



Power Meter Monitor

**Business and Mission-
Critical Solutions Provider**

X86 BASED EMBEDDED INDUSTRIAL COMPUTER

Data Sheet



Model: PMM0107

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

- Intel® Atom™ x5-Z8350 CPU
- Embedded 16GB eMMC hard drive
- Built to meet all Power substation requirements
- 2x customized serial/IO communication ports covering all industrial standards
- Supports 2.4/5GHz WIFI
- Wide range of power supply options
- -40 to 85°C system operating temperature
- DIN rail, wall, panel and rack mounting
- Compact size with fanless design

TARGET APPLICATION

PMM0107 is made with intelligent and flexible solutions to equip the clients with all features needed to deploy their industrial applications with swiftness and reliability. It is ideal, including, but not limited to the following target application:

- Power plant controllers
- Power meter reader
- IEC 101/104 to Modbus converter
- Database synchronizing
- Tracker controller
- Factory automation

DESCRIPTION

PMM0107 is a rugged powerful reliable fanless industrial embedded computer, powered by Intel® Atom™ x5-Z8350 CPU, which offers a high level of performance and low level of power consumption.

The device represents an ideal computing solution for tight spaces, since it is designed with small footprints and multiple I/Os. Covered by a durable metal chassis which was designed and tested on the field to withstand shock, vibration, extended temperature ranges and challenging elements of a harsh environment.

PMM0107 is especially designed to meet all power substations and PV plants requirements. Furthermore, it covers all field standards of power, reliability, easy configuration and long-lasting life.

Moreover, PMM0107 offers the client a wide range of interfaces covering most of the industrial standards and increasing the connectivity.

TECHNICAL SPECIFICATIONS

Computer

CPU	Intel® Atom™ x5-Z8350 CPU
DRAM	4GB DD3RAM
Storage	16GB eMMC
RTC CHIP	CR2032
Pre-installed OS	Windows 10 lite

Computer Interface

Ethernet	1x 10/100/1000Base-T RJ45
Fiber	1x 1000Base-X SFP
USB	1x USB3.0 Type A
Wi-Fi	MediaTek RT5572 2.4/5GHz/2x2 with external antennas
Serial	1x RS485
Optional Interface	8 pins connector on edge with following options (max 2 options can be chosen upon order to be factory pre-fitted) RS232 RS485 RS422 CAN bus Analog Input Analog Output Digital Input Digital Output
SD Slot	1x MicroSD card socket for user supplied card up to 256GB

