RS485/RS422/RS232 - Fiber converter

Data Sheet

Model: PMM0503
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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

KEY FEATURES

- 2x LED indicators per board to monitor network activity
- 2x Fiber optic ports
- Auto Switching Baud Rate, 300 ~ 115200 bps
- Transmission Speed of up to 115200 bps
- ESD Protection for the RS-232/422/485 Data Line
- Isolated power supply
- Wide range of power supply options
- Meets all power substation requirements
- Din Rail, wall mount, panel mount and rack mount options.
- Compact size with fanless design

TARGET APPLICATION

PMM0503 can perform efficiently and effectively in the PV, substation and industrial applications as:

- RS485 - Fiber Converter
- RS422 - Fiber Converter
- RS232 - Fiber Converter

DESCRIPTION

PMM0503 is a dual board RS-232/422/485 to fiber media converter. It used for RS-232/422 point-to-point connections and RS-485 multi-drop applications for transmitting a signal up to 2 km (6,600 ft) and is the perfect solution for applications where transmission must be protected from electrical exposure, surges, lightning or chemical corrosion

PMM0503 is an industrial grade media converter that can function the 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. Check below ordering information page for available options that meets your requirement.

TECHNICAL SPECIFICATIONS

Interfaces

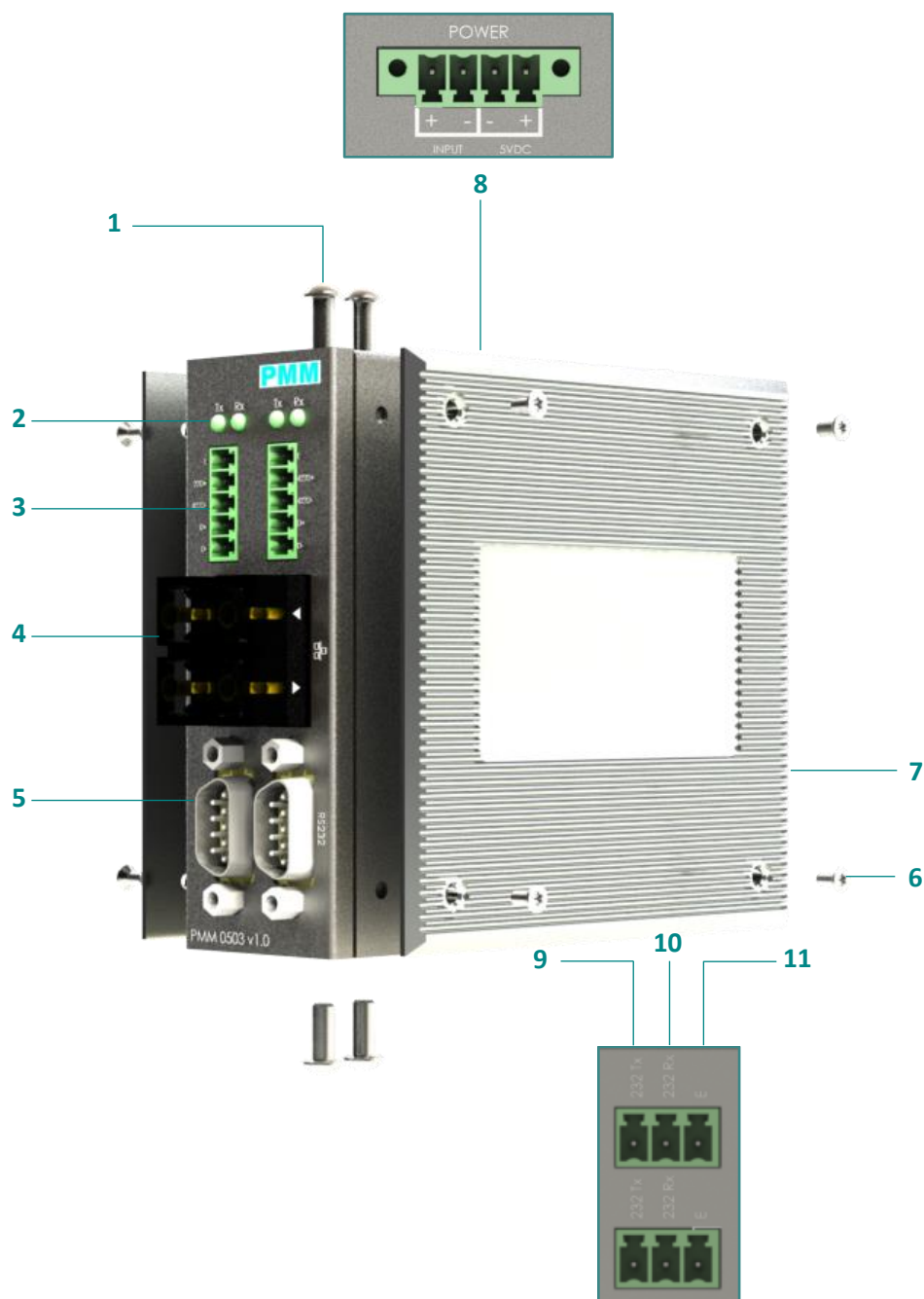|	
Fiber	2x customized fiber optics ports on ordering: SC or SFP port
Serial Port	1x RS485 1x RS422 1x RS232. (Note: The RS-232, RS-422 and RS-485 cannot be used simultaneously)

