



# Modular Matrix Solution Series

## Complete AV Signal Control in One Expandable System



# Explore the Modular Matrix Solution Series



• Introduction	01
• Features	03
• Award-Winning Graphical User Interface	05
• ATEN Video Matrix Control App	09
• Product Specifications	11
- VM3250, VM3200 and VM1600A Product Specifications	11
- Compatible Input and Output Boards	13
• Success Stories	15
• Solutions for Long Distance Extension	23
• Accessories	25

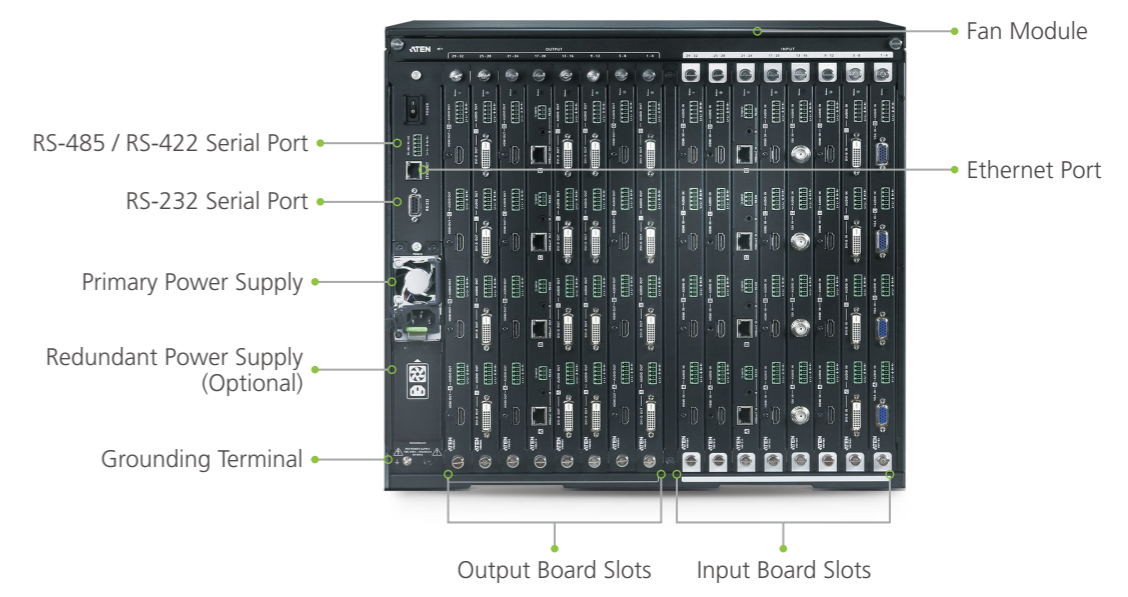


# Introduction

ATEN Modular Matrix Solutions are powerful matrix switches that provide various video interfaces and transmission options – including digital and analog video formats such as Fiber Optic, HDBaseT™, HDMI, SDI, DVI, and VGA – and offer real-time control and advanced access to manage 16/32 video sources and 16/32 displays simultaneously.

In addition to their modular flexibility, models feature an all-in-one control mechanism that integrates video wall processing and matrix switching. Empowered by ATEN Seamless Switch™ technology, models incorporate a speed-progressive video switching function and a unique scaler that integrates seamlessly with video wall systems, and enables the distribution of video with perfect timing in any dimension.

## 32 x 32 Hardware Overview



# Features



## Bandwidth for True 4K, HDR

Designed to handle extreme bandwidth requirements to deliver up to True 4K, HDR video signals, the latest generation of ATEN's Modular Matrix Switch provides support for the latest source devices and displays as well as future-proofs your installation.

## Easy Maintenance and High Reliability

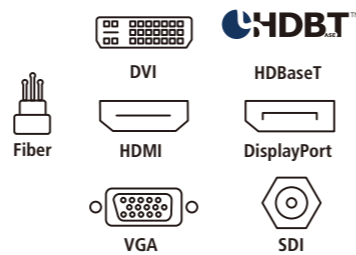
- The removable front panel, modular interior PCBs, hot swappable I/O board, power, and fan modules make repair and replacement easier than ever.
- Redundant power design prevents single points of failure from shutting down the entire system and ensures 24/7 operation.



Interior PCBs      Fan Module      I/O Boards      Power Modules

## Future-proof Expandability

Hassle-free expandability with a selection of modular I/O boards, including HDBaseT, Fiber, HDMI, DVI, SG-SDI, and VGA.



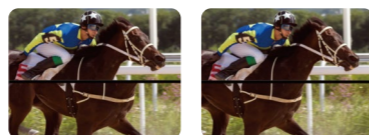
## Seamless Switch™

ATEN's unique Seamless Switch™ technology features close-to-zero second video switching from any input to any output without any blank screens, delivering uninterrupted experiences while transitioning from one video source to another.



## Tear-free Video Walls

ATEN's FrameSync Technology prevents screen tearing by synchronizing the scaler frame rates, guaranteeing smooth video for high-motion elements and ensuring stunning tear-free video walls.



Before      After

## Scaling for Optimized Output

A unique scaler utilizes ATEN FPGA technology to unify various video input signals and render optimized output resolutions on displays with uncompromised precision.



## Calendar-based Scheduling

A built-in calendar-based scheduling function allows you to queue and play profiles via a calendar view for a specific amount of time. This easy-to-use scheduling tool is exactly what you need to set auto play by month, week, hour or minute, reducing human operation costs and saving time.



## Cable Quality Testing

Allows the examination of connected cable signal quality to eliminate the need for extensive checking processes and facilitate troubleshooting.

- Bulk cable testing: Allows the simultaneous testing up to 32 cable connections with VM7814 and VM8814
- Long distance cable testing: Check the cable quality over long distances, up to 100 meters away, with VM8514 and VE816R



Up to 32 connection can be checked at once



Check 4K HDBaseT signal extending up to 100m away

## Multiple Control Methods

- Built-in award-winning Web GUI
- RS-232, RS-485, RS-422, Ethernet
- Front-panel pushbuttons
- ATEN Video Matrix Control App
- Integrated control via ATEN Control System



## Bi-directional IR & RS-232 Channel

Transmits full range IR and RS-232 signals to control displays or other devices.

# Award-Winning Graphical User Interface



reddot award 2015  
winner interface design



The Modular Matrix Solution Series can be configured over a standard TCP/IP connection via its built-in Graphical User Interface (GUI). Because it can be accessed from anywhere over a network or the Internet, operators can easily log in via any web browser.

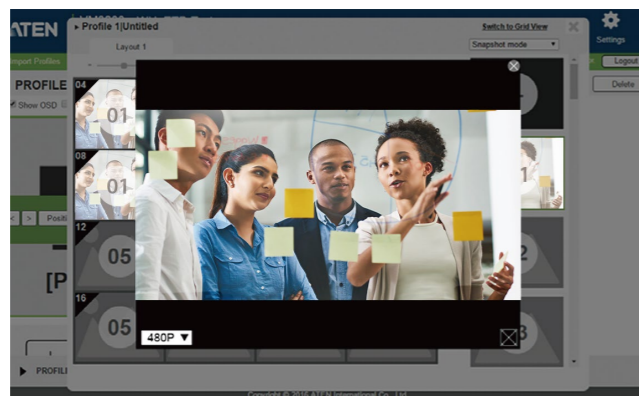
## Easy and Quick Setup

No matter if you want to display video sources independently on separate monitors, or in unison on a video wall, the Modular Matrix Solution Series offers an easy method for quick setup and profile creation. Choose between a Digital Signage and Video Wall layout then use the GUI to set the connections. Making a video wall or digital signage profile has never been easier.



