



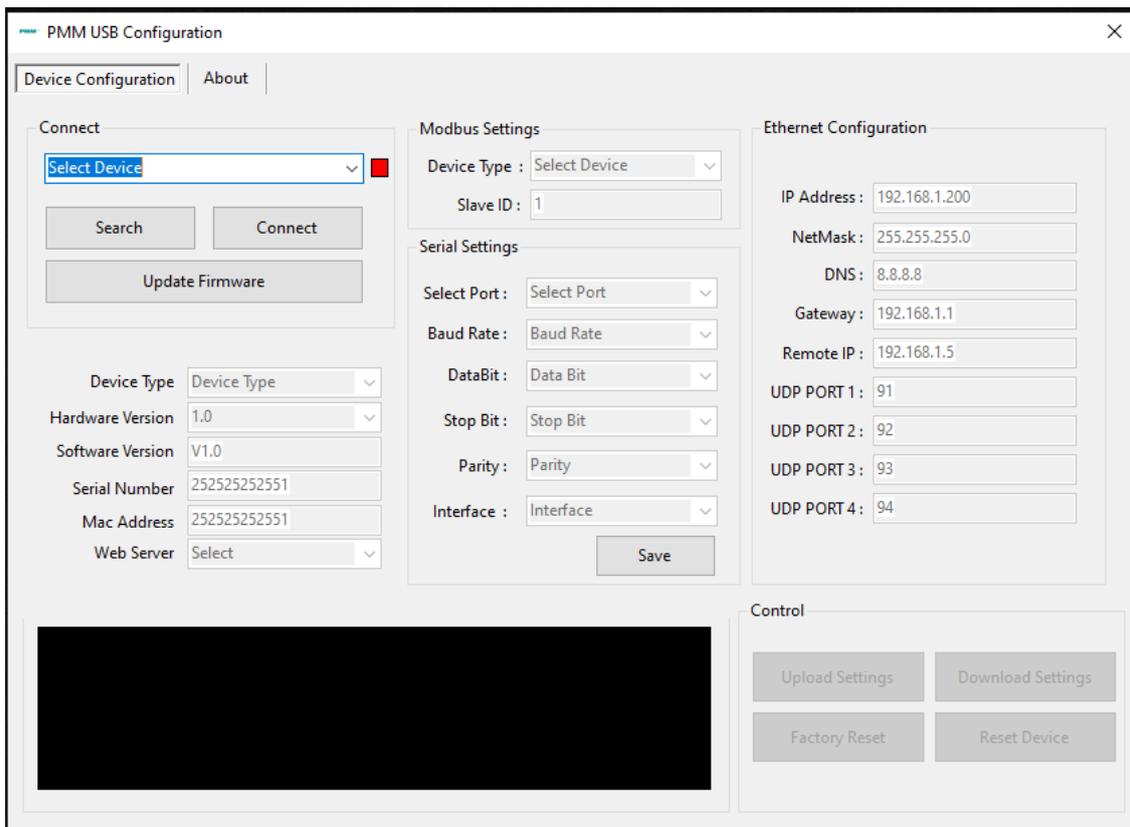
Power Meter Monitor

Business and Mission-

Critical Solutions Provider

USB Products Configurator

User Manual



Model: PMM2003

Document: User Manual

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Date: May 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 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 USB Products Configurator software. Providing the operator with the needed information in terms of instructions and screen layout allowing for easy use.

1.1 Description

The user can use USB configuration utility which is only compatible with Microsoft Windows 10 operating system for the Ethernet, Modbus and serial settings configuration of PMM devices instead of using the web server configuration for more control and advanced features. In addition to upgrading the firmware and factory reset.

