

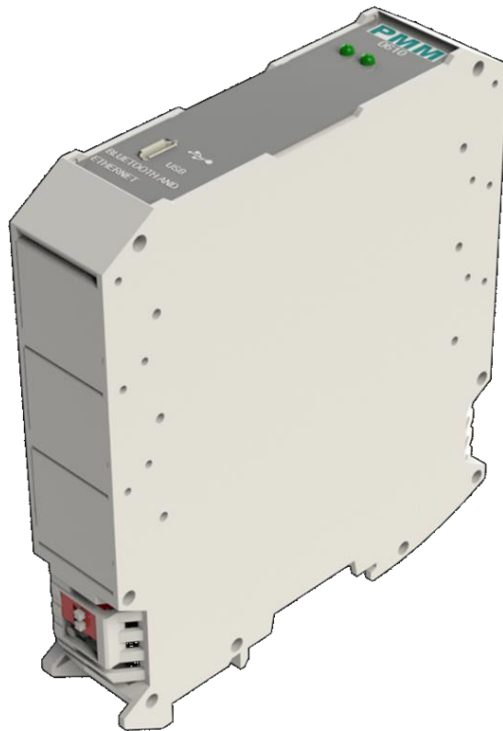


Power Meter Monitor

**Business and Mission-
Critical Solutions Provider**

Base (Bluetooth and Ethernet)

Data Sheet



Model: PMM0610

Document: Data Sheet

Document version: 1.0

Date: December 2022



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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

- Easy to use, install and configure module
- The ability to have 5 concurrent connections
- Bluetooth v2.1+EDR
- Supports wide range up to 300 meters
- Built-in antenna with a unique half globe radio coverage pattern making installation easy and cost effective
- Low Emission Mode to handle potential wireless interference
- 1x Ethernet interface 10/100Base-T
- 1x RS485 with power surge ± 2.5 kV isolation protection
- Overvoltage and reverse polarity protected
- Meeting several industrial standards
- Wide range of power supply options (10-60 VDC)
- Onboard Termination resistor via dip switch
- EMI, EMS, EMC, and shock protected
- IP45-classed housing with integrated antenna
- -40 to 80 °C (-40 to 185°F) Operating temperature
- 5% to 90% Non-condensing Relative Humidity
- Standard 35mm din rail mounting bracket

DESCRIPTION

PMM0610 is a base (Bluetooth and Ethernet) communication module that replaces seamlessly the ethernet connection with rugged and maintenance free Bluetooth connection where needed in tough applications.

PMM0610 is easy to use, install and configure module. In addition to, low emission feature which solves potential interference between Bluetooth and Wireless LAN that is not handled by Adaptive Frequency Hopping.

Furthermore, PMM0610 supports 2.4GHz WLAN 802.11 b, g, n, 5GHz WLAN 802.11 a, n and Dual-band WLAN 802.11 a, b, g, n.

TECHNICAL SPECIFICATIONS

Wireless Specifications

Bluetooth	v2.1+EDR
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Radio, Chipset and Stack

Max range	300m
Max output power including antenna	13dBm
2.4 GHz channels	1-79

Interfaces

Serial	1x RS485 port
Ethernet	1x 10/100
USB	1x USB2.0 Type micro-B
LED Indicators	1x LED for Tx and 1x LED for Rx for communication over RS485 port indication

Power Parameters

Input Power Supply Options	10-60 VDC (10-48 VAC)
Power Connector	Phoenix Contact 4 pins 3.5mm

