



Power Meter Monitor

**Business and Mission-**

**Critical Solutions Provider**

## Data Bank Industrial Server

# Data Sheet



**Model:** PMM0204

**Document:** Data Sheet

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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

- SQL based Server with many hardware options to fit your need
- User friendly configuration and API interface
- 2x RS485 Ports serial/IO communication ports
- Supports 2.4/5GHz WIFI
- Built to meet all Power substation requirements
- Wide range of power supply options
- Wide range of mounting systems to ensure excellent heat dissipation
- Compact size with fanless design
- -20 to 60°C system operating temperature
- -40 to 85°C storage temperature

## TARGET APPLICATION

PMM0204 is made with intelligent and flexible data logging and storage and retrieval solutions to equip the clients with all features needed to deploy their industrial applications with swiftness and reliability. It is ideal, including, but not limited to the following target application:

- Utility power plants
- BMS (Building Management Systems)
- Industrial firms and manufacturing facilities

## DESCRIPTION

PMM0204 is an industrial repository of information on one or more data field that is organized in a way that facilitates local or remote information retrieval and can process many continual queries over a long period of time. PMM0204 may be either centralized or decentralized, though most usage of this term refers to centralized storage and retrieval of information. The data in a data bank can be anything from scientific information like global temperature readings, utility sale power plant historic information like inverters, meters, transformers, weather stations, switch gears, notifications trackers or even financial-system records like credit card transactions, or the inventory available from various suppliers.

PMM0204 is based on PMM0108 hardware. The hardware is a rugged, powerful, reliable and fanless industrial embedded computer, powered by Intel® Apollo Lake Series J3355.

It's enclosed within a durable metal chassis that has been thoroughly tested on field to withstand shock, vibration, extended temperature ranges as well as the challenging elements of the harsh environment.

With this industrial computer all field standards of power, power substation and PV requirements are met. Besides being reliable it is easily configured giving it a long-lasting life.

## TECHNICAL SPECIFICATIONS

### Processor

CPU	Intel® Apollo Lake Series J3355
Frequency	Dual core 2.3GHz
L2 Cache	2 MB

### Display

Display Controller	Integrated graphics media accelerator
HDMI	Max resolution up to 4096x2160@30Hz

### Memory

BIOS	AMI EFI 16Mbit
Architecture	DDR3L-1666MHz
Capacity	Up to 8GB
DIMM	1 x 204-pin SODIMM

### LAN

LAN 1	Intel i210 Gbe LAN controller
LAN 2	Intel i210 Gbe LAN controller
Extended LAN	4x 1000Mbps RJ-45

### IO

COM	2x RS-232 Ports (RS-232/485 Optional)
USB	4x USB3.0/2.0/1.1

### Other

Digital IO	N/A
Watchdog	1x full size mSATA SSD

### Expansion Slot

Mini ePCI	2x full size PCIe with SIM holder
ePCI	N/A

### Storage Medium

SSD	1x full size mSATA SSD
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### Operating System

Microsoft Windows	Windows 10
Linux	Ubuntu

### Power

Type	AT
Input Voltage	9-30V DC ±10%
Minimum Input	12V, 3A
Power Adapter	Optional

### Power Dissipation

No-load	15 Watt
Full load	31 Watt

### physical Characteristics

housing	Aluminum Alloy Box
Mounting	Standard 35mm Din-rail 2 Bracket wall mounting
Dimensions	5.71 x 5.71 x 2.95 inch (145 x 145 x 75 mm)
Weight	1.6 Kg

### Environmental

Operating Temperature	-20 to 60°C (-4 to 140°F) Wide temperature SSD 0 to 45°C (32 to 113°F) General temperature HDD/SSD
Storage Temperature	-40 to 80°C (-40 to 176°F)
Operating Humidity	5 to 95% (Non condensation)
Shake	SSD applied: 1.5 Grms, IEC 60068-2-64, random, 5 to 500 HZ, 1hr/axis
Shock	SSD applied: 10 G, IEC 60068-2-64, Half sine wave, 11ms duration
EMC	CE/FCC Class A
Safety Certification	CCC

