



Power Meter Monitor

**Business and Mission-
Critical Solutions Provider**

Unmanaged Industrial Ethernet Switch with Wi-Fi

Data Sheet



Model: PMM0305

Document: Data Sheet

Document version: 1.1

Date: March 2022



TRADEMARKS

All registered trademarks and product names mentioned herein are used for identification purposes only and may be trademarks and/or registered trademarks of their respective owners.

AMI is a trademark of American Megatrends Inc.

Intel & Atom are trademarks of Intel Corporation

IBM, PC/AT, PS/2&VGA are trademarks of International Business Machines Corporation
Microsoft Windows is a trademark of Microsoft Corp. RTL is the trademark of Realtek Semiconductor Co., Ltd.

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.



Contents

PAGE

DESCRIPTION	4
TARGET APPLICATIONS	4
KEY FEATURES.....	4
TECHNICAL SPECIFICATIONS.....	5
ENCLOSURE ASSEMBLY INFORMATION	6
ENCLOSURE DIMENSIONS.....	7

KEY FEATURES

- MediaTek MT7688AN MIPS24KEc CPU
- Arduino® compatible programming
- 2x Fiber optic ports
- 2x Ethernet 10/100 ports
- 2x Customizable communication ports; RS485, RS232, RS422, CAN bus or IO
- Built-in or add-on cards are easily customized
- Wide range of power supply options
- Meets all substation requirements
- Ubuntu core with mainline kernel 4.14
- Degree of protection: IP54
- Different mounting system options
- Compact, fanless design
- -40 to 85°C system operating temperature

DESCRIPTION

PMM0305 is an Industrial Ethernet switch powered by MediaTek MT7688AN MIPS24KEc CPU with several interfaces to provide greater versatility for use with applications from different industries.

In addition to providing enduring performance in harsh environments, such as those found in manufacturing, transportation and physical security. Therefore, offering high throughput, rich functionality and advanced security features. PMM0305 switch deliver the performance and reliability demanded by industrial deployments in the age of the Internet of Things (IoT).

TARGET APPLICATIONS

PMM0305 is especially designed to meet all power substation requirements and covers all field standards of power, reliability, easy configuration and long-lasting life.

Moreover, PMM0305 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, etc., network operators.
- 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.

TECHNICAL SPECIFICATIONS

Computer

CPU	MediaTek MT7688AN MIPS24KEc CPU
DRAM	1 GB
RTC CHIP	DS3231
Pre-installed OS	Linux

Computer Interface

Ethernet	2x ports 10/100
Fiber	2x customized fiber optics ports on ordering: SC or SFP port
Expansion COMM Slots	2x customizable communication slots: PMM RS485 Module PMM RS232 Module PMM RS422 Module PMM CAN Bus Module PMM IO Module
USB Ports	1x USB2.0 type A

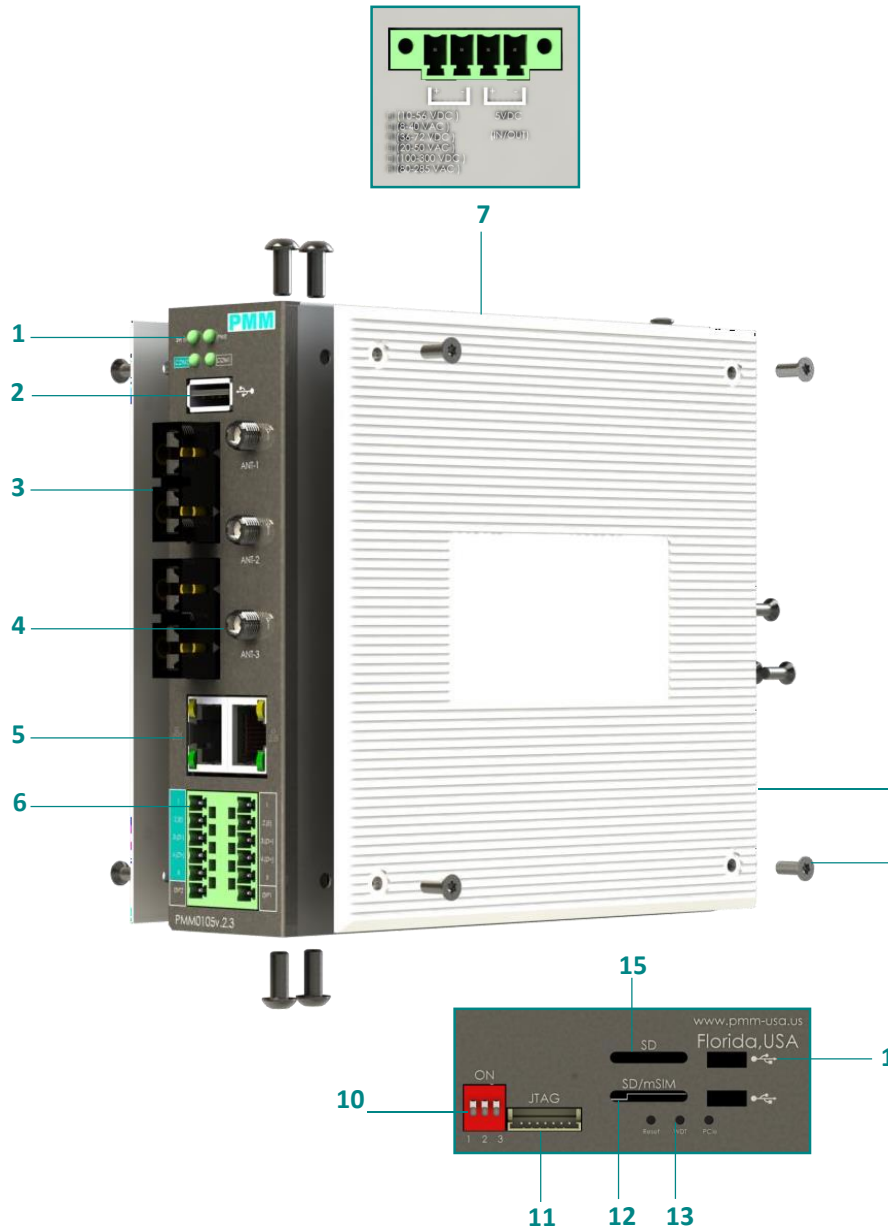
Power Parameters

Power Supply Options	10-56 VDC 8-40 VAC 36-72 VDC 25-50 VAC 85-285 VAC / 100-300 VDC
Power Connector	Phoenix Contact 6 pins 3.5mm

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
Certifications	RoHS, CE and FCC

ENCLOSURE ASSEMBLY INFORMATION



ITEM	DESCRIPTION
1	4x LED indicators
2	USB port
3	2x SC Fiber Optic Ports
4	3x Antennas
5	2x Ethernet ports
6	COMM Port
7	Power supply

8	Heat sink
9	Screw
10	DIP switch
11	JTAG interface port
12	SD/mSIM card slot
13	Reset buttons
14	2x USB ports
15	SD card slot

ENCLOSURE DIMENSIONS

