



Power Meter Monitor

**Business and Mission-**

**Critical Solutions Provider**

## Basic Modbus TCP to 2xRTU + 2xF.O Gateway

# Data Sheet



**Model:** PMM0407

**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](http://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

- Converts easily from Modbus TCP to RTU
- 20 simultaneous TCP masters with up to 32 simultaneous requests per master
- Easy and smooth configuration via web-based wizard
- Allwinner H3, Quad-core Cortex-A7 CPU
- Arduino® compatible programming
- 2x Ethernet 10/100 ports
- Embedded traffic monitoring as well as diagnostic information for fast trouble shooting
- 4x LED indicators
- 2x Customized Fiber optic ports
- 1x RS485 Fixed console serial communication port
- 2x RS485 - RS232 Serial communication ports
- Baud rate: 110-115200 bps
- Supports 64 GB SD card for configuration backup and duplication for event logs
- Status monitoring with fault protection for easy maintenance
- Different Power supply options with over voltage and reverse polarity protection
- Operating temperature: -40 to 75°C (-40 to 167°F)
- Storage temperature: -40 to 85°C (-40 to 185°F)
- Ambient relative humidity 5 to 95% (non-condensing)
- EMI, EMS, EMC, and shock protected
- Overvoltage and reverse polarity protected
- Serial port with power surge  $\pm 2.5\text{kV}$  isolation protection
- Degree of protection: IP54

## DESCRIPTION

PMM0407 is a highly configurable industrial Ethernet gateway device capable of quick protocol conversion on Modbus Networks.

Modbus slave devices are simply incorporated into an existing Modbus TCP network, where slave devices are easily reached by their respective masters. PMM0407 provides the flexibility needed to fulfill the different conditions that happen with field devices that use diverse communication protocols to connect any type of industrial solution network such as the SCADA system.

PMM0407 gateways support a system log that main function is to record events so it can be easily monitored; users can easily review log data remotely through the web interface. The gateways also support status monitoring and fault protection functions. The status monitoring function notifies the SCADA system. When a device gets disconnected or does not respond or faces any error or failures, in such cases the SCADA system gets alarms of the status of each end device to the operators to make corrective actions immediately.

## SOFTWARE SPECIFICATIONS

### Ethernet Software Features

Protocols	Modbus TCP
Configuration Options	Web Console (HTTP/HTTPS), Telnet Console
Time Management	NTP Client

### Serial Software Features

Protocols	Modbus RTU/ASCII
Configuration Options	Serial Console

## HARDWARE CHASSIS SPECIFICATIONS

### Computer

CPU	Allwinner H3, Quad-core Cortex-A7 CPU
DRAM	1 GB
RTC CHIP	DS3231
Pre-installed OS	Linux

### Computer Interface

Ethernet	2x ports 10/100
USB Port	1x USB2.0 type A
Expansion COMM Slots	2x communication slots: PMM RS485 Module PMM RS232 Module
Fiber	2x customized Fiber optic on ordering: SC or SFP port

