## **User Manual**

# **MPP** software

Management Software for Solar Charge Controller

Version: 1.0

### **Table of Contents**

1.	MPPTracker Overview
1.1.	Introduction1
1.2.	Features1
2.	MPPTracker Install and Uninstall
2.1.	System Requirement1
2.2.	Software Install2
2.3.	Software Uninstall4
3.	Tray Application
3.1.	Startup5
3.2.	Configuration5
3.3.	Software Upgrade6
3.4.	Icon and Software Status7
3.5.	Message Board7
3.6.	Exit7
4.	GUI Interface
4.1.	MPPTracker Configuration9
4.2.	Device control15
4.3.	View17
4.4.	Log in and Log out19
4.5.	Help20

#### 1. MPPTracker Overview

#### 1.1. Introduction

MPPTracker is a monitoring software which can monitor multiple solar charger controller via serial port at the same time. The major functions of MPPTracker monitoring software include data log for devices, alarm messages, 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
- Warning notifications or fault alarms via mobile messenger, tray message and e-mail
- Easy diagnosis from event statistics
- Supports online upgrade and manually upgrade

#### 2. MPPTracker Install and Uninstall

#### **2.1. System Requirement**

- 512 MB physical memory at least (1 GB is recommended)
- 2GB hard disk space at least
- Administrator authority is required
- More than 32-bit colors and 1280 x 800 or above resolution display is recommended
- An available communication port is needed
- Platforms supported by software are listed below:
  - Windows XP/2000/2003/Vista/2008 (32-bit & 64-bit)
  - Windows 7/8 (32-bit & 64-bit)
  - ➢ Windows SBS 2011

#### 2.2. Software Install

**Step 1** After clicking install, it will display the installation in process. Refer to the diagram 2-1.

InstallAnyw	here	
<b>1</b>	InstallAnywhere is preparing to install	
	49%	
		Cancel
(C) 1997-2008	Acresso Software Inc. and/or InstallShield Co. Inc.	

Diagram 2-1

**Step 2** Choose wanted language and click "OK" as diagram 2-2.



Diagram 2-2

Step 3 Click "Next" to proceed to the next screen as Diagram 2-3.

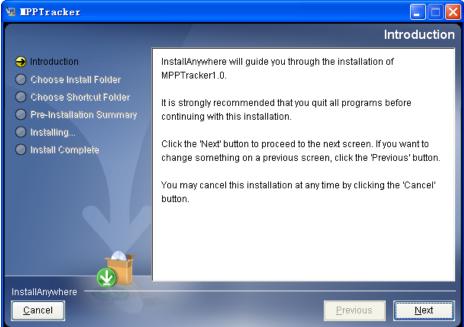


Diagram 2-3

**Step 4** Click "Choose" button to change the default folder. After choosing the installed folder, click "Next" button. Refer to the following diagram 2-4.

🖳 EPPTracker	
	Choose Install Folder
<ul> <li>Introduction</li> <li>Choose Install Folder</li> <li>Choose Shortcut Folder</li> <li>Pre-Installation Summary</li> <li>Installing</li> </ul>	Please choose a destination folder for this installation.
Install Complete	Where Would You Like to Install?
	C:\Program Files\MPPTracker1.0           Restore Default Folder         Choose
InstallAnywhere Cancel	Previous Next

Diagram 2-4

**Step 5** Choose the shortcut folder and click "Next" button. Refer to the following diagram 2-5.

🖳 🎞 IPPTracker		
		Choose Shortcut Folder
<ul> <li>Introduction</li> </ul>	Where would you like to create prod	uct icons?
Choose Install Folder	💿 In a new Program Group:	MPPTracker1.0
<ul> <li>Choose Shortcut Folder</li> <li>Pre-Installation Summary</li> </ul>	🔘 In an <u>e</u> xisting Program Group:	FileZilla FTP Client 🛛 💌
Installing	$\bigcirc$ In the Start Menu	
Install Complete	🔘 On the <u>D</u> esktop	
	🔵 In the Quick Launch Bar	
	◯ Othe <u>r</u> :	Choose
	🔵 Don' <u>t</u> create icons	
	Cregte Icons for All Users	
InstallAnywhere		
<u>C</u> ancel		Previous <u>N</u> ext

