



Power Meter Monitor

**Business and Mission-**

**Critical Solutions Provider**

## Ethernet - Serial Media Converter

# Data Sheet



**Model:** PMM0501

**Document:** Data Sheet

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[www.Pmm-usa.us](http://www.Pmm-usa.us)

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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 smoothly from Modbus TCP to RTU
- 2 simultaneous TCP masters with up to 8 simultaneous requests per master
- Effortless configuration via web-based wizard
- 32-bit ARM core microcontroller, with an 4 MHz clock
- Embedded traffic monitoring as well as diagnostic information for easy trouble shooting
- Baud rate: 110-115200 bps
- Operating temperature: -40 to 75oC (-40 o 167°F)
- EMI, EMS, EMC and shock protected
- Overvoltage and reverse polarity protected
- Serial port with power surge  $\pm 2.5\text{kV}$  isolation protection

## DESCRIPTION

PMM0501 hardware provides the flexibility needed to fulfill the various conditions that arise with field devices that use different communication protocols to connect any type of industrial solution network such as the SCADA system. This slave device is effortlessly incorporated into an existing Modbus TCP network from any Modbus RTU device.

PMM0501 industrial grade media converter can function under harsh environmental conditions of any site. It 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.

This device can be ordered with multiple power supply ratings to select from.

## APPLICATIONS

PMM0501 can perform efficiently and effectively in the PV, substation and industrial applications as:

- Ethernet - Rs485 General Converter
- Modbus TCP-RTU bridge Converter

## TECHNICAL SPECIFICATIONS

### Interfaces

|                |                                                                            |
|----------------|----------------------------------------------------------------------------|
| Serial         | 2x customized Serial ports on ordering:<br>Isolated RSR85/RS422/RS232 port |
| Ethernet       | 1x 10/100/1000Base-T RJ45                                                  |
| LED Indicators | 2x LED for full duplex                                                     |

