



Power Meter Monitor

**Business and Mission-
Critical Solutions Provider**

Zero Export Controller

User Manual



Model: PMM1104

Document: User Manual

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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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1. INTRODUCTION

This Document is a fully descriptive operational manual for PMM's zero export controller. Providing the operator with the needed information in terms of instruction and screen layout of the monitors, allowing for easy use.

PMM1104 is the ideal solution to rising utility rules for export control in residential and medium-sized commercial PV systems.

The export is achieved by restricting the quantity of solar energy fed into the grid by altering the set point of the system's inverters. As the integrated power analyzer calculates the total power at the connection point and compares it to the controller's programmable set point. The controller continually increases or decreases power on inverters while reading active power from the Net meter. PMM1104 raises power when the active power is above the maximum set point, and decreases power when the active power is below a particular set point.

PMM1104 zero export controller can be used in single- or three-phase systems and can be compatible with up to 12 different inverter manufacturers types. PMM1104 is a single device that combines a power analyzer, data logger, and controller. A new generation of single component solutions. The zero export at any moment prevents the solar system from connecting to the grid.

PMM1104 can be contained within multiple hardware chassis such as PMM0102 which has the ability to control up to 120 inverters in the same time, PMM0610 Stand-Alone which has the ability to control up to 60 inverters with an internal meter that excludes the need for an external one, and PMM0610 that controls up to 30 inverters with the need for an external meter.

Furthermore, the real-time control feature which can be used with web interface, provides a graphic representation of the historical and current grid and solar power use. The controller stores the data for further analysis on a USB. The self-consumption can be increased by applying intelligent switching of loads with user-adoptable thresholds.

PMM1104 supports a large number of different inverter manufacturers such as SMA, KACO, ABB, Fronius, HUAWEI and many more.

1.1 KEY FEATURES

- Integrated smart meter, logger and controller
- Preventing grid power feed-in
- Improve the zero export and self-consumption functions
- Real-time power control of up to 120 inverters at a time
- Universal Solution for all Inverter Brands
- Works flawlessly with a variety of PV setups and inverter brands
- Built-in web server enables monitoring and controlling

2. SPECIFICATIONS

2.2 Hardware CPU Chassis Specification

CPU



Option1: PMM0102



Option2: PMM0610 Stand-alone



Main Features

Number of inverters	120 Inverter	60 Inverter	30 Inverter
External meter need	Needed	Not needed	Needed

Interface

Ethernet	2x 10/100Base-T RJ45	1x 10/100/1000Base-T RJ45	1x 10/100/1000Base-T RJ45
USB	1x USB2.0 Type A 1x Micro USB	1x USB2.0 type A	1x USB2.0 type A
Wi-Fi	2.4 GHz		
Serial	4x RS485	2x customized Serial ports on ordering: <ul style="list-style-type: none"> Isolated RS485 Isolated RS422 Isolated RS232 	2x customized Serial ports on ordering: <ul style="list-style-type: none"> Isolated RS485 Isolated RS422 Isolated RS232
Optional Interface	16x pins connector with following options: (max 3 options can be chosen upon order) <ul style="list-style-type: none"> RS232 RS485 RS422 CAN bus Analog Input Analog Input Digital Input Digital Output 		
SD Slot	1x Micro SD card socket for user supplied card up to 64GB		

Power Parameters

Power Supply Options	8-40 VAC / 10-56 VDC 25-50 VAC / 36-72 VDC 85-285 VAC / 100-300 VDC	10-48 VAC / 10-60 VDC	10-48 VAC / 10-60 VDC
Power Connector	Phoenix Contact 4 pins 3.5mm	Phoenix Contact 4 pins	Phoenix Contact 4 pins

		3.5mm	3.5mm
Physical Characteristics			
Housing	Metal	Plastic	Plastic
Dimensions	4 x 4 x 1.75 inch (103 x 103 x 44 mm)	3.91x4.37x0.99 inch (99.4x111.2x22.6 mm)	3.91x4.37x0.99 inch (99.4x111.2x22.6 mm)
Mounting Options	Standard 35mm DIN Rail Direct Panel Mounting Front Panel Mounting 19" rack 1U	DIN Rail	DIN Rail

3. MECHANICAL INSTALLATION

3.1 CONNECTIONS

3.1.1 POWER

PMM0102 has customized power supply options including: 10-56 VDC, 8-40 VAC, 36-72 VDC, 25-50 VAC, 85-285 VAC / 100-300 VDC based on these options:

- Connect the power line to the CPU terminal block (POWER) as shown in the figure below.



Figure 1 PMM0102 Power Connection

PMM0610 has customized power supply options including: 10-48 VAC / 10-60 VDC.

- Connect the V DC+ to pin no.1 and V DC- to pin No.2 as shown in the figure below.

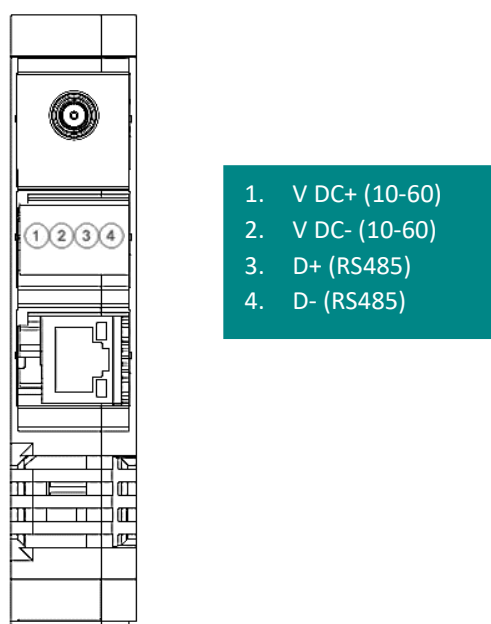


Figure 4 PMM0610 Power Connection

3.1.2. NETWORK

- PMM0102 has 2x 10/100 Ethernet port supports up to twenty clients.
- PMM0610 has 1x 10/100 Ethernet port.

