

Power Meter Monitor

Business and Mission-

Critical Solutions Provider

Basic Modbus TCP to RTU Gateway



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Model: PMM0407 Document: User Manual Document version: 1.3 Date: October 2022



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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 <u>Pmm-usa.us</u> 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 between Modbus TCP to 2 or 4 RTU with optional Fiber Optic Internal Switch
- Up to 20 simultaneous TCP masters
- Easy and smooth configuration via web-based server
- Embedded traffic monitoring as well as diagnostic information for fast trouble shooting
- Optional 2 or 4 Ethernet 10/100 ports
- Optional supports 2.4/5 GHz WIFI
- Optional 2x customized Fiber optic ports
- 2 or 4 RS485 RS232 Serial communication ports (Customizable)
- Baud rate: 110-256000 bps
- Different Power supply options with over voltage and reverse polarity protection
- Operating temperature: -40 to 75°C (-40 to 167°F)
- Storage temperature: -40 to 85°C (-40 to 185°F)
- Ambient relative humidity 5 to 95% (non-condensing)
- EMI, EMS, EMC and shock protected
- Serial port with power surge ±2.5kV isolation protection
- Enclosure Ingress Protection Code: IP54

DESCRIPTION

PMM0407 is a highly configurable industrial Ethernet gateway device capable of quick protocol conversion on Modbus Networks.

Modbus slave devices are simply incorporated into an existing Modbus TCP network, where slave devices are easily reached by their respective masters. PMM0407 provides the flexibility needed to fulfill the different conditions that happen with field devices that use diverse communication protocols to connect any type of industrial solution network such as the SCADA system.

PMM0407 gateways support a system log that main function is to record events so it can be easily monitored; users can easily review log data remotely through the web interface. The gateways also support status monitoring and fault protection functions. The status monitoring function notifies the SCADA system. When a device gets disconnected or does not respond or faces any error or failures, in such cases the SCADA system gets alarms of the status of each end device to the operators to make corrective actions immediately.

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SOFTWARE SPECIFICATIONS

Ethernet Software Features

Protocols	Modbus TCP
Configuration Options	Web Console (HTTP/HTTPS), Telnet Console
Time Management	NTP Client
Serial Software Features	
Protocols	Modbus RTU/ASCII

Serial Console

HARDWARE SPECIFICATIONS

Configuration Options

PMM0407 can be housed in several PMM CPU platforms such as:

- PMM0102 (default platform): PMM Industrial Computer, CPU: Allwinner H3, Quad-core Cortex-A7, DRAM: 512MB RAM and Embedded 8GB eMMC hard drive, Interfaces: 2x Ethernet ,4 x Serial ports.
- PMM0304: PMM Industrial Ethernet switch with Wi-Fi, CPU: MediaTek MT7688AN MIPS24KEc, DRAM:128GB, Interfaces: 4x 10/100 Ethernet (RJ45) + SFP or SC1X9).
- PMM0305: PMM Industrial Ethernet switch, CPU: MediaTek MT7688AN MIPS24KEc, DRAM:128GB, Interfaces: 2x Ethernet + 2x fiber optics + 2x Serial ports.
- PMM0103: PMM Industrial Computer, CPU: Allwinner H3, Quad-core Cortex-A7, DRAM: 512MB RAM and Embedded 8GB eMMC hard drive equipped with 3x RS485 Serial ports, and plastic light housing.

The hardware platform is chosen in the order configuration, refer to PMM website for more details about the CPUs <u>https://www.pmm-usa.us/Industrial-Computer.php</u>

