

32 x 32 Modular Matrix Switch

VM3200 (Preliminary)

- The VM3200 Modular Matrix Switch offers advanced access and real-time control of multiple local and remote A/V input devices and displays from a single chassis. The VM3200 allows users to independently switch and route video and/or audio content directly to various monitors, displays, projectors, and/or speakers simply by pressing front panel pushbuttons. A built-in Scaler encodes the video format in order to provide seamless, real-time switching. The front panel LCD shows a quick view of active port connections. The switch also includes an option to select an EDID Mode that yields the best resolution across different monitors.

The VM3200 is easily expandable and accommodates a lineup of hot-swappable ATEN I/O boards. Equipped with automatic signal conversion, it allows various combinations of digital video formats, including HDBaseT (VM7514 / VM8514), HDMI (VM7804 / VM8804), DVI (VM7604 / VM8604), 3G-SDI (VM7404), and VGA (VM7104). This makes it ideal for large-scale A/V applications such as broadcasting stations, traffic and transportation-related control rooms, emergency service centers, and any application that requires customizable, high-speed A/V signal routing.

VM3200 Front view



VM3200 Rear view



Features

- Connects any of 32 video sources to any of 32 displays in combination with ATEN Modular Matrix Solutions
- Built-in Scaler on each output port converts input resolutions into the display's native resolution
- Supports 4K resolutions up to UHD (3840 x 2160) and DCI (4096 x 2160) with refresh rates of 30 Hz (4:4:4) and 60 Hz (4:2:0)
- Seamless Switch™ – ATEN FPGA design unifies video formats to provide continuous video streams, real-time switching, and stable signal transmissions*
- Video wall – allows you to create custom video wall layouts via intuitive web GUI
- EDID Expert™ – selects optimum EDID settings for smooth power-up and highest quality display
- Multiple Control Methods – system management via front-panel pushbuttons, RS-232, RS-485/422, and Ethernet (Telnet / Web GUI) connections
- Hot-pluggable:
 - Modular fan design
 - Power module
 - Easy integration of I/O boards
- Optional redundant power supply for continuous operation
- Audio-enabled, HDMI audio can be extracted, and stereo audio can be embedded (VM7804/VM8804)
- HDMI (3D, Deep Color) (VM7804/VM8804); HDCP 1.4 compatible
- Consumer Electronics Control (CEC) support (VM7804/VM8804)
- ESD protection for HDMI
- Firmware upgradeable
- Rack mountable

Note: If Seamless Switch is enabled, the video output will not display 3D, Deep Color, or interlace (i.e., 1080i) resolution features. To use these features, you must disable Seamless Switch.

Highlights

Flexible Integration	The VM3200 can be configured with up to 32 video sources x 32 displays, with a flexible installation process that allows integration of different video interfaces and encoding of various video formats to customize system configurations for each application. The I/O slots are hot-swappable, making it easy and convenient to switch between multiple video sources and displays.
Smooth and Seamless Viewing Experience	The VM3200 has a built-in Scaler and CrossPoint design that unifies video formats and provides continuous video streams, real-time switching, and stable signal transmissions. The VM3200 is also capable of high-speed switching between all input/output ports – supporting high data transfer rates of up to 15.2 Gbps/ch to minimize latency.
Hot-pluggable Modular Fan and Redundant Power	Overheating slows down device performance significantly and can result in equipment breaking down mid-operation. The VM3200 is equipped with fan modules to ensure that a cooling system is always in place and working. The fans are hot-pluggable and can easily be replaced without shutting down the system. The VM3200 has two power slots that can connect to two different power supplies. If the primary power shuts down, the secondary power supply can automatically take over. ATEN ensures that your investment is protected while delivering outstanding performance.

Video Wall

The VM3200 is equipped with Video Wall functionality integrated with a Scaler and Cross Point design that ensures all input sources are processed at the same time so that the video content is delivered across all screens with no delays or signal loss. The video wall functionality provides up to 64 profiles that you can customize into layouts by setting the display outputs in accordance to your preference, designed from an easy to use web GUI. Through profile setup, you can form a single large screen or a variation of multiple screens in different layouts.



Audio Separation

The VM3200 provides the capability to separate audio signals from their corresponding video signals, including both HDMI extracted audio and embedded stereo audio. This allows the audio and video signals from one source device to be switched and sent out to different destinations.



Optional Equipments

Available Input and Output Boards

Input Boards	Output Boards
<p>VM7604 (DVI Input Board)</p>	<p>VM8604 (DVI Output Board)</p>
<p>VM7804 (HDMI Input Board)</p>	<p>VM8804 (HDMI Output Board)</p>
<p>VM7514 (HDBaseT Input Board)</p>	<p>VM8514 (HDBaseT Output Board)</p>
<p>VM7404 (3G-SDI Input Board)</p>	-
<p>VM7104 (VGA Input Board)</p>	-

Available Accessories

VM-PWR800	Video Matrix Power Module	VM-FAN556	Video Matrix Fan Module
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Rack Mount Kits (Optional)

Easy Installation Rack Mount Kit	Rack Depth
2X-034G (Short)	41 to 72 cm
2X-035G (Long)	68 to 108 cm

Specifications

Function	VM3200
Board Input	8 x Slot
Board Output	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, Pin 3=Rx, Pin 5= Gnd Baud Rate and Protocol: Baud Rate:19200, Data Bits: 8, Stop Bits:1, Parity: No, Flow Control: No
RS-485/RS-422	1 x Captive Screw Connector, 5 Pole
Ethernet	1 x RJ-45 Female
EDID Settings	EDID Mode: Default / Port1 / Remix / Customized
Power	
Connectors	1 x 3-Prong AC Socket
I/P Rating	100-240 VAC; 47-63 Hz; 4-8 A
Consumption	TBD
Environmental	
Operating Temperature	0° to 40° C
Storage Temperature	-20° to 60° C
Humidity	0 - 80% RH, Non-condensing
Physical Properties	
Housing	Metal
Weight	18.96 kg (chassis only)
Dimensions (L x W x H)	48.20 x 47.19 x 39.90 cm

Combination	Matrix Switch	VM3200				
	Input Board	VM7514	VM7804	VM7604	VM7104	VM7404
	Output Board	VM8514	VM8804	VM8604	-	-
Interface		HDBaseT (RJ-45)	HDMI	DVI	VGA	3G-SDI
Max. Video Resolution		4K @ 60 Hz (4:2:0); 4K @ 30 Hz (4:4:4)***	1920 x 1080	1920 x 1200	1920 x 1200	SD: 625i (PAL) / 525i (NTSC) HD / 3G: Up to 1920 x 1080
Max. Distance		100 m***	15 m	5 m	1.8m	SD: 300 m HD: 150 m 3G: 90 m
Audio		V	V *	V	V	V
Scaler Support		VM8514 + VE805R**	VM8804	VM8604	N/A	N/A
Seamless Switch		VM8514 + VE805R**	VM8804	VM8604	N/A	N/A
Video Wall		VM8514 + VE805R**	VM8804	VM8604	N/A	N/A

Note : * HDMI audio signals can be extracted into stereo audio. Stereo audio can be embedded into HDMI audio.

** For the VM8514, the Seamless Switch™, scaler, and video wall functions are only available when used with the VE805R.

*** Supported resolution and distance may vary depending on which HDBaseT extender is used.

Note: These preliminary specifications are subject to change without notice. Please check our website or with a sales representative for the most up-to-date specifications.

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