Diagram 2-5

**Step 6** It will display the software summary before installation. Click "Install" button

#### to start the installation and refer to Diagram 2-6.

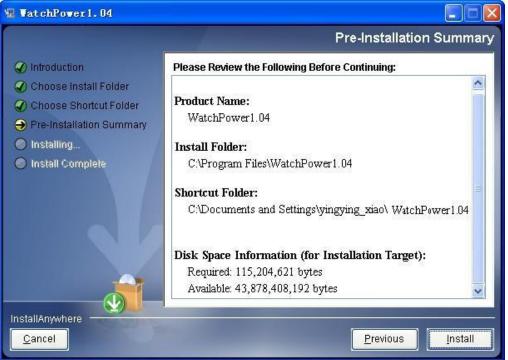
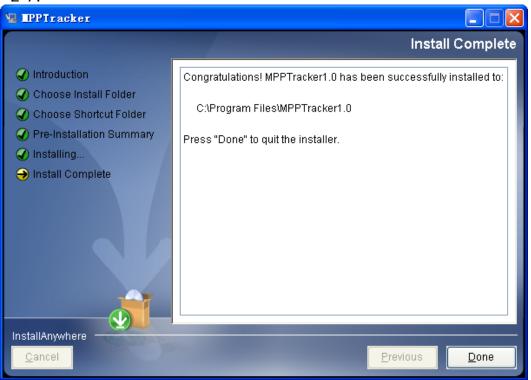


Diagram 2-6

**Step 7** Click "Done" button to confirm the installation completely. Refer to Diagram 2-7.



#### Diagram 2-7

Note: Please uninstall the previous version before installing the new version software.

#### 2.3. Software Uninstall

Please choose Start >> All Programs >> MPPTracker1.0 >> Uninstall. Then, follow the on-screen instruction to uninstall the software.

**Note:** Before uninstalling software, you must stop all software programs first and log in as "Administrator"! Otherwise, it can't be uninstalled completely.

#### 3. Tray Application

#### 3.1. Startup

The Installer will leave a shortcut icon called "MPPTracker" on your desktop. 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. It will pop up function menu by clicking right button of the mouse. Refer to below diagram 3-2.



Diagram 3-2

#### 3.2. Configuration

#### 3.2.1. Software Upgrades

Refer to Diagram 3-3 for the detailed configuration for online upgrade:

- Specify the URL for update files: This is the directory to online update software. Please do not change it unless it's instructed by software manufacturer.
- Save files to: The directory to save files in your hard drive.
- Online auto-update: If selected, it will automatically check if there is any new version launched online every 1 hour.
- If applying online upgrade, please follow below for configuration:
  - 1. Select "Apply the proxy configuration".
  - 2. Enter IP address and port of server.
  - 3. If ID identification is requested, select "Enable authentication" and enter User Name and Password.
- Connection test: Click this button to test if all configurations are set up well.

🗴 configuration		
Specify the URL for update files Save files to	-download.com/WatchPower/updatewindows.zip C:\Program Files/WatchPower1.00\UpgradeFiles	Browse
Online auto-update		
Apply the proxy configuration		
Port Enable authentication		
User name Password		
Connection test		
		Apply Close

Diagram 3-3

#### 3.2.2. Configuration Saved

Click "Apply" button to save all changes in Configuration page. Click "Cancel" to stop the change.

#### 3.3. Software Upgrade

Software upgrades includes online upgrade and manually upgrade.

 Online Upgrade: Click "Online Upgrade" to search the latest software version. If there is new version, it will automatically download and upgrade. Refer to Diagram 3-4.