1.2 Key Features

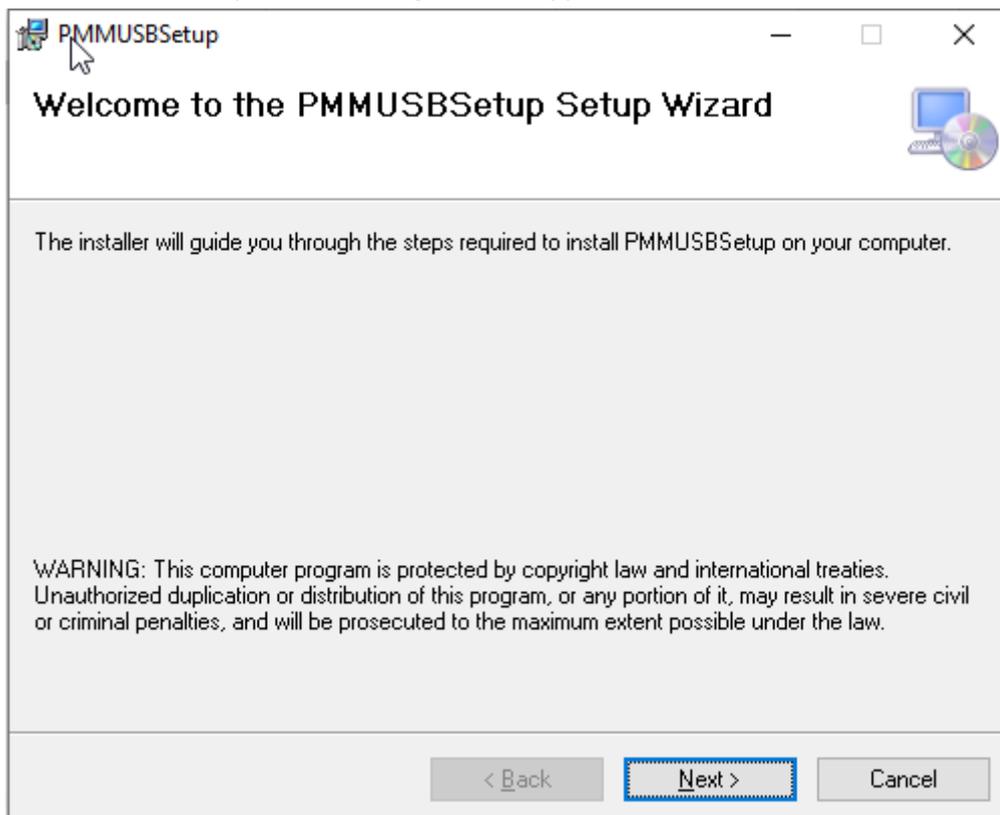
- Configure PMM Products with USB Port
- Restore and Backup user Setting
- Upload/download online Setting for process tuning
- Firmware downloading/updating
- Factory reset and more ...

2. SETUP INSTRUCTIONS

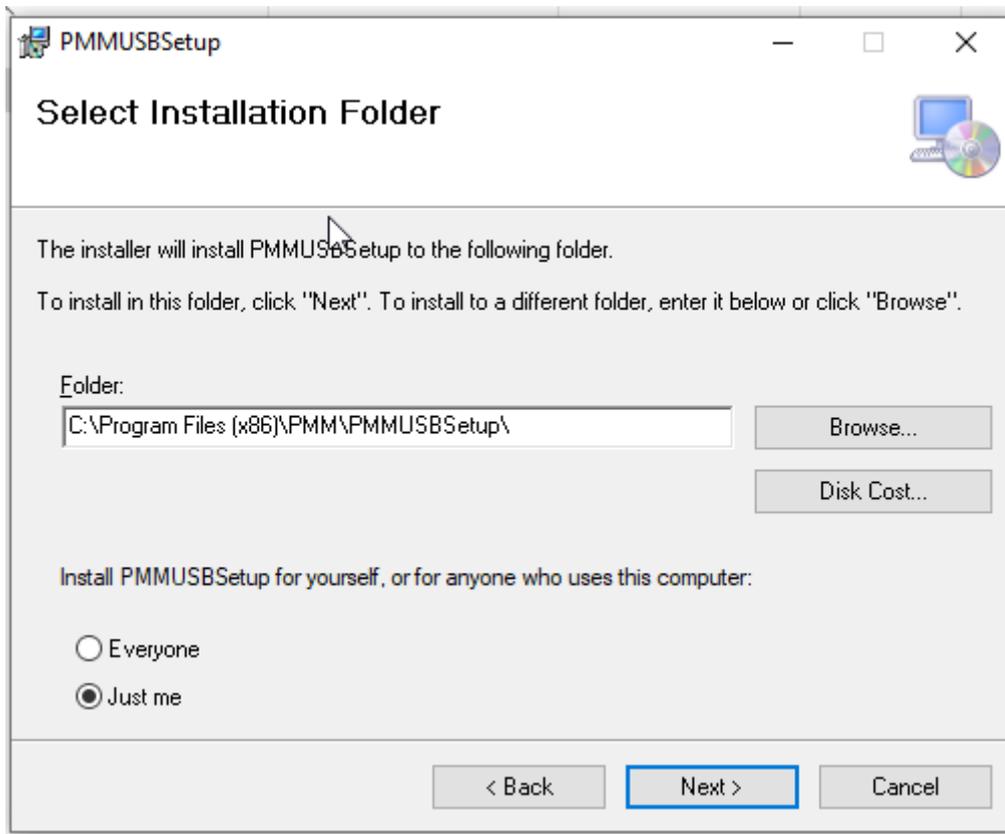
- Before installing the USB configurator, the user must install .NET 5.0 SDK (v5.0.408) run time. [Click here](#) to start downloading.
- Click on “[PMM USB Configurator](#)” and click on download.