4. ZERO EXPORT CONTROLLER INTERFACE

4.1 login

- Type the username “**admin**” and the password “**admin**”.
- Click on “Login” to login into the system.

🔗 **NOTE:** the username must be lowercase because the web server is case sensitive.



Figure 5 Login

4.2 Overview

Overview displays the status of the device and connected devices.

Overview consists of three sections:

- 1) Run Time Console: displays the device status, alarms and operational modes.
- 2) system Information: displays system's performance measures as it illustrates the usage and free percentage of:
 - CPU.
 - CPU.
 - RAM.
 - Disk.
- 3) System Summary which displays:
 - The software version.
 - Last Time Started.
 - Servers' status which displays the status of Signal-R server and its address, RTU Modbus Slave and TCP Modbus slave, the number of connected TCP clients, number of connections and number of tags.
 - Web API status, address, and number of calls.
 - Alarms & Events.

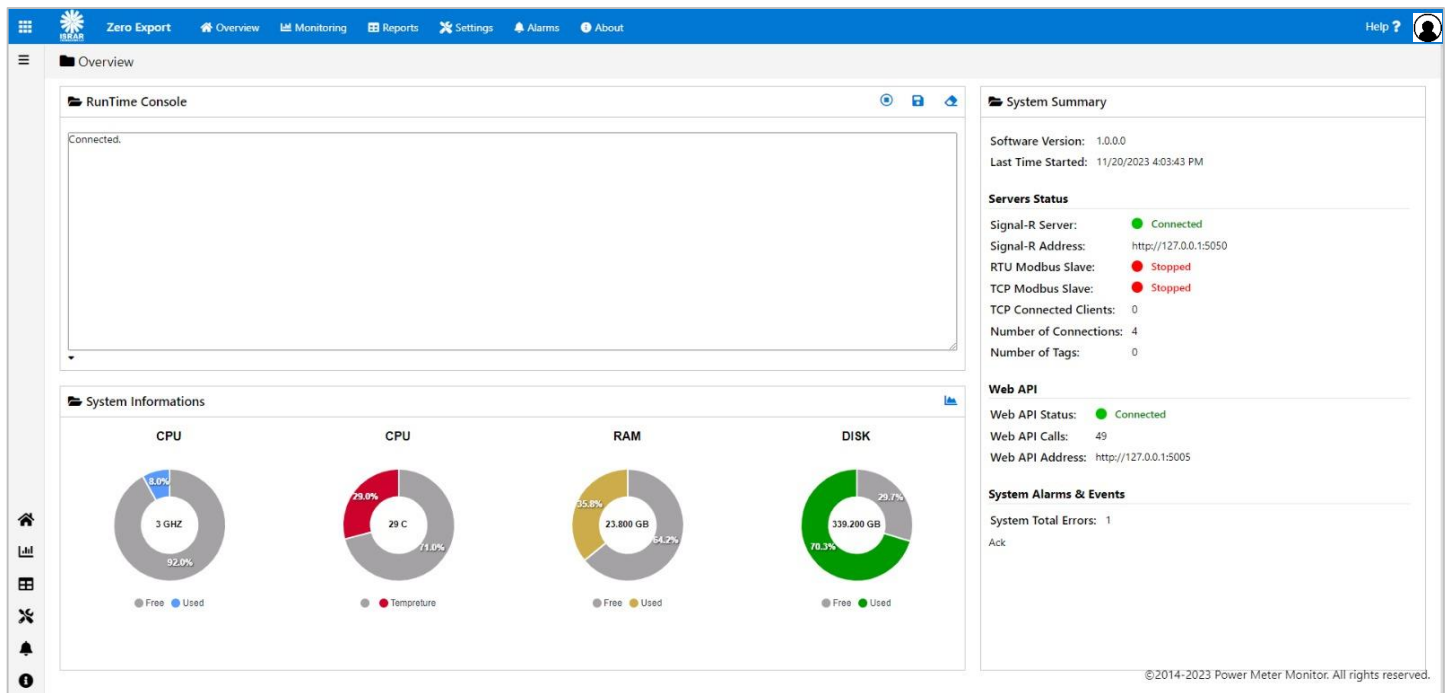


Figure 6 Overview

4.3 Monitoring:

The user is able to monitor the status of connections and tags from this page.