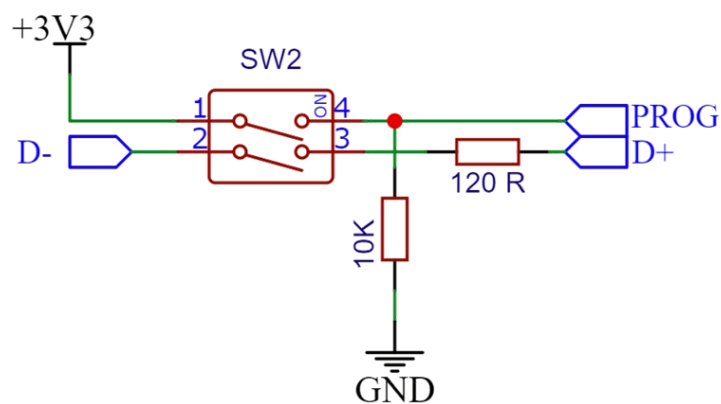
Physical Characteristics

Housing	Polyamide (Nylon 6.66)/PA
Dimensions	3.91x4.48x0.99 inch (99.4x113x22.6 mm)
Degree of protection	IP45
Mounting Options	DIN Rail

HARDWARE CONFIGURATION

Termination resistor is needed to avoid data-corrupting reflections and expand the network between D+ and D- lines for the RS485.

- Turn on the dip switch (closed circuit) to have a termination resistor of 120Ω between D+ and D- lines.
- The other dip switch is for PROG mode, it is used to switch between two customized modes. As shown in the figure below.



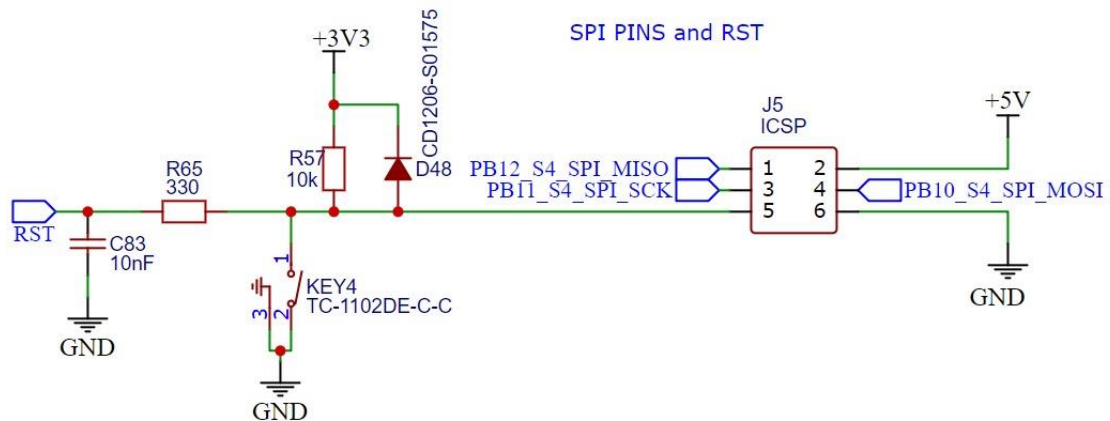
PMM0610 can be alternatively switched between two preprogrammed modes through the second dip switch.

- Turn on the dip switch (closed circuit) on mode number one to enable the device to run in the first functional programmed mode.

- Turn on the dip switch (closed circuit) on mode number two to enable the device to run in the second functional programmed mode.
- In case of not choosing any modes by the user the device will run in the general/default mode.

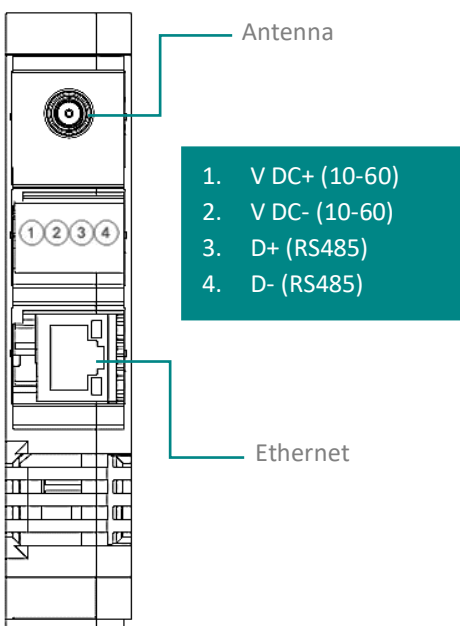
In addition, there is a reset button enabling the user to reset the device to the default settings.