ORDERING INFORMATION

	Ord	er Conf	igurati	on tabl	le	
PMM0407	-X	-09xx	-09xx	-09xx	Table1* Comm port options	
1. CPU Platform: PMM0102						
Power supply					COM Ports Options	
10-56 VDC	-1				Analog input PMM0901	L
8-40 VAC	-2				Analog output PMM0902	2
36-72 VDC	-3				CANBUS (UART) PMM0910)
25-50 VAC	-4				CANBUS (UART) PMM0910)i
85-285 VAC/100-300 VDC	-5				CANBUS (SPI) PMM0091	1
COM Port 1				,	CANBUS (SPI) PMM0911	li
RS485		-0912			RS485 PMM0912	2
CAN Bus]	-0910			RS422 PMM0913	<u>3</u>
ANALOG INPUTS		-0901			RS422 PMM0914	ŀ
DIGTAL INPUT		-0920			RS232 PMM0915	5
GSM/GPRS		-0917			LTE PMM0916	5
See the COM Ports table for more options					Digital input PMM0920)
COM Port 2 (Same as COM Port 1			-09xx		Digital output PMM0921	L
options)					_	
					-	
COM Port 3 (Same as COM Port				-09xx		
1&2 options)						
					7	
COM Port 4 (Same as COM Port				-09xx		
1&2&3 options)						
PMM0407						
2. CPU Platform: PMM0103					-	
Power supply						
10-56 VDC	-1					
COM Port 1					1	
R\$485		-0912				
See the COM Ports table for more options			-00vv			
contions)			-03XX			
options)						
COM Port 3 (Same as COM Port				-09xx		
1&2 options)						

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PMM0407

3. CPU Platform: PMM0304

Power supply	-x	-X
10-56 VDC	-1	
8-40 VAC	-2	
36-72 VDC	-3	
25-50 VAC	-4	
85-285 VAC/100-300 VDC	-5	
Fiber Optic Options		
1x SC Ports		-A
1x SFP Ports		-B
PMM0407		

4. CPU Platform: PMM0305

Power supply		
10-56 VDC	-1	
8-40 VAC	-2	
36-72 VDC	-3	
25-50 VAC	-4	
85-285 VAC/100-300 VDC	-5	
Fiber Optic Options		
1x SC Ports		-A
1x SFP Ports		-B
Fiber Optic Options		
1x SC Ports		-A
1x SFP Ports		-B

CONTACT INFORMATION:

For direct inquiries or any customized orders, contactus on <u>sales@Pmm-usa.us</u>

MODBUS GATEWAY INTERFACE

login

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- 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.

ISRAR	ISRAR ENGINEERING ,LLC	
Username		
Password		
		Login

Once the user has logged in successfully the default main web page "General Information" will be displayed as shown in the figure below.

=	🗱 😂 General Informations 🍰 Users Access			
=	📽 General Informations			
	Company Name: Company Name: Company Name: Company Prove: Company P	pmm-v68.ud mt +962789758508		
	Company Address:	Jordan		
	Software licenses:		PMM0103	PMM0107
	license :	PMM All Converters	Industrial Computers - Arm Based Computers	Industrial Computers - 86 Based Computerss
	likees version:	10	COMPACT AM BASED EMBEDDED INDUSTRIAL COMPUTERS PMMUTER in angeof paraverlar reliable fuelness time based embedded industrial comparts, power by Alphanes 18 (CP), which aftes high sectormance processing with a high degree of functional integration.	Xe6 6ASCD EMBEDDED INDUSTBAL COMPUTER PMM0000 is a nggel powerkel milable fatters industrial embedded computer, powerskel privat Amore 'ss-73830 C/X, which offers a high keel of parformance and four feed of poter consumption.
\$				
20				©2014-2022 Israr Engineering LLC. All rights reserved. ୍ଥିମ



Set General Information and Web Page Theme

The "general information" that is displayed at the main page must be set originally by the user. As well as, the user can redesign his own theme style to make the web page more comfortable. **Inserting general information instructions:**

• Click on "the user's icon" in the right top of the page.

	stan denoral informations 💄 Users Access				
	Ceneral Informations		1		My Account
	ISRAR				admin@isras.com sdmin@isras.com Sign Out
					My Profile
	Company Name:	prom-usauus		-	Change Password
	Company Email:	m			() Reboot Device
	Company Phone:	+962789705508			-
	Company Address:	Jordan			
	Software licenses:		PMM0103		
	license :	PMM All Converters	Industrial Computers - Arm Based Computers	Industrial	
	license Version:	1.0	COMPACT ARM BASED EMBEDDED INDUSTRIAL COMPUTERS	X86 BASED	
			PMMMIDIS is a rugged powerful reliable failess tinux based embedded industrial computer, powered by Albuhner H3 CPU, which offers high serformance processing with a high degree of functional integration.	PMM0107 is a r embedded comput which offers a h	
20					
				©2014-	N

• Click on "My Profile" then the web page at which the user can modify the information manually will be displayed as shown below.

