

# VM6404H

## 4x4 4K HDMI Matrix Switch with Scaler

- 4K is the next generation in image quality. It has four times the resolution quality of Full HD. To create 4K images both the monitor and source have to support both HDMI 2.0 and HDCP 2.2. ATEN's 4K HDMI Matrix Switch with Scaler - VM6404H is compatible with the latest video standards and provides powerful computing capabilities to process the 4K resolutions to ensure a crystal clear image.

The VM6404H supports 4K@60Hz, HDMI 2.0 and HDCP 2.2 and features seamless switching that employs a FPGA matrix architecture that ensures continuous video streams, real-time control and stable signal transmissions. With a built-in high-performance scaler, the VM6404H 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 VM6404H is an ideal solution for applications that require multiple HDMI displays with multiple HDMI sources to be conveniently setup – such as for stage presentations, competition events, control centers and any installation that requires real-time reporting.

Front view



Rear view



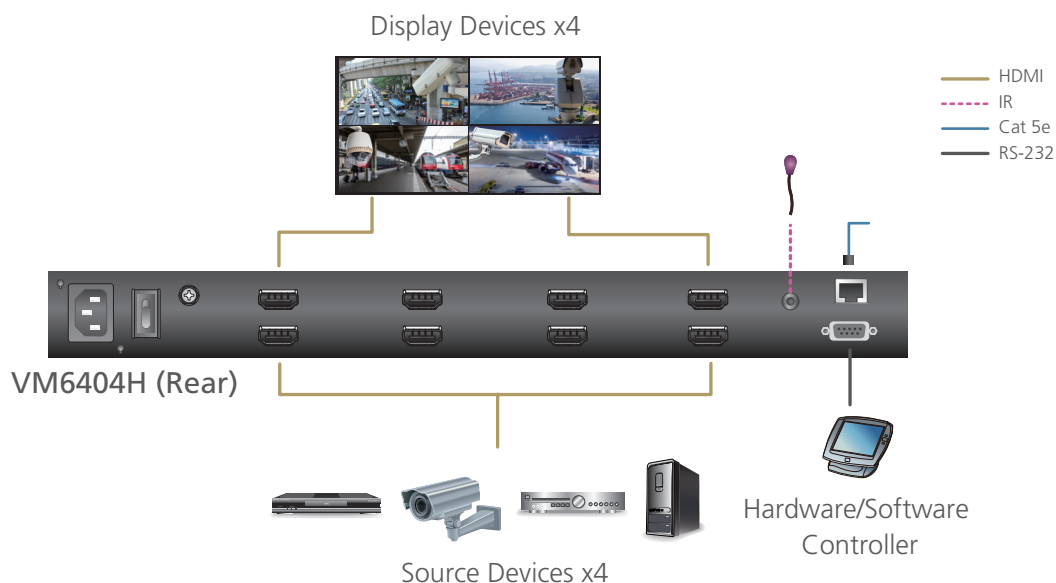
## Features

- 4x4 HDMI input/output connections
- Front-Panel configuration via LCD display / pushbuttons / IR remote control
- System Operation via bi-directional RS-232 serial controller / Ethernet / Telnet / IR Remoter Control / front-panel pushbuttons / GUI
- Scaler – features a video scaling function to integrate a video wall seamless with various output video formats
- Seamless Switch™ – features close-to-zero-second switching that provides 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 screens
- Firmware upgradable
- Rack-mountable

\* **Note:** If Seamless Switching is enabled, the video output will not display 3D, Deep Color or interlace (i.e., 1080i) resolutions. To make these features available, you must disable Seamless Switching.

## Highlights

<b>Video Wall</b>	The VM6404H is equipped with video wall functionality integrated through an easy to use web GUI. The video wall setup provides up to 8 connection profiles that you can customize into layouts using a simple point and click web interface. Video walls allow you to setup multiple displays that are configured to form and show video as a single large screen in various layouts – to see what you want, how you want.
<b>Scaler</b>	The VM6404H is equipped with a high-performance scaling engine that converts various input resolutions into the display's native resolution, giving viewers the best picture and video quality. Low input resolutions are scaled perfectly to the best fit so that video playback is smooth and enjoyable. In addition, the premium scaling engine offers a range of aspect settings that automatically adjust the picture ratio for maximum viewing comfort.
<b>Smooth and Seamless Viewing Experience</b>	The VM6404H's built-in FPGA design unifies video formats and provides continuous video streams, real-time switching and stable signal transmissions. It is capable of high-speed switching between all input and output ports – supporting TMDS high data transfer rates of up to 4K @ 60Hz to minimize latency.



## Specification

Function		VM6404H
Video Input	Interface	4 x HDMI Type A Female (Black)
	Impedance	100Ω
	Max. Distance	1.8 m
Video Output	Interface	4 x HDMI Type A Female (Black)
	Impedance	100Ω
	Max. Distance	15 m
Video	Max. Data Rate	10.2 Gbps (3.40 Gbps per lane)
	Max. Pixel Clock	340 MHz
	Compliance	HDMI (3D, Deep Color, 4K); HDCP 2.2 Compatible; Consumer Electronics Control (CEC)
	Max. Resolutions	Up to 4K@60Hz (4:2:0)
	Max. Distance	Up to 15 m
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	Connector: 1 x RJ-45 Female
EDID Settings		EDID Mode: Default / Port 1 / Remix / Customized (EDID Wizard Support)
Power		Connector: 1 x 3-prong AC Socket; I/P Rating: 100-240 VAC; 50-60Hz; 1.0A Consumption: 120VAC, 47.6W; 230VAC, 47.5W
Environment	Operating Temp.	0 – 50°C
	Storage Temp.	-20 – 60°C
	Humidity	0 – 80% RH, Non-Condensing
Physical Properties	Housing	Metal
	Weight	5.02 kg
	Dimensions (L x W x H)	43.24 x 35.23 x 4.40 cm