Follow the downloading instructions to complete installing the application successfully.

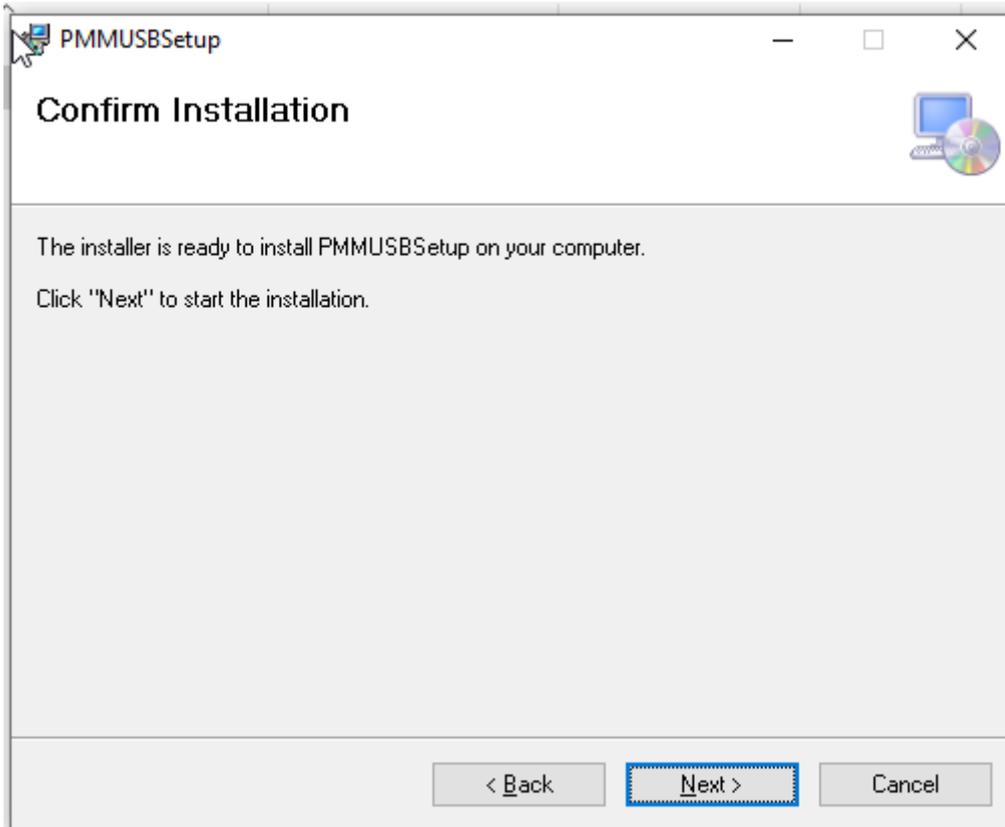
- Once the user clicks on “Setup” the following window appears. Click on “Next”



