



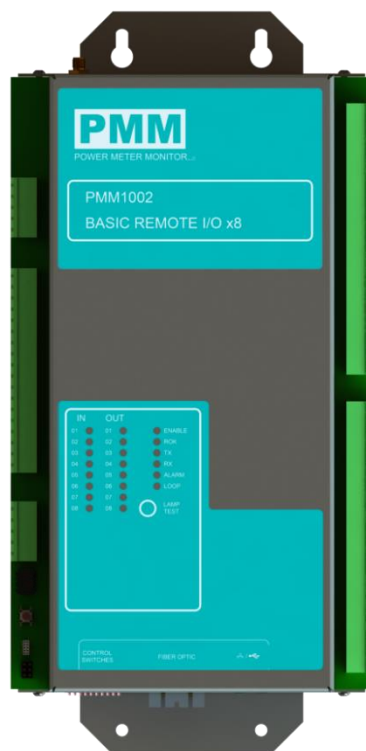
Power Meter Monitor

Business and Mission-

Critical Solutions Provider

8xIO Mirror-Basic

Data Sheet



Model: PMM1002

Document: Data Sheet

Document version: 1.1

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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.



Contents

DESCRIPTION4

TARGET APPLICATION.....4

KEY FEATURES.....4

TECHNICAL SPECIFICATIONS.....5

ENCLOSURE ASSEMBLY INFORMATION.....6

ENCLOSURE DIMENSIONS7

KEY FEATURES

- 8x Digital input
- 8x Output relays
- 1x 10/100 Ethernet port
- 1x Customized fiber optic port
- 1x Serial communication port RS485
- Reducing installation cost while increasing workers safety
- High data transmission reliability
- Simple to set up
- High operating speed
- Built to meet stringent industrial standards
- Wide range of power supply options
- Direct Panel Mounting
- EMI, RFI, shock and vibration protected
- RoHS, CE and FCC certifications
- System operating temperature -40 to 85°C (-40 to +185°F)

DESCRIPTION

PMM1002 is a reliable, secure, simple to set up remote I/O module that communicates with remote devices using Mirrored Bits® through a fiber optic port. Each contact input controls one of the eight MIRRORRED BITS transmit bits, while each of the eight received MIRRORRED BITS controls an output contact.

PMM1002 ensuring data transmission between remote devices for extended distances through the fiber optic port with high security and lower project costs as fiber optic replaces the large wires that are conventionally used.

PMM1002 is covered within a durable metal chassis that is designed and tested on field to withstands vibration, electrical surges, fast transients, and extreme temperatures as well as harsh environmental conditions.

TARGET APPLICATION

PMM1002 is especially designed to meet industrial standards, increasing the reliability and security for remote data transmission.

There are many applications can be performed by PMM1002 with high efficiency, including:

- Enhancing communication between existing relays
- Enhancing and isolating remote communication through fiber optic links
- Ensuring that relays are functioning properly by performing self-testing
- Transmitting data directly to existing cogeneration interconnections
- Enabling tele protection through digital multiplexers which allows monitoring transmission lines, isolating faults and preventing permanent damage with minimum possible cost
- Increasing I/O relay capability through MIRRORRED BIT communications protocol

TECHNICAL SPECIFICATIONS

Power Parameters

Power Supply Options	Built-in 10-120 VDC Optional 220 VAC
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Data Transmission Rate

Operating Time (Baud Rate)	38400 (5-10 mS) 19200 (8-13mS) 9600 (14-19mS)
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Input Contact

Input Voltage Options	24 VDC 48 VDC 110 VDC 110 VAC 220 VAC
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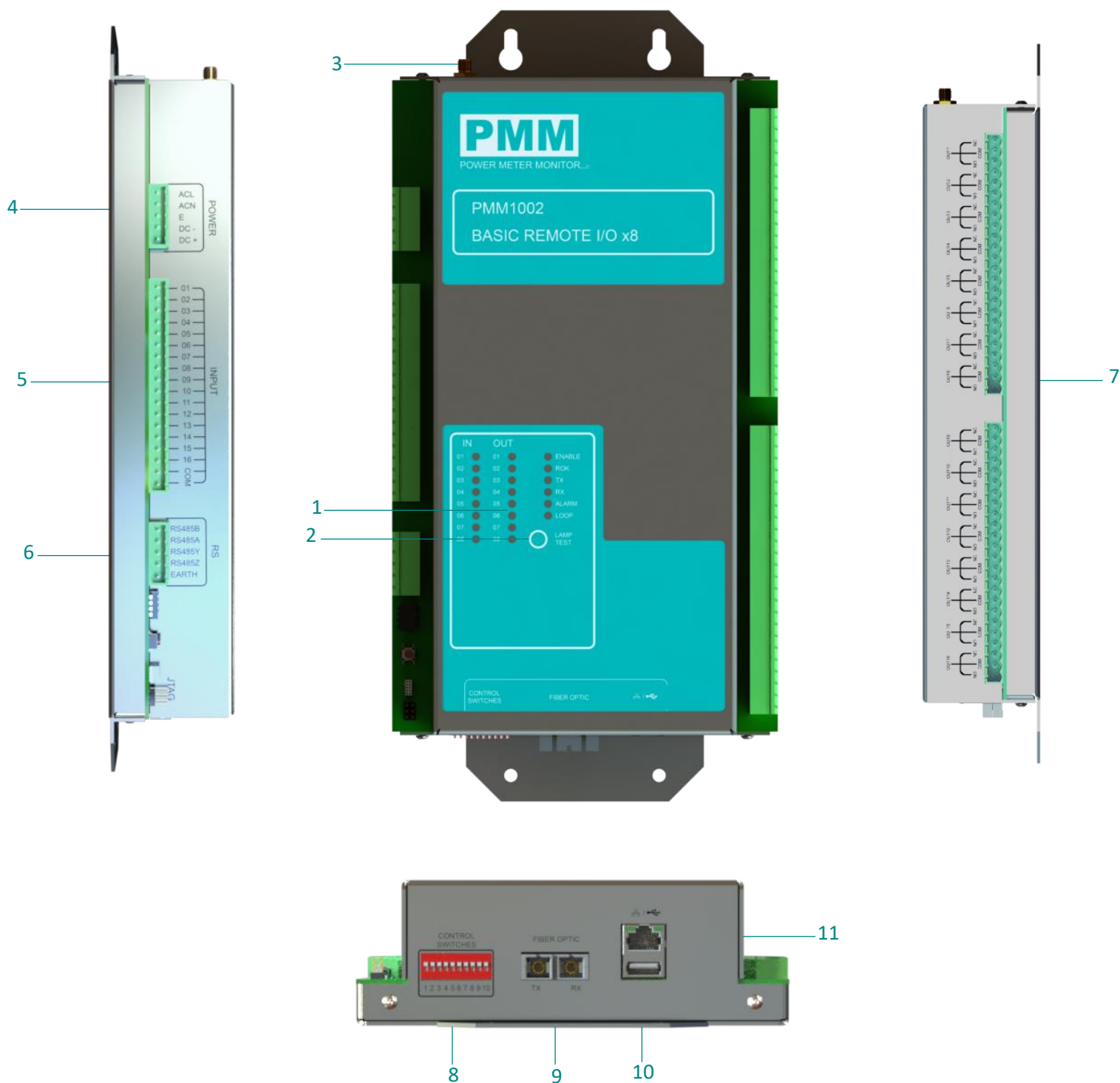
Output Contact