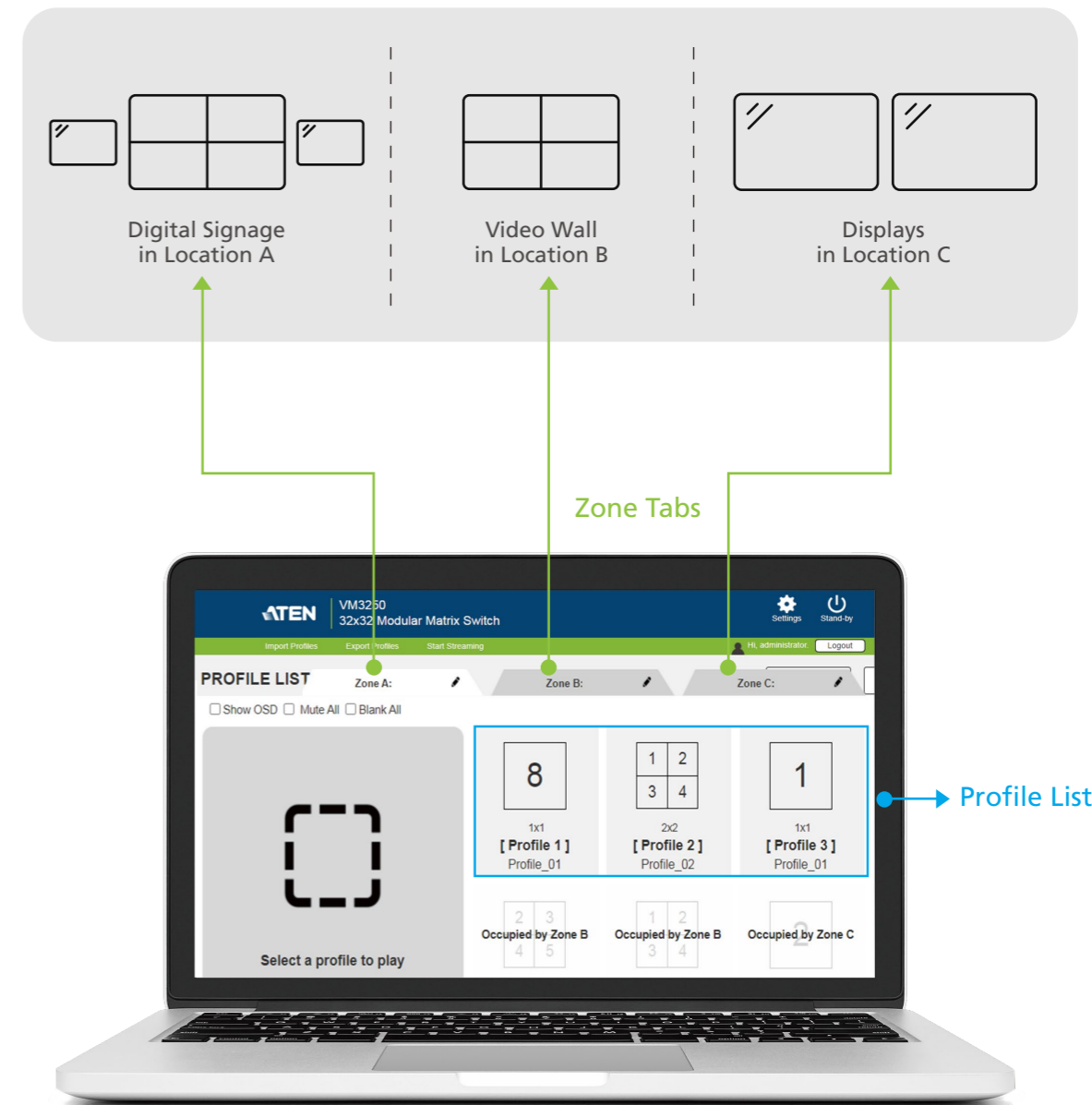
## Live Preview (VM3250 / VM3200)

Allows you to preview the video source in real-time before broadcasting.



## Manage Video Outputs by Display Zones

You might have more than one video wall or display set up which are managed by one modular matrix in your application. In this case, you can use Display Zones to separate each setup in order to switch and manage profiles independently in each display zone, which ensures streamlined operations as well as zero interference between each setup.



## Easy Video Wall Management

Provides up to 64 profiles that you can customize into layouts by setting the display outputs in accordance to your preferences. With the easy-to-use web GUI, you can form a single large screen or a variation of multiple screens in different layouts – to see what you want, how you want to see it.

VM3250 / VM3200 >  
GUI image preview

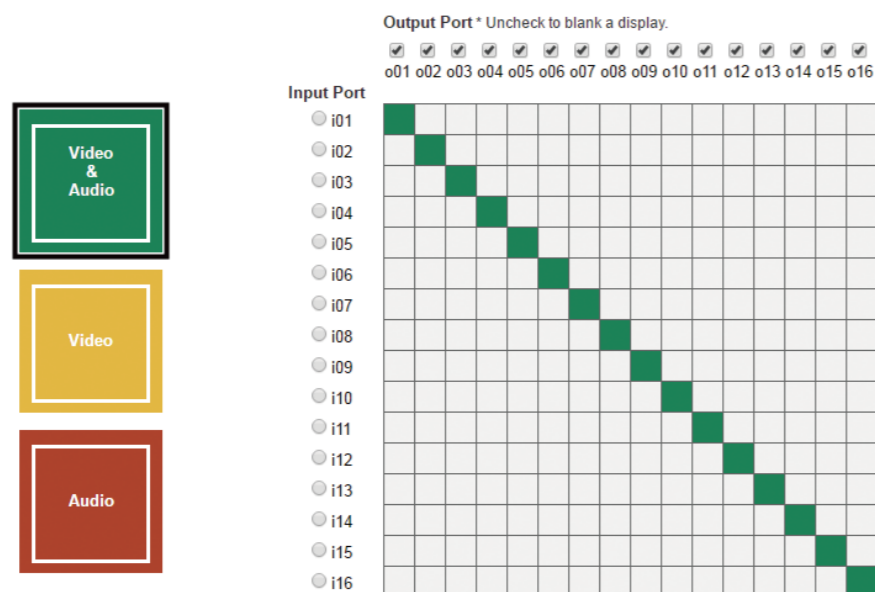


VM1600A GUI >



## Grid View

You can also use the traditional view to quickly select the input-to-output and audio connections using a simple grid layout.