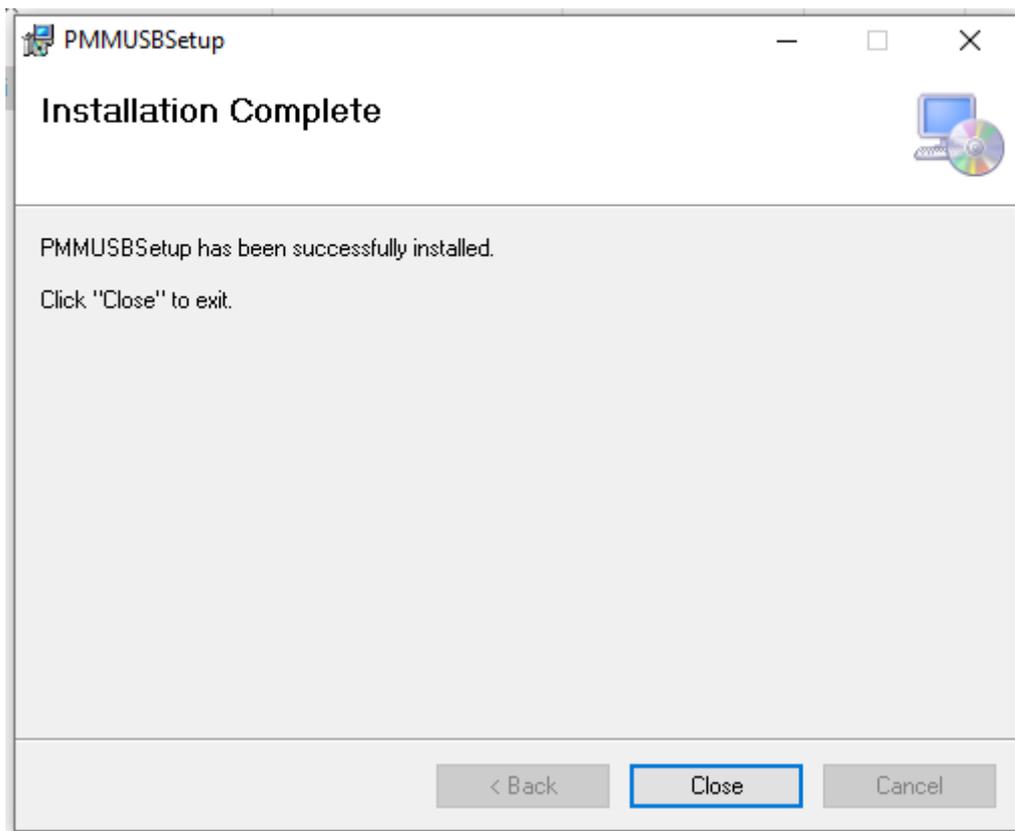
- Browse for the desired installation folder in your PC. Then, choose whether the setup is for yourself or everyone uses the PC by clicking on the desired choice.
- Click on “Next”.



- Confirm the installation by clicking on “Next”



- When the installation is completed, the following window appears for confirmation.
- Click on "Close".



3. USB CONFIGURATION UTILITY

The following Instructions aims to let the user able to complete device configuration successfully:

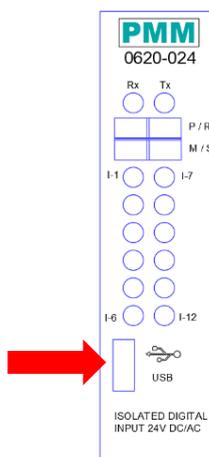
1. Table of requirements:

No.	Requirements
1.	USB type: Micro-USB
2.	Personal computer with Windows 10 operating system.

2. USB connecting instructions:

- Connect the Micro-USB type to the device through the USB port which is often located in the front panel of the PMM devices.

