

# HDMI over IP Extender

VE8900T / VE8900R

# 4K HDMI over IP Extender

VE8950T / VE8950R

# 4K HDMI over IP Extender with PoE

VE8952T / VE8952R

The ATEN VE8900/VE8950/VE8952 Video over IP Extenders deliver visually lossless 1080p / 4K AV signals with low latency over long distance via a standard Gigabit network switch.

ATEN's Video over IP solution is designed to address the challenges that system integrators encounter when implementing AV over IP solutions and provides an effective, easy-to-use, and economical digital signage solution with the following features and advantages:

- Limitless scalability and flexibility
- No complicated IP setup
- No additional server PCs or software required
- Go further for less with daisy chaining
- Flexible control with Mobile App
- Convenient integration and installation

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/VE8952 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.

(VE8952)

VE8952T



VE8952R



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, VE8952)
- 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

### Power over Ethernet Support

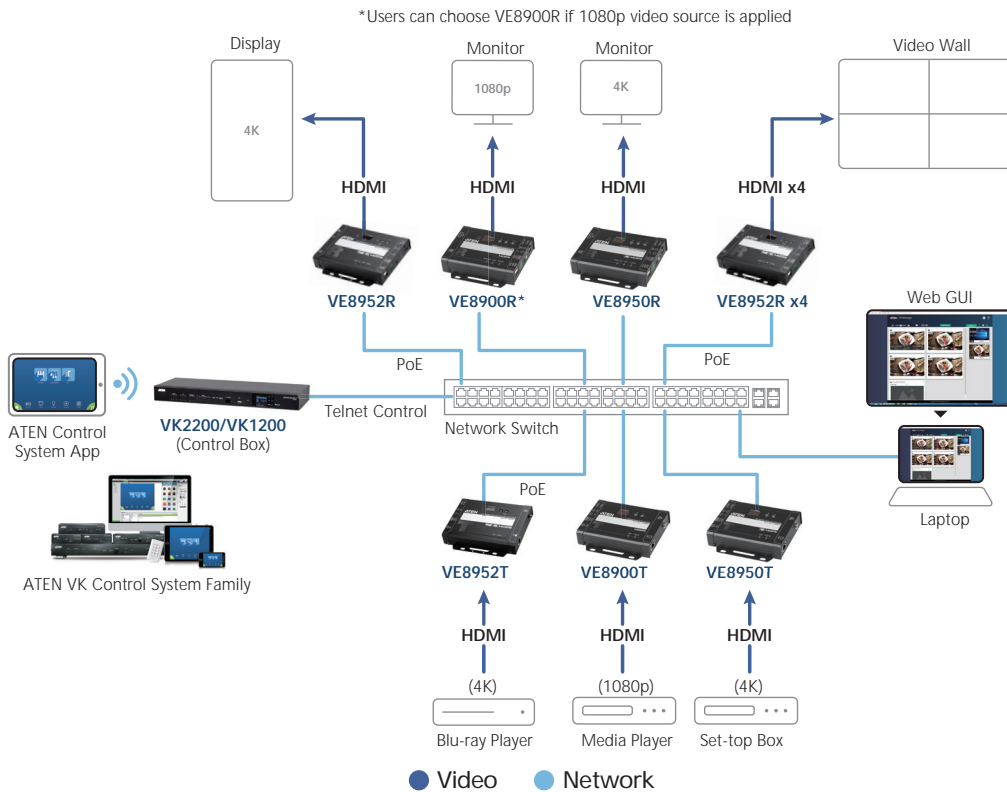
- Locate VE8952 anywhere without having to install additional power cabling and outlets

### 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 (VE8952/VE8950) and 1080p screens (VE8900). 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

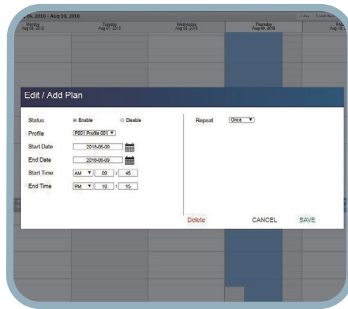
- Integrated solution – Compatible with ATEN Control System, allowing users to directly operate VE8900/VE8950/VE8952 via CLI Telnet, RS-232 protocol, or Mobile Control App
- Effortless operation – One click to effectively operate VE Manager, TV, projector, source player, and related equipments via touch panel and keypad



**Note:** VE8952 supports PoE and can be installed in combination with PoE network switches to reduce power cabling and additional power outlets. Before choosing the Network switch and installation, please refer to the Implementation Guide.

