



EN 50155 L2/L3

SWMH-3110-PM series

Industrial PoE Ethernet Switch

10-port M12 Managed



SWMH-3110-PM series are a ruggedized switching platform that complies with the most demanding IP67 industrial standards, designed for industrial applications requiring completely potted to protect against water, shock and vibration. SWMH-3110-PM series provides 8 Fast Ethernet M12 PoE ports and 2 Giga Cooper interfaces. With the managed features, users are easily to prioritize, partition and organize user's network and provide reliable and high quality services.

Industrial Ruggedized Managed PoE Ethernet Switches

EN 50155
Compliant

L2+ / L3
Managed

PoE+

IP67
option

Features

- Provide 8 Fast Ethernet M12 D-code Copper ports, with IEEE 802.3af/at compliant PoE PSE functionality
- Provide 2 Gigabit Ethernet M12 X-code Copper ports, with bypass functionality
- 9K Jumbo frames
- L2 & L3 wire-speed switching engine
- 8K MAC forwarding addresses
- Network redundant LACP, Spanning tree STP, RSTP & MSTP, and quick Ring fail-over protection (< 20 ms)
- Port-based /tag-based VLAN, IEEE 802.1ad/QinQ VLAN, Add/remove VLAN tags,
- Multicasting support IGMP v1/v2, proxy & snooping
- Ethernet port mirroring diagnostic
- Isolated power inputs with 24 to 110 VDC power supply range
- -40 to 70°C operating temperature range
- IP42 & IP67 protection options
- industrial-hardened, wall-mountable form factor

Specifications

Ethernet	
Operating mode	Store and forward, L2 wire-speed/non-blocking switching engine
MAC addresses	16K
Jumbo frames	9K Bytes
Copper interface	
Ethernet	M12, D-coded, Female; M12 X-code, Female
MDI/MDIX Auto-crossover	Support straight or cross wired cables
Auto-negotiating	10/100 or 10/100/1000 Mbps speed auto-negotiation; Full and half duplex
Network Redundancy	
Fast failover protection rings	Link loss recovery < 20ms Single & Multiple rings supported
Spanning Tree Protocol	IEEE 802.1D STP, IEEE 802.1w RSTP, IEEE 802.1s MSTP
Port Trunk with LACP	Static trunk or Dynamic via LACP (Link Aggregation Control Protocol)
Bridge, VLANs & Protocols	
Flow control	IEEE 802.3x (Full Duplex) and Back-Pressure(Half Duplex)
Max VLANs	256
VLAN Types	Port-based VLANs IEEE 802.1Q tag-based VLANs IEEE 802.1ad Double Tagging (Q in Q)
Multicast protocols	IGMP v1, v2 with up to 255 multicast groups
	IGMP snooping and querying
	Immediate leave and leave proxy
	Throttling and filtering
LLDP	IEEE 802.1ab Link layer Discovery Protocol (LLDP)
Traffic management & QoS	
Priority	IEEE 802.1p QoS
Number of queues per port	8
Scheduling schemes	SPQ, WRR
Traffic Shaper	port-based shaping
Security	
Port security	IP and MAC-based access control IEEE 802.1X authentication Network Access Control
Storm Control	Multicast/Broadcast/Flooding Storm Control
L3	
L3 routing (L3 model only)	Static routing, RIPv1/RIPv2, OSPF (*) VRRP (*) NAT (Network Address Translation)
Management	
User Management interfaces	Cisco-like CLI (command line interface) WEB-based Management SNMP v1, v2c Telnet (5 sessions)
Management Security	HTTPs, SSH
Upgrade & Restore	FTP for Configuration Import/Export, FTP for Firmware Upgrade
Diagnostic	Syslog
	Mirroring
MIBs	Ethernet Copper connection diagnostic tool
	RFC 1757 RMON 1,2,3,9; RFC 2674 Q-Bridge MIB RFC-1213 MIB-II; RFC-1493 Bridge MIB; RFC 2233 IF MIB
DHCP	Client
SNTP	Yes
System status	Device info/status; Ethernet port status
Power	
Power Input	24-110 VDC, M23, Male
Reverse power protection	Yes

SWMH-3110-PM series M12 Ruggedized Ethernet Switch

Transient protection	> 15,000 watts peak
Input Current	7 A @ 24 VDC; 1.5 A @110VDC
Indicators	
Power Status indication	Indication of power input status
Ethernet port indication	Link & Speed
PoE status indication	PoE connection
Ring protection indication	Ring role and Ring status
Environmental & Compliances	
Operating temperature range	-40 to +70°C (cold startup at -40°C)
Storage temperature range	-40 to +85 °C
Humidity (non-condensing)	5 to 95% RH
Vibration, shock & freefall	IEC 60068-2-6, IEC 60068-2-27, IEC 60068-2-32
Certification compliance	CE/FCC; EN-50121-4, EN 50155
EMC	FCC Part 15 Subpart B Class A, CISPR 22 (EN55022) Class A EN 61000-4-2, -3, -4, -5, -6 (Level 3), EN 61000-4-8, EN 61000-4-11
RoHS and WEEE	RoHS (Pb free) and WEEE compliant
MTBF	> 25 years
Mechanical	
Ingress protection	IP42 / IP67 options
Installation option	Wall mounting
Dimension	210 mm x 200 mm x 80.4 mm

SWMH-3110-PM series Ruggedized managed PoE switch information

Available Models	Description	Ethernet Port	
		10/100Base-T(X) PoE M12 D-code	10/100/1000Base-T(X) M12 X-code
SWMH-3110-PM-D-42	Industrial 10-port Ruggedized L2 Managed PoE Ethernet Switch	8	2
SWMH-3110-PM-D-67	Industrial 10-port Ruggedized L3 Managed PoE Ethernet Switch	8	2



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