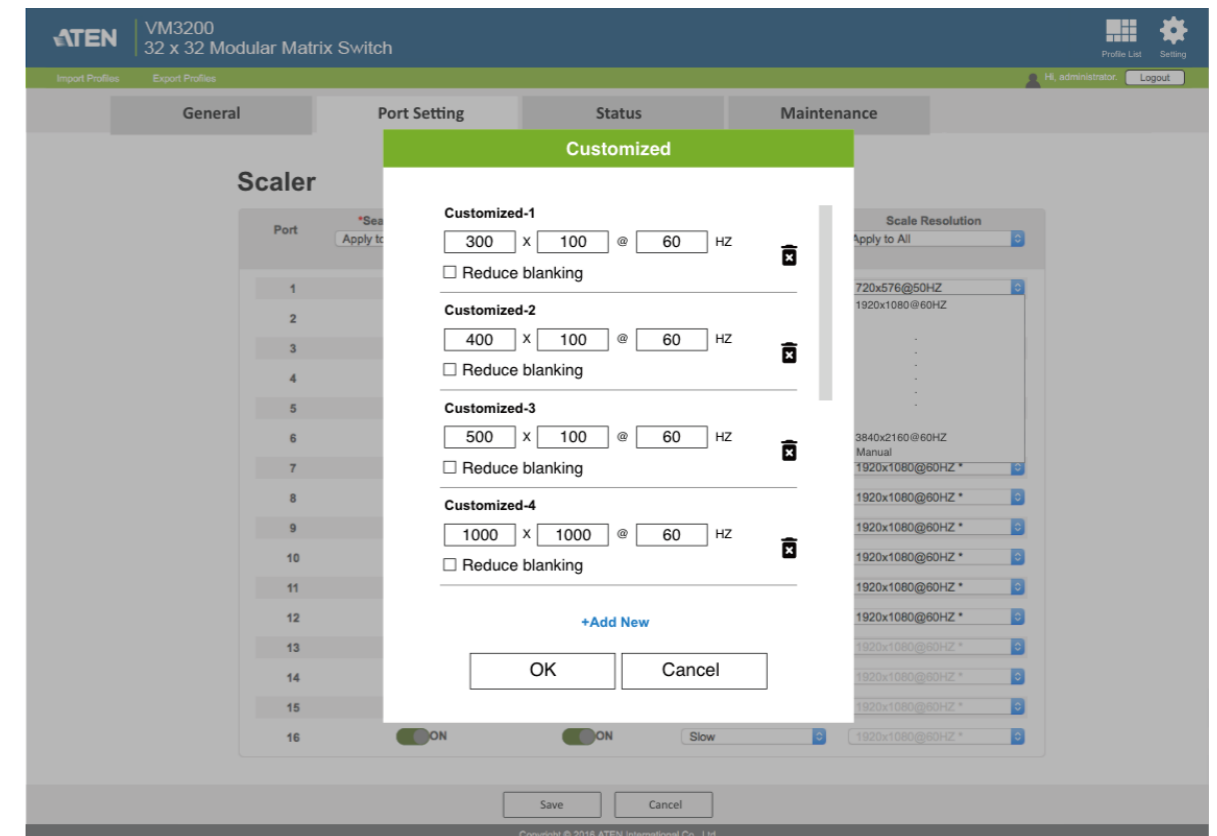
## Customizable Resolutions

To fulfill diverse applications in the market, including those less common resolutions produced from LED tiles, the Modular Matrix Solution Series also offers customizable resolution settings for greater flexibility and enhanced compatibility.



Application: LED Video Walls

Note: VM8814 / VM8824 / VM8514+VE816R models support customizable resolution on scaler outputs.  
Feature Available Date: May, 2021.



# ATEN Video Matrix Control App



The ATEN Video Matrix Control App turns your mobile device into a remote control for ATEN Video Matrix Switches. Featuring an easy-to-use, intuitive interface, this control app provides direct access to manage ATEN Video Matrix Switches anytime, anywhere to make AV matrix control even easier than before.



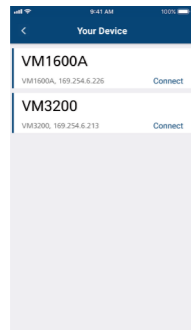
iOS 12.0 or later



Android 8.0 or later

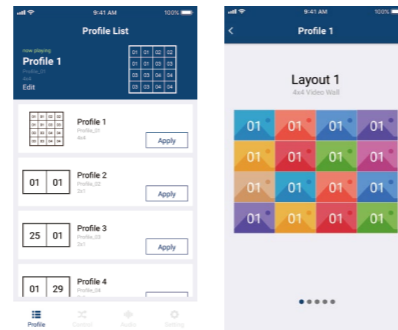
## Simple Setup and Login

Auto scan the network for ATEN Video Matrix devices and connect by entering the corresponding IP Address, User Name, and Password.



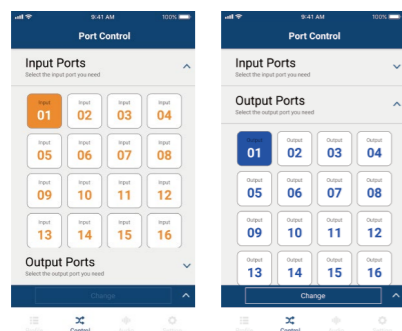
## Easy Profile Management

Scroll among Profiles and apply for current application needs. Edit a Profile's Layout contents as well by changing the input sources via the interface.



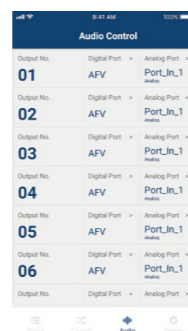
## Instant Video Switching

Switch video sources instantly via your mobile device by simply selecting the input port and output port.



## Flexible Audio Control

Route, embed / de-embed, or turn on / off audio any audio input with ease.



# Product Specifications

## VM3250 Modular Matrix Switch Gen. 2

- 32 x 32 I/O connections via 8 x 8 I/O modular matrix board slots
- Multiple Control Methods – pushbuttons, RS-232 / RS-422 / RS-485 and Ethernet
- **True 4K Resolutions** – uncompressed video resolutions up to 3840 x 2160 / 4096 x 2160 @60Hz (4:4:4)\*
- **Scaler** – video scaling function to integrate a video wall seamlessly with various output video formats\*
- **Seamless Switch™** – close-to-zero second switching that provides continuous video streams, real-time switching and stable signal transmissions\*
- **Video Wall** – creates custom layouts via intuitive web GUI
- **EDID Expert™** – selects optimum EDID settings for smooth power-up, high-quality display and use of the best resolution across different screens
- **Display Zone** – enables configuration and management of each setup in installations with more than one video wall or display
- **Live Streaming** – single source live streaming via web GUI for convenient evaluation of display output
- **Content and Layout Preview** – displays thumbnails of source media in web GUI, simplifying profile configuration
- **Advanced Scheduling** – improves efficiency and saves costs by allowing media playback to be set based on time and date



Note: \* The availability of these features depends on which I/O board is inserted.