- To the auto refresh of the status check the box "Auto Refresh"

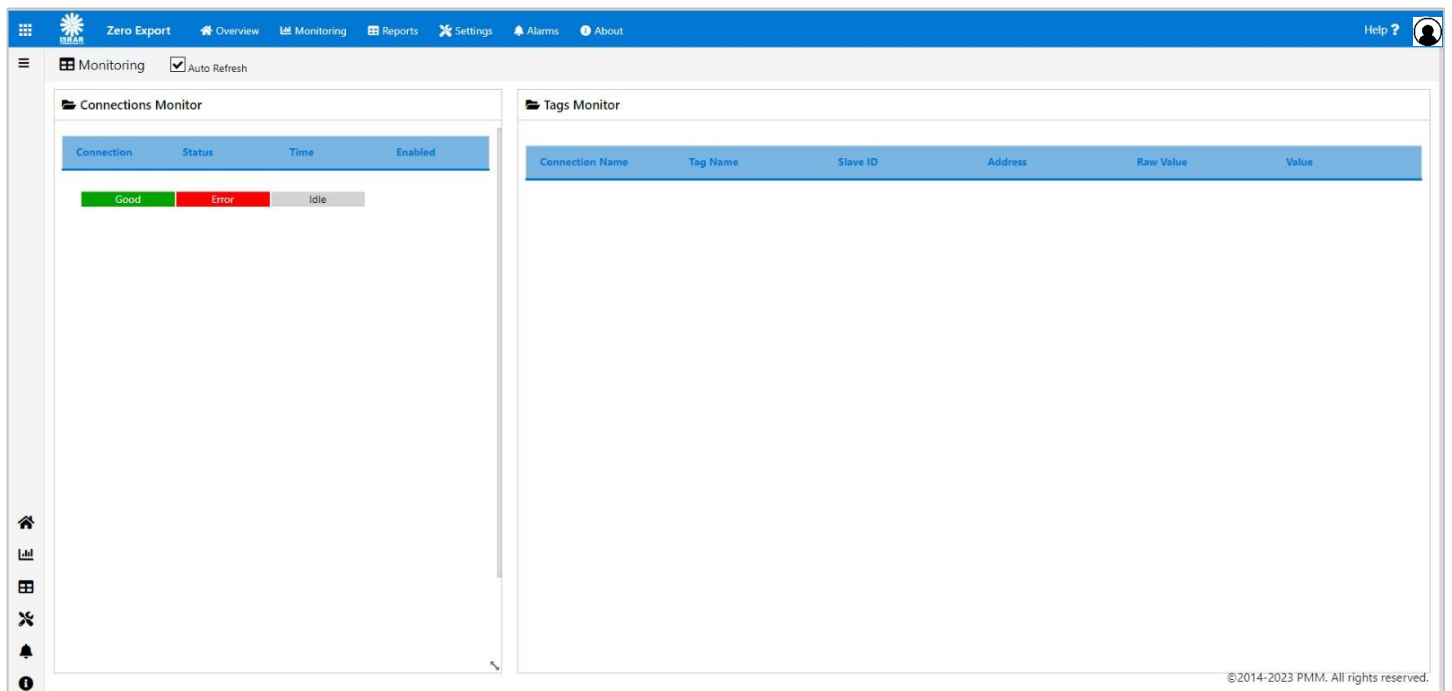


Figure 7 Monitoring

Connections Monitor:

- Displays the connections, their status whether **Good**, **Error**, **Idle**, the time and whether the connection is enabled or disabled.

Status	Description
Good	The connection status is good and has no problem
Error	There is an error with the connection that the user must fix
Idle	The connection is neither connected nor has a problem to fix

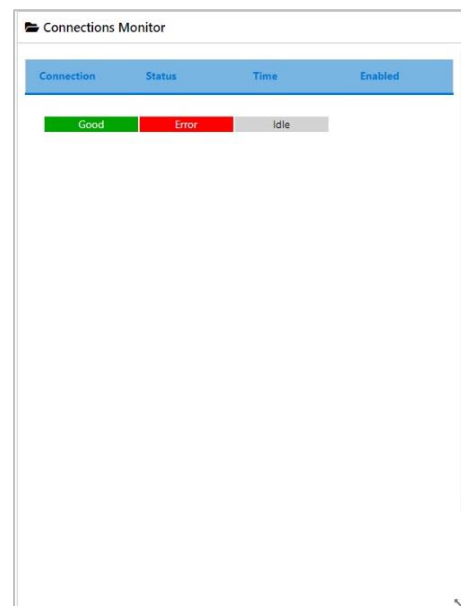


Figure 8 Connections Monitor

Tags Monitor:

- Displays the connection name, the tag name slave ID, address, raw value; which is the initial input value without any processing and the value which is the value after processing whether scaling or ordering.