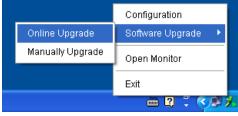


Diagram 3-4

• Manually Upgrade:

Users can manually upgrade the software. Follow below steps: 1. Click "Manually Upgrade" from function menu. Refer to Diagram 3-5.

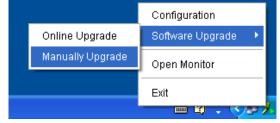


Diagram 3-5

2. Click "Browse" to choose file directory. Then, click "Upgrade" to upgrade software. Refer to Diagram 3-6.

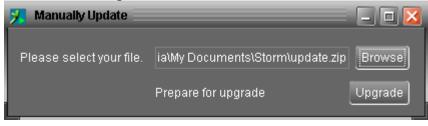


Diagram 3-6

#### 3.4. Icon and Software Status

- Connecting devices: 🗾 and 💹 will rotate as an animation
- When receiving event message with devices connected: will flash for reminder
- When receiving event message without devices connected: will flash for reminder

#### 3.5. Message Board

Users can check message board for event list. Refer to Diagram 3-7:

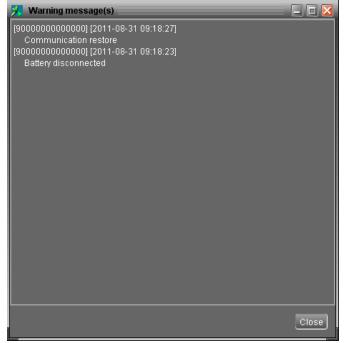


Diagram 3-7

#### 3.6. Exit

Click "Exit" to exist service application.

#### 4. GUI Interface

There are five sections in GUI interface as marked in the illustration below:

configuration Device control View Help						
	Guest Monitored device: COM1_0000000000000 D					
😡 fu-jia-nb.vcn.vol.corp			Basic information			
Сом1_000000000000000000000000000000000000						۰c
			Battery voltage:		External battery voltage:	v
c		- A				°C
		+0				day
с						
	Product Information	Rated inf	ormation			
			inal battery voltage:		Float voltage	
					Battery type	M
			Absorption voltage:			

#### Diagram 4-1

A. Function Menu offers complete tool-set for navigating and setting the GUI.

- B. Shortcut Menu provides short cuts to more commonly used functions.
- C. Navigation indicates all devices.
- **D. Current Monitoring Information** displays User ID, monitored device ID.

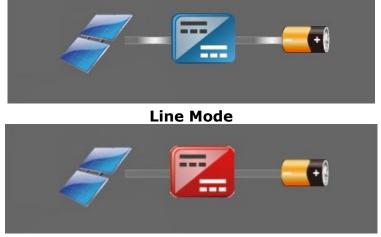
**E. Main Window** displays power flow, basic information, product information and rated information of current monitored device. Refer to Diagram 4-2.

28								) ILL) 🔼
configuration Device control View He								
	Guest Monitored	device: COM1_00000000000000						
👰 fu-jia-nb.vcn.vol.corp	1			Basic information				
Сом1_000000000000000000000000000000000000				PV input voltage:	20.2			'C
				Battery voltage:	13.49	External battery voltage:		v
			A			External battery temperature:		
				Charging power		Next equalization:		day
	Product Information		Rated int	ormation				
				inal battery voltage:		Float voltage:		
		00002.01				Battery type:	AGI	M
				Absorption voltage:				

Diagram 4-2

#### 1. Power flow:

There are three icons to represent solar panel, DC/DC and battery. It displays dynamic power flow with these three device icons.



Fault Mode

2. Basic Information:

It displays information of PV input voltage, battery voltage, charging current, output voltage, charging power, temperature, external battery voltage and external battery temperature.

3. Product information:

Product information displays Serial number and Main CPU version.

4. Rated information:

Rated information displays information of Nominal battery voltage, Nominal charging current, Absorption voltage, Float voltage and Battery type.

