VM1600

16x16 Modular Matrix Switch

The VM1600 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 VM1600 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, with an option to select an EDID Mode that yields the best resolution across different monitors.

VM1600 is easily expandable and accommodates a lineup of hot-swappable ATEN I/O boards. Equipped with automatic signal conversion, it allows any combination of digital video formats, such as, HDBaseT (VM7514 / VM8514), HDMI (VM7804 / VM8804), DVI (VM7604 / VM8604), 3G-SDI (VM7404) and VGA (VM7104), thus making 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.

Features

- Connects any of 16 video sources to any of 16 displays in combination with ATEN Modular Matrix Solutions
- Superior video quality – HDTV resolutions of 480p, 720p, 1080i and 1080p (1920 x 1080); VGA, SVGA, XGA, SXGA and WUXGA (1920 x 1200)
- HDCP 1.4 Compatible
- Seamless Switch™ – provides continuous video streams, real-time switching and stable signal transmission*
- 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
- Easily switch between multiple sources and multiple displays
- Hardware Configuration:
  - Front panel pushbuttons
  - RS-232 serial port
- System Operation
  - Browser-based Graphical User Interface (GUI)
  - Telnet
- Built-in bi-directional RS-232 serial remote port for high-end system control
- Hot-pluggable:
  - Modular Fan Design
  - Power Module
  - Easy integration of I/O boards
- Optional redundant power supply for continuous operation
- Firmware upgradeable via web
- Rack Mountable
- Built-in scaler on each output port to support the scaling function for different video resolutions
- Consumer Electronics Control (CEC) support (VM7804/VM8804)
- Audio-enabled, HDMI audio can be extracted, and stereo audio can be embedded (VM7804/VM8804)

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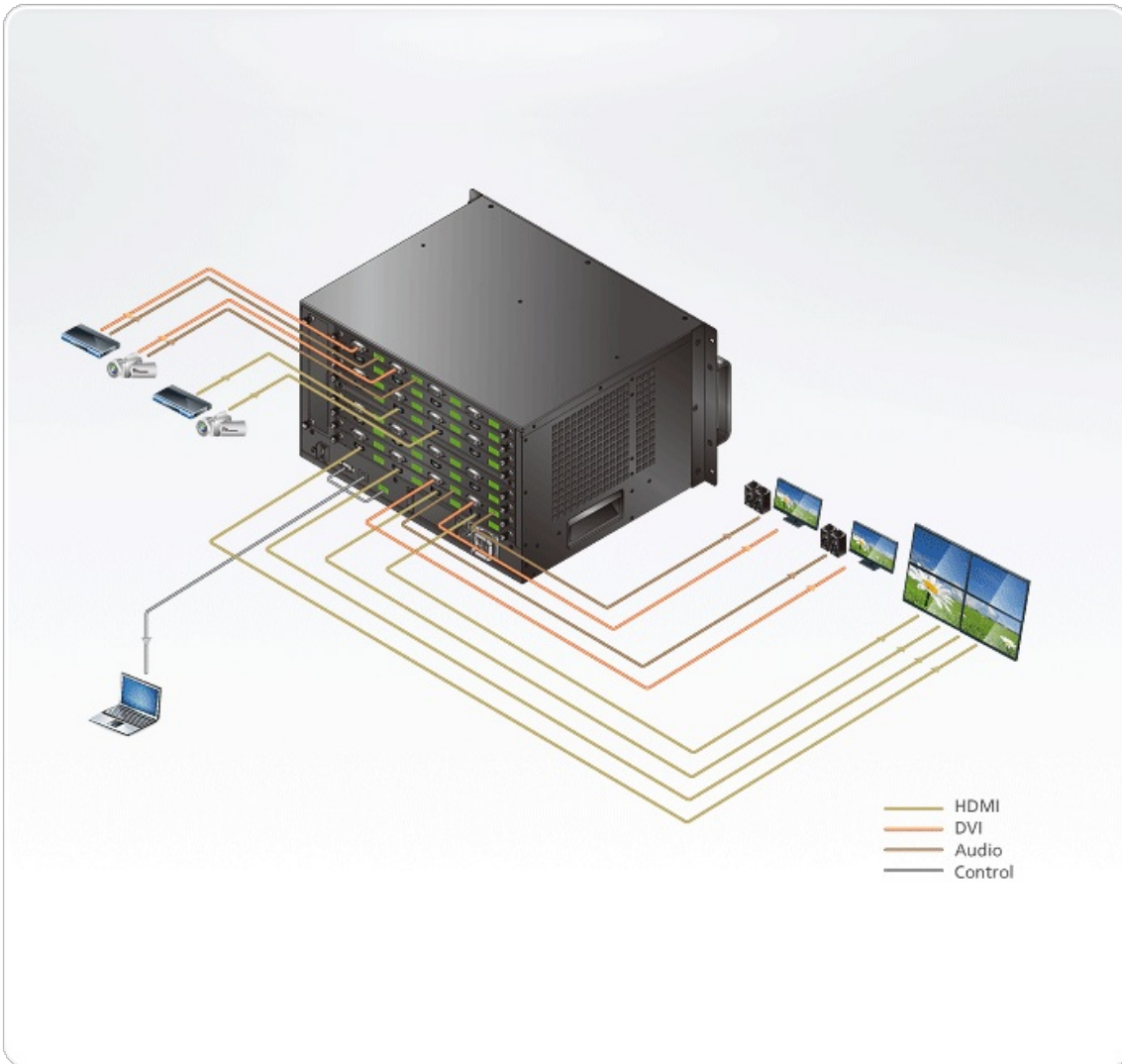
Specification

16x16 Modular Matrix Switch

Video Input	
Interfaces	Depends on which I/O board is inserted
Impedance	100 Ω
Max. Data Rate	10.2 Gbps (3.4 Gbps per lane)
Max. Pixel Clock	340 MHz
Compliance	HDMI (3D, Deep Color, 4K) HDCP 1.4 Compatible Consumer Electronics Control (CEC) HDBaseT Compatible
Audio	
Input	Depends on which Input board is inserted
Output	Depends on which Output board is inserted
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	Connector: 1 x Captive Screw Connector, 5 Pole
Ethernet	Connector: 1 x RJ-45 Female
EDID Settings	EDID Mode: Default / Port1 / Remix / Customized (EDID Wizard support)
Power	
Connectors	1 x 3-Prong AC Socket
Maximum Input Power Rating	100-240 VAC; 50-60Hz; 1.0A
Consumption	120 VAC, 180W; 230 VAC,172W *A redundant power supply is optional.
Fan	Airflow: 60 cfm Operating Voltage: 10.8 - 13.8 VDC Operating Temp: -10 - 70°C
Environmental	
Operating Temperature	0 - 40°C
Storage Temperature	-20 - 60°C
Humidity	0 - 80% RH, Non-Condensing
Physical Properties	
Housing	Metal
Weight	17.00 kg (37.44 lb)
Dimensions (L x W x H)	48.22 x 39.90 x 26.59 cm (18.98 x 15.71 x 10.47 in.)
Carton Lot	1 pc

Topology Diagram

▬▬	HDMI
▬▬	DVI
▬▬	Audio
▬▬	Control