## Specifications

Function	VM3250
Input Board	8 x Slot
Output Board	8 x Slot
Video	Max. Data Rate 22.5 Gbps (3.8 Gbps per Lane)
Control	RS-232 Connector: 1 x DB-9 Female (Black) Serial Control Pin Configurations: Pin2 = Baud Rate and Protocol: Baud Rate: 19200, Data Bits: 8, Stop Bits: 1, Parity: No, Flow Control: No
	RS-485 / RS-422 Connector: 1 x Captive Screw Connector, 5 Pole
	Ethernet Connector: 1 x RJ-45 Female
EDID Settings	EDID Mode: Default / Port1 / Remix / Customized
Power	Connectors 1 x 3-Prong AC Socket
	Max. Input Power Rating 100 - 240 VAC; 50 - 60 Hz; 1.0A
	Consumption AC110V: 800W; AC220V: 800W
Environmental	Operating Temperature 0-40°C
	Storage Temperature -20-60°C
	Humidity 0-80% RH, Non-Condensing
Physical Properties	Housing Metal
	Weight 18.20 kg (40.09 lb)
	Dimensions ( L x W x H ) 48.20 x 47.19 x 39.90 cm (18.98 x 18.58 x 15.71 in.) Rack Height: 9U
Features	VM3250
Hot-pluggable Modules	•
True 4K Support	•
Award-winning Web GUI	•
Video Wall Processor	•
Seamless Switch™	•
Real-time Preview	•
Calendar-based Scheduling	•

# Product Specifications



Note: \* The availability of these features depends on which I/O board is inserted.

## VM3200 32 x 32 Modular Matrix Switch

- 32 x 32 I/O connections via 8 x 8 I/O modular matrix board slots
- Multiple Control Methods – pushbuttons, RS-232 / RS-422 / RS-485 and Ethernet
- **4K Resolutions** – up to UHD (3840 x 2160) and DCI (4096 x 2160) with refresh rates of 30Hz (4:4:4) and 60Hz (4:2:0)\*
- **Scaler** – a video scaling function to integrate a video wall seamlessly with various output video formats\*
- **Seamless Switch™** – close-to-zero second switching that provides continuous video streams, real-time switching and stable signal transmissions\*
- **Video Wall** – creates custom layouts via intuitive web GUI
- **EDID Expert™** – selects optimum EDID settings for smooth power-up, high-quality display and use of the best resolution across different screens
- **Display Zone** – enables configuration and management of each setup in installations with more than one video wall or display
- **Live Streaming** – single source live streaming via web GUI for convenient evaluation of display output
- **Content and Layout Preview** – displays thumbnails of source media in web GUI, simplifying profile configuration
- **Advanced Scheduling** – improves efficiency and saves costs by allowing media playback to be set based on time and date

## VM1600A 16 x 16 Modular Matrix Switch

- 16 x 16 I/O connections via 4 x 4 I/O modular matrix board slots
- Multiple Control Methods – pushbuttons, RS-232 / RS-422 / RS-485 and Ethernet
- **4K Resolutions** – up to UHD (3840 x 2160) and DCI (4096 x 2160) with refresh rates of 30Hz (4:4:4) and 60Hz (4:2:0)\*
- **Scaler** – a video scaling function to integrate a video wall seamlessly with various output video formats\*
- **Seamless Switch™** – close-to-zero second switching that provides continuous video streams, real-time switching and stable signal transmissions\*
- **Video Wall** – creates custom layouts via intuitive web GUI
- **EDID Expert™** – selects optimum EDID settings for smooth power-up, high-quality display and use of the best resolution across different screens
- **Display Zone** – enables configuration and management of each setup in installations with more than one video wall or display



Note: \* The availability of these features depends on which I/O board is inserted.

## Specifications

Function		VM3200
Input Board		8 x Slot
Output Board		8 x Slot
Video	Max. Data Rate	15.2 Gbps (3.8 Gbps per Lane)
Control	RS-232	Connector: 1 x DB-9 Female (Black) Serial Control Pin Configurations: Pin2 = Tx, Pin3 = Rx, Pin5 = Gnd Baud Rate: 19200, Data Bits: 8, Stop Bits: 1, Parity: No, Flow Control: No
	RS-485 / RS-422	Connector: 1 x Captive Screw Connector, 5 Pole
	Ethernet	Connector: 1 x RJ-45 Female
EDID Settings		EDID Mode: Default / Port1 / Remix / Customized
Power	Connectors	1 x 3-Prong AC Socket
	Max. Input Power Rating	100 - 240 VAC; 50 - 60 Hz; 1.0 A
	Consumption	AC 110V: 800W; AC 220V: 800W
Environmental	Operating Temperature	0–40°C
	Storage Temperature	-20–60°C
	Humidity	0–80% RH, Non-Condensing
Physical Properties	Housing	Metal
	Weight	18.20 kg (40.09 lb)
	Dimensions ( L x W x H )	48.20 x 47.19 x 26.59 cm (18.98 x 18.58 x 15.71 in.) Rack Height: 9U
Features		VM3200
Hot-pluggable Modules		•
4K Support		•
Award-winning Web GUI		•
Video Wall Processor		•
Seamless Switch™		•
Real-time Preview		•
Calendar-based Scheduling		•

## Specifications

Function		VM1600A
Input Board		4 x Slot
Output Board		4 x Slot
Video	Max. Data Rate	15.2 Gbps (3.8 Gbps per Lane)
Control	RS-232	Connector: 1 x DB-9 Female (Black) Serial Control Pin Configurations: Pin2 = Tx, Pin3 = Rx, Pin5 = Gnd Baud Rate: 19200, Data Bits: 8, Stop Bits: 1, Parity: No, Flow Control: No
	RS-485 / RS-422	Connector: 1 x Captive Screw Connector, 5 Pole
	Ethernet	Connector: 1 x RJ-45 Female
EDID Settings		EDID Mode: Default / Port1 / Remix / Customized
Power	Connectors	1 x 3-Prong AC Socket
	Max. Input Power Rating	100-240 VAC; 50-60Hz; 3/6A
	Consumption	AC 110V: 460W; AC 220V: 460W
Environmental	Operating Temperature	0–40°C
	Storage Temperature	-20–60°C
	Humidity	0–80% RH, Non-Condensing
Physical Properties	Housing	Metal
	Weight	15.11 kg (33.28 lb)
	Dimensions ( L x W x H )	48.20 x 46.66 x 26.59 cm (18.98 x 18.37 x 10.47 in.) Rack Height: 6U
Features		VM1600A
Hot-pluggable Modules		•
4K Support		•
Award-winning Web GUI		•
Video Wall Processor		•
Seamless Switch™		•
Real-time Preview		N/A
Calendar-based Scheduling		•



## Compatible Input Boards

Model	Interface	Inputs	RS-232	Max. Distance	Audio	RS-232 / IR Channel
<b>VM7584</b> 4-Port 10G Optical Input Board	Fiber Optic	4	4K@60Hz (4:2:0)	VM7584K1: 300m VM7584K2: 10m	N/A	•
<b>VM7514</b> 4-Port HDBaseT Input Board	HDBaseT (RJ-45)	4	4K@60Hz (4:2:0)	100m	N/A	•
<b>VM7904</b> 4-Port 4K DisplayPort Input Board	DisplayPort	4	4K@60Hz (4:2:0)	3m	•	N/A
<b>VM7824</b> 4-Port True 4K HDMI Input Board	HDMI	4	4K@60Hz (4:4:4)	5m	•	N/A
<b>VM7814</b> 4-Port 4K HDMI Input Board	HDMI	4	4K@60Hz (4:2:0)	5m	•	N/A
<b>VM7804</b> 4-Port HDMI Input Board	HDMI	4	1920 x 1080	5m	•	N/A
<b>VM7604</b> 4-Port DVI Input Board	DVI	4	1920 x 1080	5m	•	N/A
<b>VM7104</b> 4-Port VGA Input Board	VGA	4	1920 x 1080	1.8m	•	N/A
<b>VM7404</b> 4-Port 3G-SDI Input Board	3G-SDI (BNC)	4	1920 x 1080	SD: 300m HD: 150m 3G: 100m	•	N/A