#### 4.1. MPPTracker Configuration

#### 4.1.1. Basic

It is to set up parameters for display. Select MPPTracker Configuration>>Basic. Refer to Diagram 4-3.

Basic			×
Page refresh interval:	2 🛟	Sec.	
Device scan interval:	5 🖨	Sec.	
Record interval:	60 <del>(</del>	Sec.	
Date format:	YYYY-MM-D	D 🔻	
			Apply Close

#### Diagram 4-3

1. Page refresh interval: This interval time will determine how long the web page is

refreshed. Setting range is from 5 to 600 seconds. The default setting is 5 seconds.

- 2. Devices scan interval: This interval time will determine how long to scan connected devices. The setting range is from 5 to 600 seconds. The default setting is 5 seconds.
- 3. Record interval: This interval time will determine how long to record monitoring data of device into database. The setting range is from 30 to 600 seconds. The increment of each click is 30 seconds. The default setting is 60 seconds.
- 4. Date format: This system supports 4 different formats, "YYYY-MM-DD", "YYYY/MM/DD", "MM-DD-YYYY" and "MM/DD/YYYY". The default setting is "YYYY-MM-DD".

If any change is made, simply click "Apply" button. Then, the setting will be saved.

#### 4.1.2. Password

It's password configuration for administrator only. Before operating and configuring the software, please login first and modify the password. The default password is "**administrator**" at first log in. Users can only browse device status and information as Guest without login as an Administrator. A guest can not control or execute any setting.

**Step 1** Select MPPTracker Configuration>>Password. Refer to Diagram 4-4.

Password		
	Password	
Old paceword:	•••••	
Old password:		
New password:	•••••	
Confirm password:	•••••	
	Apply Clear	

**Diagram 4-4** 

**Step 2** Enter old password, new password and re-type new password to confirm new password. The new password should be at least 6 digits. Then, click "Apply" button to successfully modify password for administrator.

**NOTE1:** Simply click "Login" button on the top right corner to log in the software. **NOTE2:** If password is forgotten, it's necessary to re-install the software.

#### 4.1.3. SMS Setting

It's to enter SMS receiver list. In the event of an alarm occurring, a message about device status will be sent to the specified users via mobile phone. For the event receiving list, please configure in "Event Action" page (refer to section 4.1.5).

**Step 1** Choose MPPTracker Configuration >> SMS Setting. Refer to Diagram 4-5.

SMS Setting		
	Com. port setting	
Com. port:	СОМЗ 🔽	
Baud rate:	1200 🔽	
Receivers list:	12345677788	12345677788 Add Delete
Note:	Click "Test" button to checkif	the transmission is successfully
		Apply Close

Diagram 4-5

- **Step 2** Select communication port and baud rate.
- **Step 3** Enter mobile phone numbers in "Phone no." column and click "Add" button to add phone no. in Receivers List. To delete numbers, simply select phone no. from "Receivers list" and click "Delete".
- Step 4 Click "Apply" button to save all changes. The "Test" button can be used to send a test SMS to make sure all setting is correct. If all parameters are set up correctly, system will send a test message to all receivers and pop up a successful message. (Refer to Diagram 4-6) Otherwise, it will pop up a failure dialog to indicate there is an error for parameter setting. (Refer to Diagram 4-7)

SMS Setting	(	×
	Com. port setting	
Com. port:	сомз	
Baud rate:		
Receivers list:	Test was successful	
Note:	Click "Test" button to checkif the transmission is successfully	
	Apply Close	J

Diagram 4-6

SMS Setting	
(	Com. port setting
Com. port:	СОМЗ
Baud rate:	9600 V
Receivers list:	Test failed Delete
Note: (	Click "Test" button to checkif the transmission is successfully Test
	Apply Close

Diagram 4-7

**NOTE:** It's required to plug in a GSM modem if sending a SMS to mobile phone.

#### 4.1.4. E-mail

This configuration is allowed to send an alarm mail from SMTP server. For the event receiving list, please configure in "Event Action" page (refer to section 4.1.5).