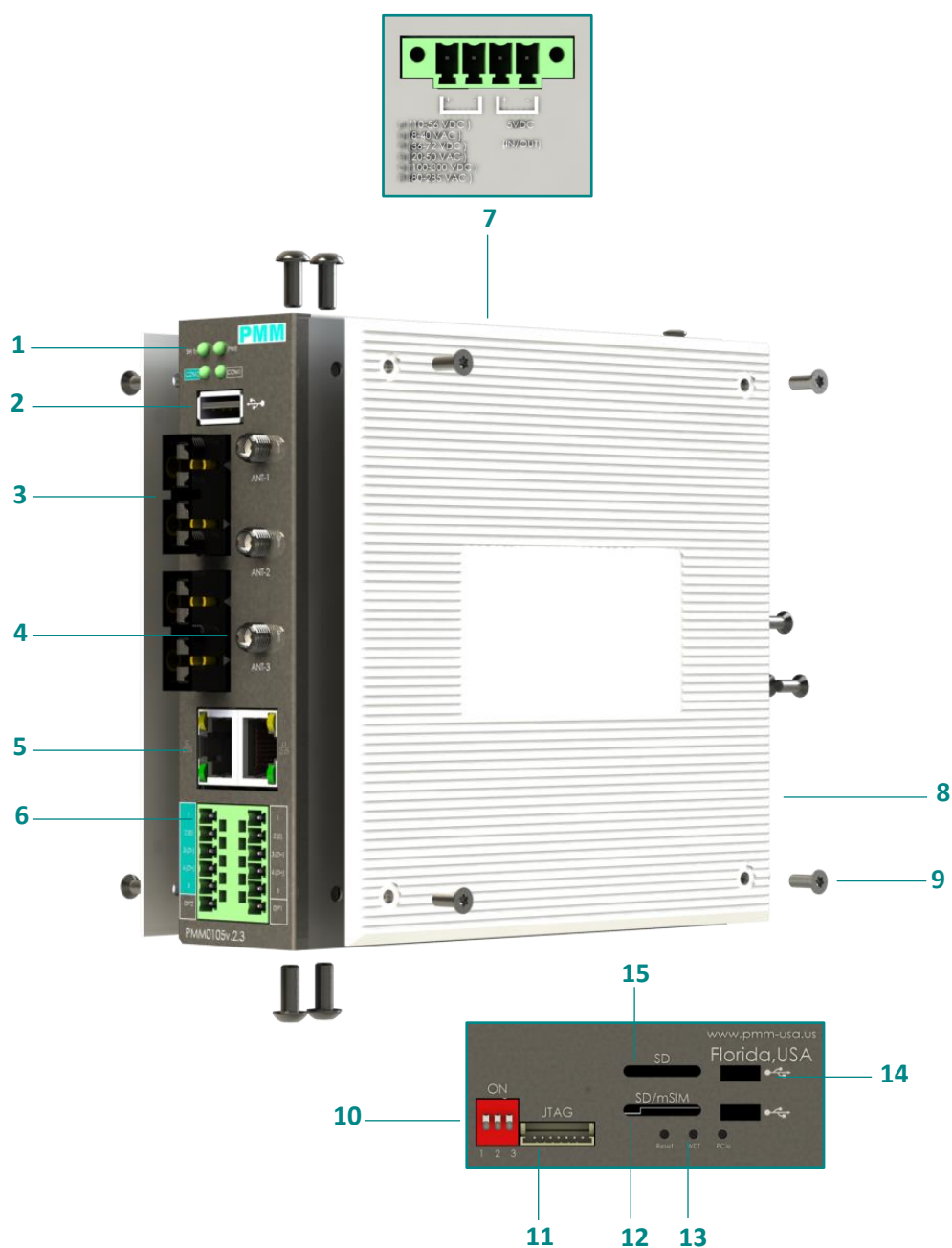
### Power Parameters

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

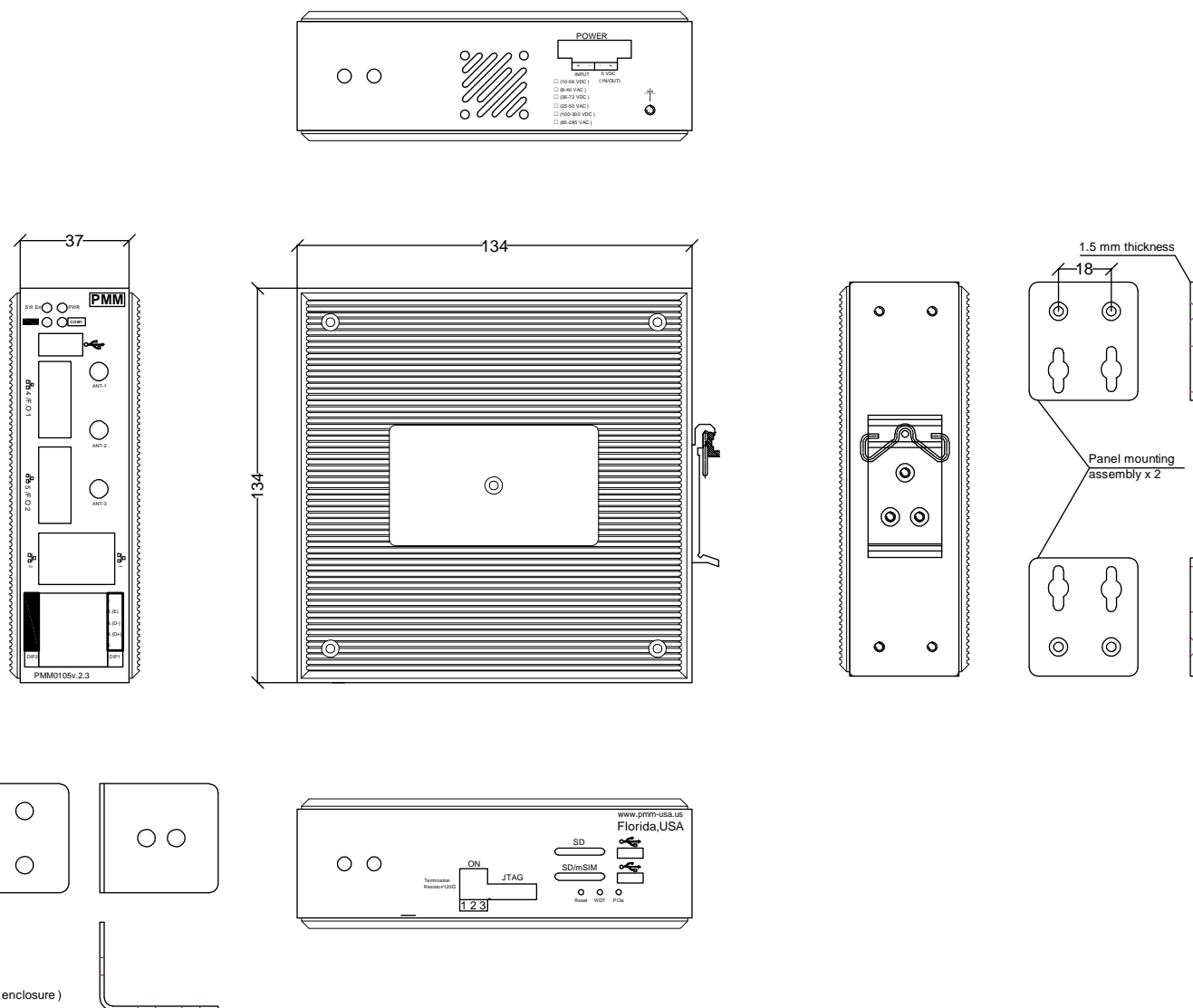


ITEM	DESCRIPTION
1	4x LED indicators
2	USB port
3	2x SC Fiber Optic Ports
4	3x Antennas
5	2x Ethernet ports
6	COMM Port
7	Power supply

8	Heat sink
9	Screw
10	DIP switch
11	JTAG interface port
12	SD/mSIM card slot
13	3x Reset buttons
14	2x USB ports
15	SD card slot



# ENCLOSURE DIMENSIONS



## ORDERING INFORMATION

Order Configuration Table		
<b>PMM0407</b>	-X	-Y
<b>Power Supply</b>		
10-56 VDC	-1	
8-40 VAC	-2	
36-72 VDC	-3	
25-50 VAC	-4	
85-285 VAC / 100-300 VDC	-5	
<b>Fiber options:</b>		
SC port		-A
SFP port		-B

### 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 [sales@Pmm-usa.us](mailto:sales@Pmm-usa.us)