## Compatible Output Boards

Model	Interface	Inputs	Max. Video Resolution	Max. Distance	Audio	Scaler	Video Wall	Seamless Switch™	FrameSync	RS-232 / IR Channel	Cable Quality Tester
<b>VM8584</b> 4-Port 10G Optical Output Board	Fiber Optic	4	4K@60Hz (4:2:0)	VM8584K1: 300m VM8584K1: 10m	N/A	VM8584 + VE883R	VM8584 + VE883R	VM8584 + VE883R	•	•	N/A
<b>VM8514</b> 4-Port HDBaseT Output Board	HDBaseT (RJ-45)	4	4K@60Hz (4:2:0)	100m	N/A	VM8514 + VE805R / VE816R	VM8514 + VE805R	VM8514 + VE805R / VE816R	N/A	•	N/A
<b>VM8824</b> 4-Port True 4K HDMI Output Board	HDMI	4	4K@60Hz (4:4:4)	5m	•	•	•	•	•	N/A	•
<b>VM8814</b> 4-Port 4K HDMI Output Board	HDMI	4	4K@60Hz (4:2:0)	15m	•	•	•	•	•	N/A	•
<b>VM8804</b> 4-Port HDMI Output Board	HDMI	4	1920 x 1080	15m	•	•	•	•	N/A	N/A	N/A
<b>VM8604</b> 4-Port DVI Output Board	DVI	4	1920 x 1080	5m	•	•	•	•	N/A	N/A	N/A

**Note:**

- True 4K resolutions are only supported when the VM7824 and VM8824 are used with VM3250.
- 4K resolutions are only available when the Scaler is disabled. When the Scaler function is implemented, the highest resolution available is 1080p. The scaler function is enabled by default.
- HDMI audio signal can be extracted to stereo audio output; stereo audio can be embedded into the HDMI audio output.
- Certain functions depend on video extender model used.

# Success Stories

## I Broadcasting & Media

Artear, one of Argentina's longest running and most prolific television networks, decided to build a state-of-the-art newsroom so they could keep setting the pace for news broadcasting and creative, high-quality content.

### Challenges

- To control a large 10x6 video wall and a smaller 5x5 video wall, and extend the content over long distances
- Required a solution that can switch among different video wall layouts and content sources easily with minimal lag
- Must be able to work 24-7 with high power stability

### ATEN Solution

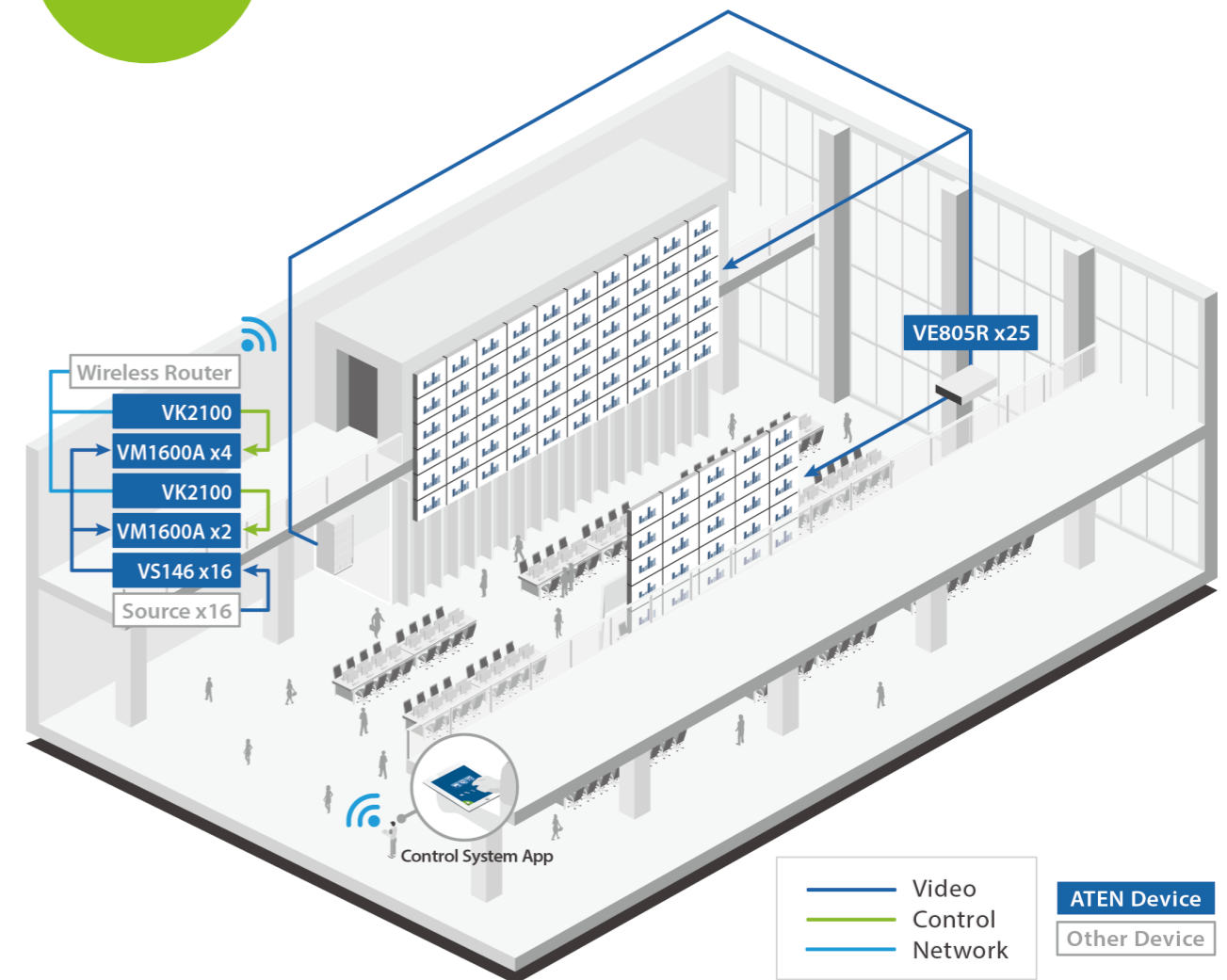
- Enables flexible video wall configurations with different video input and output interfaces, and provides centralized control from multiple devices
- Ensures top video quality and seamless switching between reliable video streams and instant real-time sources
- Supports long distance video transmission with HDBaseT
- Features a reliable power redundancy design

### Product List

- VM1600A – 16x16 Modular Matrix Switch
- VM7404 – 4-Port 3G-SDI Input Board
- VM8804 – 4-Port HDMI Output Board with Scaler
- VK2100 – ATEN Control System - Control Box
- VS146 – 6-Port 3G-SDI Splitter
- VE805R – HDMI HDBaseT-Lite Receiver with Scaler



### Solution Setup



## I Corporate

Medytox, a global biopharmaceutical company based in South Korea, wanted to enhance the quality and effectiveness of their meeting rooms, training facilities and offices, which required various AV management and IT control solutions.

