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 DVI (VM7604 / VM8604) and HDMI (VM7804 / VM8804), 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 I/O Boards
- Multiple means for system configuration including front-panel pushbuttons, RS-232/422/485 control, and Ethernet connections for web GUI or Telnet
- 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™ – features close-to-zero second switching for continuous video streams, real-time switching, and stable signal transmissions*
- Scaler – features a (4K) video scaling function to convert input resolutions to the display's native resolutions*
- Video wall – allows you to create custom video wall layouts via intuitive web GUI*
- EDID Expert – selects optimum EDID settings for smooth power-up, high-quality display, and use of the best resolutions across different screens
- Audio-enabled – HDMI audio can be extracted and stereo audio can be embedded*
- Bi-directional RS-232 channel – allows you to control the connected serial devices simultaneously through the web GUI
- Supports redundant power module for higher reliability
- Hot-swappable design for easy integration of I/O boards, fan module, and power supplies
- HDCP 2.2 Compatible*
- HDMI: 3D, Deep Color, 4K*
- Consumer Electronics Control (CEC) supported*
- ESD protection for HDMI
- Rack mountable (6U design)

  * Note:

  1. The availability of the features with "*" depends on which I/O board is inserted.
  2. When Seamless Switch™ is enabled, 3D, Deep Color, or interlace (i.e., 1080i) formats will not be supported. To use these formats, make sure to disable Seamless Switch™.
  3. Videos may not display within range when Seamless Switch™ or Video Wall is enabled, in which case please adjust the display settings on your device.

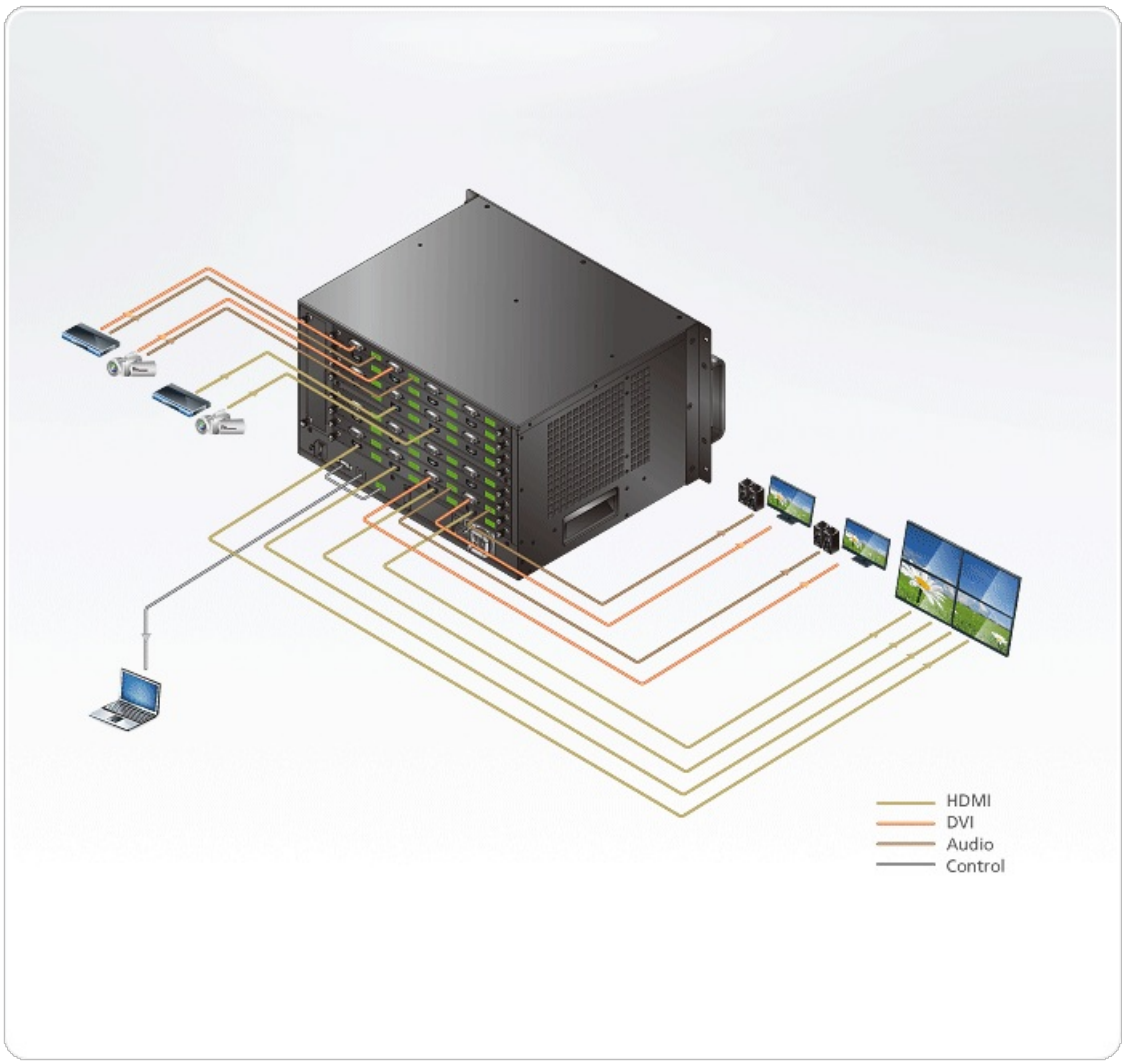
Specification

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 Support depends on the boards selected 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)
Connectors	
Power	1 x 3-Prong AC Socket
Power	
Maximum Input Power Rating	100-240 VAC; 50-60Hz; 1.0A
Power Consumption	378W (Max.) *A power module can be purchased for power redundancy. Note: ● The measurement in Watts indicates the typical power consumption of the device with no external loading. ● The measurement in BTU/h indicates the power consumption of the device when it is fully loaded.
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.)
Rack Height (U Spaces)	6U
Carton Lot	1 pc
Note	For some of rack mount products, please note that the standard physical dimensions of WxDxH are expressed using a LxWxH format.

Diagram



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