

VM3909H

9 x 9 4K HDMI HDBaseT-Lite Matrix Switch



With the rapid development of HDBaseT technology, ATEN has released the new VM3909H HDMI HDBaseT-Lite Matrix Switch. The switch extends uncompressed 4K / Full HD digital video, audio, IR and power via HDBaseT technology through a single Cat 6a cable up to 40/70 meters.

When the VM3909H is combined with VE805B/VE816R receivers, it supports both ATEN Seamless Switch™ technology and Video Wall functionality. ATEN's exclusive Seamless Switch™ technology employs an FPGA graphics processor to ensure continuous video streaming, real-time control and stable signal transmission across all sources. The Video Wall functionality allows you to create 18 video wall profiles for custom screen layouts through an easy-to-use web interface. The Power over HDBaseT (POH) feature provides an ingenious way to power the VE802R receivers through the Cat 5e cable without the need of using an additional power supply.

The VM3909H offers flexibility with reliable signal distribution controlled via front-panel pushbuttons, IR, RS-232 and Ethernet (Telnet / Web GUI) connections. It's designed as a functional and integrated control system built for residential, commercial and conference center settings

Model				Seamless Switch™	Video Wall	РОН	Dual View	
VE801R	70m*	N/A	•	N/A	N/A	N/A	N/A	N/A
VE802R	70m*	•	•	N/A	N/A	•	N/A	N/A
VE805R (with Scaler)	70m*	•	N/A	•	•	N/A	N/A	N/A
VE816R (with Scaler)	70m*	•	•	•	•	N/A	N/A	•
VE814AR	70m*	•	•	N/A	N/A	N/A	•	N/A
VE601R (DVI)	70m*	N/A	N/A	N/A	N/A	N/A	N/A	N/A
VE901R	70m*	N/A	•	N/A	N/A	N/A	N/A	N/A

 $^{^{\}star}\text{A}$ Cat 6a cable is required to extend the distance up to 70 meters.







Features

- Supports 9 HDMI inputs and mirrored 9 HDMI and HDBaseT outputs
- The mirrored HDMI outputs can be used to verify the corresponding HDBaseT output or as an additional video display*
- HDBaseT Connectivity connects HDMI displays over a long distance via one Cat 5e/6/6a cable

 HDBaseT Anti-jamming resists signal interference during high-quality video transmission
- Power over HDBaseT (POH) supplies power over a long distance from the switch to a receiver over a single Cat 5e/6/6a cable ** / ***
- Seamless Switch™ Technology ATEN FPGA engine unifies video formats to provide continuous video si Video Wall allows you to create custom video wall layouts via intuitive web GUI** ams, real-time switching and stable signal transmissions**
- EDID ExpertTM selects optimum EDID settings for smooth power-up, high-quality display and use of the best video resolution across different screens Multiple Control Methods – system management via front-panel pushbuttons, IR, RS-232 and Ethernet (Telnet / Web GUI) connections View and control via ATEN <u>Video Matrix</u> Control App in a swift and agile way
- View and control via ATEN, <u>Video Matrix</u> Control App in a swift and agile way
 Bi-directional IR channel ports support full frequency IR signals from 30 KHz to 60 KHz
 Supports ATEN's LockPro™ HDMI cable lock for securing HDMI cables to the device
 Firmware Upgradeable
 Rack Mountable (VM3909H: 2U Design)

- *The HDMI outputs can't support the Video Wall and Seamless Switch™ functions.

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 **The Seamless Switch™, Video Wall and POH features are only available when used a compatible receiver.

 ***The VM3909H can provide up to 15.4 W @ 48 VDC of power per port and 75W of total power; please ensure that the power consumption of the devices connected to the VM3909H does not exceed this limit.

Specifications

Video Input			
Impedance	100 Ω		
Interfaces	9 x HDMI Type A Female (Black)		
Max. Distance	3.0 m		
Video Output			
Interfaces	9 x HDMI Type A Female (Black) ; 9 x RJ-45 Female		
Impedance	100 Ω		
Max. Distance	HDMI: up to 15 m HDBaseT (Class B): 4K up to 35 m (Cat 5e/6) / 40 m (Cat 6a); 1080p up to 60 m (Cat 5e/6) / 70 m (Cat 6a)		
Video			
Max. Data Rate	10.2 Gbps (3.4 Gbps Per Lane)		
Max. Pixel Clock	340 MHz		
Compliance	HDMI (3D, Deep Color, 4K); HDCP 1.4 Compatible Consumer Electronic Control (CEC) HDBaseT Compatible		
Max. Resolution	Up to 4096 x 2160 / 3840 x 2160 @ 60Hz (4:2:0); 4096 x 2160 / 3840 x 2160 @ 30Hz (4:4:4)		
Max. Distance	Up to 70 m		
Control			
RS-232	Connector: 1 x DB-9 Female (Black) Baud rate and protocol: Baud Rate: 19200, Data Bits: 8, Stop Bits:1, Parity: No, Flow Control: No		
IR Channel	9 x Mini Stereo Jack Female (Black); 30~60 KHz full range transmission		
Ethernet	1 x RJ-45 Female		
EDID Settings	EDID Mode: Default / Port1 / Remix / Customized		
Connectors			
Power	1 x 3-Prong AC Socket		
Power			
Maximum Input Power Rating	100-240 VAC; 50-60 Hz; 1.0A		

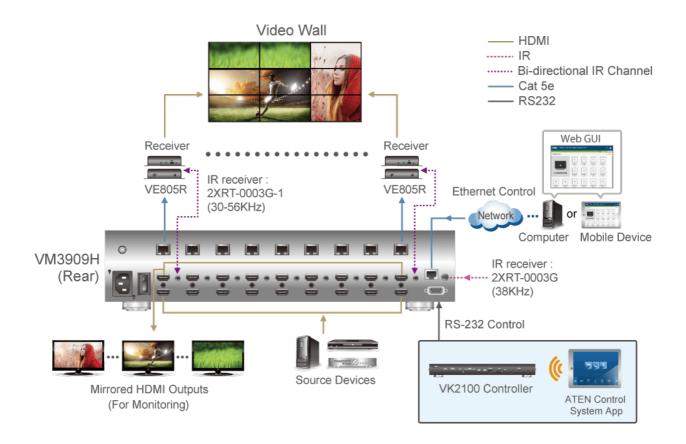


Power Consumption	AC110V:122W:572BTU/h AC220V:120W:563BTU/h Note: The measurement in Watts indicates the typical power consumption of the device with no external loading. The measurement in BTU/h indicates the power consumption of the device when it is fully loaded.
Environmental	
Operating Temperature	0-50°C
Storage Temperature	-20 - 60°C
Humidity	0 - 80% RH, Non-Condensing
Physical Properties	
Housing	Metal
Weight	7.33 kg (16.15 lb)
Dimensions (L x W x H)	43.24 x 38.23 x 8.80 cm (17.02 x 15.05 x 3.46 in.)
Rack Height (U Spaces)	2U
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

▶ Video Wall Setup



ATEN International Co., Ltd.

3F., No.125, Sec. 2, Datong Rd., Sijhih District., New Taipei City 221, Taiwan Phone: 886-2-8692-6789 Fax: 886-2-8692-6767 www.aten.com E-mail: marketing@aten.com



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