

## VM5404D

4 x 4 DVI Matrix Switch with Videowall & Scaler



reddot award 2015  
winner interface design



While HDMI-compliant devices are becoming more popular, the majority of traffic control centers and other large-scale, centralized control rooms still rely on DVI display devices.

In order to avoid signal instability, quality deterioration and other factors associated with interface converters, ATEN created the VM5404D: A seamless matrix switch for DVI signals that offers an easy and affordable way to route any of 4 DVI video sources to any of 4 DVI displays.

The VM5404D includes seamless switching that employs an FPGA matrix architecture to ensure continuous video streaming, real-time control and stable signal transmission. With a built-in high-performance scaler, the VM5404D easily converts various input resolutions into a array of output resolutions, giving viewers the best image quality across all displays. The switch also integrates video wall functionality with an easy-to-use web GUI that lets you create 8 connection profiles for convenient layout customization.

The VM5404D is the ideal solution for any control center streaming multiple sources to multiple displays.



### Features

- 4 x 4 DVI I/O connections
- Configuration and Control via pushbuttons / IR Remote Control
- View and control via [ATEN Video Matrix Control App](#) in a swift and agile way
- System Operation via bi-directional RS-232 serial controller / Browser Graphical User Interface (GUI) / Telnet
- Extends IR transmission via IR extension cable
- Built-in Scaler on each output port converts input resolutions into the display's native resolution, supports scaling 1920 x 1200 resolutions up or down
- Seamless Switch™ – ATEN FPGA design unifies video formats to provide continuous video streams, real-time switching and stable signal transmissions \*
- Video Wall – features up to 8 video wall profiles for custom screen layouts via point-n-click web GUI \*
- EDID Expert – configures optimum EDID settings for smooth power-up, high-quality display and use of the best resolution across different screen
- Firmware Upgradeable
- Rack Mountable (1U Design)

#### Note:

1. 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.
2. 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	4 x DVI-D Female (White)
Impedance	100 Ω
Max. Distance	1.8 m
Video Output	
Interfaces	4 x DVI-D Female (White)
Impedance	100 Ω
Video	
Max. Data Rate	6.75 Gbps (2.25 Gbps Per Lane)
Max. Pixel Clock	225 MHz
Compliance	HDCP 1.4 Compatible
Max. Resolution	Up to 1920 x 1200
Max. Distance	Up to 5m
Control	
RS-232	Connector: 1 x DB-9 Female (Black) Baud Rate and Protocol: Baud Rate: 19200, Data Bits: 8, Stop Bit: 1, Parity: No, Flow Control: No
IR	1 x Mini Stereo Jack Female (Black)
Ethernet	1 x RJ-45 Female (Black)
EDID Settings	EDID Mode: Default / Port 1/ Remix / Customized
Connectors	
Power	1 x 3-Prong AC Socket
Power	
Maximum Input Power Rating	100-240VAC; 50-60Hz; 1.0A
Power Consumption	AC110V:34.1W:160BTU/h AC220V:34.4W:161BTU/h  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.
Environmental	
Operating Temperature	0-50°C
Storage Temperature	-20 - 60°C
Humidity	0 - 80% RH, Non-Condensing
Physical Properties	

Housing	Metal
Weight	3.50 kg ( 7.71 lb )
Dimensions (L x W x H)	43.24 x 25.98 x 4.40 cm (17.02 x 10.23 x 1.73 in.)
Note	For some of rack mount products, please note that the standard physical dimensions of WxDxH are expressed using a LxWxH format.

#### Diagram

