# 4-Port 4K HDMI Input Board / 4-Port 4K HDMI Output Board with Scaler VM7814 / VM8814 

The VM7814/VM8814 is a 4 K HDMI input/output board that works with an ATEN Modular Matrix Switch to offer an easy way to route 4 HDMI sources to 4 displays. In addition to the HDMI interface that carries digital A/V signals, the VM7814/ VM8814 is equipped with 4 stereo audio input/output ports that allow stereo audio embedding and HDMI audio extraction.

Considering the need for fast video switching and resolution adaptation in video wall applications, the VM8814 supports Seamless Switch ${ }^{\text {TM }}$ and EDID Expert™ that make real-time video switching possible, and contains a built-in 4K scaler that handles different video resolutions. The ATEN VM input/output boards support hot-swappable installation that gives system integrators great flexibility and efficiency for maintenance. The ATEN VM input/output boards along with ATEN Modular Matrix Switches offer ideal solutions that perfectly meet your demands for video-critical applications.

VM7814 HDMI Input Board


VM8814 HDMI Output Board with Scaler


## Features

- Compatible with the VM1600 / VM3200; mix and match with modular I/O boards of any type for optimum flexibility
- Superior video quality - HDTV resolutions of 480p, 720p, 1080i, and 1080p (1920 x 1080); VGA, SVGA, SXGA, UXGA, WUXGA (1920x1200), and 4K2K @ 60Hz (4:2:0)
- Audio-enabled, HDMI audio can be extracted and stereo audio can be embedded
- 4 K Scaler - features a video scaling function to convert input resolutions to the optimum display resolutions (VM8814)
- Seamless Switch™ - features close-to-zero second switching that provides continuous video streams, real-time switching, and stable signal transmissions (VM8814)*
- Video Wall - allows you to create custom video wall layouts via an intuitive web GUI (VM8814)*
- EDID Expert - selects optimum EDID settings for smooth power-up and the highest quality display
- HDMI (3D, Deep Color); HDCP 2.2 Compatible
- Cable Quality Tester - examines the HDMI cable quality
- FrameSync - prevents image tearing by synchronizing the scaler output frame rate to the input signal frame rate (VM8814)
- Consumer Electronics Control (CEC) support


## *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 ${ }^{\text {TM }}$.
2. To use the Seamless Switch or the Video Wall function, disable the scaler on your display.


Specifications)

| Function | VM7814 / VM8814 |
| :---: | :---: |
| Video Input |  |
| Interfaces | VM7814: $4 \times$ HDMI Type A Female (Black) |
| Impedance | 100 ' |
| Max. Distance | Up to 5 m |
| Video Output |  |
| Interfaces | VM8814: $4 \times \mathrm{HDMI}$ Type A Female (Black) |
| Impedance | 100 ' |
| Max. Distance | Up to 15 m |
| Video |  |
| Max. Data Rate | 10.2 Gpbs (3.4 Gbps Per Lane) |
| Max. Pixel Clock | 340 MHz |
| Compliance | HDMI (3D, Deep Color, 4K); HDCP 2.2 Compatible; Consumer Electronics Control (CEC) |
| Max. Resolution | $\begin{aligned} & 4096 \times 2160 / 3840 \times 2160 @ 60 \mathrm{~Hz}(4: 2: 0) ; \\ & 4096 \times 2160 / 3840 \times 2160 @ 30 \mathrm{~Hz}(4: 4: 4) \end{aligned}$ |
| Audio |  |
| Input | 4 x Captive Screw Connector, 5 pole <br> *Audio signal type: stereo, balanced/unbalanced. |
| Output |  |
| Power |  |
| Consumption | VM7814: 4.45W; VM8814: 20.00W |
| Environmental |  |
| Operating Temperature | $0^{\circ}$ to $40^{\circ} \mathrm{C}$ |
| Storage Temperature | $-20^{\circ}$ to $60^{\circ} \mathrm{C}$ |
| Humidity | 0-80\% RH, Non-Condensing |
| Physical Properties |  |
| Housing | Metal |
| Weight | VM7814: 0.56 kg ; VM8814: 0.65 kg |
| Dimensions (L x W x H) | $35.20 \times 23.80 \times 2.33 \mathrm{~cm}$ |

Product information is subject to change without prior notice.

