

## 1G-SW-24-M-POE

24 port, 1G smart managed ethernet POE switch for AV over IP



front

## **Features**

- 24 Port 1G with layer 3 features: i.e. IGMP Multicasting.
- 24x 1G copper and 2 SFP+ optic ports
- Advanced Network Features: Includes Link Aggregation, Quality of Service (QoS), VLAN, and IGMP support.
- 1U Rackmount Design
- GUI control and status of every port
- Ability to reboot each PoE port independently
- Set IP Watchdog for rebooting PoE
- 30W PoE support for each port
- High Speed Network Capability: 166
   Gbps switching capacity

1G-SW-24-M-POE is 1 gigabit switch featuring 24 x 1G ports, 2 x 1G SFP ports, 1 Uplink port, and separate management port. 1G-SW-24-M-POE has a blazing fast 166Gbps switching capacity, providing higher-speed connectivity for AV over IP distribution. Not only does 1G-SW-24-M-POE have switching capacity suited for AV over IP, but it has a simple to use UI with a click of a button it can easily be set up for AV over IP applications. Additionally, it has 24 ports that auto-detect PoE and provides up to 30W of power on each port. The UI also provides the ability to turn PoE on and off PoE for each port independently. 1G-SW-24-M-POE can be configured to scale to larger system by "daisy chaining" multiple switches together in master/slave configuration. The 1G-SW-24-M-POE combined with our HMX-IP-LINK is designed with AV over IP in mind and provides all the performance and features needed to have the simplest set-up and highest quality AV over IP matrix installation.



Data Specifications	
Data Compliance	IEEE802.3, 802.3az, 802.3ae, 802.3x, 802.3ad, 802.1x, 802.1Q, 802.1p, 802.1d, 802.1w
Interface	24 x 1G Base-X RJ45 ports 1 x Uplink port 1 x Management port 2 x 1G SFP ports
Switching Capacity	166 Gbps
MAC Address Table	10K
Jumbo Frame	10 KB
Forwarding Delay	< 5us
Packet Forwarding Rate	123.504 MPPS
Network Topology	Ring, Star, Bus, Tree etc.
Memory	1GB
Storage	eMMC 8GB

Mechanical Specifications		
Enclosure	1U Rackmount	
Dimensions	"x"x"	
Power Specifications		
Power Supply	110-240VAC	
Power Consumption	Up to 400W	
PoE+	PoE+ Up to 30W x 24 ports	
Environmental Specifications		
Operating Temp	-10 to 70C	
Storage Temp	-20 to 75C	





Software Specifications	
MAC Address Table	<ul> <li>Dynamic MAC address</li> <li>Static MAC address</li> <li>MAC address filtering</li> <li>Port security MAC address</li> </ul>
VLAN	<ul> <li>4K VLAN 802.1Q</li> <li>VLANs based on ports, MACs, voice, surveillance, GVRP and protocols</li> </ul>
Spanning Tree	<ul> <li>Function, port, instance, instance port</li> <li>Message statistics</li> </ul>
Port Control	<ul> <li>Bi-directional bandwidth control</li> <li>Static and LACP dynamic aggregation port aggregation</li> <li>Multi-port mirroring</li> <li>Port storm suppression</li> <li>Port isolation control</li> <li>10K Jumbo ultra-long frame forwarding</li> </ul>

User Security	<ul> <li>Anti-ARP-spoofing spoofing protection</li> <li>Automatic suppression of Anti-ARP-flooding attacks</li> <li>IP Source Guard to automatically create IP+MAC+Port+VLAN binding tables</li> <li>Port Isolation hardware to isolate messages between ports</li> <li>MAC address binding to ports and port MAC address filtering</li> <li>IEEE 802.1x and AAA/Radius/TACACS+ for user authentication</li> </ul>
Switch Security	<ul> <li>SSHv2 Secure Shell</li> <li>SNMP v3 encryption management</li> <li>Security IP's Telnet login and password mechanism</li> </ul>
Network Security	<ul> <li>One-click binding based on dynamic ARP tables</li> <li>Manual binding of IP address, VLAN ID, MAC address and port parameters</li> <li>L2-L7 ACL flow filtering Supports port broadcast/multicast message suppression and automatic shutdown of dangerous ports</li> <li>DHCP snooping and IP Source Guard</li> </ul>





ACL	<ul> <li>MACACL</li> <li>MAC ACE</li> <li>Pv4 ACL</li> <li>Pv6 ACL</li> <li>Pv6 ACE</li> <li>ACL binding</li> </ul>
QoS	<ul> <li>COS/DSCP-based traffic classification</li> <li>Rate limiting of incoming and outgoing messages on ports or custom streams.         Message mirroring and message redirection for ports or customized streams</li> <li>Priority marking of ports or customized streams and provides Remark capability for 802.1P and DSCP priorities</li> </ul>

Qos cont'd	<ul> <li>Traffic supervision based on VLAN direction (in/out)</li> <li>Traffic supervision based on aggregated flow direction (inbound/outbound) Queue-based traffic shaping</li> <li>Port-based traffic shaping SP strict priority scheduling</li> <li>WRR (weighted round robin) scheduling</li> <li>SP + WRR hybrid scheduling</li> <li>IPv4-v6 QoS (qc)</li> </ul>
Multicast	<ul> <li>IGMP v1/v2/v3     Snooping</li> <li>MLD Snooping</li> <li>MVR</li> </ul>
ARP	<ul><li>ARP table entry aging</li><li>ARP Proxy</li></ul>
Routing	IPV4, IPV6 and Static routing





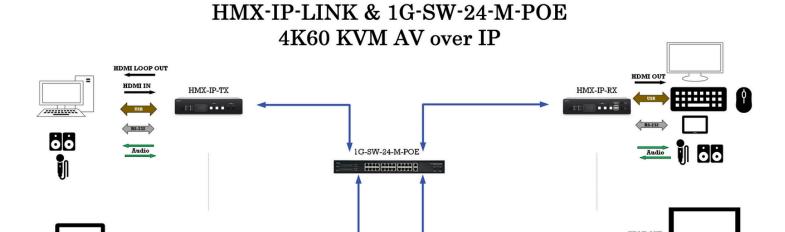
Loop Protection	<ul> <li>Enhanced Ethernet ring protocol</li> <li>Loopback-detection port loopback detection</li> </ul>
Link Protection	<ul> <li>FlexLink link backup</li> <li>RSTP/MSTP link healing hardware acceleration capability</li> <li>LACP dynamic link aggregation</li> </ul>
Maintenance/ Diagnostics	<ul> <li>Logging</li> <li>Mirroring</li> <li>Ping and Traceroute</li> <li>Electrical port testing</li> <li>optical module information</li> <li>UDLD protocols</li> </ul>

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Models	Description
1G-SW-24-M-POE	24 port POE, 1G smart web managed ethernet switch, POE+ 30 Watts per port, 1U rackmount, 110-240 VAC





HMX-IP-TX

HDMI LOOP OUT

HDMI IN



HMX-IP-RX

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