De Account Settings User Company Project Type superadmin Name pmm-vda.us Name Pecs Type superadmin Name pmm-vda.us Name Pecs That admin@forscom mini timal dadress Jandan Theme 496278970508 Standan Address Jandan Starkay Astern Management/Mafad Address Jandan Theme Statings Name Page Header Content Tabler Sp & Littps/stating Name Imal Imal Main Header makgeround Imal Imal Imal Sp & Littps/stating Main Header Rakgeround Imal Imal Loge Volve Imal Imal Imal Imal Loge Volve Imal <td< th=""><th></th></td<>	
User Company Project Tye wuperdmin Name permsussian Name demin@firezcom Plone +96278970508 Rmail demin@firezcom Plone +96278970508 Biner +96278970508 Envail mtr Adress Jordan Address Jordan Starkup Austress Jordan Address Terme Stattigt Internet Mane Merrin Position Radgeround Internet Mane Merrin Position Log Outer Text Internet Mane V Main Header Radgeround Isordier Internet Merin Position Main Header Page Header Content Log Outer Internet Merin V Milin Header Marken V Internet Merin V Vidjets Buttons Inputs	
Pye wgeradmin Name person stane Person Name admin@feraccom Hone +95278570508 Hone +95278570508 Enall admin@feraccom Hone +95278570508 Hone +95278570508 Stanip Address Jordan Address Jordan Address Stanip Aust Management/offault Name Person Hones +95278570508 Theme Sattings Aust Management/offault Name Address Jordan Address Theme Sattings Name Page Header Content Main Header Background Background Inst Itage Volut Itage Background Itage You under Widjets Buttons Inputs	
Name admin@trazcom Plane +96278575508 Plane +96278575508 Imail string@trazcom imail stri imail draid Plane +96278575508 imail string draid draid Plane +96278575508 imail string draid draid Plane +96278575508 imail string draid draid Startup Aust Management/Malad Address indrain https://www.g Former Name Pore Namin Header Page Header Content Money Tops (table) inat inat inat Log olar v Badground inat inat Fort cathr inat inat inat Widjets Buttons Inputs	
Imail admin@first.com fmail fmail detail Phose +96278970508 Address Ardem Address Starkup Aust Mangresset@taflait Address Ardem Address Formas Settings Incent Managresset@taflait Incent Managresset@taflait Incent Managresset@taflait Incent Managresset@taflait Themes Settings Incent Managresset@taflait Page Header Content Mour Insoltion Tape if yes Kon(befault) Inset Logo Color Inset Inset Inset Tout Color Widjets Buttons Inputs	08
Phone +942789705508 Address Andress Andress Startup Acat Masagement@htflash Acat Masagement@htflash Acat Masagement@htflash Acat Masagement@htflash Theme Sattings Theme Sattings Main Header Page Header Content Mour Investion Top & Lett[Default] Main Header Page Header Content Mour Investion Top & Lett[Default] Inve Inve Inve Logo Color Wonte Background Inved Inved Fort Color Withingers Withingers Inputs	
Startup Accet Management/balalt Storation Incredient Theme Satings The Satings	
Image: Settings Theme: Settings Theme: Settings Theme: Settings Mona Position Top 5 Latt[Default] Main Header Page Header Content Sackground Sackground Logo Optime Background Foot Background Widjets Buttons Inputs	oogle.com/mi
Numer Dave Wain Header Page Header Content Mem Problem Top Upt Background Background Image Page Logo Color Wind Wein Voille Image Page Image Page Image Page Logo Color Wind Wein Voille Image Page Image Page Image Page Fost Calter Image Page Image Page Image Page	С в +
Tops Lut(bulk) • Badgeound • Badgeound • Badgeound • Badgeound • • Badgeound •	С в +
togo color text vite text togo color text togo	S 8 +
root Calerr Vidjets Buttons Inputs	S B +
Widjets Buttons Inputs	2 B +
Widjets Buttons Inputs	2 B +
	2 B +
Background Background Background	3 9 +
Sub Background v Test v Test	3 9 +
Text Radius Opp Border Constantiation	2 D +

- Type the user's name, Email, and phone.
- Select the startup page which will be displayed once the user has logged in to the server.
- **NOTE:** The default startup page is "Assets Management".
- Type the company's name, phone, Email, and address.
- Type the project's name, phone, Email, address, and location.
- After completing inserting all the user's, company's and project's information accurately click on "Save".
- If the information is saved "Updated successfully" will be displayed at the head of the page.
- NOTE: if the information is updated successfully the user will be able to view the general information at the startup page.

