Power Meter Monitor

Business and Mission-

Critical Solutions Provider

INDUSTRIAL ETHERNET PoE SWITCH WITH FIBER

Data Sheet

Model: PMM0306
Document: Data Sheet
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DECLARATION OF CONFORMITY

This restriction is subject to protect the operational process of the system in the business environment, which will produce, use, and transmit radiofrequency energy. Harmful interference to radio communication could result if instructions to the correct installation and usage were not applied. The interference prevention cannot be guaranteed even with proper installation according to the manual. If the device causes a bad effect on the radio / TV signal. The user could preclude that by turning the device on/off.
When this device produces some harmful interference, the user can use the following measure to solve the interference problem:
1-Setting the receiving antenna's direction or location to increase the distance between this device and receiver.
2-Plug in the device's power connector into different circuits of the power outlet with the receiver.
3-If any technical support is needed, the dealer or experienced radio/TV technical personnel must be informed.

TECHNICAL SUPPORT AND SERVICE

Visit Pmm-usa.us to browse FAQs and get further details.
User should collect the following information before submitting technical support and service requests:
- Product name, model and serial number.
- Installed software (operating system, OS version, installed applications and so on).
- Full description of the problem
-Detailed information about every error.

SAFETY INSTRUCTIONS

- Only trained and qualified personnel can install, operate, or maintain the device.
- Before starting the installation, all safety precautions must be read and warning labels affixed to the device must be observed. Doing so protects the device from damage and ensures your safety.
- Safety precautions provided in this document may not cover all safety aspects, note to always remain mindful of safety.
- PMM is not liable for any consequence that results from violation of regulations pertaining to safe operations or safety codes pertaining to design, production, and equipment usage.
- DO NOT use liquids or decontamination spray to clean the device surface and assure that it is totally disconnected while cleaning.
- Take all measures to prevent device drop before or during installation.
- Prior to connecting the device to power source, ensure the source and device voltage and power are 100% matched.
- Keep the cables in a suitable covered place.
- If the device is not used for a long time, shut off the power to avoid the damages by transient overvoltage.
- DO NOT allow any liquid flow into the device; to avoid fire or short circuit.
- The recommended storage temperature range should NOT be less than 30°C OR higher than 85°C.

Warning:

- Read the power source and device inlet carefully.
- Handle device with both hands.
- Clean and maintain the device using recommended, safe and suitable methods.

Caution:

If any unauthorized changes of settings or repairs are done without PMM approval; then user's rights of controlling this device will be canceled.

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KEY FEATURES

- Layer 2 / Layer 3 routing functions
- 8 Gigabit PoE ports + 2 Gigabits + 1 Console port
- Supports: IEEE802.3, IEEE802.3u, IEEE802.3x, IEEE802.3z/ab, IEEE802.1Q, IEEE802.1p, IEEE802.1d/w
- PoE Power Management, PoE Watchdog based on data stream detection
- Supports: IEEE802.3af (15.4w), IEEE802.3at (30w), IEEE802.3bt (90w)
- Supports: STP (802.1D, RSTP (802.1w), MSTP (802.1s), ERPS
- Supports SNMP v1/v2/v3
- Supports IGMP Snooping, Static multicast filtering and MLD Snooping
- Supports 802.1x port and AAA Certification, Enhance network security
- Supports WEB, TELENT, CLI, SSH management
- Supports lightning protection, surge: General Mode 6KV, Differential Mode 2 KV, ESD: 15 KV
- Supports EMC EN55032 standard
- Built to meet all Power substation requirements
- Wide range of power supply options
- -40 to 85°C system operating temperature
- DIN rail, wall, panel and rack mounting

TARGET APPLICATION

PMM0306 is especially designed to meet all power substation requirements and covers all field standards of power, reliability, easy configuration and long-lasting life.

Moreover, PMM0306 offers the client a wide range of interfaces covering most of the industrial standards and applications:

- Metropolitan area fiber broadband network: telecommunications, cable TV, network system integration, network operators etc.
- Broadband private network: Suitable for financial, government, oil, railway, electric power, public security, transportation, education and other industries.
- Multimedia transmission: image, voice, data integrated transmission, suitable for remote teaching, conference TV, videophone and other applications.

DESCRIPTION

PMM0306 is a green low-power Industrial Ethernet Switch, that complies with industrial environment and supports FCC, CE, CCC and RoHS standards; reliable industrial design ensures uninterrupted automation system stable operation.

PMM switches provide advanced network management capabilities; redundant ring, loop protection, VLAN, QOS, speed control, port mirroring and firmware online upgrades. The stringent requirements of industrial sites are met, since it is covered by a durable metal chassis which is designed and tested on the field to withstand shock, vibration, extended temperature ranges and challenging elements of the harsh environment. All components used are industrial grade for greater reliability, providing redundant, wide-voltage power inputs and outputs for uninterrupted industrial safety communications.

