

# Tailyn Technologies

Your Best Network Solution Partner

## EN 50155 L2/L3

### IMP-PM series

### Industrial PoE Ethernet Switch

### 10/14-port M12 Managed



**Tailyn IMP-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. Tailyn IMP-PM series provides 8 Fast Ethernet M12 PoE ports, 4 FE Ethernet M12 non-PoE ports (14 models only) 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
- IMP-PM514B/IMP-PM814B provide additional 4 Fast Ethernet M12 D-code Copper ports
- 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

# IMP-PM series M12 Ruggedized Ethernet Switch

## 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

Multicast protocols	IEEE 802.1Q tag-based VLANs IEEE 802.1ad Double Tagging (Q in Q) IGMP v1, v2 with up to 255 multicast groups IGMP snooping and querying Immediate leave and leave proxy Throttling and filtering
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LLDP	IEEE 802.1ab Link layer Discovery Protocol (LLDP)
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### 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)
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### 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 Ethernet Copper connection diagnostic tool
MIBs	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	DHCP Server, DHCP relay (option82 and option61)
SNTP	Yes
System status	Device info/status; Ethernet port status

### Power

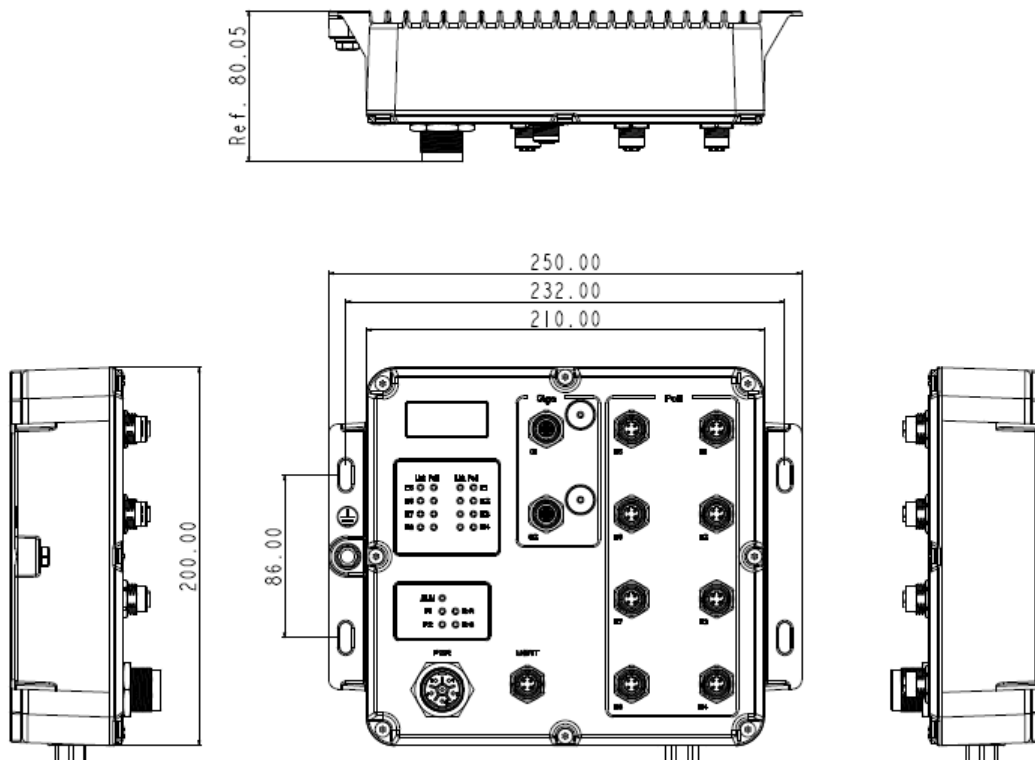
Power Input	24-110 VDC, M23, Male
Reverse power protection	Yes
Transient protection	> 15,000 watts peak

