PMM

Power Meter Monitor

Business and Mission-Critical Solutions Provider

PMM0105

Data$S$heet

Model: **PMM0105**

Document: *Datasheet*

Document version: *1.1*

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DECLARATION OF CONFORMITY

This restriction is subject to provide protection for system operation in business environment, which will produce, use and transmit radio frequency energy. Without notice of the instructions of the correct installation and use, it may cause harmful interference to radio communication. The interference prevention cannot be guaranteed even with proper installation according to the manual. If the device gets bad effect on the signal of radio / TV. User could insure by turn device on/off.

When this device produces some harmful interference, user can use the following measure to solve interference problem:

Setting the receiving antenna's direction or location Increase the distance between this device and receiver.

Plug in this device's power connector into different circuits of the power outlet with receiver.

If you need technical support, please inform the dealer or experienced radio/TV technical personnel.

TECHNICAL SUPPORT AND SERVICE

Please visit: Pmm-usa.us to get the details.

User should collect the product information following:

-Product name and serial number.

-Attached device's description.

-User software description (operational system, vision, application software and so on).

-Full description of the product's problem -Full details of every error information.

SAFETY INSTRUCTIONS

- Read the safety operating introduction carefully.
- Be cautious of the warnings and notices on the device.
- DO NOT use any liquid or decontamination spray to clean up the device, and assure that it is totally disconnected while cleaning!
- Ensure that the device is in a stable position before installation; to avoid falling it down.
- Ensure that the out voltage of power outlet, fits the required voltage, before connecting the device.
- Keep the cables in 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.
- DO NOT pull the device up by yourself, let certificated engineer collaborate for safety assurance purposes.
- DO NOT store the device in out of the recommended temperature range; NOT less than -30°C or higher than 80°C.

If you face the following situations, please repair it by professional party:

- Broken Power cable or connector.
- Liquid flow into the device.
- Device is not working properly.
- The device falls down or damaged.
- Appearing of any obvious malfunctions.

Warning:

- Read the power supply input carefully.
- Package: be careful, please take the device by both hands.
- Maintenance: clean and maintain the device using recommended, safe and suitable methods.

Caution:

If user changes the unauthorized setting, or repairs the device without any approval of the relevant authority; then user's rights of controlling this device will be canceled.

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Contents

HAZARDOUS MATERIALS DISCLOSURE

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FEATURES

- MediaTek MT7688AN MIPS24KEc CPU
- Built to meet all Power substation requirements
- 2 X RS485 ports
- 2 X customized fiber optics
- 2x Ethernet 10/100 ports
- Support 2.4GHz WIFI
- Many options for built-in /add-on cards
- Wide range of power supply options
- -40 to 85°C system operating temperature
- Wide range of mounting system
- Compact size with fanless design
- LINUX 2.6.36SDK/Open Wrt 3.10

DESCRIPTION

PMM0105 is a Rugged, Powerful & Reliable industrial fanless Embedded computer powered by MediaTek MT7688AN MIPS24KEc CPU.

PMM0105 has metal durable chassis that is tested on field to withstand shock, vibration, extended temperature ranges and challenging elements of a harsh environment.

PMM0105 meets all field standards of power, reliability, easy configuration and long-lasting life

PMM0105 designed to meet all power substation and PV plants requirements

APPLICATION

The PMM0105 is a LINUX BASED embedded computer powered by MediaTek MT7688AN MIPS24KEc CPU.
The PMM0105 is designed especially for industrial applications and harsh working environments.
The PMM0105 has many interfaces to cover all of the industrial standards and to increase the connectivity giving the client a wide range of options to fits all of his needs.

There are many applications that PMM0102 can perform with high efficiency and effectiveness offering intelligent and flexible solution such as:

- NTP timing servers
- Billing server
- SQL data banks
- Data loggers
- Power plant controllers
- Power meter reader
- IEC 101/104 to Modbus converter
- DLMS to Modbus converter
- Database synchronizing
- Tracker controller
- Factory automation

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Power Meter Monitor

ORDERING INFORMATION

PMM0105-AC1-2SC-FP01

(PMM0105 - SUPPLY VOLTAGE - OPTION1/OPTION2/OPTION3/OPTION4 - ACC1/ACC2/ACC3/ACC4)

Type	Description
PMM0102-DC1	36VDC-75VDC
PMM0102-DC2	10VDC-56VDC
PMM0102-AC1	85-265 VAC /100-300 VDC

OPTIONS

PMM0102-SC	1x SC 1X9 fiber optic port
PMM0102-SFP	1x SFP fiber optic port

ACCESSORIES

PMM0102-DIN01	1x DIN Rail Clip
PMM0102-MB01	2x Mounting Bracket
PMM0102-PM01	2x Front panel Bracket
PMM0102-FP01	2x Mounting 19 Inch Bracket (4mm screw)

WORLDWIDE DISTRIBUTION (OUT OF USA)

Amazon, ebay, and direct sales are the sole and exclusive distributor outside the territory of USA.