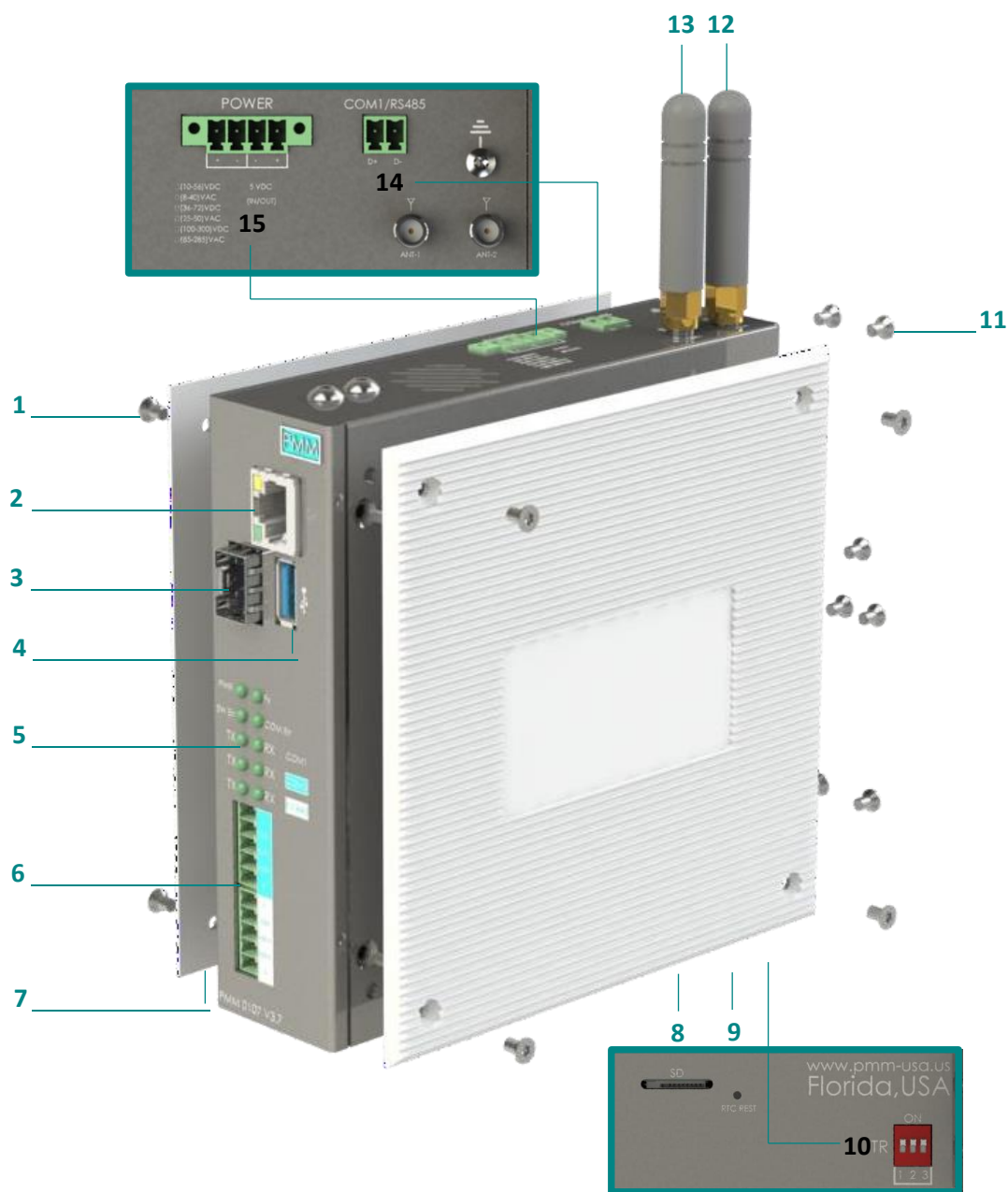
Power Parameters

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 4pins 3.5mm

Physical Characteristics

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

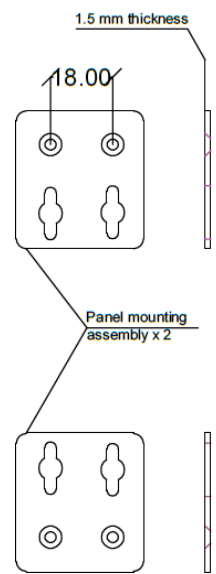
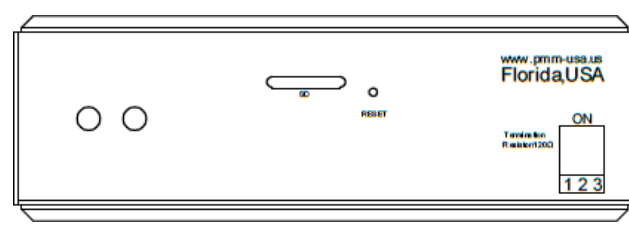
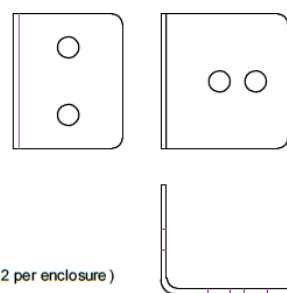
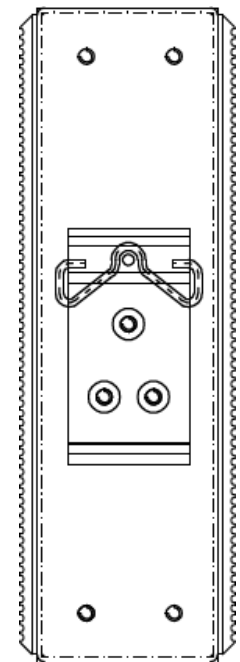
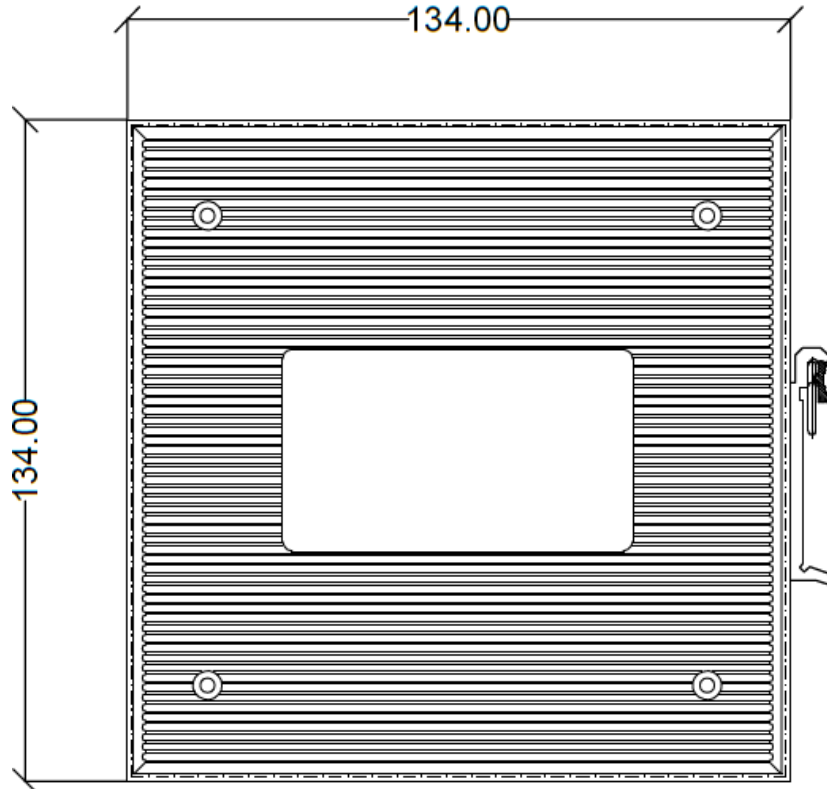
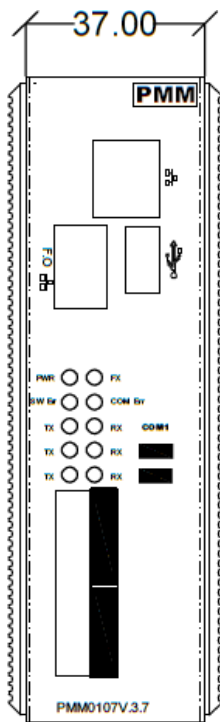
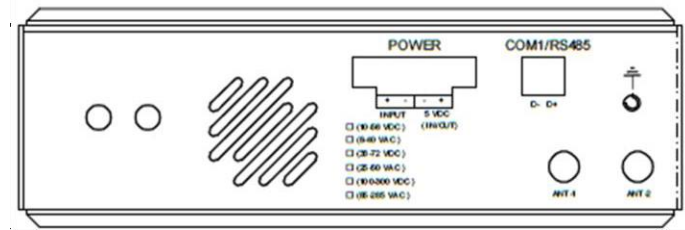
ENCLOSURE ASSEMBLY INFORMATION



ITEM	DESCRIPTION
1	Screw
2	Ethernet port
3	SFP Fiber optic port
4	USB A interface
5	10x LED indicators
6	2x Communication ports
7	Heat sink

8	SD interface
9	RTC REST
10	Termination Resistor Selector (RS485)
11	Screws
12	Antenna 1
13	Antenna 2
14	RS485 port
15	Power inlet

ENCLOSURE DIMENSIONS



ORDERING INFORMATION

Order Configuration table			
PMM0107	-x	-09xx	-09xx
Power supply			
10-60 VDC	-1		
8-40 VAC	-2		
36-72 VDC	-3		
25-50 VAC	-4		
85-265 VAC / 100-300 VDC	-5		
COM Port 1			
RS485		-0912	
CAN Bus		-0910	
ANALOG INPUTS		-0901	
DIGITAL INPUT		-0920	
GSM/GPRS		-0917	
<i>See the COM Ports table for more options</i>			
COM Port 2 (Same as COM Port 1 options)			-09xx

Table1* Comm port options	
COM Ports Options	
Analog input	PMM0901
Analog output	PMM0902
CANBUS (UART)	PMM0910
CANBUS (UART)	PMM0910i
CANBUS (SPI)	PMM0911
CANBUS (SPI)	PMM0911i
RS485	PMM0912
RS422	PMM0913
RS233	PMM0914
RS232	PMM0915
LTE	PMM0916
Digital input	PMM0920
Digital output	PMM0921

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