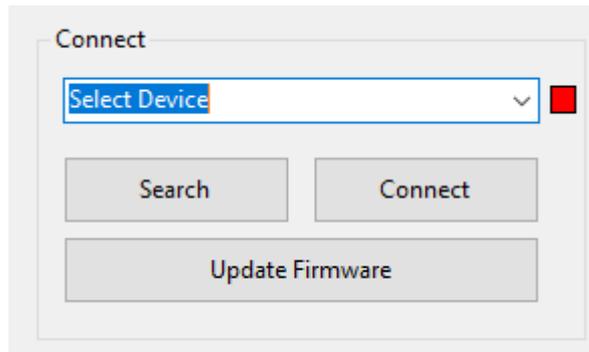
For clarification:



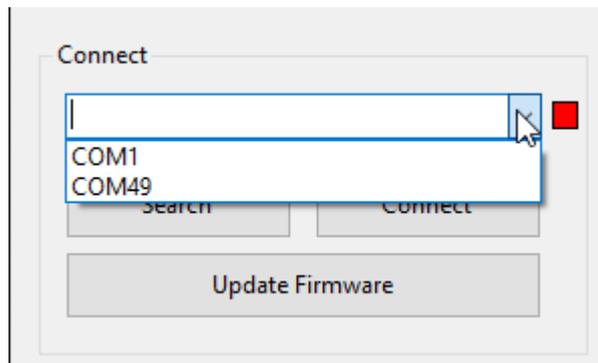
- Connect the other side with personal computer (PC).

Once the USB is connected between the device and PC, the user can start configuration as shown in the figures and instructions below:

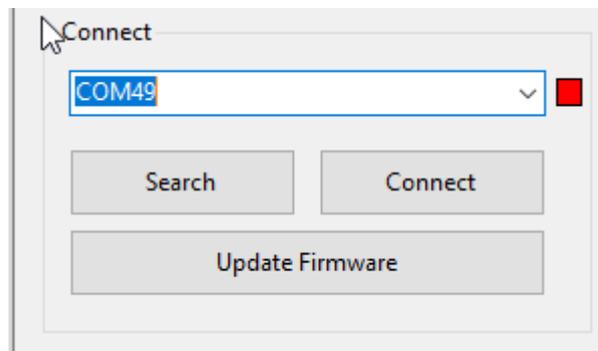
- Click on “Select device” drop list as shown below.



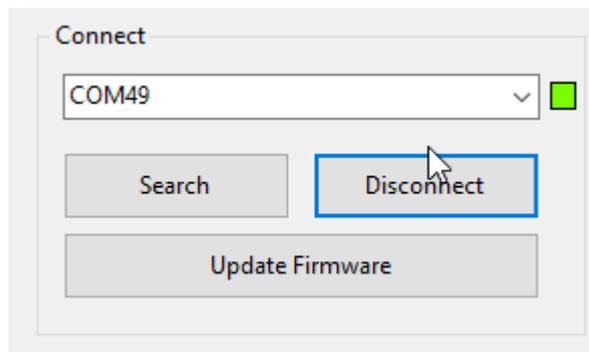
- All the connected devices will be displayed based on which of COMs are connected.