### 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



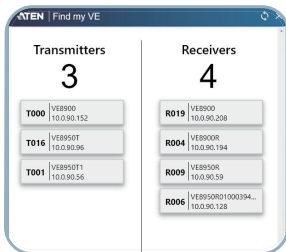
### No Complicated IP Setup

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

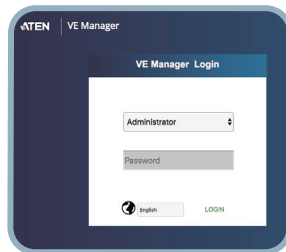


### Web GUI-Based Management, No Additional Server PCs or Software Required

- 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



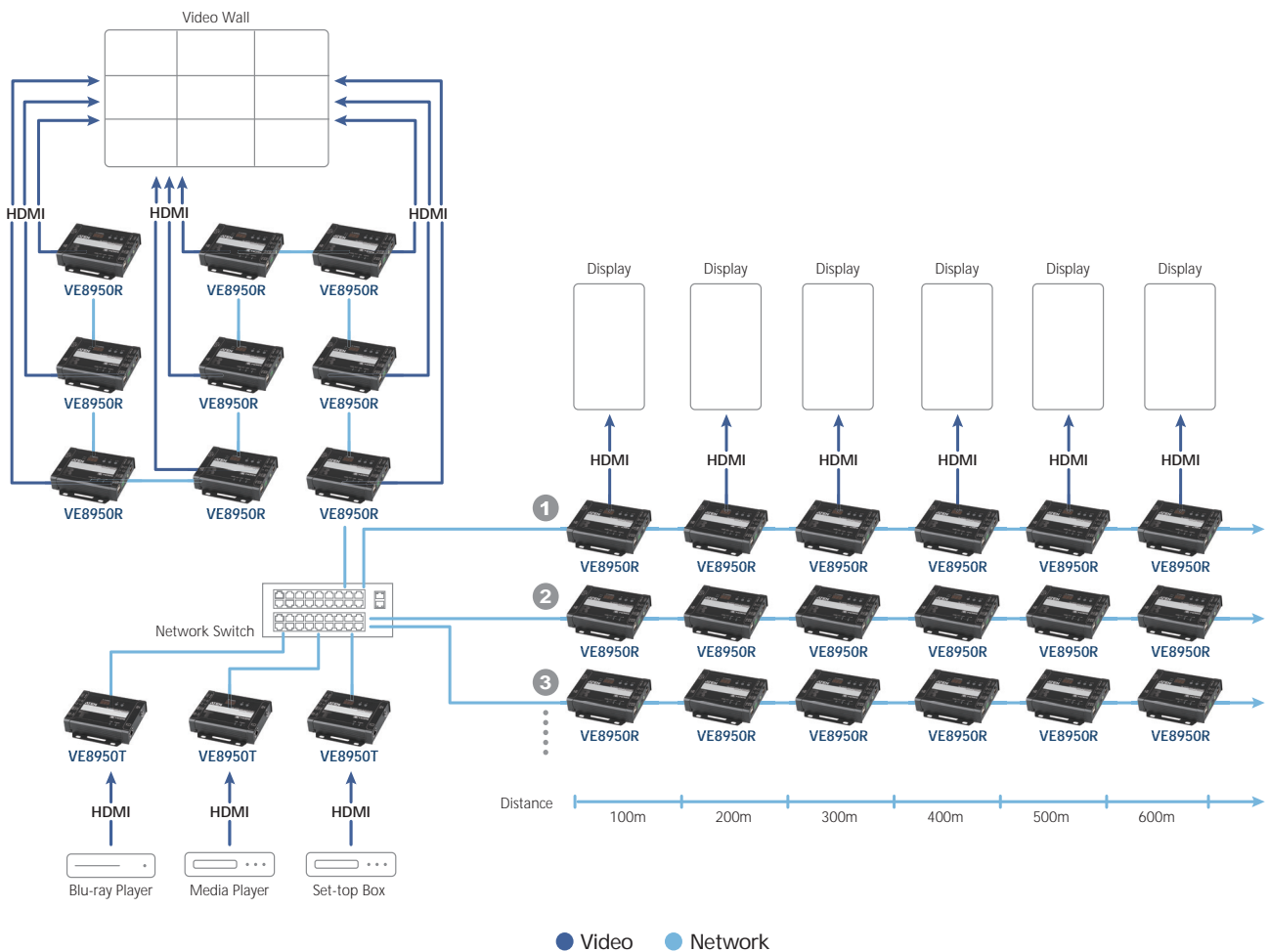
Click any transmitter to log in



### 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

**Note:** 1. Depending on your network architecture, we recommend daisy chaining up to 30 units.  
 2. VE8952 does not support PoE in daisy chain architecture.