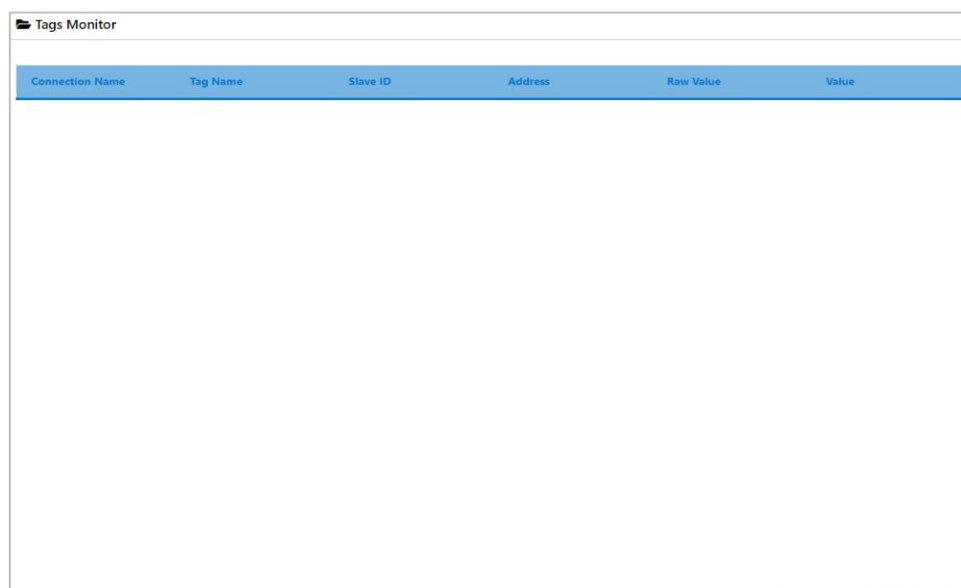


Figure 9 Tags Monitor

4.4 Reports

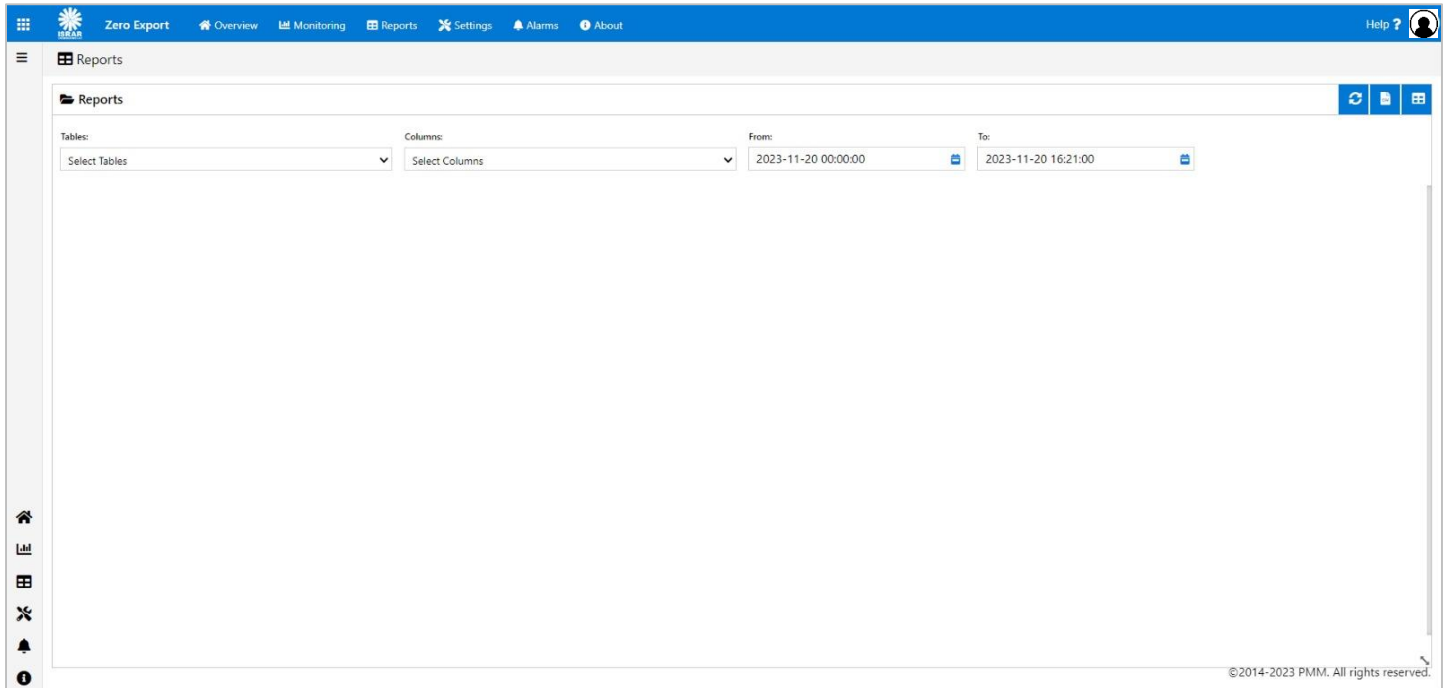


Figure 10 Reports

This page enables the user to export the data logged in the data base into an easy-to-read format for operators.

- Choose from the “Tables” drop list the desired timer to export the data from.
- Choose from the “Columns” drop list desired tags to export the data from.
- Choose the desired from to date from the calendar.
- Click on “Refresh” to start uploading the data.
- Click on “Export to PDF” to save the data as PDF.

NOTE: In case of requesting a large amount of data >3000 record, there are two options available:

- Either the data will be downloaded by default in separated .CSV file with the current date instead of being displayed on the screen.
- Or by using direct WebAPI link as follow:
[http://\(Your Device IP Address\):5005/pmmapi/command?commandString=command,sqlselectinjson,query statement](http://(Your Device IP Address):5005/pmmapi/command?commandString=command,sqlselectinjson,query statement)
- Where the query statement:

Select **TagsName** from **TimerName** where “**Timestamp**” ≥ “**From Date**” and “**Timestamp**” < “**To Date**”

TagsName: you can insert tags name separated by comma and each value between two back quotations (') .. e. g: 'Tag01','Tag02',...etc

TimerName: you can insert Timers name separated by comma and each value between two back quotations (') .. e.g.: 'Timer01','Timer02',...etc

From Date & To Date : should be in Unix format (YYYY-MM-DD HH:mm:ss) and between two single quotations (') e.g: `2010-08-20 23:00:00`

NOTE:

- The WebAPI command shouldn't exceed 255 characters in total.
- Keep some delay between Commands to not overload device CPU.

4.5 Basic Settings

Zero Export

Overview

Monitoring

Reports

Settings

Alarms

About

Help ?

