

**Business and Mission-**

**Critical Solutions Provider** 

## INDUSTRIAL ETHERNET SWITCH WITH FIBER

# Data Sheet



Model: PMM0303

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 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
- 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**

- 6x 10/100 BASE-Tx Ethernet ports + 2 Fiber 10/100 Base ports
- 1x 10/100 BASE port for extending to other switches (internal)
- Advanced Ethernet Switching Engine support 2 operation modes:
  - Normal Mode (Default)
  - IPC Mode
- Supports: IEEE802.3, IEEE802.3u, IEEE802.3x, IEEE802.3az (at 100M Full Duplex), and IEEE802.1Q
- Supports: STP (802.1D, RSTP (802.1w), MSTP (802.1s)
- Support Auto MDI-MDIX
- IEEE802.1Q VLAN
  - Support 16 VLAN groups
  - Support Port-based/tagged-based VLAN
  - Support SVL/IVL
  - Support Insert and Remove Tag Supports
- Support Port Mirror
- Supports IGMP (v1/v2/v3) Snooping
- Support LBAS® (Length/Link Based Auto Switch)
- **Broadcast Storm Protection**
- Support Special Tag and QinQ header
- Support Port Trunking (Link Aggregation)
- **Support Loop Detection**
- Supports lightning protection, surge: General Mode 6KV, Differential Mode 2KV, ESD: 15KV
- 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 mount options

- 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**

PMM switches are green, low-power Industrial Ethernet Switches, complies with the industrial environment and supports FCC, CE, CCC and RoHS standards; reliable industrial design ensures uninterrupted automation system stable operation.

PMM0303 is an unmanaged switch that supports 10/100 BASE port mirroring, loop detection, VLAN, and link aggregation.

This standardized industrial design, meets the stringent requirements of industrial sites, since it is covered by a durable metal chassis which has been designed and tested on the field to withstand shock, vibration, extended temperature ranges and challenging elements of a harsh environment. All components are industrial grade for greater reliability, providing redundant, wide-voltage power inputs and outputs for uninterrupted industrial safety communications.

#### **TARGET APPLICATION**

PMM0303 is especially designed to meet all power substation requirements and covers all field standards of power, reliability, easy configuration and long-lasting life.

Moreover, PMM0303 offers the client a wide range of interfaces covering most of the industrial standards and applications:

## **TECHNICAL SPECIFICATIONS**

### Technology

Network Standards	IEEE802.3
	IEEE802.3u
	IEEE802.3x
	IEEE802.1az
	IEEE802.1q
Network Media	10BASE-T: Cat3,4,5 UTP (≤100 M)
	100BASE-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	ON: Powered
	OFF: No Power
LD (Loop Detection LED)	Blinking: Loop Detected
	OFF: Normal Operation

#### **Power Parameters**

Power Supply Options	Option 1, Input voltage: 7-60 VDC
	Option 2, Input voltage: 85-265 VAC/ 100-300 VDC
	Type of input: 4 PIN Industrial Terminal block V1+V1- V2+ V2-

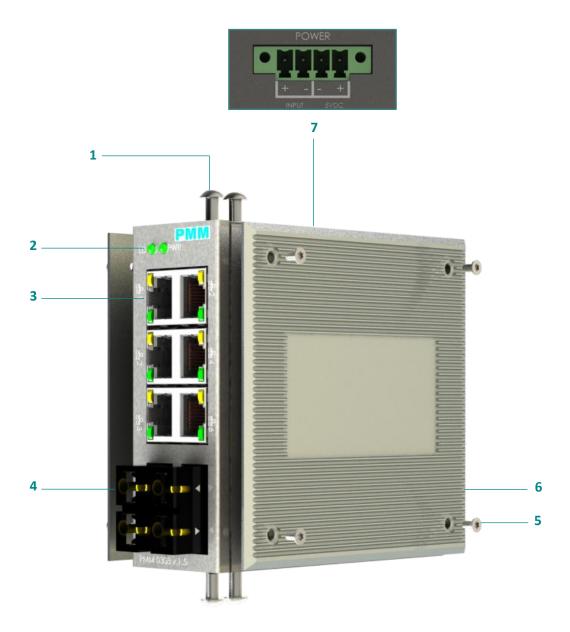
#### **Hardware Parameters**

Bandwidth	100 Mbps
RAM	SSRAM
Packet Buffer Memory	1 M
VLANs	16 Groups
MAC	2 K
Forwarding Mode	Store-And-Forward

## **Physical Characteristics**

Housing	Metal	
Dimensions	5.27*5.27*1.45 inch (134*134*37 mm)	
Mounting Options	Standard 35mm DIN Rail	
	Direct Panel Mounting	
	Front Panel Mounting	
	19" rack 1U	

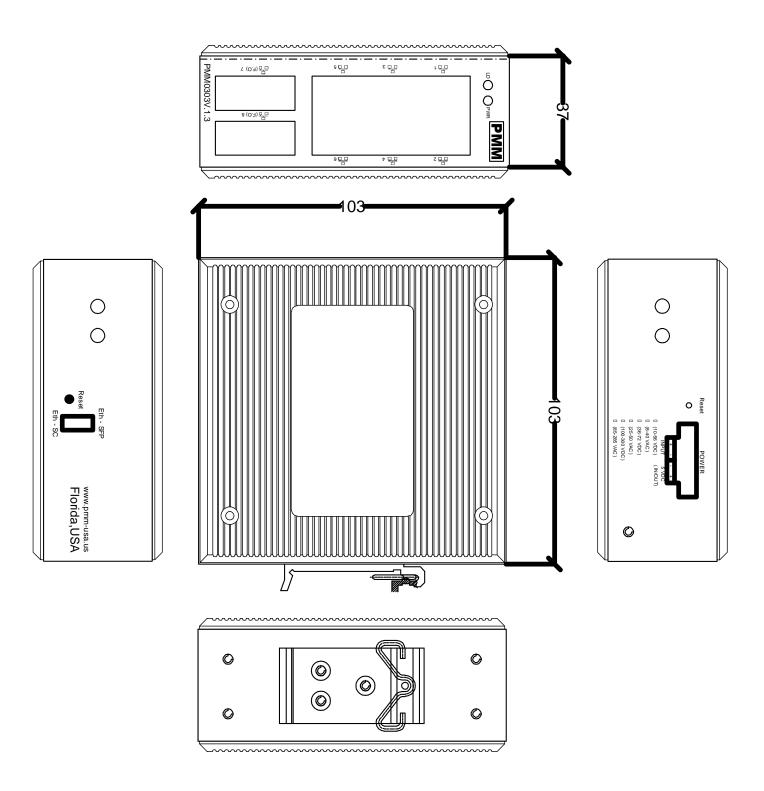
## **ENCLOSURE ASSEMBLY INFORMATION**



ITEM	DESCRIPTION
1	Screw
2	2x LED Indicators
3	6x Ethernet Ports

4	2x Fiber Optic Ports
5	Screw
6	Heat Sink
7	Power Adapter

## **ENCLOSURE DIMENSIONS**



## **ORDERING INFORMATION**

Order Configuration table		
PMM0303	- X	- X
Power supply		
7-60 VDC	-1	
85-265 VAC/ 100-300 VDC	-2	
Fiber Optic Options		
2x SC Ports		-A
2x SFP Ports		-В
1x SC and 1x SFP Ports		-C

#### Accessories

DIN Mounting Kit (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 <u>sales@Pmm-usa.us</u>