Power Meter Monitor

Business and Mission-

Critical Solutions Provider

DC-DC 10-60 VDC – 5V6A UPS

Data Sheet

Model: PMM0802
Document: Data Sheet
Document version: 1.2
Date: February 2021

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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

- Ultra-wide range input voltage: 10-60VDC
- 5V output
- Input and output isolation withstand voltage 3000VDC
- High efficiency, conversion efficiency up to 88% (Typ)
- Output to charge 12V Battery
- 1x RS485 serial communication port
- High reliability, long-life design, continuous work over 100000H
- Overvoltage and reverse polarity protected
- Protections:
  System: Short circuit / Overload / Input and Output Overvoltage

  Battery: Over-Discharge

- 0.95" OLED Display
- Compact size with fanless design
- Cooling by free air convection
- LED for battery health indication
- Wide range of mounting options
- Operating temperature: -40 to 85°C (-40 to 185°F)
- Ambient relative humidity: 5 to 95% (non-condensing)
- Serial port with power surge ±2.5kV isolation protection

DESCRIPTION

PMM0802 is a dependable and accurate 30W DC-DC converter with battery output.

It has wide input range: 10-60v and two 5V/6A outputs which feature high efficiency; up to 88%, wide working temperature range -40~+85C and 3KVDC isolation voltage.

It uses an ATmega328 CPU along with an RS485 module for smooth communication with any monitoring system.

PMM0802 is in compliance with a continuous-mode short circuit protection which comes with an over voltage and reverse polarity protection, it also contains a battery charging controller as well as BMS to protect the battery bank from overcharging and over discharging.

This model has an added feature of a 0.95 inch OLED display, so the client can monitor the battery health and faults logs.

This power supply is suitable for the harsh industrial environment because it is protected against high vibration, high dust, extremely low or high temperature.

TECHNICAL SPECIFICATIONS

Input characteristics

Input voltage range	10-60 VDC
Maximum input voltage	≤64VDC
Reflected ripple current	40mA(typical)
Impulse voltage (Isec.max)	-0.7-70 VDC
Starting voltage	9 VDC (MAX)
Start Time (Typ.)	1mS(Nominal input voltage and constant resistance load)

Output characteristics

Voltage regulation rate	±0.5 %（Tpy）
Load regulation	±1 %（Tpy）
Start delay time	100ms
Output Voltage regulation	No adjustment
Output overcurrent protection	110%-200%（Full voltage range input）
Output short circuit protection	Sustainable, self-healing

General Specification

Controller	ATmega328
Serial Interface	1x RS485
Display	0.96" OLED
Indicators	2x LED For RS485 TX/RX 2x LED For power status