Basic Settings

Basic Settings

Server Name: PMMailConverter

Local Date: 23 / 11 / 20

Local Time: 16 : 22 : 17

Set time to: Server (NTP)

NTP/IP Address: 127.0.0.1

RTC: Available

General Servers Configuration

Server Auto Start: ☒

Web API Auto Start: ☒

Enable Datalogging: ☐

Enable Scripts: ☐

API Port: 5005

Reading Cycle: 20 (≈500 ms)

Keep Record For:

Stop Rebuild

Network Settings

Name: Ethernet1

IP Assignment: Manual

IP Address: 127.0.0.1

Netmask: 255.255.255.0

Gateway: 192.168.1.1

DNS Server 1: 0.0.0.0

DNS Server 2: 0.0.0.0

Status: ETHERNET1 NOTFOUND

Name: Ethernet2

IP Assignment: Manual

IP Address: 192.168.2.114

Netmask: 255.255.255.0

Gateway: 192.168.2.0/24

DNS Server 1: 8.8.8.8

DNS Server 2: 4.4.8.8

Status: ETHERNET2 NOTFOUND

Serial Settings

Port 1 Name: COM1

Baud Rate: 9600

Parity: Even

Data Bits: 8

Stop Bits: 1

Flow Control: None

Port 2 Name: COM2

Baud Rate: 9600

Parity: Even

Data Bits: 8

Stop Bits: 1

Flow Control: None

Port 3 Name: COM3

Baud Rate: 9600

Parity: Even

Data Bits: 8

Stop Bits: 1

Flow Control: None

Port 4 Name: COM4

Baud Rate: 9600

Parity: Even

Data Bits: 8

Stop Bits: 1

Flow Control: None

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Figure 11 Basic Settings

4.5.1 Basic Settings

Basic settings display the server’s name, location, time zone, local date and time, set time to and NTP/ IP address.

Basic Settings

Server Name: PMMailConverter

Local Date: 23 / 11 / 20

Local Time: 16 : 22 : 17

Set time to: Server (NTP)

NTP/IP Address: 127.0.0.1

RTC: Available

Figure 12 Basic Settings

- The user can change the time zone based on the server location.

4.5.2 General Server Configuration

General Servers Configuration

Server Auto Start:

☒

Web API Auto Start:

☒

Enable Datalogging:

☐

Enable Scripts:

☐

API Port:

5005

Reading Cycle:

20

(> = 500 ms)

Keep Record For:

Stop

Rebuild

Figure 2 General Server Configuration

- To enable the server auto start, check the box “server auto start” this means that the data will be automatically saved to the data base.
- **NOTE:** if the user wants to control the process manually; click on “Start” to start connecting with the server and saving the data in the data base and click on “Stop” to stop the process.
- To enable Web API Auto Start, check the box “Web API Auto Start”.
- To enable datalogging, check the box “enable datalogging”.
- To enable scripts, check the box “enable scripts”.
- Type the API port.
- Type the reading cycle (reading cycle $\geq 500\text{ms}$).
- Select from the drop list the time period which is desired to keep the record for.

Parameter	Value
Keep Record For:	One month
	Three months
	Six months
	One year
	Forever

Rebuild: click on “Rebuild” when a new logging timer is defined or a new tag to add them in the data base and start logging data into them.

4.5.3 Network Settings

PMM0102 has 2x TCP ports while PMM0610 has only one, it is required to insert the settings for each port manually by the user.

Network Settings

Name

Ethernet1

IP Assignment

Manual

IP Address

127.0.0.1

Netmask

255.255.255.0

Gateway

192.168.1.1

DNS Server 1

0.0.0.0

DNS Server 2

0.0.0.0

Status

ETHERNET1 NOTFOUND

Name

Ethernet2

IP Assignment

Manual

IP Address

192.168.2.114

Netmask

255.255.255.0

Gateway

192.168.2.0/24

DNS Server 1

8.8.8.8

DNS Server 2

4.4.8.8

Status

ETHERNET2 NOTFOUND

Figure 3 Network Settings

- Insert the IP Address, Netmask, Gateway for each port.
- After the user completes inserting the settings for the ports, click on “Save”.
- If the settings are saved “Updated Successfully” will be displayed at the head of the page.

 **NOTE:** once the user has set the ports settings the status of each port will be updated.

Network Settings:

Parameter	Value	Notes
Name	Ethernet 1, Ethernet 2	
IP Address	Default IP Address is 192.168.1.240 (or other 32-bit number)	The IP (Internet Protocol) address identifies the server on the TCP/IP network.
Netmask	255.255.255.0 (or other 32-bit number)	Netmask identifies the server as belonging to a Class A, B, or C network.
Gateway	192.168.1.1, 192.168.2.1, 192.168.3.1, 192.168.4.1	
Status	Connected/ disconnected/ not found	Displays the connection status

4.5.4 Serial Settings

Figure 4 Serial Settings

There are four serial ports for PMM0102 and two ports for PMM0610 the user must set the required parameters for each port.

- Select the Baud Rate ranges from 75 to 128000 bps, Parity, Data Bits, Stop Bits, Mode (RTU or ASCII) from the drop list for each port
- Type the timeout in (ms).
- Click on “Save”
- If the settings are saved “Updated Successfully” will be displayed at the head of the page

NOTE: selecting the mode is adjustable only if the user has chosen Modbus gateway mode.

