

# **User Manual**

## **PowerMonitor**

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# 1.PowerMonitor Overview

## 1.1 Introduction

PowerMonitor is an inverter/charger monitoring software which can monitor multiple type devices.The major functions of PowerMonitor software include data log for devices, fault messages, and parameter setting for devices.

## 1.2 Features

- Automatic and real-time data acquisition of devices and secured data log saving.
- Graphic display of device data for quick and easy reading.

# 2. PowerMonitor Install and Uninstall

## 2.1 System Requirement

- An available communication port is needed
- 512 MB physical memory at least(1 GB is recommended)
- 2 GB hard disk space at least
- More than 32-bit colors and 1280 × 800 or above resolution display is recommended
- Platforms supported by software are listed below:
  - Windows XP/2000/2003/Vista/2008(32-bit&64-bit)
  - Windows 7/8/8.1/10(32-bit&64-bit)
- Microsoft .NET Framework 4.0 Software or Newer Versions

Read Power Monitor from CD-ROM, Double click the PowerMonitor (Single485).exe to install this software. Choosing the path (default path is C:\Program Files \CC\PowerMonitor(Single485) ) click install to make sure the clause, waiting for the installation. The finished picture is as below. Refer to below diagram 2-1.



Diagram 2-1

Click “Finish” to log out installation.

## 2.3 Software Uninstall

When you want to uninstall PowerMonitor, click PowerMonitor(Single485).exe, can choose “Modify”, “Repair” or “Remove”. Click “Remove” you can finish software unistall. Refer to below diagram 2-2.

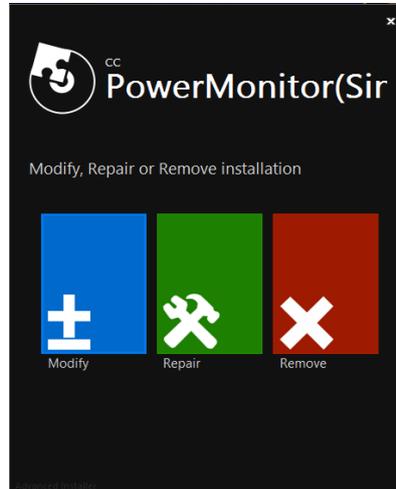


Diagram 2-2

## 3. Tray Application

### 3.1 Startup

The Installer will leave a shortcut icon called “PowerMonitor(single485)” on your desktop. The desktop will show the above icon. Refer to Diagram 3-1. Simply double click the shortcut icon. Then, it will start the software and display a service icon located in tray.



Diagram 3-1

### 3.2 Open PowerMonitor

(1) Open Power Monitor. Refer to below diagram 3-2.



Diagram 3-2

(2) Connect to PC and machine, according to your machine, select the corresponding Drive.

(3) Wait a moment, power monitor will work normally.

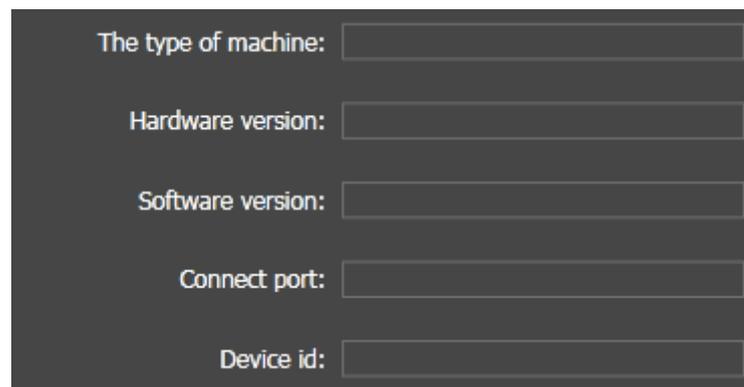
### 3.3 PowerMonitor Configuration

#### 3.3.1 Basic Information

It display information of Work state, AC voltage grade, Inverter voltage, PV input voltage, Battery voltage, Charging current, Batttery grade etc.

#### 3.3.2 Product Information

Product information display The type of machine, Hardware version, Software version, Connect port, Device id.Refer to below diagram 3-3.



The type of machine:

Hardware version:

Software version:

Connect port:

Device id:

Diagram 3-3

### 3.4 Device control

#### 3.4.1 Parameter Setting

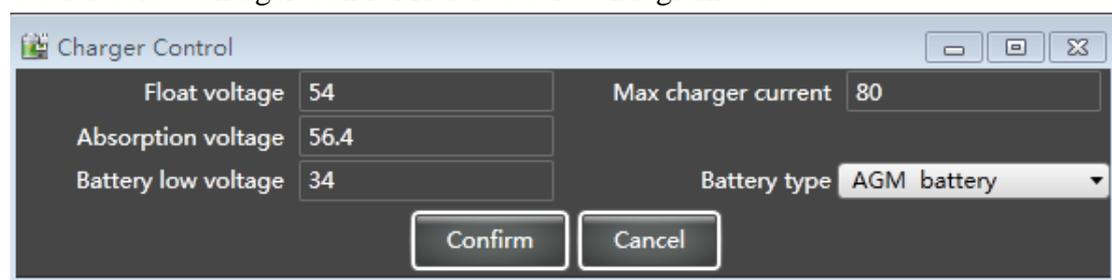
This page is to activate some features and set up parameter for charger/inverter. Refer to below diagram 3-4.