Web page theme settings:

- 1) Apply existed theme instructions:
- Select the desired theme from the theme name list.
- Click on "Refresh" to apply the theme.
- 2) Adjust existed theme instructions:
- Edit the chosen theme as wanted.
- Click on "Save".
- If the theme is saved "Updated Successfully" will be displayed at the head of the page.
- **NOTE:** the default theme is not editable.
- 3) Create new theme instructions:
- To add a new theme, click on "Add".
- Name the theme as wanted.
- Select the theme style.
- Click on "Save".
- If the theme is saved "Updated Successfully" will be displayed at the head of the page.
- Select the added theme from the theme name list.
- Click on "Refresh" to apply the theme.

Change password

The user can change the password in order to enhance the security after the first login or any other time as necessary.

Change password instructions:

- Type the current password.
- Type the new password.
- Retype the new password for confirmation.
- Click on "Change password".
- If the new password is saved "Updated Successfully" will be displayed at the head of the page.

admin@israr.c admin@israr.com	om
Current password	Ø
New password	ø
Re-type new password	Ø
Change Password	

To restart the application

• Click on "Restart Application".

To reboot the device:

- Click on "Reboot Device".
- The reboot process may take a while.

)
	My Account ×	
,	admin@israr.com admin@israr.com Sign Out	
	🚨 My Profile	
	Change Password	
	2 Restart Application	
AAAA A	U Reboot Device	
		-

In order to set the converter settings configuration:

- Login to the converter.
- Click on the left screen at the startup page.
- Click on MB-Gateway as shown in the figure below.
- The overview page will be displayed.

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Asset Manager	nent
SCADA	Billing System
🛞 ERF-CRM	6 ran
Servers	
IEC 60870	Hanning DUNS HIX
N ⁽¹¹¹⁾ DUMS 87	1971 DLMS Server
Mater ION Meter-API	MB Data Logger
Weather Log	The sec
2aro Export	Burg DNP3
9 Mil-Savar	PROFILIS
Component	
Life Advanced Chart 2.	📗 Advanced Report v
About Page	• Wdgets
(2) Help Rege	
MCU	
MB-Bridge	MB-Gateway

Overview

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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.

Overview				
E RunTime Console			۰ ۵ ک	🖨 System Summary
Connected.				Software Version: 1.0.0.0 Last Time Started: 0/30/2022 12:57:66 PM Servers Status
-				Signal-R Server: Connected Signal-R Address: http://127.00.15050 RTU Modbus Slave: Stopped TCP Modbus Slave: Stopped TCP Connected Cleints: 0 Number of Connections: 5 Number of Tags: 49
System Informations			-	Web API
CPU	CPU	RAM	DISK	Web API Status: Connected Web API Calls: 961 Web API Address: http://127.0.0.15005 System Alarms & Events
2.9 GHZ	29 C	7.500 GB 1725%	283,000 GB 76,8%	System Total Errors: 7 Ack
Free OUsed	Tempreture	Free Used	i Free i Used	

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" **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





Tags/Points Monitor:

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• Displays the connection name (COM1, COM2, COM3 or COM4), the tag name which in the form of (command_Slave ID_Address), slave ID, address and the read value.

Tags / Points Monito	r			
Connection Name	Tag Name	Slave ID	Address	Value
COM1	Command_11_0	11	0	833
COM1	Command_11_0	11	0	1918
COM1	Command_11_0	11	0	-6508
COM1	Command_11_0	11	0	0
COM1	Command_11_0	11	0	9912
COM1	Command_11_0	11	0	865
COM1	Command_11_0	11	0	826
COM1	Command_11_0	11	0	848
COM1	Command_11_0	11	0	833
COM1	Command_11_0	11	0	818
COM1	Command_11_0	11	0	840
COM1	Command_11_0	11	0	846
COM1	Command_11_0	11	0	863
COM1	Command_11_0	11	0	832
COM1	Command_11_0	11	0	834