Serial settings:

Parameter	Value	Notes
Port Name	COM1, COM2, COM3, COM4	
Baud Rate	75, 110, 134, 150, 300, 600, 1200, 1800, 2100, 4800, 7200, 9600, 14400, 19200, 38400, 57600, 115200, 128000 bps	The serial port baud rate on the server must match the serial baud rate of the connected device.
Parity	None, Odd, Even, Mark, Space	This setting must match the data format of the connected device
Data Bits	7,8	This setting must match the data format of the connected device
Stop Bits	1, 1.5, 2	This setting must match the data format of the connected device
Flow control	None, RTS/CTS, RTS Toggle	
Interface	RS-232, RS-422, RS-485 2 wires, RS-485 4 wires	
Timeout	Any inserted value in ms	Timeout field is used to configure how long the gateway will wait for a response from a Modbus ASCII or RTU slave. NOTE: This field is set independently for each serial port NOTE: the timeout is set in ms

4.5.5. Wi-Fi Settings and Connection

WiFi Settings

Name: WiFi

IP Assignment: Manual

IP Address: 192.168.2.114

Netmask: 255.255.255.0

Gateway: 192.168.2.0/24

DNS Server 1: 8.8.8.8

DNS Server 2: 4.4.8.8

Status: WI-FI NOTFOUND

WiFi Connections

Wi-Fi Networks: -- No Wifi Network Available --

Password:

Connect

Disconnect

Status: Disconnected

Figure 16 Wi-Fi Settings

- Select the IP assignment to be manual or automatic.
- Type the IP address of the network at the specified space.
- Type the Netmask at the specified space.
- Type the gateway address.
- Type the DNS server 1 and server 2.
- The status will indicate if the Wi-Fi is connected or not found.
- Wi-Fi connection enables the user to search for available Wi-Fi networks and type the password then click on “connect”.
- The status will be changes upon the status of the network to be whether connected or disconnected.

4.6 Zero Export Settings

Zero Export Settings

Numbers Of Inverters: 0

Inverters Settings

Action	Name	Template	Kit	Connect To Meter
--------	------	----------	-----	------------------

Numbers Of Meters: 0

Meters Settings

Action	Name	Template	Kit
--------	------	----------	-----

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Figure 17 Zero Export Settings

- The user can add all the installed inverters and connect them with the meters through this page.
- Each inverter can be connected to one meter only.
- PMM0102 can be connected to 120 inverters, PMM0610 stand-alone can be connected to 60 inverters and PMM0610 can be connected only to 30 inverters.

The screenshot displays two side-by-side panels: 'Inverters' and 'Meters'. Each panel features a header with a folder icon and a '+' button. Below the header, there is a 'Numbers Of' section with a counter set to 0. The main area of each panel is titled 'Settings' and contains a table for adding new items. The 'Inverters' table has columns: Action (with a green plus icon), Name, Template (a dropdown menu currently showing 'Generic'), kW, and Connect To Meter (a dropdown menu). The 'Meters' table has columns: Action (with a green plus icon), Name, Template (a dropdown menu currently showing 'Generic'), and kW. Both tables are currently empty of data rows.

Figure 18 Adding inverters and meters

- Click on the add icon “+”.
- Type the name of the inverter/meter you want to add.
- Choose the template from the drop down list.
- Type the power in kW.
- For inverters; choose which meter to connect to.
- Click on “Save”.
- Numbers of inverters and meters added will be shown above.

4.7 Quick Settings

This page enables the user to add logger timers and control the settings of connections and tags.

Zero Export Quick Settings

Logging Timer

Timer: halfsecond

☒ Enabled ☒ Zero Based

Interval: 500 (ms)

Delay: 0 (ms)

Connections

Name:

Type: Modbus TCP

IP Address:

Port:

Com Port: COM1

Timeout:

ID:

Tags

Tag Name:

Tag Settings

Basic Settings

☐ Enabled

Slave ID:

Type: Bool

Bit Number:

Address:

Order: ABCD

Swap Order: 1

Modbus Type: F01 : Read Coils

Scaling

☐ Enable Scaling

☐ Scale to float

Upper Limit:

Lower Limit:

Scale X1:

Scale X2:

Scale Y1:

Scale Y2:

Logging Settings

Log Timer 1: NON

Log Timer 2: NON

Log Timer 3: NON

$V_{out} = V_{in} [(Y2-Y1) / (X2-X1)]$

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Figure 19 Modbus Settings

4.7.1. Logging Timer

Logging Timer

Timer: halfsecond

☒ Enabled ☒ Zero Based

Interval: 500 (ms)

Delay: 0 (ms)

Figure 20 Logging Timer

- Click on the add icon “+”.
- Type the desired name in “Timer” field.
- Check “Enabled” to enable the timer to save the values in the data base.
- Type the desired interval needed between the readings in (ms).
- Type the desired delay time needed between the readings in (ms).
- Click on “Save”.
- Click on “Delete” to delete any not needed timer.

NOTE: after following the previous instructions make sure to click on “**Rebuild** in the general server configurations” to add the timer in the data base and start logging into it.

4.7.2. Connections Settings

Figure 21 Connections Settings

- Click on the add icon “+”.
- Type the desired name for the connection.
- Check “Enabled” to enable the connection data logging.
- Choose the type of the connection from the drop list.

Parameter	Value
Connection Type	Modbus TCP
	Modbus UDP
	Modbus RTU
	Modbus TCP Slave
	Modbus RTU Slave

- Set the IP address.
- Set the port number.
- Choose the com port from the drop list.
- Type the timeout for the connection in (ms).
- Type the slave ID.
- Click on “Save”.

- ✍ **NOTE:** after following the previous instructions make sure to click on “**Rebuild**” in the general server configurations” to add the connection in the data base and start logging into it.
- To delete a not needed connection click on “delete”.