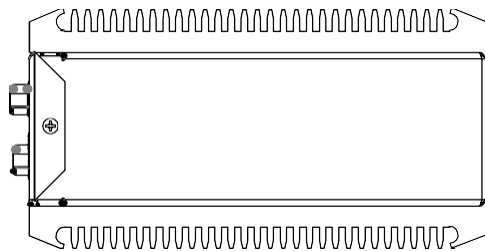
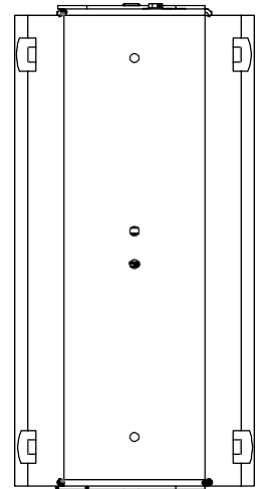
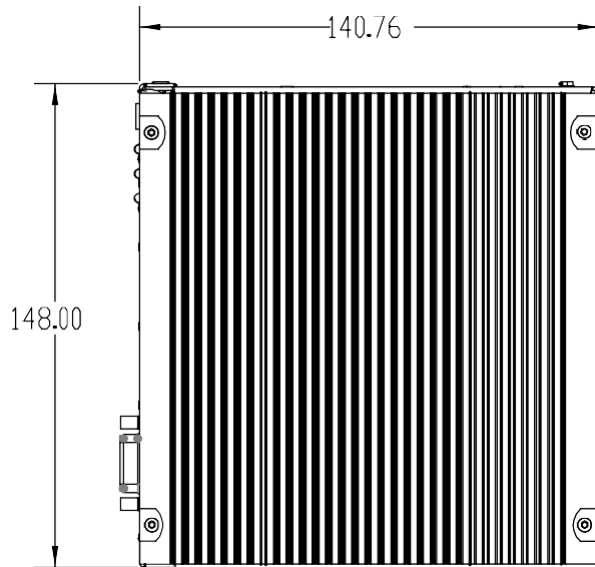
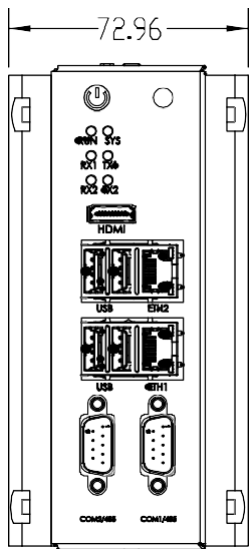
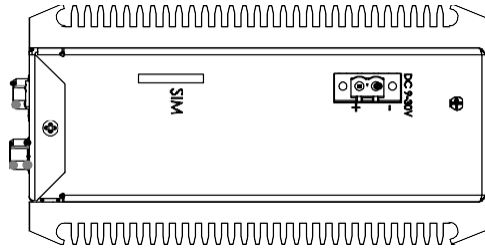
# ENCLOSURE ASSEMBLY INFORMATION



ITEM	DESCRIPTION
1	Power Switch
2	6x LED indicators
3	HDMI Port
4	4x USB3.0 Ports
5	2x Ethernet Ports

6	2x RS485 Ports
7	SIM card slot (option only)
8	9-30 VDC
9	Heatsink
10	Screw

# ENCLOSURE DIMENSIONS



## ORDERING INFORMATION

### Product

Part Number	Description
PMM0204	PMM Databank Configuration and Management Software
PMM0108	PMM Industrial Intelligence Hardware Unit

### Accessories

DIN01	1x DIN Rail Clip (included)
MB01	2x Mounting Bracket (included)

### Optional Modules

EC25-EUX Mini PCIe	LTE module for cellular connectivity.
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## CONTACT INFORMATION:

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



# 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 presence 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 replaceable 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