### 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

\*If you experience issues related to your network architecture, please contact ATEN representatives for support. If you experience issues related to your network architecture, please refer VE89 Implementation guide or contact ATEN representatives for support.



### Embedded / De-embedded Audio Support

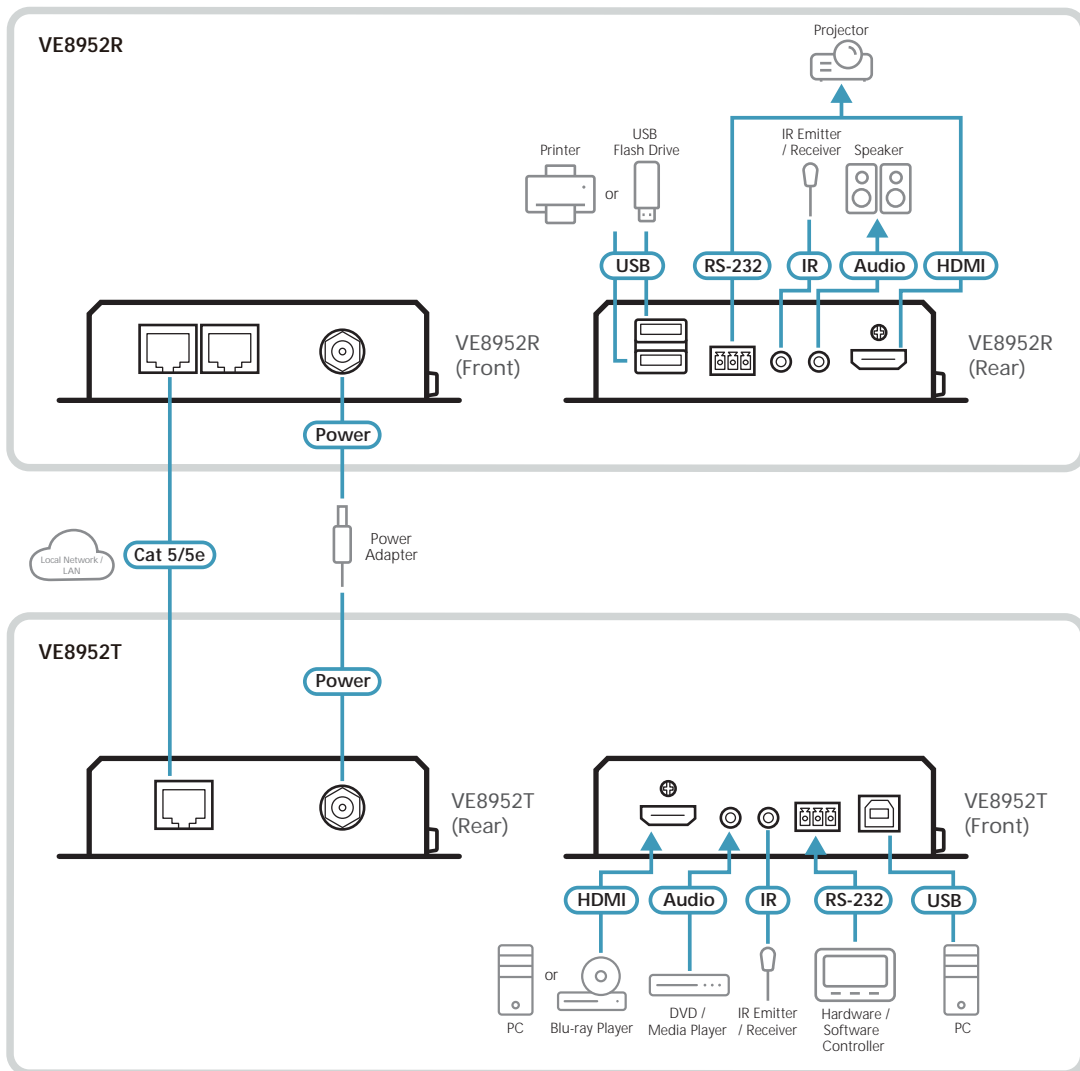
- For transmitters – separate audio signal can be embedded into the HDMI stream
- For receivers – audio stream can be extracted from the HDMI stream and delivered as a separate audio signal

### 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

\*Each transmitter can be controlled by a total of 4 USB touch screens installed to receivers.