4.7.3. Tags Settings

The screenshot shows the 'Tag Settings' window with the following sections:

- Basic Settings:**
 - ☐ Enabled
 - Slave ID:
 - Type:
 - Bit Number:
 - Address:
 - Order:
 - Swap Order:
 - ModBus Type:
- Scaling:**
 - ☐ Enable Scaling
 - ☐ Scale to float
 - Upper Limit:
 - Lower Limit:
 - Scale X1:
 - Scale X2:
 - Scale Y1:
 - Scale Y2:
 - Formula: $V_{out} = V_{in} [(Y2-Y1) / (X2-X1)]$
- Logging Settings:**
 - Log Timer 1:
 - Log Timer 2:
 - Log Timer 3:

Figure 22 Tags Settings

4.7.3.1. Basic Settings

- Check “Enabled” to enable the connection data logging.
- Type the slave ID.
- Choose the data type from the drop list.

Parameter	Value
Type	Bool
	Bitfield 16
	Bitfield 32
	Int16
	UInt16
	Int32
	UInt32
	Float32

- Type the “Bit Number”.
- Type the “Address”.
- Choose the tags “Order”.

Parameter	Value
Order	ABCD
	BADC
	CDAB
	DCBA
	CDBA
	DCAB

- Choose the swap order from the drop list.
- Choose the Modbus type from the drop list which sets the desired function for the tag.


Parameter	Value
Modbus Type	F01: Read Coils
	F02: Read Discrete Input
	F03: Read Holding Registers
	F04: Read Input Registers
	F05: Write Single Coil
	F06: Write Single Register

4.7.3.2. Logging Settings

- The user can choose up to three log timers for logging the tags in.
- Choose the log timers needed from the drop lists.

4.7.3.3. Scaling

- To enable the scaling function for the logged values, check the box “Enable scaling”.
- To scale to float, check the box “Scale to float”.
- Set the upper and lower limits.

 **NOTE:** the upper and lower limits values shall only be a number, 0 or NON.

- Set the scaling values: X1, X2, Y1, Y2.

Scaling values conditions:

1) $X2 \neq X1$ && $X2 > X1$

2) $Y2 \neq Y1$ && $Y2 > Y1$

The scaling equation:

$$V_{out} = V_{in} ((Y2 - Y1) / (X2 - X1))$$

- Click on “Save” to save the tags settings.
- All the tags along with their settings will be displayed in “Tags”.

7.8. Alarms

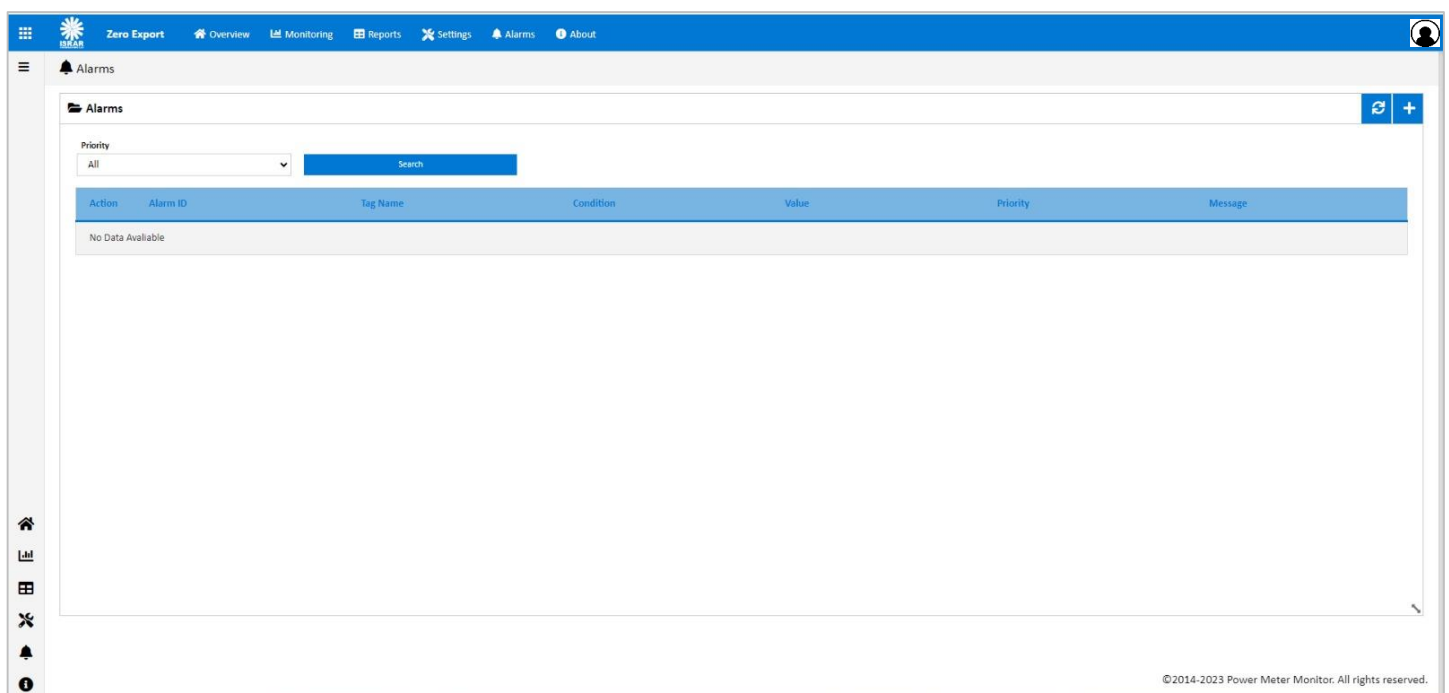


Figure 23 Alarms

This page enables the user to define and set the conditions on which an alarm or warning must be issued.