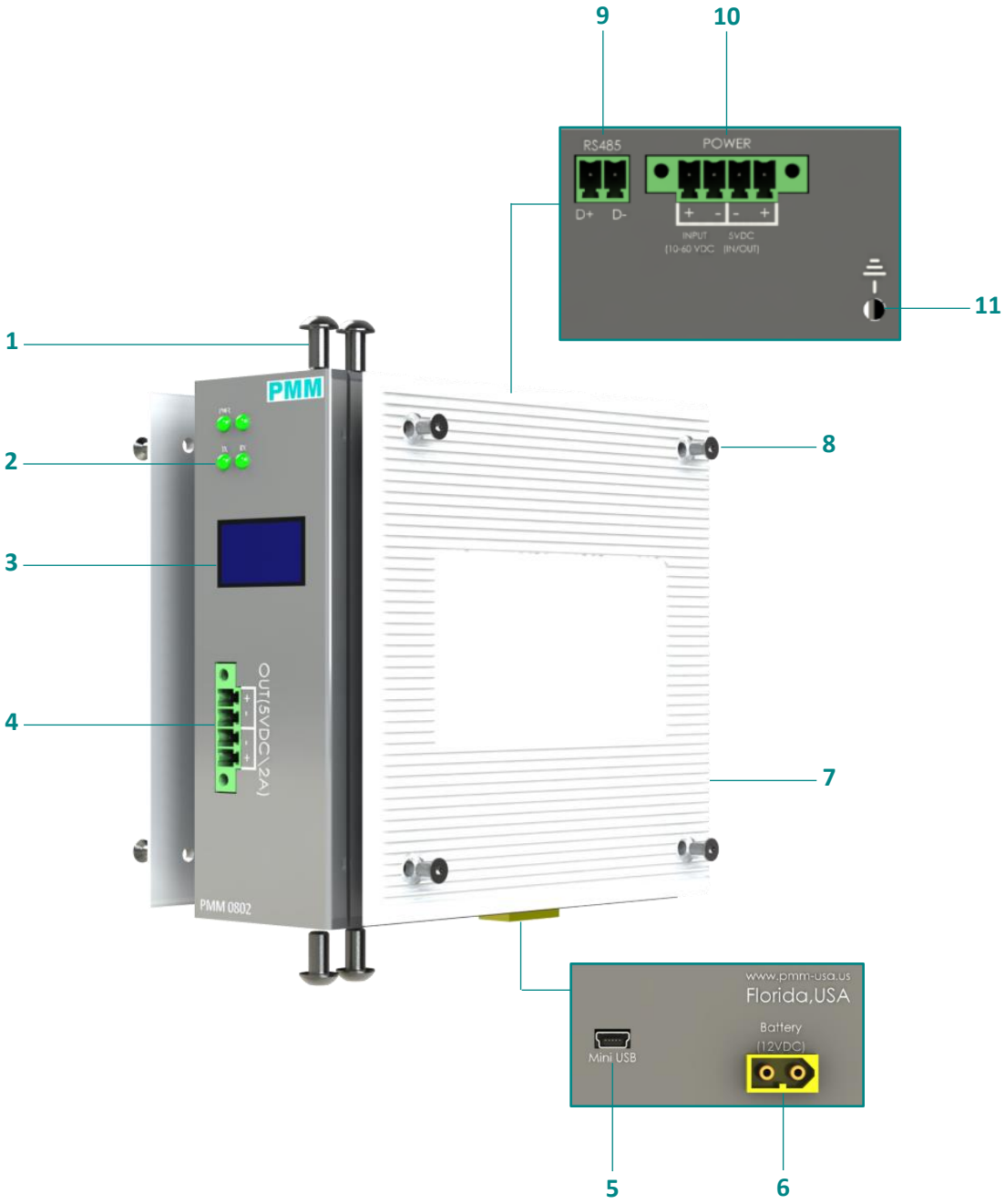
Mechanical Characteristics

Housing	Metal
Dimensions	3.93*3.93*1.7 inch (100 x 100 x44 mm)
Mounting Options	Standard 35mm DIN Rail Direct Panel Mounting Front Panel Mounting 19” rack 1U

Environmental Conditions

Operating temperature	-40 to +85℃
storage temperature	-40 to +125℃
Relative humidity	5 to 95% (non-condensing)

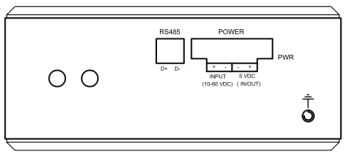
ENCLOSURE ASSEMBLY INFORMATION



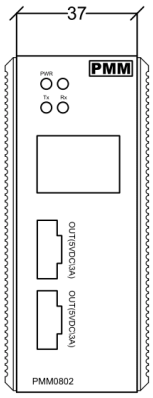
ITEM	DESCRIPTION
1	Screws
2	4x LED Indicators
3	OLED 0.95’ Display
4	Output Port
5	Mini USB Port

6	Battery Port
7	Heat Sink
8	Screw
9	RS485 Port
10	Power Adapter
11	Earth

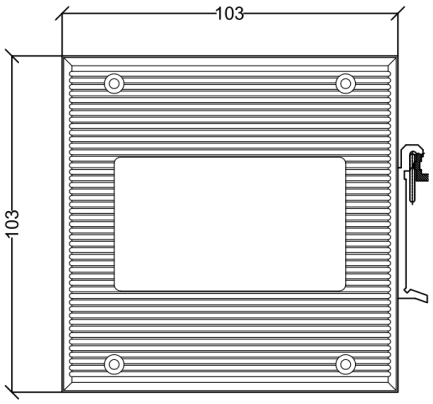
ENCLOSURE DIMENSIONS



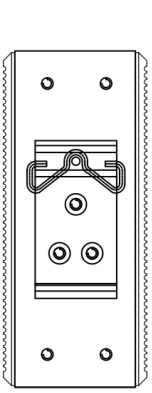
Top View



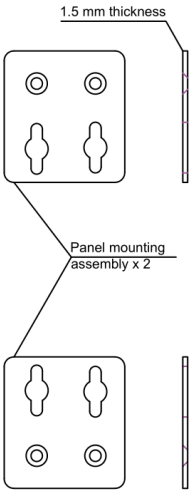
Front View

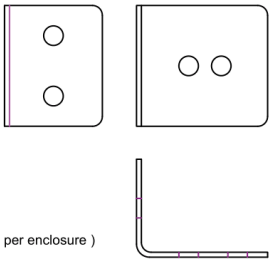


Side View

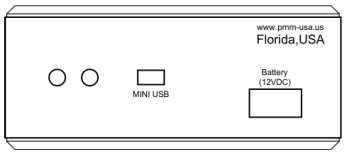


Back View





(X 2 per enclosure)



Bottom View

ORDERING INFORMATION

Order Configuration Table		
	PMM0802	-x
Power Supply		
10-60 VDC		-1

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**