineered to meet today's demands of large scale, multi-display, 1080p/4K signal transmission, and designed to be easy to set up and operate, the VE8900/VE8950 Video over IP Extender is an ideal product for a wide range of environments, such as trade shows, airports, university campuses, conference centers, and shopping centers.

| A/V In HDMI | A/V Out HDMI | A/V Out RJ-45 | Stereo Audio | Video Wall | 4k x 2k | RS-232 Channel | IR Channel | Over IP |

VE8950T

VE8950R

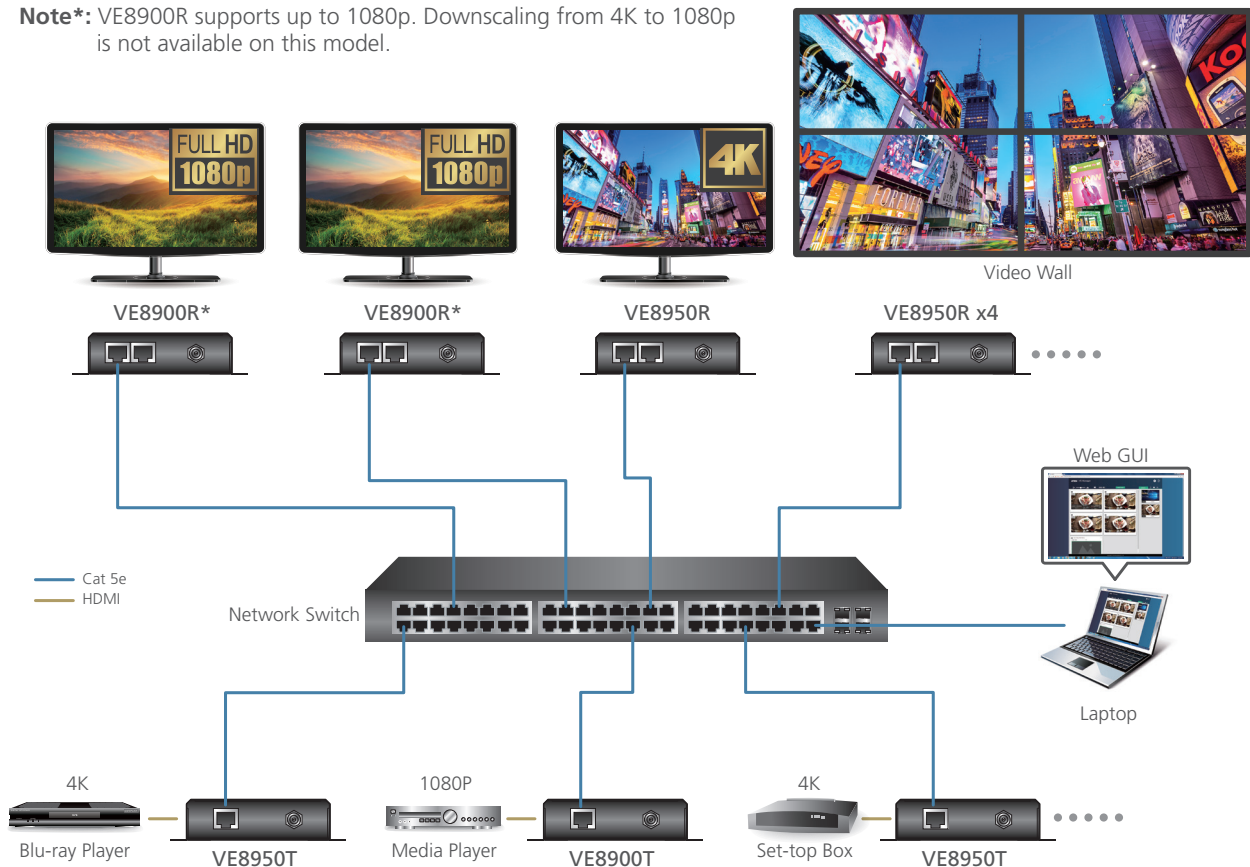Transmitter

Receiver

Features

Lightweight Compression with Ultra-low Latency

• Delivers visually lossless high-quality video up to 1080p @ 60 Hz (VE8900) / 4K @ 30 Hz 4:4:4 (VE8950)

• Ensures stunning quality video using ATEN advanced video lossless compression technology

• EDID Expert™ selects the optimum EDID settings for smooth power-up, high-quality display and the best video resolution across different screens

Limitless Scalability and Flexibility

• Extends AV connections from a simple point-to-point to a multi-point to multi-point setup via LAN without distance limitations

• Offers multi-functionality in extender, splitter, matrix switch, video wall and daisy chain applications

• Mix and match the latest 4K displays and 1080p screens. The built-in scaler automatically scales up incoming video signals to match the maximum resolution of the connected display devices

Note*: VE8900R supports up to 1080p. Downscaling from 4K to 1080p is not available on this model.