Maximum Current	6A
MOV Protected	270 VAC rms 360 VDC continuous

Physical Characteristics

Housing	Aluminum
Dimensions	11.1 x 6.5 x 2.1 inch (282 x 165 x 55 mm)
Mounting Options	Direct Panel Mounting
Certifications	RoHS, CE and FCC

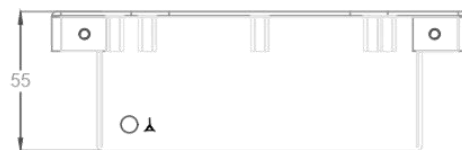
ENCLOSURE ASSEMBLY INFORMATION



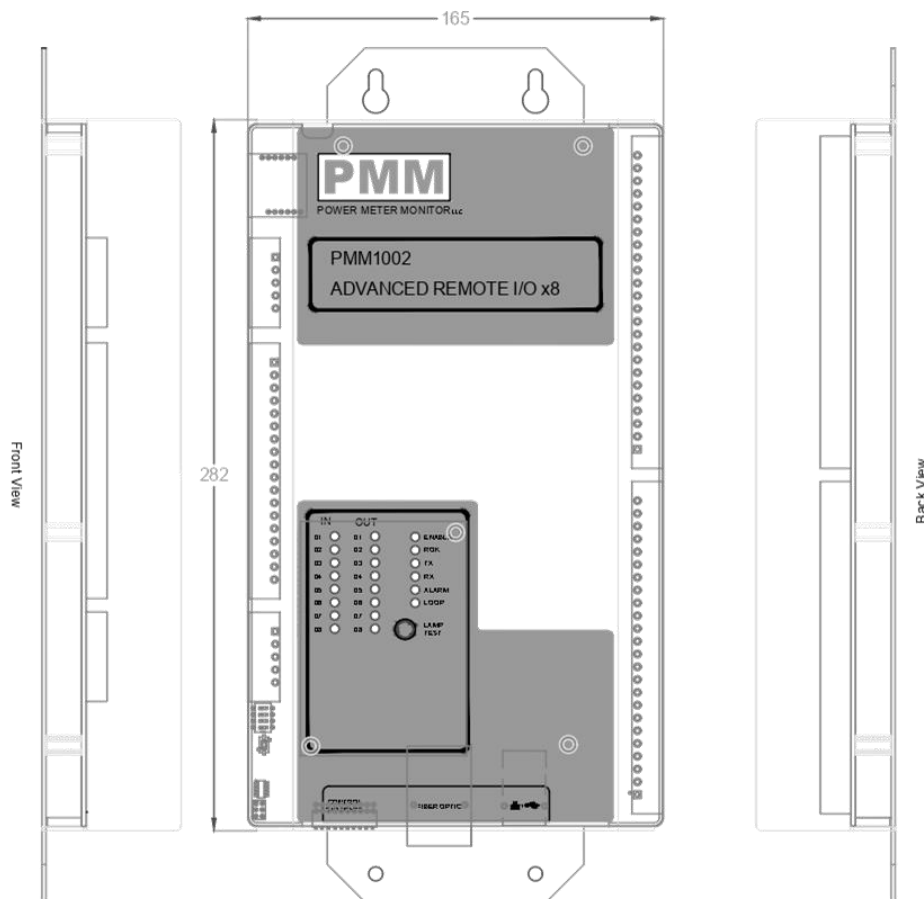
ITEM	DESCRIPTION
1	38x LED indicators
2	LAMP TEST
3	Antenna
4	Power Supply
5	8x Digital Input

6	1x RS485
7	8x Relay Output
8	DIP Switch
9	Fiber Optic Port
10	1x USB Port
11	1x Ethernet Port

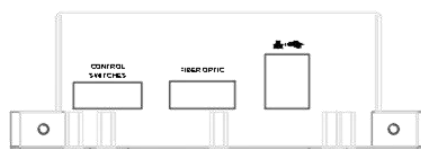
ENCLOSURE DIMENSIONS



Top View



Side View



Bottom View