For direct quotation contact us on sales@Pmm-usa.us

SPECIAL MODIFICATIONS TO FIT YOUR NEEDS

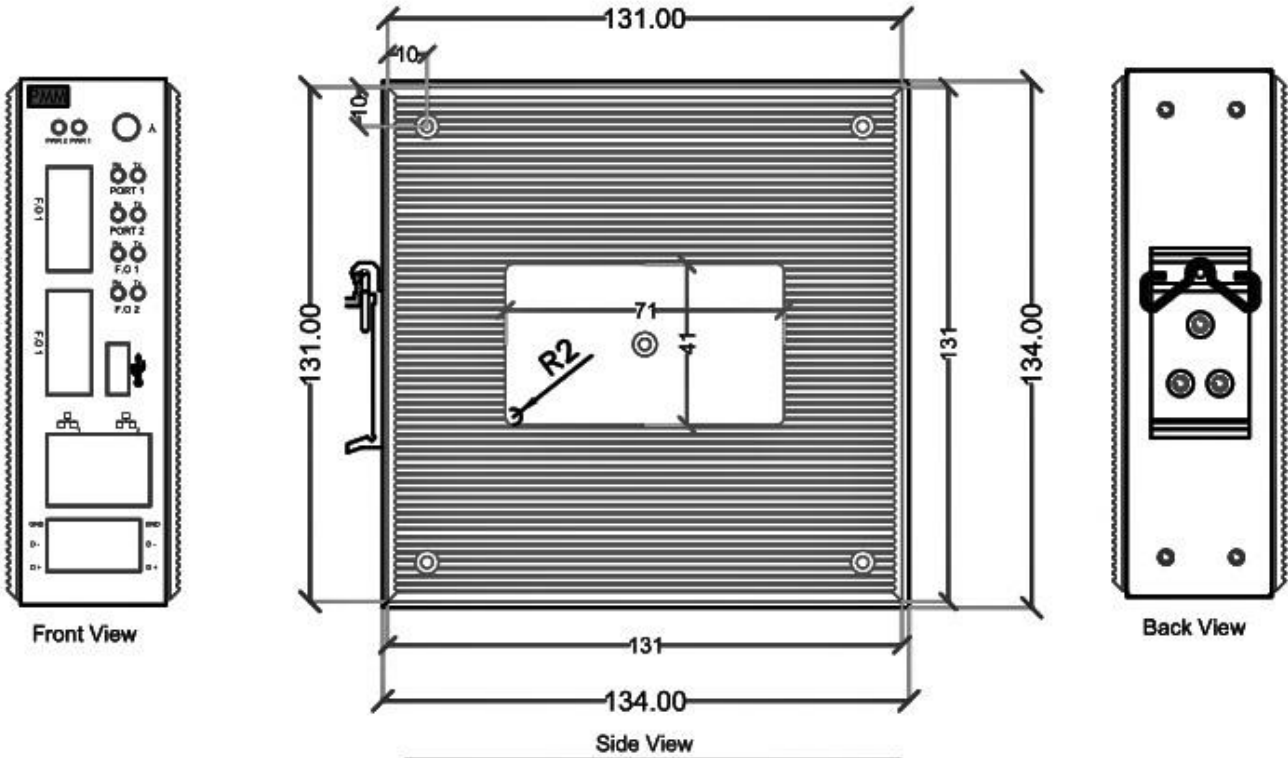For any customized inquiries and orders; contact us on sales@Pmm-usa.us

ENCLOSURE ASSEMBLY INFORMAION

Front Mounting Holder

Rear Holder

HeatSink

ENCLOSURE DIMENTIONS

Top View

Front View

Side View

Back View

Bottom View

TECHNICAL SPECIFICATION

Computer

CPU	MediaTek MT7688AN MIPS24KEc CPU
DRAM	128 MB
RTC CHIP	DS3231
Pre-installed OS	LINUX 2.6.36SDK/Open Wrt 3.10

Computer Interface

Ethernet ports	2 x ports 10/100
Fiber optic ports	2 X customized fiber optics ports on ordering: Sc1x9 40km / SFP port
Communication ports	2 x RS485
USB ports	1 x mUSB, 1 x USB2.0
Digital Inputs	10 x High speed digital inputs (24VDC)
Wi-Fi chip	MT7601UN

Serial signals

RS485	TX,RX,GND

Power Parameters

Power supply options	85-265 VAC /100-300 VDC 10-48VAC / 10-60VDC 25-60VAC / 36-72VDC Direct input 5VDC/3A
Power connector	Phoenix Contact 4pins 3.5mm

Physical Characteristics

Housing	Metal
Dimensions	5.27(134)x5.27(134)x1.45(37) inch (mm)
Mounting system	Standard 35mm din rail / direct panel mounting / front panel mounting / 19" rack 1U

HAZARDOUS MATERIALS DISCLOSURE

Hazardous Materials Disclosure Table for IPB Products Certified as RoHS Compliant Under 2002/95/EC without Mercury

The details provided in this appendix are to ensure that the product is compliant with the Peoples United states of America (USA) RoHS standards. The table below acknowledges the presences of small quantities of certain materials in the product and is applicable to USA RoHS only.

A label will be placed on each product to indicate the estimated "Environmentally Friendly Use Period" (EFUP). This is an estimate of the number of years that these substances would "not leak out or undergo abrupt change." This product may contain replace able sub-assemblies/components which have a shorter EFUP such as batteries and lamps. These components will be separately marked.

Please refer to the table below.

Part Name	Toxic or Hazardous Substances and Elements					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (CR(VI))	Polybrominated Biphenyls (PBB)	Polybrominated Diphenyl Ethers(PBDE)
Housing	X	O	O	O	O	X
Housing	X	O	O	O	O	X
Printed Circuit Board	X	O	O	O	O	X
Metal Fasteners	X	O	O	O	O	O
Cable Assembly	X	O	O	O	O	X
Fan Assembly	X	O	O	O	O	X
Fan Assembly	X	O	O	O	O	X
Battery	O	O	O	O	O	O
O: This toxic or hazardous substance is contained in all the homogeneous materials for the part is below the limit requirement in SJ/T11363-2006 X: This toxic or hazardous substance is contained in at least one of the homogeneous materials for this part is above the limit requirement in SJ/T11363-2006						