TECHNICAL SPECIFICATIONS

Technology

Network Standards	IEEE802.3 IEEE802.3u IEEE802.3z IEEE802.3ab IEEE802.3x IEEE802.1d IEEE802.1w
PoE Parameters	PoE Standard: IEEE802.3af / IEEE802.3at Single PoE Port Power Output: Max.: IEEE802.3af (15.4W) / IEEE802.3at (30W) PoE Compatibility: IEEE802.3af / at adaptive PoE Power Output: 48-55 VDC PoE Power Pin: 1/2- and 3/6+
Network Media	10BASE-T: Cat3,4,5 UTP (≤100 M) 100BASE-TX: Cat5 or above UTP (≤100 M) 1000BASE-TX: Cat5 or above UTP (≤100 M)
Fiber Media	Multi-mode: 850nm, 1310nm Transmission Distance: 550m/2Km Single-mode: 1310nm, 1550nm Transmission Distance: 20/40/60/80/100/120Km

LED Indicator

PWR	When device receives power LED is ON
SYS	When system is operating normally LED is ON
Yellow Light	When PoE is powered LED is ON, if LED is flashing port and device are mismatched
Green Light	When 10/100/1000 is linked normally the light will be slowly flashing, when there is no light the link is disconnected, when there is data transfer the LED will be flashing.
G9-G10	When the fiber connection is normal LED will be ON, when it is flashing the link is transferring data.

Power Parameters

Power Supply Options	Input voltage: 12-55 VDC 85-265 VAC / 100-300 VDC Type of input: 4 PIN Industrial Terminal block V1+V1- V2+ V2-

Hardware Parameters

Bandwidth	20 Gbps
Packet Forwarding Rate	14.88 Mpps
RAM	128 MB
Flash	16 MB
Packet Buffer Memory	4 M
Jumbo Frame	9.6 Kbytes
VLANs	4096
MAC	8 K
Forwarding Mode	Store-And-Forward

L2 Management

Port Management	Supports enable / disable port Supports speed, duplex, MTU setting Supports flow control flow control settings Supports port mirroring Supports in / out direction Supports port speed limit Supports port isolation setting Unknown unicast, multicast, broadcast storm suppression
STP	Standard Spanning Tree (STP) 802.1d Rapid Spanning Tree (RSTP) 802.1w Multiple Spanning Tree (MSTP) 802.1s
Ring Network Protocol	ERPS
Link Aggregation	Supports static manual aggregation Supports LACP dynamic convergence
VLAN	Supports static VLAN and IEEE8021Q VLAN
IGMP Snooping	Supports static add / delete
MAC	Supports static ass / delete MAC address learning limit Supports dynamic aging time setting

L3 (Layer 3 Switching) and Router Function

Interface Configuration	Supports virtual VLAN interface
ARP	Support check ARP
Router Function	Static Router