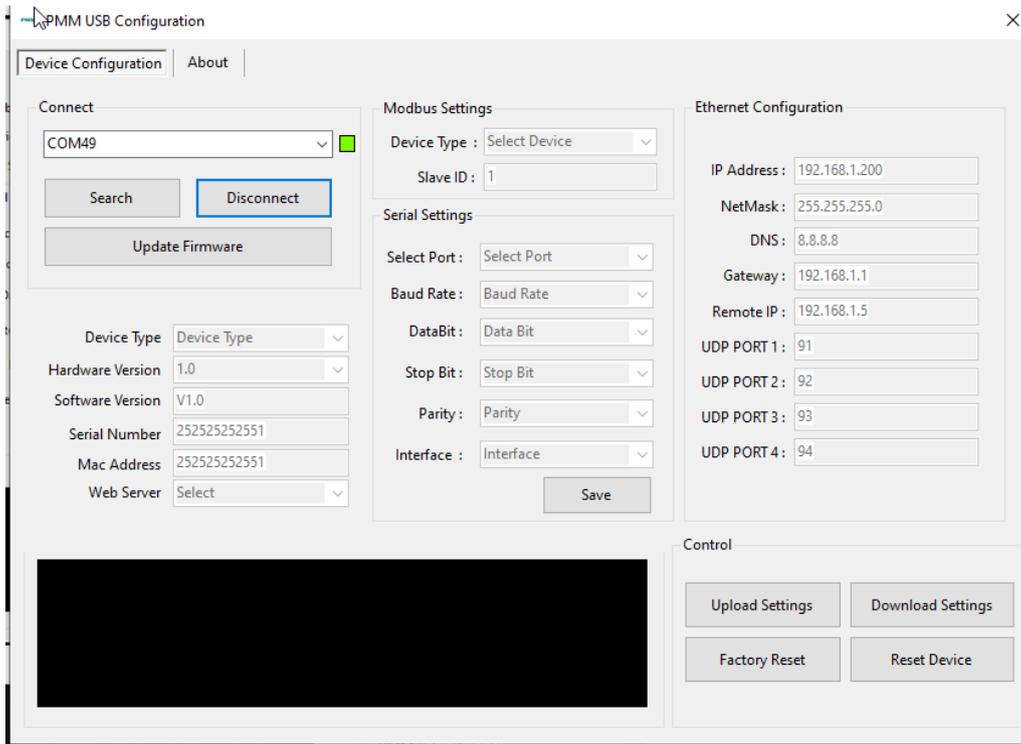
- Click on the connected PMM device that needs settings configuration.



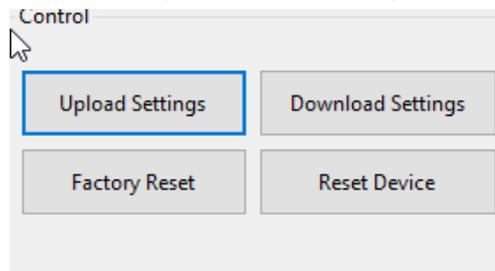
- Click on “Connect, the light indicator will be turned into green.



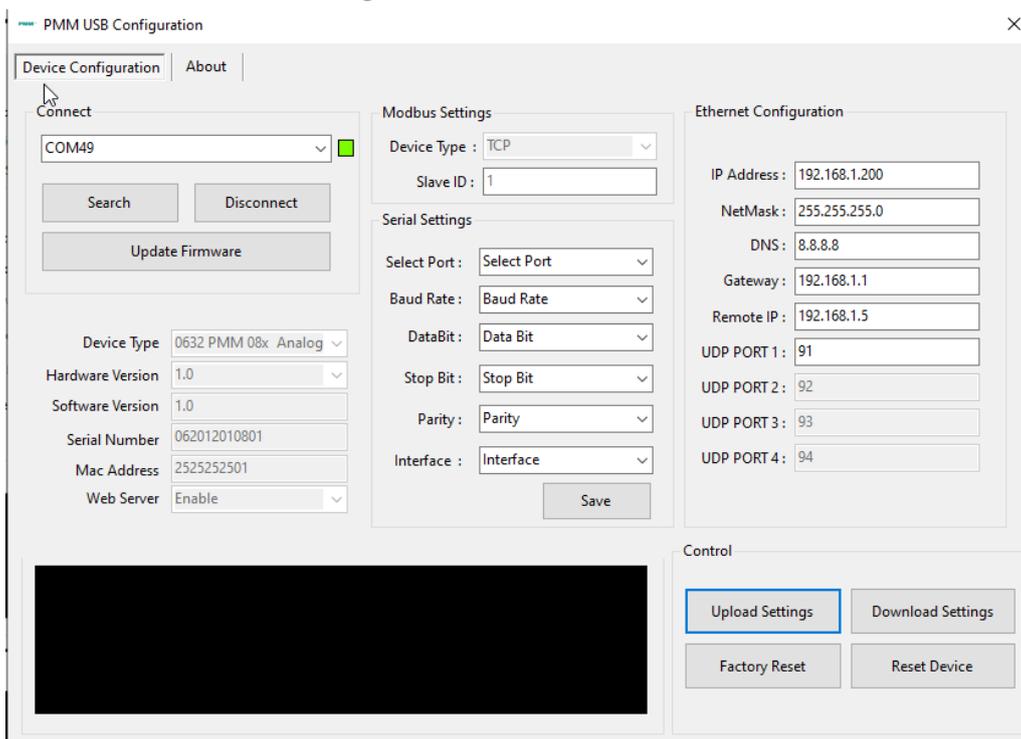
- Once the device is connected, the settings by default are not editable as shown below.



