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 local network of standard Gigabit network switch.

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.
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
- Offers different levels of video compression rate including Smooth, Balance, and High Quality for users to choose depending on practical usage

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 signal to match the maximum resolution of the connected display devices*

Collaboration with ATEN Control System
- Integrated solution – Compatible with ATEN Control System, allowing users to directly operate VE8900/8950 via CLI Telnet or RS-232 protocol
- Effortless operation – One click to effectively operate VE Manager, TV, projector, source player, and related equipments via touch panel and keypad

*Users can choose VE8900R if 1080p video source is applied
Spontaneous Scheduling Management
- Offers an user-friendly scheduling management function for users to pre-plan the display schedule
- Provides robust and intuitive scheduling management options to help users to manage all events in the calendar to as detailed as to setting events to minute intervals
- Integrates all VE89 units to arrange the profile by grouping individual receiver or video wall
- Multiple profiles can be arranged to play in any order over a selected period of time

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

Web GUI-Based Management, No Additional Server PCs or Software Required
- Simple Access – Without typing IP address on Chrome browser, users are allowed to directly link to VE Manager via one click on “Find My VE” Chrome based free tool
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.

Video Wall Support

- Supports up to 8 x 8 video wall (64 displays)*
- Supports horizontal or vertical (90° and 270° 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

Note: Each VE8900/8950 transmitter can be controlled by a total of 4 USB touch screens installed to VE8900/8950 receivers.

Installation Diagram
**VE8900 / VE8950 Control App**

**Turn your mobile phone into a remote control for VE8900 / VE8950**

The VE8900 / 8950 Control App is a free app that supports iOS and Android operating systems. This mobile app provides intuitive operation with direct access to VE Manager anytime, anywhere to make networked AV even easier than before.

**Features**

**Preview**
Review video sources before switching.

**Control**
Switch a source to multiple receivers instantly.

**Monitor**
Check the status of receivers and all your digital signage content.

**Calendar-based Scheduling**
Check and revise the display schedule on the go.

**Simple Login**
Auto search for devices and tap any transmitter to log in.

**Firmware Update Reminder**
Keeps you posted about the latest updates.
## Specifications

<table>
<thead>
<tr>
<th>Functions</th>
<th>VE8900R</th>
<th>VE8950R</th>
<th>VE8900T</th>
<th>VE8950T</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Video Input</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interfaces</td>
<td>N/A</td>
<td>1 x HDMI Type A Female (Black)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impedance</td>
<td>N/A</td>
<td>100 Ω</td>
<td>100 Ω</td>
<td></td>
</tr>
<tr>
<td>Max. Distance</td>
<td>N/A</td>
<td>1.8 m</td>
<td></td>
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<tr>
<td><strong>Video Output</strong></td>
<td></td>
<td></td>
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<tr>
<td>Interfaces</td>
<td>1 x HDMI Type A Female (Black)</td>
<td></td>
<td>N/A</td>
<td>1 x HDMI Type A Female (Black)</td>
</tr>
<tr>
<td>Impedance</td>
<td>100 Ω</td>
<td></td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td><strong>Video</strong></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Max. Data Rate</td>
<td>Average: 150 – 500Mbps</td>
<td>Average: 150 – 500Mbps</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compliance</td>
<td>HDMI HDCP Compatible</td>
<td>HDMI (4K) HDCP Compatible</td>
<td>HDMI HDCP Compatible</td>
<td>HDMI (4K) HDCP Compatible</td>
</tr>
<tr>
<td>Max. Resolutions / Distance</td>
<td>Up to 1080p@100m (Cat 5e/6, point to point)</td>
<td>Up to 4K@100m (Cat 5e/6, point to point) <strong>4K supported:</strong> 4096 x 2160 / 3840 x 2160 @ 30Hz (4:4:4)</td>
<td>Up to 1080p@100m (Cat 5e/6, point to point)</td>
<td>Up to 4K@100m (Cat 5e/6, point to point) <strong>4K supported:</strong> 4096 x 2160 / 3840 x 2160 @ 60Hz (4:2:0) 4096 x 2160 / 3840 x 2160 @ 30Hz (4:4:4)</td>
</tr>
<tr>
<td><strong>Audio</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Input</td>
<td>N/A</td>
<td>1 x HDMI Type A Female (Black)</td>
<td>1 x Mini Stereo Jack Female (Green)</td>
<td></td>
</tr>
<tr>
<td>Output</td>
<td>1 x HDMI Type A Female (Black)</td>
<td>N/A</td>
<td>1 x HDMI Type A Female (Black)</td>
<td>1 x Mini Stereo Jack Female (Green)</td>
</tr>
<tr>
<td><strong>Connectors</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unit to Unit</td>
<td>2 x RJ45 Female</td>
<td>N/A</td>
<td>2 x RJ45 Female</td>
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</tr>
<tr>
<td>Control</td>
<td></td>
<td></td>
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<tr>
<td>IR</td>
<td>1 x Mini Stereo Jack Female (Black)</td>
<td>N/A</td>
<td>1 x Mini Stereo Jack Female (Black)</td>
<td></td>
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<tr>
<td>RS-232</td>
<td>Connector: 1 x Terminal Block, 3 pole Baud Rate: 19200, Data Bits:8, Stop Bits:1, no parity and flow control</td>
<td>Connector: 1 x Terminal Block, 3 pole Baud Rate: 19200, Data Bits:8, Stop Bits:1, no parity and flow control</td>
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<tr>
<td>USB</td>
<td>2 x USB Type A Female (Black)</td>
<td>1 x USB Type B Female (White)</td>
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<tr>
<td><strong>Connectors</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power</td>
<td>1 x DC Jack (Black) with locking</td>
<td>1 x DC Jack (Black) with locking</td>
<td></td>
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<tr>
<td>Power Consumption</td>
<td>DC5V: 4.28W (without USB peripheral device loading) DC5V: 4.53W (without USB peripheral device loading)</td>
<td>DC5V: 3.07W</td>
<td>DC5V: 3.08W</td>
<td></td>
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<tr>
<td><strong>Environmental</strong></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>0 - 40° C</td>
<td>0 - 40° C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>-20 - 60° C</td>
<td>-2 - 60° C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humidity</td>
<td>0 - 80% RH, Non-Condensing</td>
<td>0 - 80% RH, Non-Condensing</td>
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<tr>
<td><strong>Physical Properties</strong></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>Housing</td>
<td>Metal</td>
<td>Metal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weight</td>
<td>0.49 kg</td>
<td>0.50 kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dimensions (L x W x H) with bracket</td>
<td>14.02 x 12.30 x 3.06 cm</td>
<td>14.02 x 12.30 x 3.06 cm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dimensions (L x W x H) without bracket</td>
<td>13.60 x 10.10 x 2.96 cm</td>
<td>13.60 x 10.10 x 2.96 cm</td>
<td></td>
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</tr>
</tbody>
</table>

Note: Supports 1920x1200@60Hz reduced blanking (ATEN Default EDID only)

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**VanCryst™ Professional A/V Solutions**

**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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