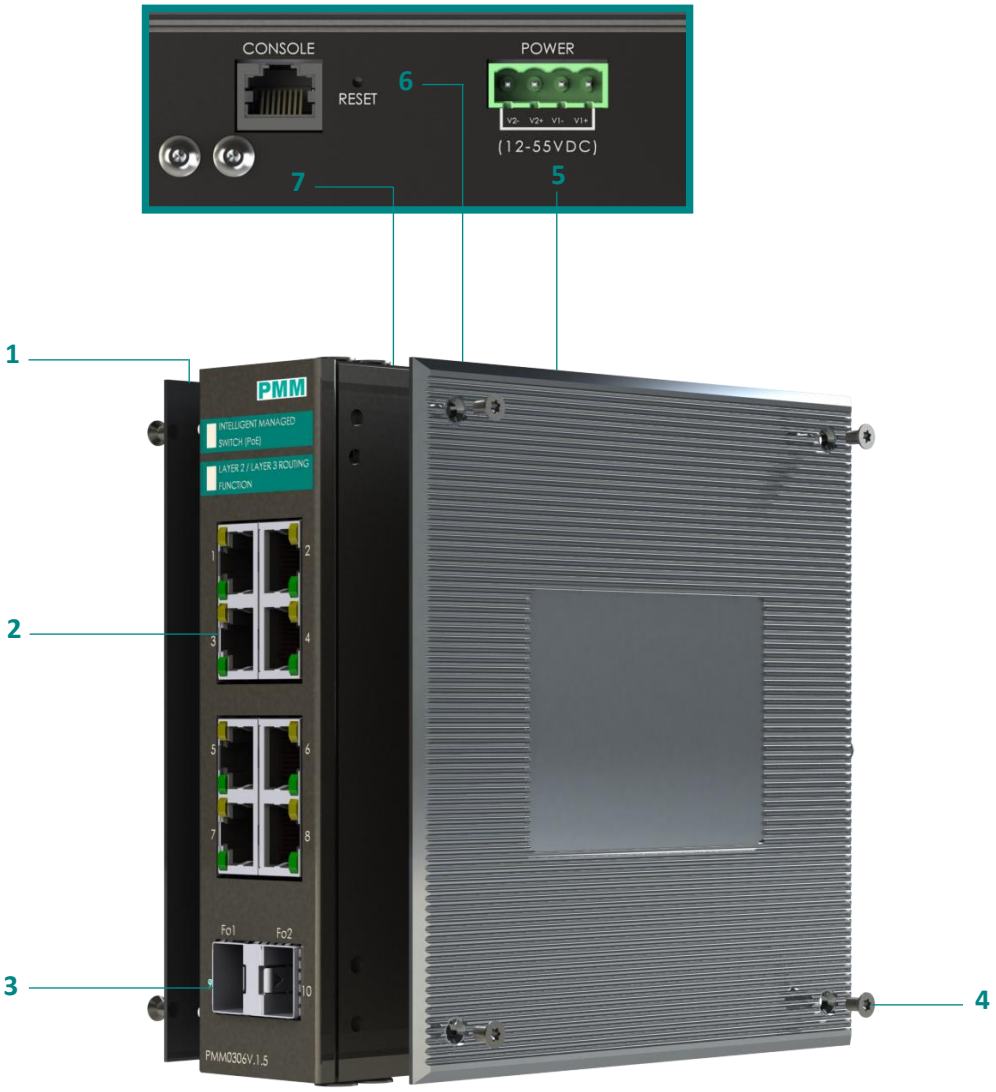
Extended Function

ACL	Based on the source MAC, destination MAC, protocol type, source IP, destination IP, L4 port number Support time-range time management
QOS	Based on 802.1p (COS) classification Based on DSCP classification Based on the source IP, destination IP, port number classification Support SP, WRR, DRR scheduling strategy Support traffic speed limit CAR
LLDP	Support LLDP
User Setting	Support add/delete user
Log	User login, operation, status, event log
Port Security	Dyning Gasp, Snmp Trap
Prevent Attack	DOS defense Support for CPU protection, limited to send CPU message rate ARP binding (IP, MAC, PORT binding)
System Management	Device reset, configuration save/restore, upgrade management, time setting, etc.

Management Function

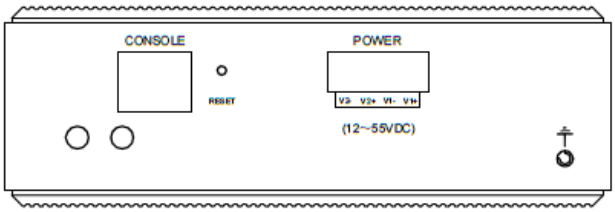
CLI	Supports serial command line management
TELNET	Supports serial command line management
SSH	Supports SSHv1/2 remote management
SNMP	Supports v1/2/3
WEB	Supports two layers of settings
PoE	PoE Power management
Physical Structure	Protect grade: IP40 Installation: DIN Rail Product weight: 0.8 KG Package weight: 1.1 KG Product Dimensions (L*W*H): 165mm*130mm*65mm Package Dimensions (L*W*H): 245mm*21mm*88mm Standard packing (L*W*H): 600mm*495mm*435mm Standard packing quantity: 28(PCS)
Working Environment	Operating temperature: -40 to 85°C Storage temperature: -40 to 85°C Humidity: 5% to 95% (No condensation)
Industry Standard	EMI: FCC part 15, CISPR (EN55032) class A EMS: En61000-4-2 (ESD) EN61000-4-4 (EFT) EN61000-4-5 (Surge) Shock: IEC 60068-2-27 Free fall: IEC 60068-2-32 Vibration: IEC 60068-2-6
Certification	CE mark, commercial FCC part 15, class B VCCI, class B EN 55032, class A
MTBF	100,000 hours