- Click on "Upload settings" to enable editing the default settings, and upload them on the device.



- The Modbus, serial and Ethernet settings are editable now as shown below.



3.1 Ethernet Settings

Parameters which are required when configuring Ethernet port are: IP address, Net Mask, Gateway, DNS Server, and Host Name.

- Type the desired IP address in the specified space (1) which uniquely identifies each computer on the network and computers use it to communicate with each other.
- Type the desired NetMask in the specified space (2) which identifies an octet in the IP address which is part of the subnet address (network address). Using Net Mask, we know which part of IP address the network address and which part is the host address.
- Type the desired DNS in the specified space (3)
- Set the gateway and remote IP address in the specified spaces (4,5) to be compatible with the network.
- Set the UDP port in the specified space (6).

Ethernet Configuration

IP Address : 192.168.1.200 **1**

NetMask : 255.255.255.0 **2**

DNS : 8.8.8.8 **3**

Gateway : 192.168.1.1 **4**

Remote IP : 192.168.1.5 **5**

UDP PORT 1 : 91 **6**

UDP PORT 2 : 92

UDP PORT 3 : 93

UDP PORT 4 : 94

3.2 Modbus Settings

- Select the device type: Modbus TCP or RTU from the “Device Type” drop list.
- Type the device slave ID; the ID must be unique. The slave ID is set by default to 1.

Modbus Settings

Device Type : Select Device

Slave ID : 1

3.3 Serial Settings

Each PMM device has different number of serial ports; select the port to edit the settings for from “Select Port” drop list.

Select Port : Select Port

Baud Rate : Port One

Baud Rate

Parameters (that can be configured) used during serial communication include:

- Select from the drop list the **baud rate**; baud rate is the communication speed, which is the number of times per second a serial communication signal changes states; a state being either a voltage level, a frequency, or a frequency phase angle.
- Select from the drop list the **data Bit**: Number of bits to represent one character of data 8 (default)

Serial Settings

Select Port : Select Port

Baud Rate : Baud Rate

DataBit : Data Bit

Stop Bit : Stop Bit

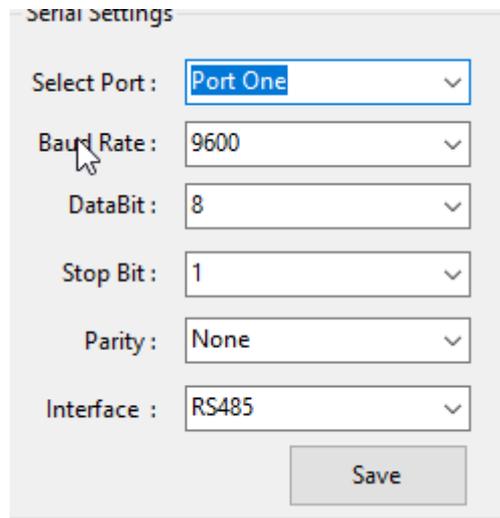
Parity : Parity

Interface : Interface

Save

- Select from the drop list the **stop Bit**: The stop bits are used in asynchronous communication as a means of timing or synchronizing the data characters being transmitted.
- Select from the drop list the **parity**: The parity bit is to determine if the data character being transmitted is correctly received by the remote device.
- Select from the drop list the **Interface**.

Example of Serial settings configuration for port one:



Serial Settings

Select Port : Port One

Baud Rate : 9600

DataBit : 8

Stop Bit : 1

Parity : None

Interface : RS485

Save

- Click on “Save” to save the new settings of the serial port.
- Click on “Download settings” to download the new settings on the device.
- Click on “Reset” to restore the default settings.