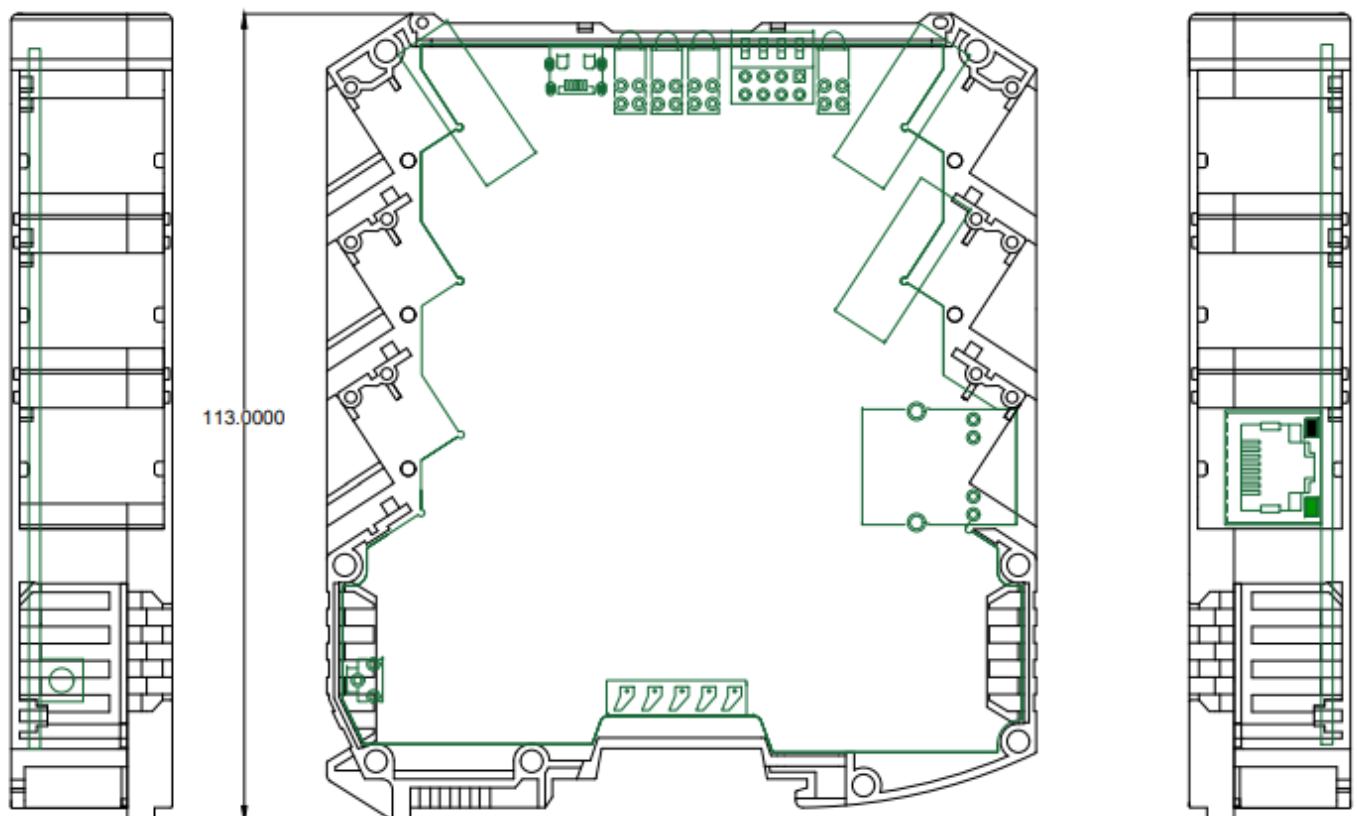
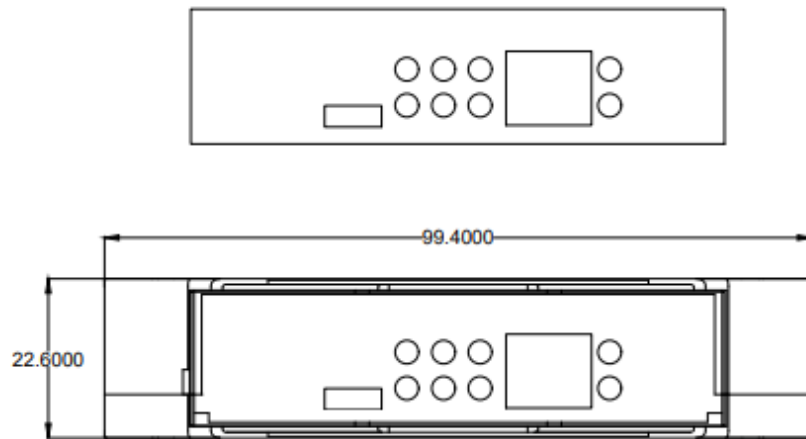
### Power Parameters

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

### Physical Characteristics

|                  |                                                  |
|------------------|--------------------------------------------------|
| Housing          | Plastic                                          |
| Dimensions       | Dimensions 4.05*4.05*1.45 inch (103*103*1.45 mm) |
| Mounting Options | DIN Rail                                         |

## ENCLOSURE DIMENSIONS



## ORDERING INFORMATION

| Order Configuration Table               |       |
|-----------------------------------------|-------|
| PMM0501                                 | -09xx |
| COM Port 1                              |       |
| RS485 (PMM0912)                         | -0912 |
| RS232 (PMM0915)                         | -0915 |
| COM port 2 (Same as COM port 1 options) | -09XX |

### Accessories

|                                   |                           |
|-----------------------------------|---------------------------|
| DIN Mounting Kit (Included 1 Kit) | DIN Rail Mounting Bracket |
|-----------------------------------|---------------------------|

## CONTACT INFORMATION:

For direct inquiries or any customized orders, contact us on [sales@Pmm-usa.us](mailto:sales@Pmm-usa.us)