

### VM8824

4-Port True 4K HDMI Output Board with Scaler





The VM8824 is a True 4K HDMI output board that works with an ATEN Modular Matrix Switch to offer an easy way to route 4 analog/digital audio/video sources to 4 HDMI displays with True 4K high-definition images support. In addition to the HDMI interface that carries digital A/V signal, the VM8824 also provides 4 stereo audio output ports that enable HDMI audio extraction.

Considering video wall applications always require fast video switching and resolution adaptation, the VM8824 supports Seamless Switch™ technology that provides real-time video switching, a built in 4K scaler that handles different video resolutions, and the EDID Expert technology for fast smooth switching between displays. All of ATEN's VM series input/output boards support hot-swappable installation that gives system integrators great flexibility and efficiency for maintenance. The VM series input/output boards along with ATEN Modular Matrix Switches offer ideal solutions that perfectly meet your demands for multi-interface video applications.







#### Features

- · Compatible with the VM Modular Matrix Switches; mix and match with modular I/O boards of any type for optimum flexibility
- True 4K Resolutions handles uncompressed video resolutions up to 3840 x 2160 / 4096 x 2160 @ 60Hz (4:4:4)\*
- 4K Scaler features a video scaling function to integrate a video wall seamlessly with various output video resolutions
- Seamless Switch™ features close-to-zero second switching that provides 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 resolution 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 and stereo audio can be embedded
- Cable Quality Tester examines the HDMI cable quality
- HDMI (3D, Deep Color, 4K); HDCP 2.2 Compatible
- Consumer Electronics Control (CEC) support \*Note:
  - 1. True 4K resolutions are only supported when the VM7824 and VM8824 are used with the VM3250.
  - 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 Output	
Interfaces	4 x HDMI Type A Female (Black)
Impedance	100 Ω
Max. Distance	Up to 5.0m
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	4096x2160/3840x2160@60Hz (4:4:4)
Audio	<u>.</u>
Output	4 x Captive Screw Connector, 5 pole * Audio signal type: stereo, balanced/unbalanced.
Power Consumption	44.83W:210BTU/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 - 40°C
Storage Temperature	-20 - 60°C
Humidity	0 - 80% RH, Non-Condensing
Physical Properties	<u>.</u>
Housing	Metal
Weight	0.65 kg ( 1.43 lb )
Dimensions (L x W x H)	35.20 x 23.80 x 2.33 cm (13.86 x 9.37 x 0.92 in.)
Carton Lot	2 pcs
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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