## Installation Diagram



**Note:** The VE8952 can be powered on through an Ethernet cable if the unit is connected to a PoE-supported Ethernet switch. When power supply is available from the power adapter and Ethernet cable (PoE), the supply from the power adapter will be prioritized.

# VE8900 / VE8950 Control App

## Turn your mobile phone into a remote control for VE8900 / VE8950 / VE8952

The VE8900 / VE8950 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

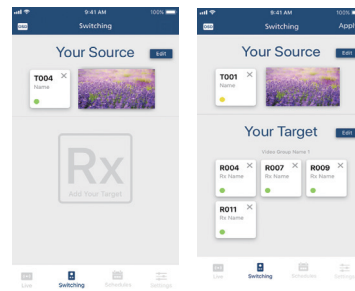
#### Preview

Review video sources before switching.



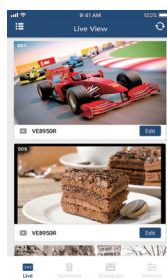
#### Control

Switch a source to multiple receivers instantly.



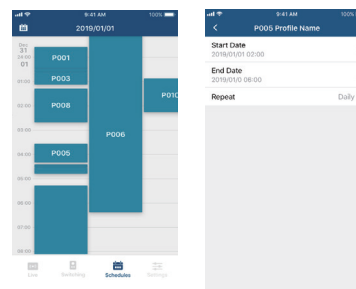
#### Monitor

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



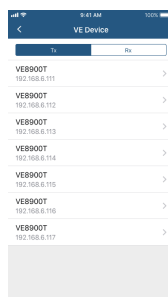
#### Calendar-based Scheduling

Check and revise the display schedule on the go.



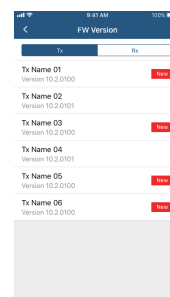
#### Simple Login

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



#### Firmware Update Reminder

Keeps you posted about the latest updates.



## Specifications

Functions	VE8952R	VE8950R	VE8900R
<b>Video Input</b>			
Interfaces	N/A	N/A	N/A
Impedance	N/A	N/A	N/A
Max. Distance	N/A	N/A	N/A
<b>Video Output</b>			
Interfaces	1 x HDMI Type A (Black)	1 x HDMI Type A (Black)	1 x HDMI Type A (Black)
Impedance	100 Ω	100 Ω	100 Ω
Max. Distance	3m (2L-7D03H)	3m (2L-7D03H)	3m (2L-7D03H)
<b>Video</b>			
Max. Data Rate	Average: 150 ~ 500Mbps	Average: 150 ~ 500Mbps	Average: 150 ~ 500Mbps
Compliance	HDMI (4K) HDCP Compatible	HDMI (4K) HDCP Compatible	HDMI HDCP Compatible
Max. Resolutions / Distance	Up to 4K@100m (Cat 5e/6, point to point) <b>*4K supported:</b> 4096 x 2160 / 3840 x 2160 @ 30Hz (4:4:4)	Up to 4K@100m (Cat 5e/6, point to point) <b>*4K supported:</b> 4096 x 2160 / 3840 x 2160 @ 30Hz (4:4:4)	Up to 1080p@100m (Cat 5e/6, point to point)
<b>Audio</b>			
Input	N/A	N/A	N/A
Output	1 x HDMI Type A Female (Black) 1 x Mini Stereo Jack Female (Green)	1 x HDMI Type A Female (Black) 1 x Mini Stereo Jack Female (Green)	1 x HDMI Type A Female (Black) 1 x Mini Stereo Jack Female (Green)
<b>Connectors</b>			
Unit to Unit	2 x RJ-45 Female	2 x RJ-45 Female	2 x RJ-45 Female
Power	1 x DC Jack (Black) with locking or 1 x RJ-45 (Power Over Ethernet, POE)	1 x DC Jack (Black) with locking	1 x DC Jack (Black) with locking
<b>Control</b>			
IR	1 x Mini Stereo Jack Female (Black)	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	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)	2 x USB Type A Female (Black)	2 x USB Type A Female (Black)
<b>Pushbuttons</b>			
ID Number Selection	3 x Push buttons	3 x Push buttons	3 x Push buttons
<b>Power Consumption</b>			
	DC5V:5.22W:46 DC48V:6.52W:52 (PoE)	DC5V:4.53W:43	DC5V:4.28W:41
<b>Environmental</b>			
Operating Temperature	0 – 40 °C	0 – 40 °C	0 – 40 °C
Storage Temperature	-20 – 60 °C	-20 – 60 °C	-20 – 60 °C
Humidity	0 - 80% RH, Non-Condensing	0 - 80% RH, Non-Condensing	0 - 80% RH, Non-Condensing
<b>Physical Properties</b>			
Housing	Metal	Metal	Metal
Weight	0.68 kg	0.49 kg	0.49 kg
Dimensions (L x W x H) with bracket	17.02 x 14.69 x 3.00 cm	14.02 x 12.30 x 3.06 cm	14.02 x 12.30 x 3.06 cm
Dimensions (L x W x H) without bracket	16.60 x 12.49 x 2.90 cm	13.60 x 10.10 x 2.96 cm	13.60 x 10.10 x 2.96 cm