# IMP-PM series M12 Ruggedized Ethernet Switch

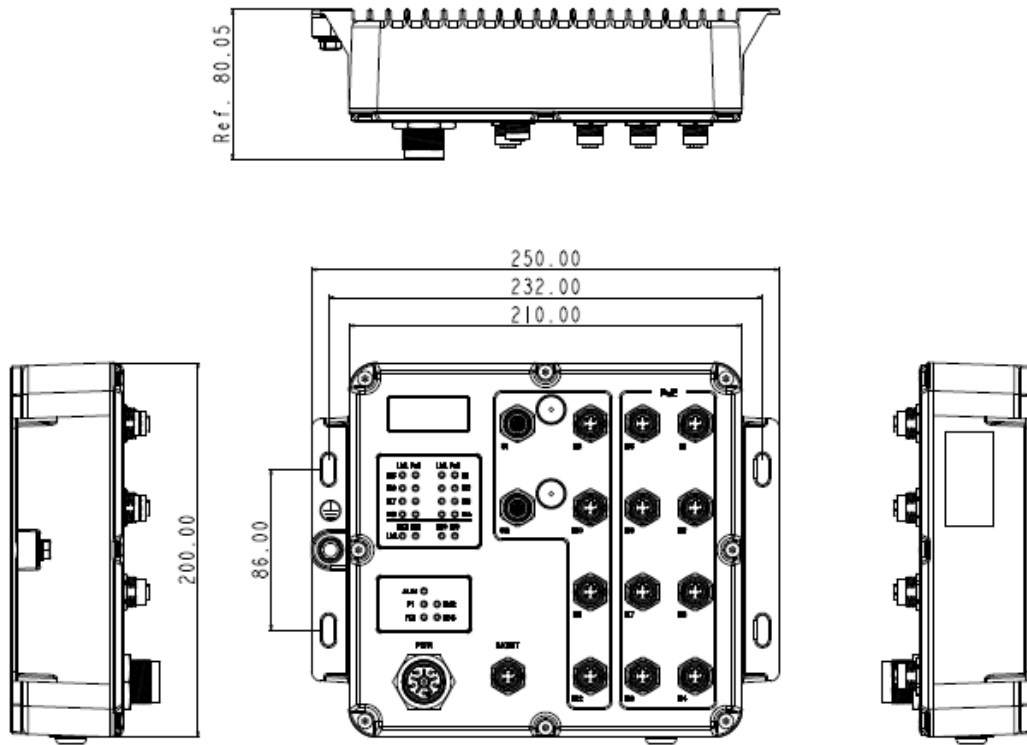
Input Current	7 A @ 24 VDC; 1.5 A @110VDC
<b>Indicators</b>	
Power Status indication	Indication of power input status
Ethernet port indication	Link & Speed
PoE status indication	PoE connection
Ring protection indication	Ring role and Ring status
<b>Environmental &amp; Compliances</b>	
Operating temperature 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
<b>Mechanical</b>	
Ingress protection	IP42 / IP67 options
Installation option	Wall mounting
Weight	3.3Kg (max.)
Dimension	210 mm x 200 mm x 80.5 mm

## Dimensions

(Unit = mm)



# IMP-PM series M12 Ruggedized Ethernet Switch



## IMP-PM series Ruggedized managed PoE switch information

Available Models	Description	Ethernet Port		
		10/100 Base-T(X) PoE M12 D-code	10/100 Base-T(X) M12 D-code	10/100/1000 Base-T(X) M12 X-code
IMP-PM510B	Industrial 10-port Ruggedized L2 Managed PoE Ethernet Switch, with Bypass	8		2
IMP-PM810B	Industrial 10-port Ruggedized L3 Managed PoE Ethernet Switch, with Bypass	8		2
IMP-PM514B	Industrial 14-port Ruggedized L2 Managed PoE Ethernet Switch, with Bypass	8	4	2
IMP-PM814B	Industrial 14-port Ruggedized L3 Managed PoE Ethernet Switch, with Bypass	8	4	2

### About Tailyn

Tailyn has been recognized as a professional quality provider for design, manufacturing and associated services including logistics, CTO (Configuration-To-Order), RMA repairing, etc. The company develops and applies its expertise in applications which require reliability in harsh environments, high-mix and variable-volume of production and customized features. Our platform solutions specializing in Industrial Networking and Industrial Computing are ready to enable our customers to shorten their product design cycle with minimized cost.

### Contact Us

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Product specifications are subject to change without notice. Please contact us for further details.