Note: These buttons can't work without a device connection.



Diagram 3-4

3.4.1.1 Select Charger Control.Refer to below Diagram 3-5.



Charger Control

Float voltage	54	Max charger current	80
Absorption voltage	56.4		
Battery low voltage	34	Battery type	AGM battery

Confirm Cancel

Diagram 3-5

- Float voltage: Click arrow to set up float charging voltage. Please refer to product

manual for the recommended float charging voltage based on connected battery type.

- Absorption voltage: Click arrow to set up absorption voltage. Please refer to product manual for the recommended absorption voltage based on connected battery type.
- Battery low voltage: In battery mode, when battery voltage is lower than cut-off voltage point, inverter will shut down battery and transfer to fault mode.
- Max charger current: Click arrow to set up maximum charging current. Maximum charger current in different inverter model may be different. Please check product manual for the details.
- Battery type: Select connected battery type. There are six options:AGM, Flooded, GEL, LEAD, Lithium Ion and User-Defined. Please refer to product manual for charging parameter for these battery types.

#### 3.4.1.2 Select Inverter Control.Refer to below Diagram 3-6.

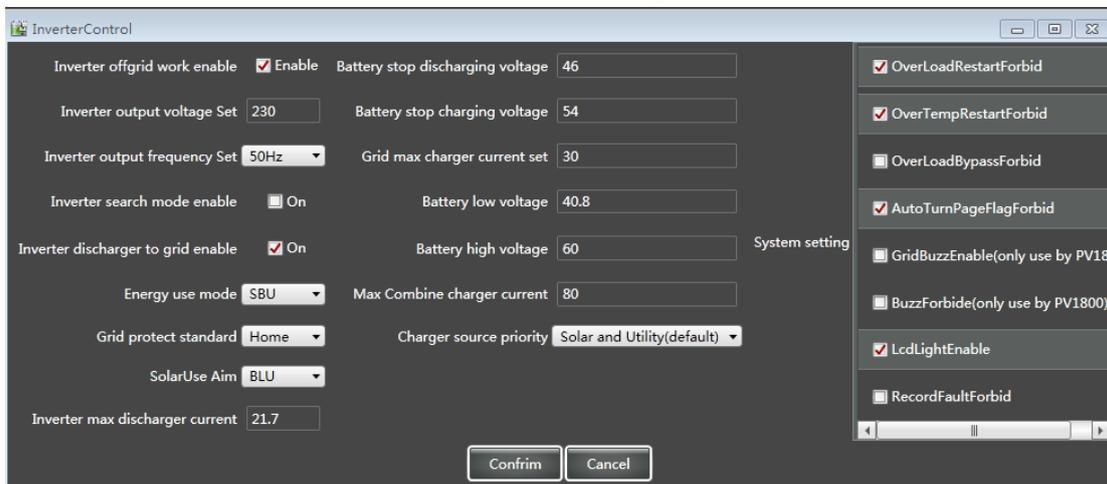


Diagram 3-6

NOTE:This screen may be different for different model of inverter.

- Inverter output voltage set: Nominal output voltage, 220~240V selectable.
- Inverter output frequency set: Nominal output frequency, 50Hz and 60Hz selectable.
- Energy use mode: Click up-down arrows to set up energy use mode. There are 4 options: SUB,SOL,UTI and SBU. See product manual for the details of these options.
- Charger source priority: Click up-down arrows to set up charger source priority.There are 3 options: solar first, solar and utility and Solar only. See product manual for the details of these options.
- Grid protect standard: Click up-down arrows to set up suitable grid protect standard for connected devices. When selecting "HOME", it's allowed to connect home appliances.Selecting "UPS", it's allowed to connect personal computer. Selecting "GEN", it's allowed to connect generator or selecting "VDE4105". For the detailed input range for connected devices, please check product manual.
- Inverter Max discharging current: Click arrow to set up AC charging current. For the detailed setting, please check product manual.

Then, Click “Confirm” button to save the settings,wait a moment the setting effect.