Basic Settings

Basic Settings		B	General Servers Config	ration	Network Settings					
Server Name	PMMAIIConverter		Server Auto Start:	×	Name	Ethernet1		Name	Ethernet2	
Server Location	Amman		Web 4PI Auto Start		IP Assignment	Manual	~	IP Assignment	DHCP	
Time Zone	Amman - 09:31	~	API Port:	5005	IP ärkiness	192.168.1.43		IP Address	192.168 2.114	
Local Date	2 22 / 10 / 04		Reading Cycle:	1000	Netmask	255,255,255.0		Netmask	255.255.255.0	
Local Time	0 15 . 29 . 50		TCF Fort:	502	Gateway	192.168.1.1		Gatewoy	192.168.2.0/24	
set time to	Saruar (NTP)	~		(annold	DNS Server 1	8.8.0.0		DNS Server 1	8.8.8.8	
temp/in address	127.0.01				DIG Server 2	0.0.0		DNS Server 2	4.4.8.8	
	107.00.1				Max Recry	3		Max Batry	1	
					Status	Connected		Status	ETHERMET2 NOTFOUND	
Port 1 Nerree	COM		Port 2 Name	50M3	Port 3 Name			Port & Nerre	C7144	
Port 1 Name	CDM1		Port 2 Name	СОМ2	Port 3 Name	СОМЗ		Port & Nerre	COM4	
Port 1 Name Baud Rate	CDM1 9500	•	Port 2 Name Daud Rate	COM2 9600	Port 3 Marme	COM3 9600	¥	Port 4 Name Baud Rate	COM4 9600	
Port 1 Norme Baud Rate Parity	CDM1 9500 None	•	Purt 2 Name Baud Rote Purity	COM2 S600 None	Port 3 Name	CDM/3 9500 None	>	Port & Nerree Bead Rate Parky	COM4 S600 None	
Part 1 Norme Baud Rate Parity Coto Bits	CDM1 9600 None 8	*	Part 2 Name Read Rate Parts Data 845	COM2 9500 None 8	Port 3 Harms	COM3 9600 None 8	> > >	Port & Narra Baud Reta Parity Data Bits	COM4 9600 None 8	
Port 1 Narrae Baud Rate Parity Doto Bits Stop Bits	CDMI 9400 9604 8 2	* * *	Rost 2 Name Rossil Rote Parity Onto Bits Stop Bits	COM2 9600 None 8 1	Part 3 Name Part 3 Name Part Name Part Name Part Name Part Name Part 3 Name	COM3 9600 None 8 5	* * *	Port & Nenne Beurg Rette Porthy Data Bits Stop Bits	COM4 9600 None 8 2	
Port 1 Name Baud Rate Parity Data Bits Step Dits Filow Control	CDMI 9600 Nore 8 1 Nore	* * *	Port 2 Name Seud Rahe Party Otta Bits Stops Bits How Control	COM2 9000 None 8 1 None	Part 3 Hame Part 3 Hame Parting Parting Parting Parting Parting Parting Parting Part 9 Hame Part 9	COM3 3600 None 8 5 5 None	> > > > >	Port & Name Basil Rele Parky Oth Bits Stop 514 How Control	CDM4 H600 None S L None	
Port 1 Norme Raud Rate Parity Dots Bits Step Dits Flow Control Interface	CDMI 9500 8 1 None 83-4551 kine	> > > > > > > >	Put 2 Name Read Bain Put Ry Data Bits Stop Sits How Control	COM2 5000 None 8 1 None 83-4551 wire	Peril Stanse V V V V V Stan Bits V Stanse Bits Stanse Bits V Stanse Bits	COM/5 9500 None 8 1 1 None 85-452 zwire	> > > > > > > > > > > > > > > > > > >	Port 4 Name Band Rain Party Dets Bits How control onterface	CDM4 1600 Nona 5 1 Nona 83-455 2 wire	
Port 1 Norme Read Rate Parity Doto Bits Stop Bits Flow Control Interface Timesut	CDM1 9600 0 3 None 89-455 2 wire 9000	x x x x x	Pert 2 Name Read Sales Parting Data Bits Name Sales Name Sales Nam	COM2 5000 None 8 1 Nons 83-485 2 Wire 3000	Put 3 Name Put 3 Name Put 9 Nam	COM/5 9500 Nore 5 1 Nore 8. 7 Nore 8.452 wire 3000	> > > > > > > > > >	Port 4 Verse Band Rein Parky Oten Bris Roy Bis How connel Interba	CDM4 4600 Nona 5 1 Nona 45-452 wire 3000	
Part 1 Nerre Read Rate Paulty Oors Bits Stop Bits How Control Interface Timetut Tippe	CDM1 9600 8 3 None 85-455 2 kine 5000 Maner	> > > > > > > > > >	Pert 2 Name Read Bain Parts Bain Data Bits Name Bain Name Costerol Interface Temperat Temperat	COM2 5000 None 8 1 Nons R5-485 2 Wire 3000 Memer	Put 3 Name Put 3 Name Put 9 Nam	COM/5 9500 None 8 2 None 85-455 2 wire 9000 Master	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Port 4 Verse Band Rein Parhy Oten Bris How conner Interba Timenat Timenat	CDM4 4600 Nona 5 1 Nona 5- 45-452 wire 3000 Master	
Purt 1 Nerree Beud Rate Parity Dots Bits Stup Bits How Control Timesul Timesul Tape Max Netry	CDM1 9600 8 1 3 5000 5455 2 kite 3000 5465 2 kite 3000 5465 2 kite 3000	> > > > > > > >	Pert 2 Name Read Bain Parts Data Bits Nam Bha How Control Read Treesart Treesart Nam Ketty	COM2 9000 None 8 1 Nons R5-485 2 Wire 3000 Masser 0	Part 3 Name P	COM5 9500 Nore 8 1 1 Nore 85-455 2 wire 3000 Master 0	> > > > > > > > >	Port 4 Verse Band Rein Parky Oten Bits Stop Bits How control Interface Timenst Type Main Hitty	CDM4 5600 Nona 5 2 Nona 5-455 2 wire 3000 Mater 0	