- Click on “Add icon +”.
- Specify the desired action that need to be taken based on the alarm.
- Specify the alarm ID.
- Specify the tag that is associated with the alarm.
- Set the condition that makes the alarm issued.
- Set the value of the alarm.
- Set the priority of the alarm.
- Type the message that comes along with the alarm or warning.
- Click on “Refresh” to save the new alarms.

The priority types:

Parameter	Value
Priority	All
	Disabled
	Alarm
	Warning
	Message
	Event
	General Alarm


4.8 About

About Page consists of three sections:

- 1) General Information: Displays general information about the data logger server including:
 - Model Name.
 - Serial Number.
 - Software Version.
 - Firmware Version.
 - Hardware Base.
 - Hardware Version.

 **NOTE:** general information is set by the manufacturer and it is not editable.

- 2) Project settings & Firmware:
 - Click on “Backup” to create project settings backup.
 - Click on “Restore” to restore a previously created project setting.

 **NOTE:** Same instructions are applicable for Firmware as the user can create firmware backup or restore a previously created firmware.

- 3) Alarms & Events Log: The user may adjust the duration of keeping logs, download logs and delete logs.

Adjust Keeping Alarms & Events Log Duration Instructions:

- Type the number of days you want to keep the logs for in the specified field and check the box to enable the setting.
- Click on “Save”.

Download Alarms & Events Log Instructions:

- Choose the required alarms & events log based on the day and date from the drop list.
- Click on “Download”.

Delete Alarms & Events Log Instructions:

- Choose the required alarms & events log based on the day and date from the drop list.
- Click on “Delete”.

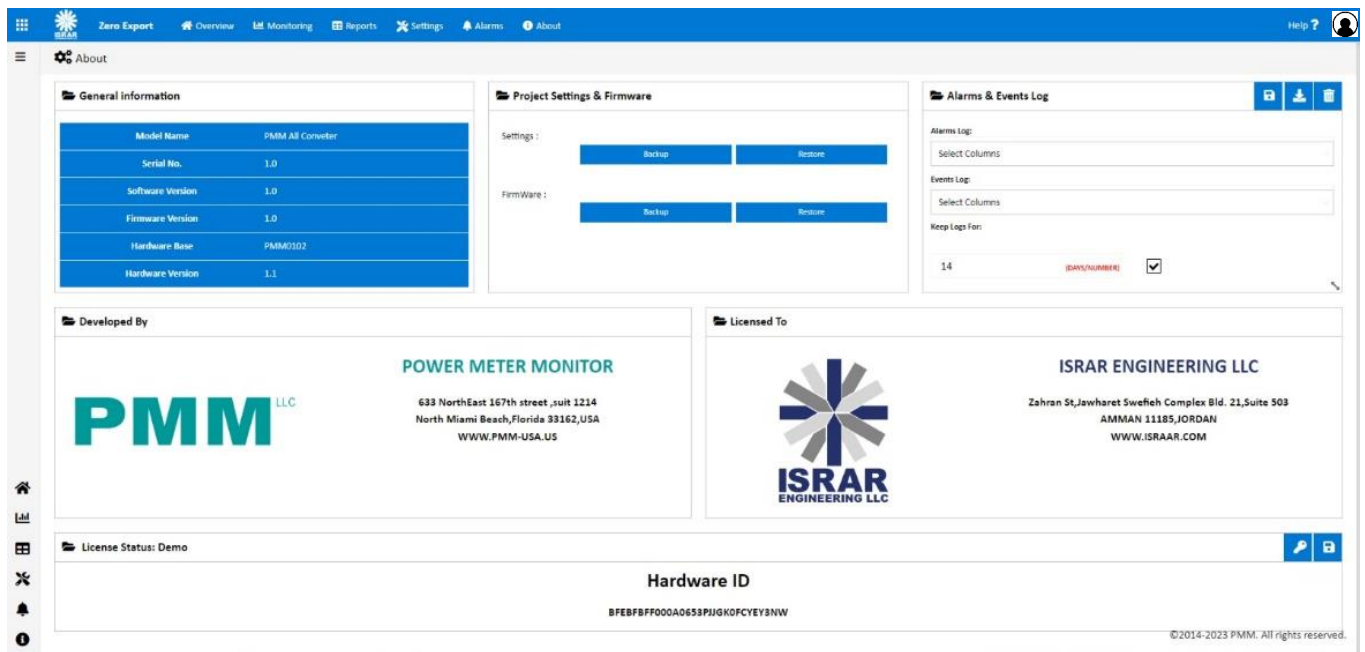


Figure 24 About

4.9 Sign Out

After completing settings configuration, the user signs out of the system.

- Click on “Admin”.
- Click on “Sign out” then the log in window will be displayed.

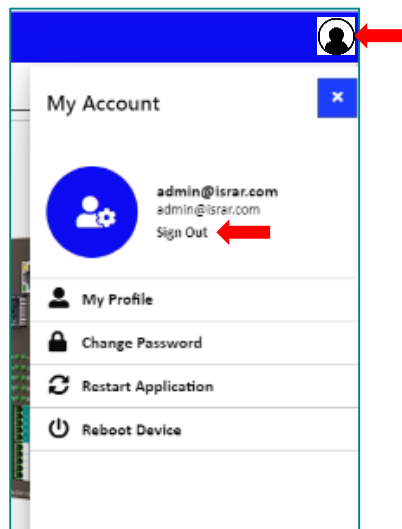


Figure 25 Sign Out