### Challenges

- Control and seamlessly switch multiple video sources and displays both centrally and separately across several meeting spaces
- Separate audio from the HDMI signal and route to different destinations
- Integrate video sources from different interfaces and output to multiple displays with user-friendly switching methods

### ATEN Solution

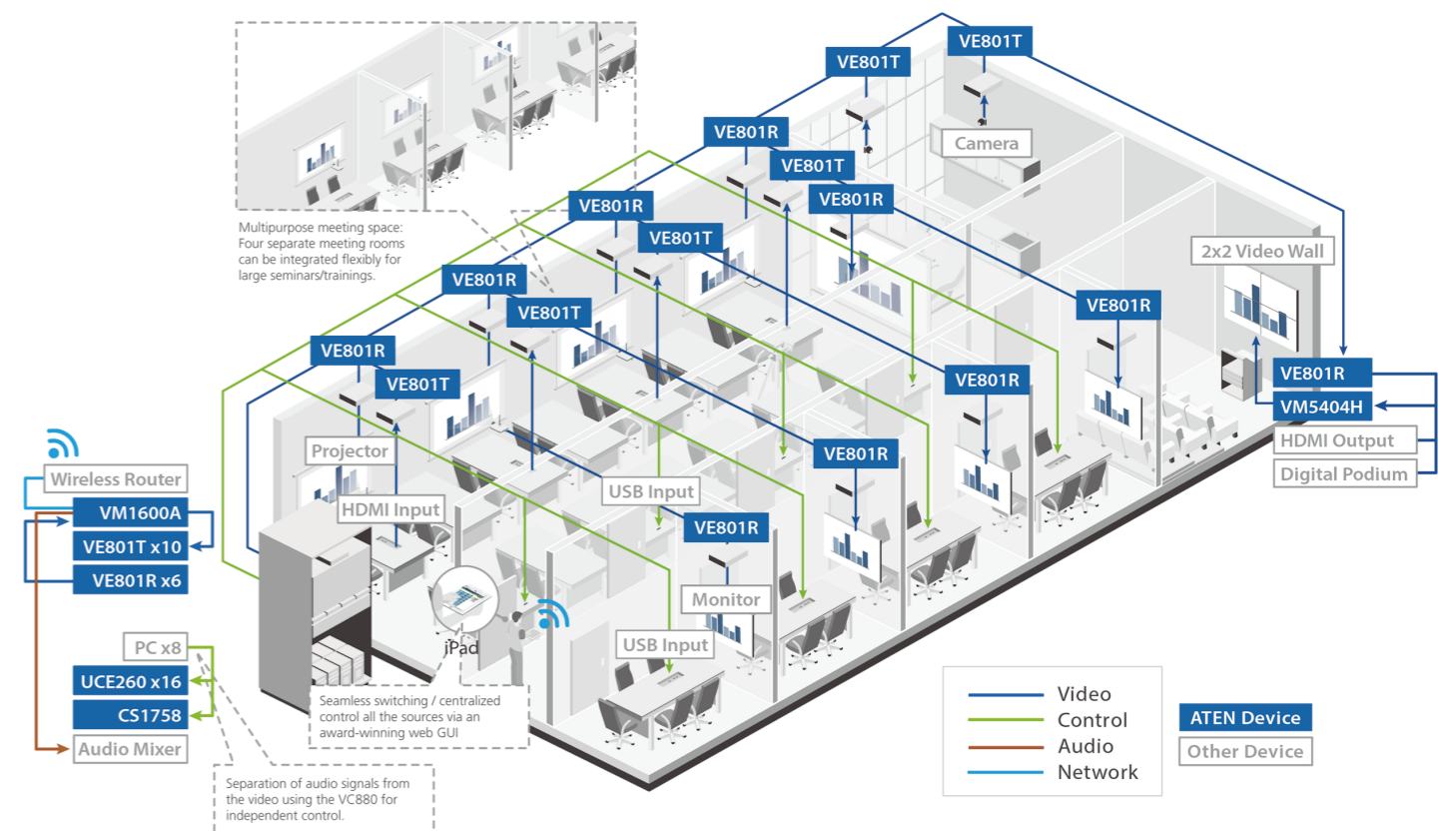
- Integrates AV and IT seamlessly, and guarantees compatibility, reliability and one-stop technical support with a single brand
- Provides effortless control of PCs located in the server room from each meeting room, and enables centralized control and seamless switching of all sources
- Extends stable AV signals over long distances with HDBaseT
- Extracts audio from HDMI signals for independent audio signal control

### Product List

- VM1600A – 16x16 Modular Matrix Switch
- VM7804 – 4-Port HDMI Input Board
- VM8804 – 4-Port HDMI Output Board with Scaler
- VM5404H – 4x4 HDMI Matrix Switch with Scaler
- VE801 – HDMI HDBaseT-Lite Extender
- CS1758 – 8-Port PS/2 USB VGA/Audio KVM Switch
- UCE260 – USB 2.0 Cat 5 Extender



### Solution Setup



# I Hospitality

Elevens Bar & Grill, a UK sports bar owned by Wales and Real Madrid footballer Gareth Bale, decided to build an advanced digital signage entertainment solution to offer unparalleled 4K broadcasting of live sporting events to its customers.

## Challenges

- Required a solution that supports 4K video transmission to up to 20 screens with synchronized sports channels shown at any time
- Must be simple, easy to operate and control by the staff, and sources need to be switched effectively under a restricted timeframe
- Facilitate the increase of video sources or displays at later stages should there be an expansion