ENCLOSURE ASSEMBLY INFORMATION

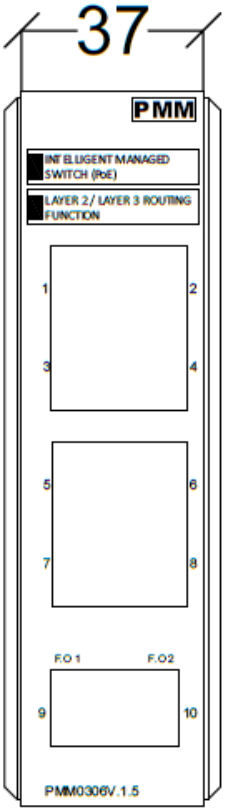


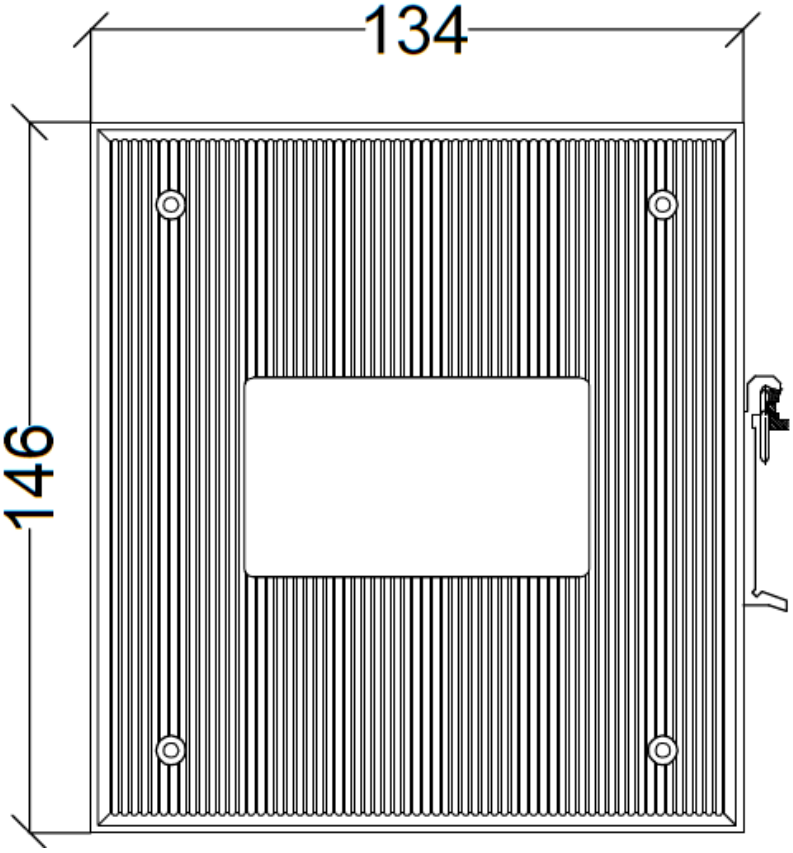
ITEM	DESCRIPTION
1	Heat sink
2	8x Ethernet ports
3	2x fiber optic SFP ports
4	Screw
5	Power inlet
6	RESET
7	Console Port

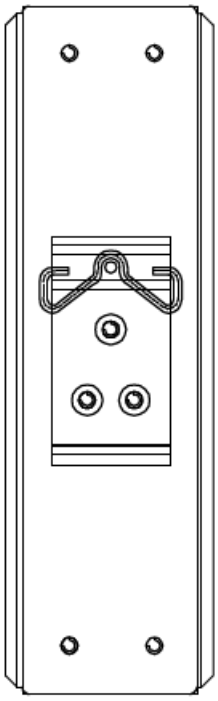
ENCLOSURE DIMENSIONS

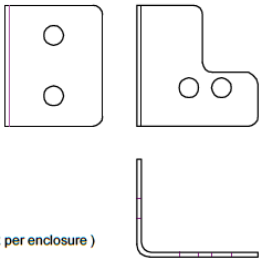


Blank Fan cover sheet /
1.0 mm thickness

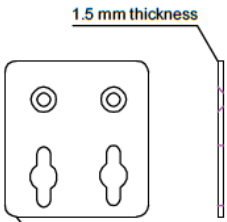






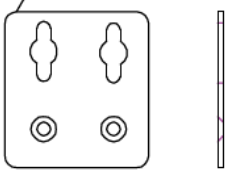


(X 2 per enclosure)



1.5 mm thickness

Panel mounting
assembly x 2



ORDERING INFORMATION

Packing List	1. Industrial grade switch: 1 Set 2. Instruction manual: 1 Pcs 3. Certificate, warranty card: 1 Pcs 4. Serial cable: 1 Pcs 5. Operation manual CD: 1 Pcs

Accessories

DIN Mount (included 1 kit)	DIN Rail Mounting Bracket
Wall Mounting Kit (included 1 kit)	2x Wall Mounting Bracket
Panel Mounting Kit (optional)	2x Panel Mounting Bracket
Rack Mounting Kit (optional)	Rack Mounting Bracket

CONTACT INFORMATION:

For direct inquiries or any customized orders, contact us on **sales@Pmm-usa.us**