Power Parameters

Input Power Supply Options	85-265 VAC / 100-300 VDC 10-48 VAC / 10-60 VDC Direct inputs 5 VDC / 3 A
Power Connector	Phoenix Contact 4 pins 3.5mm

Physical Characteristics

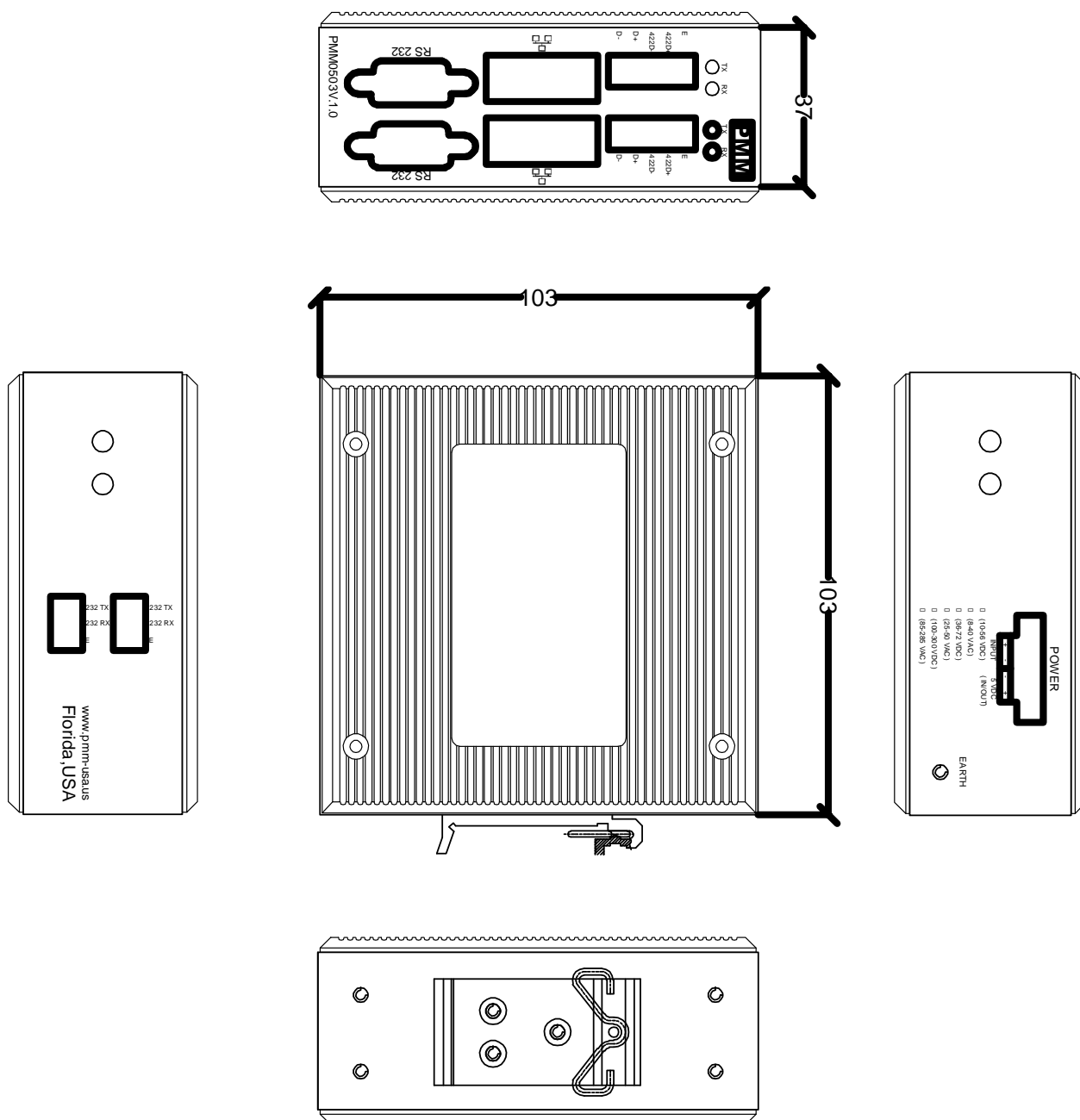|	
Housing	Metal
Dimensions	4.05*4.05*1.45 inch (103*103*1.45 mm)
Mounting Options	DIN Rail Panel Mounting Wall Mounting 19" Rack 1U

ENCLOSURE ASSEMBLY INFORMATION

ITEM	DESCRIPTION
1	Screws
2	4x LED Indicators
3	RS485/422 Pinout
4	2x Fiber Optic Ports
5	2x Serial Communication Ports

6	Screw
7	Heat Sink
8	Power Supply
9	Transmitter pin for RS232
10	Receiver pin for RS232
11	Ground pin for RS232

ENCLOSURE DIMENTIONS

ORDERING INFORMATION

Order Configuration table						
PMM0503	- x	- 09xx	- 09xx	- xxxx	- xxxx	
Power supply						
85-265 VAC / 100-300 VDC	-1					
10-48 VAC / 10-60 VDC	-2					
Direct input 5V, 3A	-3					
COM Port 1						
RS232/RS42/RS485		-0912i				
COM Port 2 (*Same as COM Port 1 options*)			-09xx			
Fiber Optic port 1						
SFP Connector				-SFP0		
Single Mode 20 Km /SC type connector				-SC20		
Single Mode 40 Km /SC type connector				-SC40		
Single Mode 80 Km /SC type connector				-SC80		
Fiber Optic port 2 (*Same as Fiber Optic port 1 options*)					-xxxx	

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**