

VM6404HB

4 x 4 True 4K HDMI Matrix Switch with Scaler



True 4K Pro AV solutions with High Dynamic Range (HDR) technology is the trend of high-definition video that delivers the ultimate visual experience with exceptional sharp and vibrant video quality. ATEN's VM6404HB True 4K [HDMI Matrix](#) Switch with Scaler is compatible with the latest True 4K video resolutions of 4096 x 2160 / 3840 x 2160@60Hz (4:4:4) and HDR, guaranteeing crystal-clear images across four displays.

The VM6404HB supports 4K@60Hz, HDMI 2.0, and HDCP 2.2 and features Seamless Switch™ that employs an FPGA matrix architecture that ensures continuous video streams, real-time control, and stable signal transmissions. With a built-in high-performance scaler, the VM6404HB easily converts various input resolutions into various output display resolutions, giving viewers the best video and picture quality across all displays. The switch integrates video wall functionality with an easy-to-use web GUI that lets you create 8 connection profiles that can be customized into different video wall layouts.

The VM6404HB is an ideal solution for applications that require multiple HDMI displays with multiple HDMI sources to be conveniently set up – such as for stage presentations, digital classroom, video conference rooms, and any installation that requires real-time synchronization.



Features

- 4 x 4 HDMI input/output connections
- Multiple Control Methods – system management via front-panel pushbuttons, IR, RS-232 control, and Ethernet connection for web GUI or Telnet
- View and control via ATEN [Video Matrix](#) Control App in a swift and agile way
- [True 4K Resolutions](#) – handles uncompressed video resolutions up to 4096 x 2160 / 3840 x 2160@60Hz (4:4:4)
- [4K Scaler](#) – features a 4K video scaler to convert input resolutions to the optimum display resolutions
- Seamless Switch™ – features close-to-zero second switching for continuous video streams, real-time switching, and stable signal transmissions*
- [Video Wall](#) – allows you to create custom video wall layouts via intuitive web GUI*
- [True 4K EDID Expert](#) – selects optimum EDID settings for smooth power-up, high-quality display, and use of the best resolutions across different screens
- [FrameSync](#) – prevents image tearing by synchronizing the scaler output frame rate to the input signal frame rate
- Audio-enabled – HDMI audio can be extracted to stereo audio
- HDMI (3D, Deep color, 4K); HDCP 2.2 compatible
- Consumer Electronics Control (CEC) support
- [ESD protection](#) for HDMI
- Rack-mountable (1U design)

*Note:

1. 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™.
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

Specifications

Video Input	
Interfaces	4 x HDMI Type A Female (Black)
Impedance	100 Ω
Max. Distance	5.0 m
Video Output	
Interfaces	4 x HDMI Type A Female (Black)
Impedance	100 Ω
Max. Distance	5.0 m
Video	
Max. Data Rate	18.0 Gbps (6.0 Gbps per lane)
Max. Pixel Clock	600 MHz
Compliance	HDMI (3D, Deep Color, 4K); HDCP 2.2 Compatible; Consumer Electronics Control (CEC)
Max. Resolution	Up to 4096 x 2160 / 3840 x 2160 @ 60Hz (4:4:4)
Max. Distance	Up to 5.0 m
Audio	
Output	1x Mini Stereo Jack Female
Control	
RS-232	Connector: 1 x DB-9 Female (Black); Baud Rate: 19200, Data Bits: 8, Stop Bits: 1, Parity: No, Flow Control: No
IR	1 x Mini Stereo Jack Female (Black)
Ethernet	1 x RJ-45 Female
EDID Settings	EDID Mode: Default / Port 1 / 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	AC110V:43.7W:205BTU/h AC220V:43.1W:202BTU/h Note: <ul style="list-style-type: none">● 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	0-40°C
Storage Temperature	-20 - 60°C
Humidity	0 - 80% RH, Non-Condensing
Physical Properties	
Housing	Metal
Weight	3.52 kg (7.75 lb)
Dimensions (L x W x H)	43.24 x 26.23 x 4.40 cm (17.02 x 10.33 x 1.73 in.)
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