## ATEN Solution

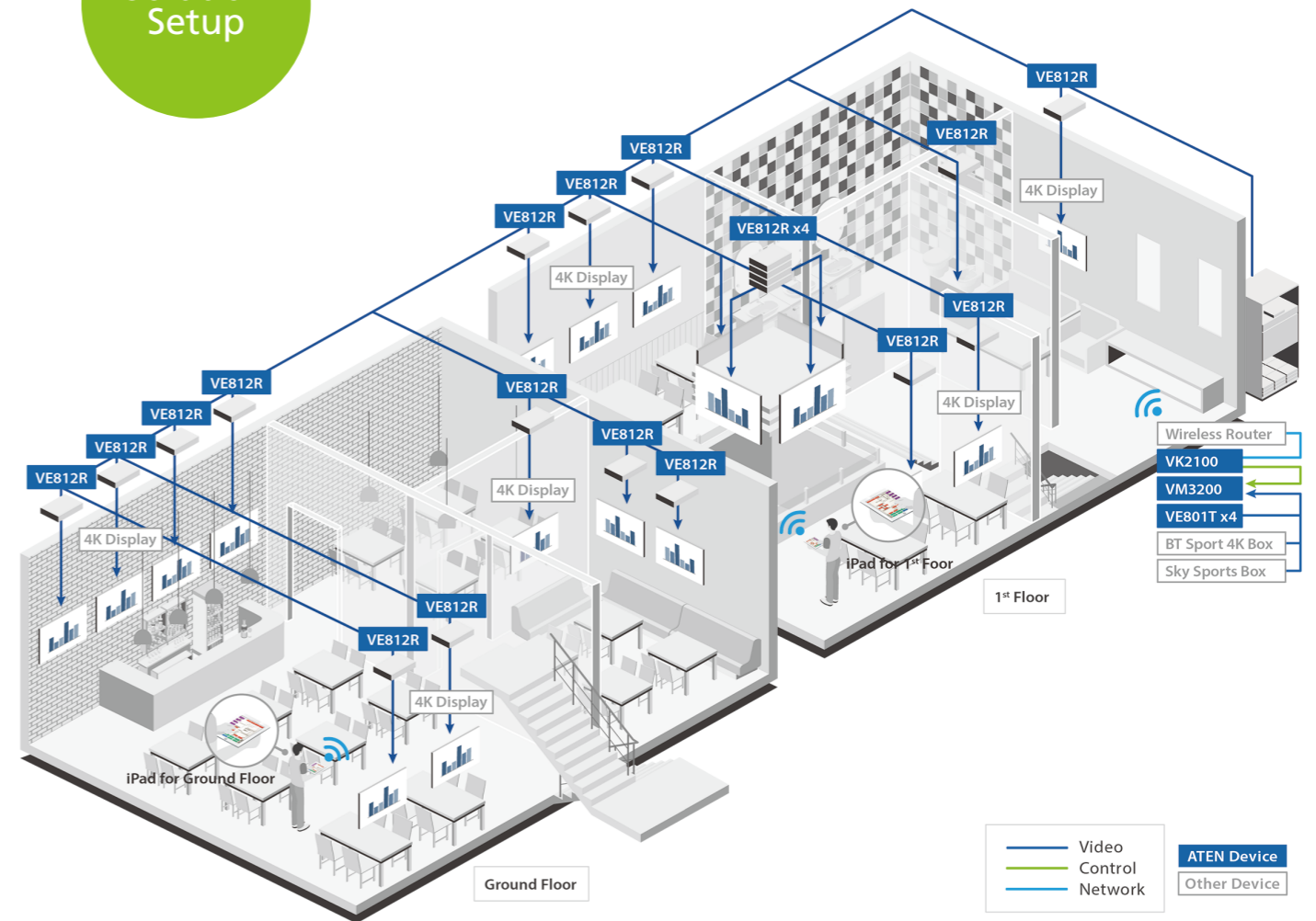
- Delivers stable and reliable continuous video streams and quick channel switching
- Provides advanced access and centralized control via iPads to give the staff the ability to quickly switch between channels
- Supports hassle-free expandability at minimal cost with a selection of modular I/O boards including HDBaseT, HDMI, DVI, 3G-SDI, and VGA boards

## Product List

- VM3200 – 32x32 Modular Matrix Switch
- VM7514 – 4-Port HDBaseT Input Board
- VM7804 – 4-Port HDMI Input Board
- VM8514 – 4-Port HDBaseT Output Board
- VK2100 – ATEN Control System - Control Box
- VE801T – HDMI HDBaseT-Lite Transmitter
- VE812R – HDMI HDBaseT Receiver



## Solution Setup



## I Government

The State Police in Turin, Italy, established a surveillance control center to monitor crowd behavior and detect incidents during city-wide public events. This involved the integration, access, and display of multiple camera video streams, and flexible access for both local and remote operations.

### Challenges

- Required a solution that can support mass media distribution over multiple video walls installed in 3 control rooms
- Operators must be able to remotely access multiple computers which are stored in a separate server area
- Easy to manage and control for operators without any technical background

### ATEN Solution

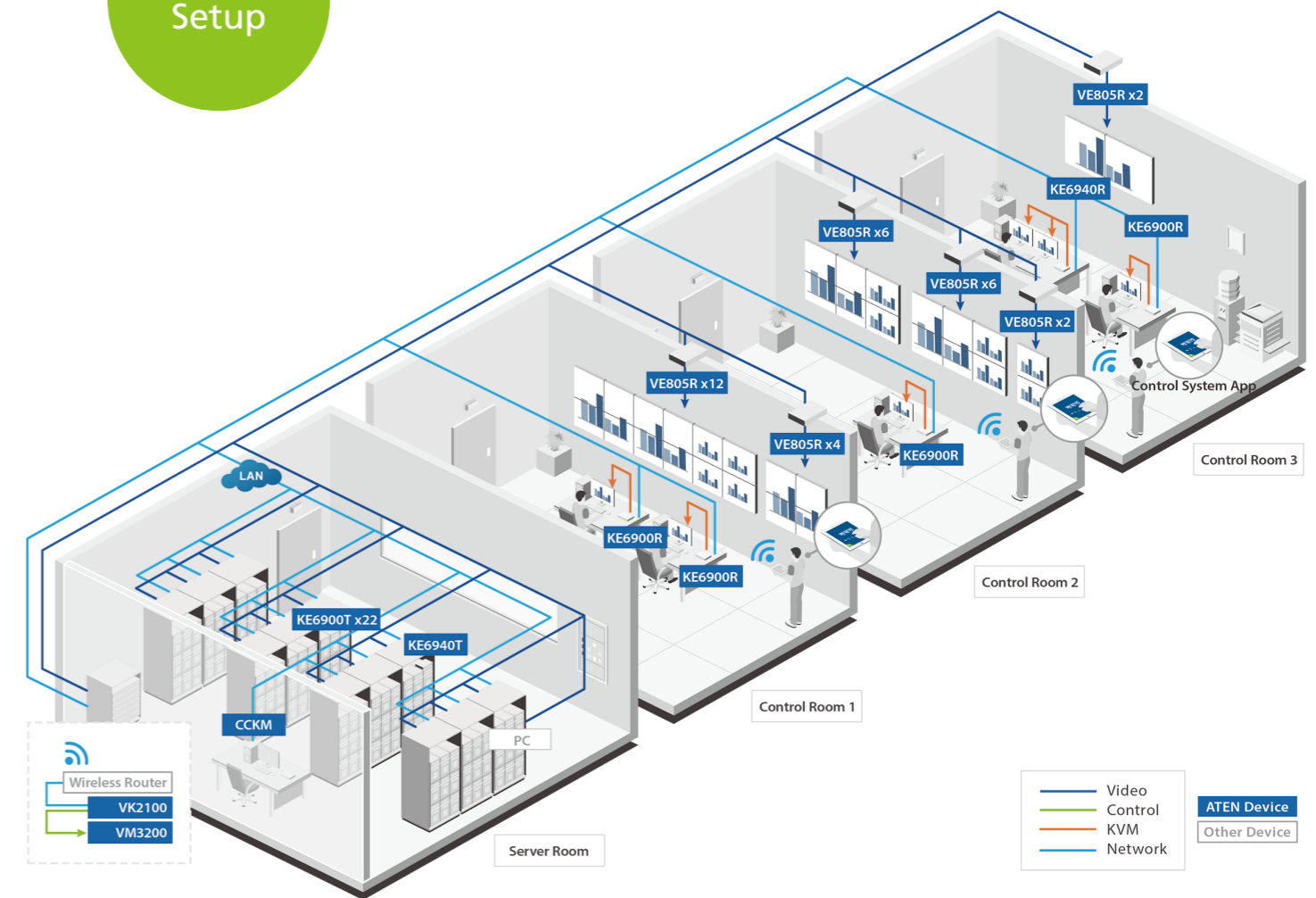
- Integrates easily with any commonly-used hardware device and provides centralized control via a dedicated, custom-designed web interface
- Offers compatibility with popular interfaces and seamlessly connects a large amount of sources and displays
- Supports user rights management and allows several authority levels to suit users' information classification needs