3.4.1.3 Select System parameter setting. Refer to below Diagram 3-7.

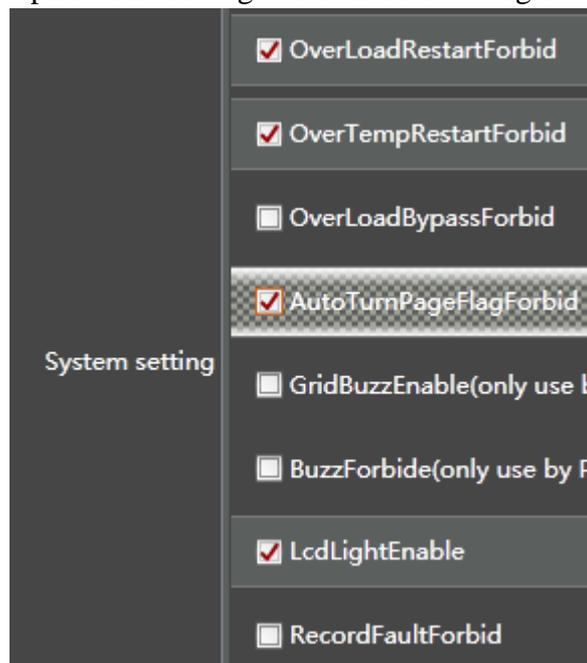


Diagram 3-7

- Overload Restart Forbid: If disabled, the unit won't be restarted after overload occurs. Vice versa.
- Over temperatureRestartForbid: If disabled, the unit won't be restarted after over-temperature fault is solved. Vice versa.
- Overload bypassForbid: If enabled, unit will transfer to line mode when overload happened in battery mode. Vice versa.
- AutoTurnPageFlagForbid: If enable, LCD screen will return to default display screen after no button is pressed. Vice versa.
- GridBuzzEnable: If disabled, buzzer won't be on when grid occurred. Vice versa.
- BuzzForbid:If disabled, buzzer won't be on when alarm/fault occurred. Vice versa.
- LcdLightEnable: If disabled, LCD backlight will be off when panel button is not operated. Vice versa.
- RecordFaultForbid: If enabled, fault code will be recorded in the inverter when any fault happens.

## 3.5 View

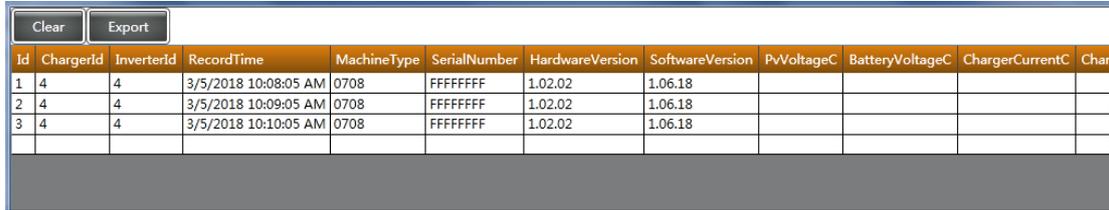
### 3.5.1 Data

This function is to browse the working data of inverter saved in table or chart format. Click “Data” to show derived the recorded data. Refer to Diagram 3-8.



Diagram 3-8

one record is saved every 5 minutes, and max records number is up to 60 thousands times. If over max records maybe appear mistakes. Please export and clear data in time.Refer to Diagram 3-9.



Clear		Export										
Id	ChargerId	InverterId	RecordTime	MachineType	SerialNumber	HardwareVersion	SoftwareVersion	PvVoltageC	BatteryVoltageC	ChargerCurrentC	Char	
1	4	4	3/5/2018 10:08:05 AM	0708	FFFFFFFF	1.02.02	1.06.18					
2	4	4	3/5/2018 10:09:05 AM	0708	FFFFFFFF	1.02.02	1.06.18					
3	4	4	3/5/2018 10:10:05 AM	0708	FFFFFFFF	1.02.02	1.06.18					

Diagram 3-9

NOTE: 1.“Clear”: Click “Clear” button to delete all records in the listed table.  
2.“Export”:Click “Export” button to save listed table to local PC in .csv, .excel file.

### 3.5.2 Restore to the defaults

This function is allowed to restore all settings back to default values. Refer to Diagram 3-10.

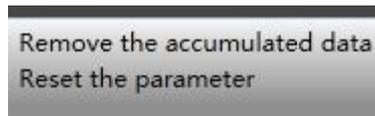


Diagram 3-10

- Click “Remove the accumulated data” is allowed to clear all accumulated data back to primary values.
- Click “Reset the parameter” is allowed restore all settings back to default values.

### 3.6 Help

Select “Help” to Document or About. Refer to Diagram 3-11.

- Document:Click “Help” menu and select “Document” item.It will open the user manual.Before operating software,please read manual carefully.
- About:Click “Help” menu and select “About”item. It represents the version number of the software.

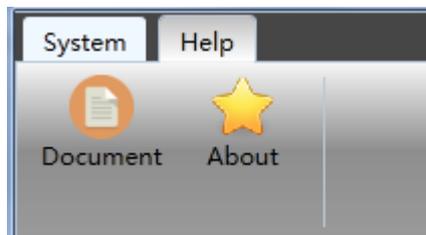


Diagram 3-11