Video Wall

VE8900R*   VE8900R*   VE8950R   VE8950R x4

Web GUI

Cat 5e
HDMI

Network Switch

Laptop

4K   1080P   4K
Blu-ray Player   Media Player   Set-top Box
VE8950T   VE8900T   VE8950T

No Complicated IP Setup
• Simple configuration that requires no extensive IT experience or extra learning
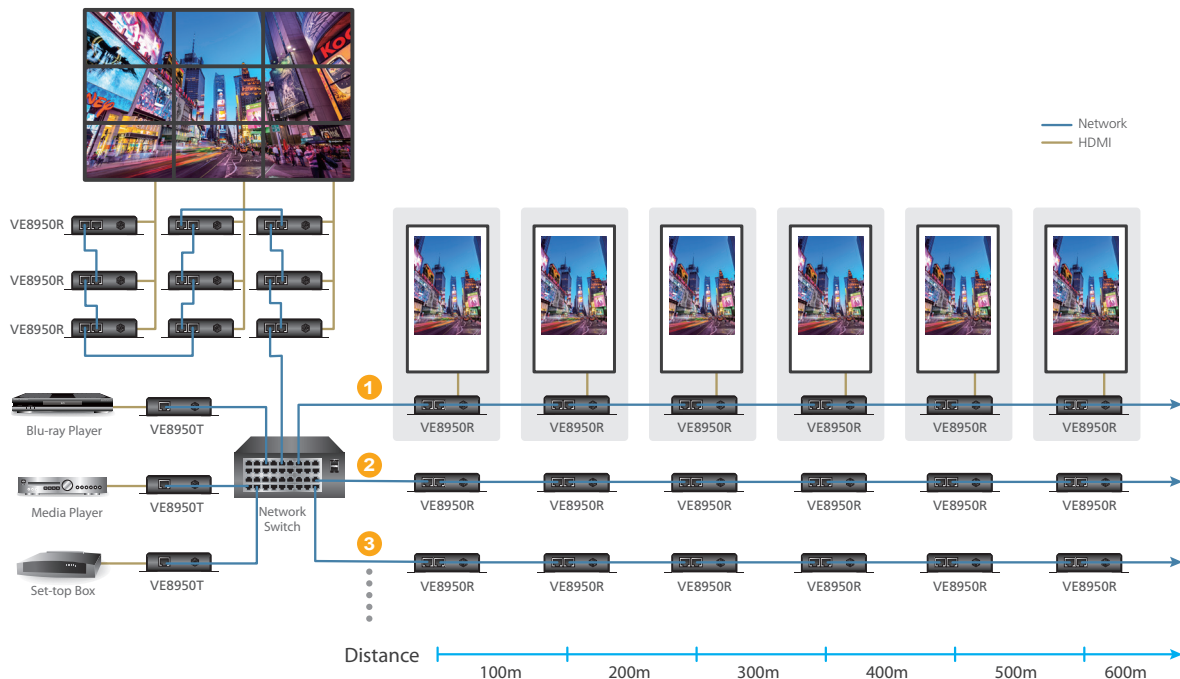• Effortlessly switches among input sources via top panel pushbuttons

No Additional Server PCs or Software Required
• Supports web GUI for device management
• No additional server PCs, control boxes, or software/drivers are needed

Go Further For Less with Daisy Chaining*
• Connects multiple displays through a single port to utilize every port of the network switch and maximize their value
• Easily expandable – cabling and system deployment is easy with no huge network switches and fewer cables needed
• Perfect for large-scale deployment covering hundreds of meters, such as hotel facilities, airports, university campuses, stations, shopping malls, and exhibition centers

*Depending on your network architecture, we recommend daisy chaining up to 30 units. Please contact ATEN representatives for more details.

Use daisy chains to configure a video wall or expand the AV system hundreds of meters

Video Wall Support

• Supports up to 8 x 8 video wall (64 displays)*

• Supports horizontal or vertical (90° rotation) display orientation

• Easily switches layout profiles, preview and drag-and-drop video sources via the intuitive web GUI