- In order to reset the device; push the reset button.
- The device will reset automatically to the default settings.

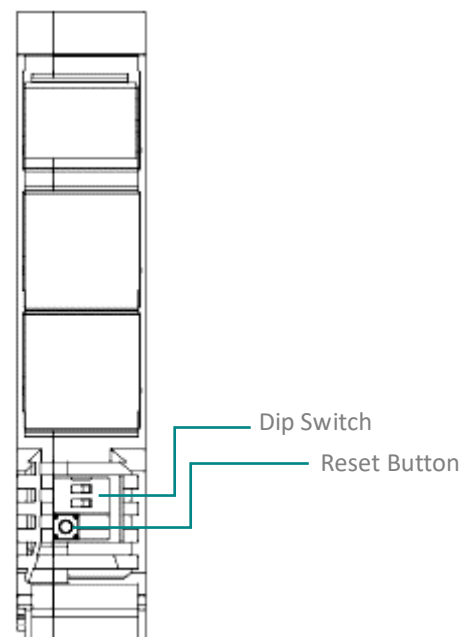


PINS ASSIGNMENTS

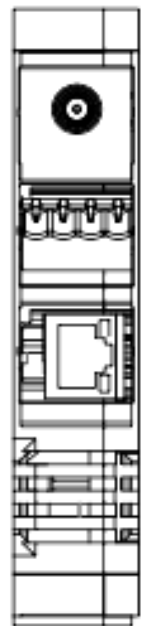
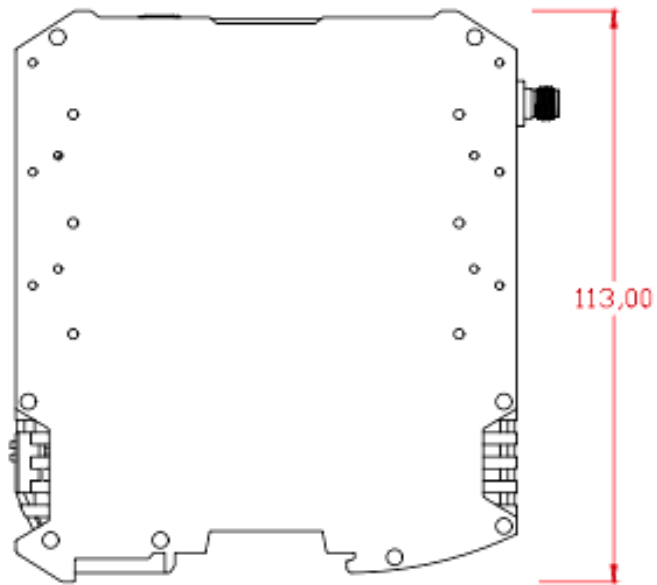
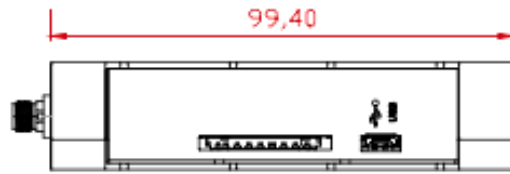
TOP VIEW



BOTTOM VIEW



ENCLOSURE DIMENSIONS



ORDERING INFORMATION

Order Configuration Table

PMM0610	-09xx
COM Port 1	
RS485 (PMM0912)	-0912
COM port 2 (Same as COM port 1 options)	-09XX
RS485 (PMM0912)	-0912

Accessories

DIN Mounting Kit (Included 1 Kit)	DIN Rail Mounting Bracket
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CONTACT INFORMATION:

For direct inquiries or any customized orders, contact us on sales@Pmm-usa.us