Basic Settings

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

Server Name		
	PMIMAIIConverter	
Server Location	Amman	
Time Zone	Amman - 09:31	¥
Local Date	■ 22 / 10 / 04	
Local Time	0 15 : 29 : 50	
set time to	Server (NTP)	v
NTP/IP Address	127.0.0.1	

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

General Server Configuration

General Servers Configra	tion	8
Server Auto Start:		12.2
Web API Auto Start		
ΔPI Port:	5005	Ĩ
Reading Cycle:	1000	
TCP Port:	502	

- To enable the server auto start, check the box "server auto start".
- Type the API port.
- Type the reading cycle.
- Type the TCP port.



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It is required to insert the settings for each port manually by the user for the TCP ports.

Network Settings			8
Name	Ethernet1	Name	Ethernet2
P Assignment	Manual 👻	IP Lasignment	DesCP 👻
IP Address	192.168.1.43	IP Address	192.168.2.114
Netmask	255.255.255.0	Netmask	255.255.255.0
Gateway	192.168.1.1	Gatewoy	192.168.2.0/24
DNS Server 1	8800	DNS Server 1	8.8.8.8
DNS Server 2	0.0.0.0	Dhis Server 2	4.4.8.8
Max Retry	3	Max Retry	1
Status	Connected	Status	ETHERNET2 NOTFOUND

- 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

Serial Settings

Port 1 Name	COM1	
Baud Rate	9600	~
Parity	None	v
Data Bits	8	Ŷ
Stop Bits	1	~
Flow control	None	~
interface	R5-485 2 wire	~
Timeout	3000	
Түре	Master	~
Max Reby	0	
Status	available	



There are four serial ports 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, flow control, interface and type.
- 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

About

About Page consists of three sections:

- 1) General Information: Displays general information about the Modbus converter 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".

🛠 About				
Seneral Information	Project Settings & Firm	ware		😂 Alarms & Events Log 🛛 🕹 🧰
Model Name	Settings :			Alarms Log:
Serial No.		Backup	Restore	Select Columns ~
Software Version	FirmWare :			Events Log:
Firmware Version		Backup	Restore	Select Columns V
Hardware Base				Keep Logs For:
Hurdware Version				(DAYS,NUMBER)
E Developed By			E Licensed To	
POWER I POWER I 633 North Mater WW	METER MONITOR Ist 167th street , suit 1214 Beach, Fioride 33162, USA WV.PMM-USA.US			ISRAR ENGINEERING LLC Zahran Stj.awharet Sweffeh Complex Bid, 21,5uite 503 AMMAN 11185.JORDAN WWW.ISRAR.COM
License Status:				P 🕀
		Hardw	are ID	
		This Mae	ihine ID	

Sign Out

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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.



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