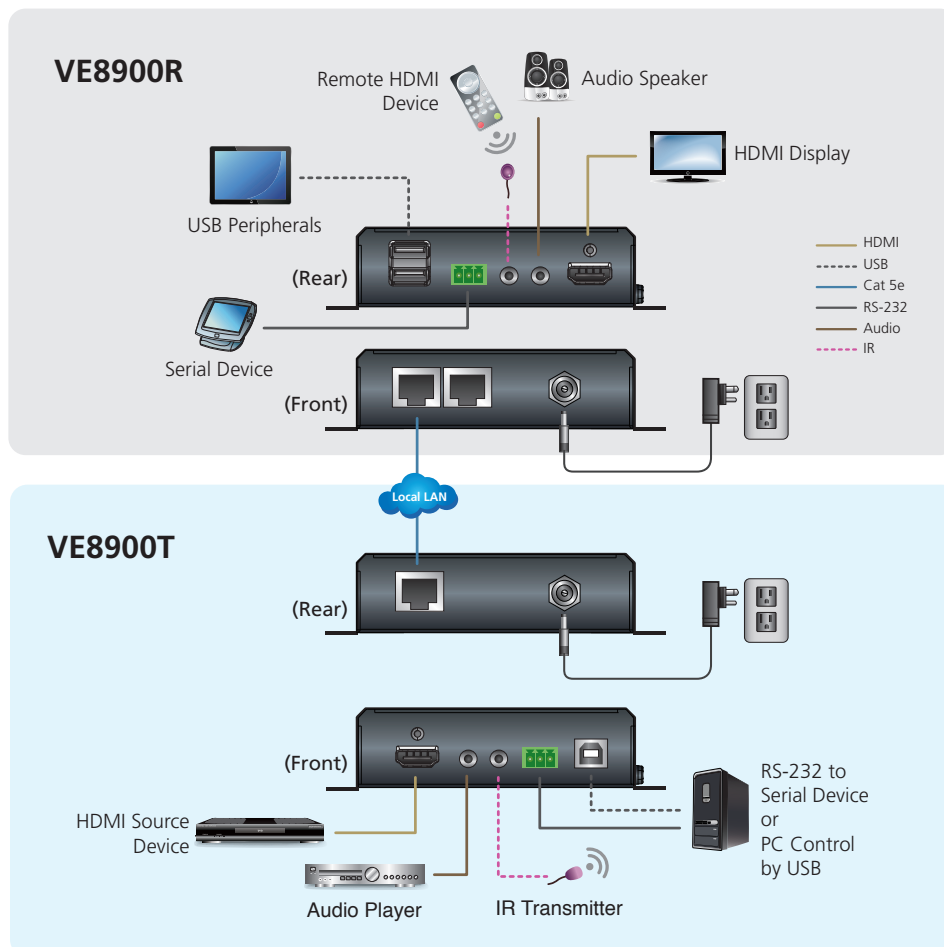*Depends on your network architecture, please contact ATEN representatives for more details.

Embedded / De-embedded Audio Support

• For VE8900T/8950T – separate audio signal can be embedded into the HDMI stream

• For VE8900R/8950R – audio stream can be extracted from the HDMI stream and delivered as a separate audio signal

Multiple Control Channels

• Multiple control methods – the system can be managed via Ethernet or top-panel pushbuttons

• USB Connectivity – USB port (USB 2.0) allows for connection of devices such as keyboard, mouse, flash drive, printer, and other USB peripherals

• Bi-directional IR Channel – IR transmission is processed one way at a time

• RS-232 Channel – bi-directional RS-232 serial port allows for connection of peripherals such as touch screens and bar code scanners

Installation Diagram

Specifications

Functions	VE8900R	VE8950R	VE8900T	VE8950T
Video Input				
Interfaces	N/A	N/A	1 x HDMI Type A Female (Black)	
Impedance	N/A	N/A	100 Ώ	
Max. Distance	N/A	N/A	1.8 m	
Video Output				
Interfaces	1 x HDMI Type A Female (Black)		N/A	
Impedance	100 Ώ		N/A	
Video				
Max. Data Rate	Average: 150 ~ 500Mbps		Average: 150 ~ 500Mbps	
Compliance	HDMI HDCP Compatible	HDMI (4K) HDCP Compatible	HDMI HDCP Compatible	HDMI (4K) HDCP Compatible
Max. Resolutions / Distance	Up to 1080p@100m (Cat 5e/6, point to point)	Up to 4K@100m (Cat 5e/6, point to point) ***4K supported:** 4096 x 2160 / 3840 x 2160 @ 30Hz (4:4:4)	Up to 1080p@100m (Cat 5e/6, point to point)	Up to 4K@100m (Cat 5e/6, point to point) ***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) 1 x Mini Stereo Jack Female (Green)	
Output	1 x HDMI Type A Female (Black) 1 x Mini Stereo Jack Female (Green)		N/A	
Connectors				
Unit to Unit	2 x RJ45 Female		1 x RJ45 Female	
Control				
IR	1 x Mini Stereo Jack Female (Black)		1 x Mini Stereo Jack Female (Black)	
RS-232	Connector: 1 x Terminal Block, 3 pole Baud Rate: 19200, Data Bits:8, Stop Bits:1, no parity and flow control		Connector: 1 x Terminal Block, 3 pole Baud Rate: 19200, Data Bits:8, Stop Bits:1, no parity and flow control	
USB	2 x USB Type A Female (Black)		1 x USB Type B Female (White)	
Power				
Connectors	1 x DC Jack (Black) with locking		1 x DC Jack (Black) with locking	
Consumption	DC 5V, 4.2W (without USB peripheral device loading)	DC 5V, 4.6W (without USB peripheral device loading)	DC 5V, 3.2W	DC 5V, 3.3W
Environmental				
Operating Temperature	0° to 40° C		0° to 40° C	
Storage Temperature	-20° to 60° C		-20° to 60° C	
Humidity	0 - 80% RH, Non-Condensing		0 - 80% RH, Non-Condensing	
Physical Properties				
Housing	Metal		Metal	
Weight	0.49 kg		0.50 kg	
Dimensions (L x W x H) with bracket	14.04 x 12.30 x 3.00 cm		14.04 x 12.30 x 3.00 cm	
Dimensions (L x W x H) without bracket	13.60 x 10.10 x 2.96 cm		13.60 x 10.10 x 2.96 cm	