### Product List

- VM3200 – 32x32 Modular Matrix Switch
- VM7604 – 4-Port DVI Input Board
- VM8514 – 4-Port HDBaseT Output Board
- VK2100 – ATEN Control System - Control Box
- VE805R – HDMI HDBaseT-Lite Receiver with Scaler
- KE6900/KE6940 – USB DVI-I Single/Dual Display KVM over IP Extender



### Solution Setup



# Solutions for Long Distance Extension

## HDBaseT™ Solutions

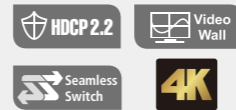
**VM3250 / VM3200 / VM1600A**  
32x32 / 16x16 Modular Matrix Switch  
**VM7514 / VM8514**  
4-Port HDBaseT I/O Boards



**VE805R**  
HDMI HDBase-T-Lite Receiver with Scaler



**VE816R**  
4K HDMI HDBaseT Receiver with Scaler



### Compatible HDBaseT™ Transmitters

Input Board	Transmitters	Video Interface	4K	Max. Distance	RS-232	IR
VM7514	VE2812AT	HDMI & VGA	•	100m	•	•
	VE1812T	HDMI	•	100m	•	•
	VE901T	DisplayPort	•	70m	N/A	N/A
	VE814AT	HDMI x 2	•	100m	•	•
	VE812T	HDMI	•	100m	N/A	N/A
	VE811T	HDMI	•	100m	N/A	N/A
	VE802T	HDMI	•	70m	•	•
	VE801T	HDMI	•	70m	N/A	N/A
VE601T	DVI	N/A	N/A	70m	N/A	N/A

### Compatible HDBaseT™ Receivers

Input Board	Transmitters	Video Interface	4K	Max. Distance	RS-232	IR	Seamless Switch™	Video Wall	FrameSync
VM8514	VE2812R	HDMI & VGA	•	100m	•	•	N/A	N/A	N/A
	VE901R	DisplayPort	•	70m	N/A	N/A	N/A	N/A	N/A
	VE816R	HDMI	•	100m	•	•	•	•	•
	VE814AR	HDMI x 2	•	100m	•	•	N/A	N/A	N/A
	VE812R	HDMI	•	100m	N/A	N/A	N/A	N/A	N/A
	VE811R	HDMI	•	100m	N/A	N/A	N/A	N/A	N/A
	VE805R	HDMI	N/A	70m	•	•	•	•	N/A
	VE802R	HDMI	•	70m	•	•	N/A	N/A	N/A
	VE801R	HDMI	•	70m	N/A	N/A	N/A	N/A	N/A
VE601R	DVI	N/A	N/A	70m	N/A	N/A	N/A	N/A	

**Note:**

- a. Up to 4K@70m (Cat 5e/6) / 100m (Cat 6a/ATEN 2L-2910 Cat6); 1080p@100m (Cat 5e/6/6a)
- b. Up to 4K@35m (Cat 5e/6) / 40m (Cat 6a/ATEN 2L-2910 Cat6); 1080p@60m (Cat 5e/6) / 70m (Cat 6a/ATEN 2L-2910 Cat6)
- c. Up to 1920x1200@35m (Cat 5e/6) / 40m (Cat 6a/ATEN 2L-2910 Cat6); 1080p@60m (Cat 5e/6) / 70m (Cat 6a/ATEN 2L-2910 Cat6)
- d. Up to 1080p@60m (Cat 5e/6) / 70m (Cat 6a/ATEN 2L-2910 Cat6)

## Fiber Solutions

**VM3250 / VM3200 / VM1600A**  
32x32 / 16x16 Modular Matrix Switch  
**VM7584 / VM8584**  
4-Port 10G Optical I/O Boards



**VE883K1**  
4K HDMI Optical Extender (Multi-Mode, 4K@300m)



**VE883K2**  
4K HDMI Optical Extender (Single Mode, 4K@10km)



### Long-distance Transmission

Delivers video, audio, and data for great distances, without or with minimal use of extenders



### Interference Immunity

Resists electromagnetic and radio frequency interference during high-quality AV transmissions



### Low Attenuation

Provides high-bandwidth transmission with exceptionally low loss

### Compatible Fiber Optic Transmitters / Receivers

Model No.	Transmitters and Receivers	Video Interface	4K	Max. Distance	RS-232	IR
VM7584	VE883K1T	HDMI	•	300m	•	•
	VE883K2T	HDMI	•	10km	•	•
VM8584	VE883K1R	HDMI	•	300m	•	•
	VE883K2R	HDMI	•	10km	•	•

**Note:**

- a. The operating distance may vary depending on the fiber type, network bandwidth, connector splicing, signal losses, model or chromatic dispersion, environmental factors, and kinks.
- b. ATEN recommends using single-mode optical fibers that conform to IEC60793-2-50 B1.1 or ITU-T G.652.B specifications; multimode optical fibers that conform to IEC11801 (OM3) specification.
- c. The VM7584 is a class 1 laser product and complies with the safety regulations of IEC-60825, FDA 21 CFR 1040.10, and FDA 21 CFR 1040.11.

# Accessories

## VM3250 / VM3200

Power Module VM-PWR800



Input voltage	100 - 240VAC
Power consumption	Max. Load 800 W
Operating temp.	0-40 °C

Rack Mount Kit (Short) 2X-034G



Rack Depth 41-72 cm

Fan Module VM-FAN556



Airflow	55.2 cfm
Operating voltage	10.2 - 12VDC
Operating temp.	-10-60 °C

Rack Mount Kit (Long) 2X-035G



Rack Depth 68-108 cm

## VM1600A

Power Module VM-PWR460



Input voltage	100 - 240VAC
Power consumption	Max. Load 460 W
Operating temp.	0-40 °C

Rack Mount Kit (Short) 2X-026G



Rack Depth 41-70cm

Fan Module VM-FAN554



Airflow	55.2 cfm
Operating voltage	10.2 - 12VDC
Operating temp.	-10-60 °C

Rack Mount Kit (Long) 2X-027G



Rack Depth 68-105cm



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# About ATEN

ATEN International Co., Ltd., established in 1979, is the leading provider of AV/IT connectivity and management solutions. Offering integrated KVM, professional AV, and intelligent power solutions, ATEN products connect, manage, and optimize AV/IT equipment in corporate, government, education, broadcasting and media, and transportation environments. ATEN has 570+ issued international patents and a global R&D team that produces a constant stream of innovative solutions, resulting in a comprehensive portfolio of products available worldwide.