Functions	VE8952T	VE8950T	VE8900T
<b>Video Input</b>			
Interfaces	1 x HDMI Type A Female (Black)	1 x HDMI Type A Female (Black)	1 x HDMI Type A Female (Black)
Impedance	100 Ω	100 Ω	100 Ω
Max. Distance	3m (2L-7D03H)	3m (2L-7D03H)	3m (2L-7D03H)
<b>Video Output</b>			
Interfaces	N/A	N/A	N/A
Impedance	N/A	N/A	N/A
Max. Distance	N/A	N/A	N/A
<b>Video</b>			
Max. Data Rate	Average: 150 ~ 500Mbps	Average: 150 ~ 500Mbps	Average: 150 ~ 500Mbps
Compliance	HDMI (4K) HDCP Compatible	HDMI (4K) HDCP Compatible	HDMI HDCP Compatible
Max. Resolutions / Distance	Up to 4K@100m (Cat 5e/6, point to point) <b>*4K supported:</b> 4096 x 2160 / 3840 x 2160 @ 60Hz (4:2:0); 4096 x 2160 / 3840 x 2160 @ 30Hz (4:4:4)	Up to 4K@100m (Cat 5e/6, point to point) <b>*4K supported:</b> 4096 x 2160 / 3840 x 2160 @ 60Hz (4:2:0); 4096 x 2160 / 3840 x 2160 @ 30Hz (4:4:4)	Up to 1080p@100m (Cat 5e/6, point to point)
<b>Audio</b>			
Input	1 x HDMI Type A Female (Black) 1 x Mini Stereo Jack Female (Green)	1 x HDMI Type A Female (Black) 1 x Mini Stereo Jack Female (Green)	1 x HDMI Type A Female (Black) 1 x Mini Stereo Jack Female (Green)
Output	N/A	N/A	N/A
<b>Connectors</b>			
Unit to Unit	1 x RJ-45 Female	1 x RJ-45 Female	1 x RJ-45 Female
Power	1 x DC Jack (Black) with locking or 1 x RJ-45 (Power Over Ethernet, POE)	1 x DC Jack (Black) with locking	1 x DC Jack (Black) with locking
<b>Control</b>			
IR	1 x USB Type B Female (White)	1 x USB Type B Female (White)	1 x USB Type B Female (White)
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	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)	2 x USB Type A Female (Black)	2 x USB Type A Female (Black)
<b>Pushbuttons</b>			
ID Number Selection	2 x Push buttons	2 x Push buttons	2 x Push buttons
<b>Power Consumption</b>			
	DC5V:3.49W:16 DC48V:4.36W:20 (PoE)	DC5V:3.08W:14	DC5V:3.07W:14
<b>Environmental</b>			
Operating Temperature	0 ~ 40 °C	0 ~ 40 °C	0 ~ 40 °C
Storage Temperature	-20 ~ 60 °C	-20 ~ 60 °C	-20 ~ 60 °C
Humidity	0 - 80% RH, Non-Condensing	0 - 80% RH, Non-Condensing	0 - 80% RH, Non-Condensing
<b>Physical Properties</b>			
Housing	Metal	Metal	Metal
Weight	0.67 kg	0.50 kg	0.50 kg
Dimensions (L x W x H) with bracket	17.02 x 14.69 x 3.00 cm	14.02 x 12.30 x 3.06 cm	14.02 x 12.30 x 3.06 cm
Dimensions (L x W x H) without bracket	16.60 x 12.49 x 2.90 cm	13.60 x 10.10 x 2.96 cm	13.60 x 10.10 x 2.96 cm