To use this function, the e-mail service must be correctly configured in the computer. All columns in this function page are default empty. This action can't be executed without the SMTP information, e-mail account and password. Besides, the sender account should be allowed for SMTP/POP3 forwarding.

**Step 1** Select MPPTracker Configuration >> E-mail. Refer to Diagram 4-8.

E-mail			<b>X</b>
	SMTP server setting		
SMTP server:	smtp.test.com	Port:	25
	📕 Exchange Server 🛛 Apply		
Send from:	account@test.com		
User name:	account		
	Password Authentication needed		
Password:	•••••		
Receivers list:	test@test.com		
	test@test.com	Add	Delete
Note:	Click "Test" button to checkif the transm	ission is	s successfully
	Test		
			Apply Close

Diagram 4-8

- **Step 2** Enter SMTP server, Port, Send from E-mail address, User name and password. Click checkbox if password authentication is needed to verify password.
- **NOTE:** If using Exchange Server for mailbox system, it's required to configure Exchange server domain name in SMTP server. Beside, please click checkbox of "Exchange server" and click "Apply" button.
- Step 3 Enter receivers' e-mail accounts in E-mail column. Then, click "Add" to add into Receivers list. To delete e-mail account, simply select accounts from Receivers list and click "Delete" button.
- Step 4 Click "Apply" to save all changes. The "Test" button can be used to send a test e-mail to all receivers to confirm correct operation. When the test e-mails are successfully sent to specific recipients, it will pop up a successful message on operated personal computer. Otherwise, it will pop up a failure dialog to indicate there is an error for parameter setting.

#### 4.1.5. Event action

It's to configure response actions for events. It provides four response actions after events occur.

**1. Event record:** It will record event to data log in software after events occur. This function is default selected.

2. Warning message(s): It will send event message to tray.

**3. SMS:** It will send event message to specific mobile phone numbers after events occur.

**4. E-mail:** It will send event e-mail to assigned e-mail accounts after events occur.

**Step 1** Select MPPTracker Configuration >> Event actions. Refer to Diagram 4-9.

**Step 2** Select action methods by clicking checkbox.

Step 3 Click "Apply" button to save all configuration	Step 3	Click "Apply"	button to save	all configurations
---	--------	---------------	----------------	--------------------

Event action	on		_		
ID	Level	Event			
4001	Fault	Over charge current			
4002	Fault	Over temperature		Send by:	Event record
4003	Fault	Battery voltage under			₩arning message(s)
4004	Fault	Battery voltage high			
4005	Fault	PV high loss			E-mail
4006	Fault	Battery temperature too low			
4007	Fault	Battery temperature too high			
4020	Warning	PV low loss			
4021	Warning	PV high derating		:	
4022	Warning	Temperature high derating			I
4023	Warning	Battery temperature low alarm			Phone No.
4024	Warning	Battery low warning		l I	
3001	Message	Communication restore			
3002	Message	Communication lost			
3010	Message	Restore to the defaults.			
					Apply Close

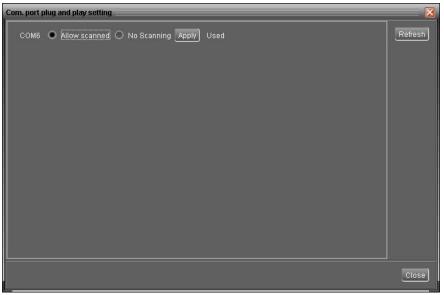
#### Diagram 4-9

**NOTE1:** When modifying receiver list in SMS or e-mail pages, it's necessary to refresh event action page to reload the updated receiver list.

#### 4.1.6. Com. port Plug And Play Setting

To real-time monitor device, it will scan each com. port anytime. In this way, it will occupy communication ports. This function will release some communication ports which are not connected with devices. To avoid any improper operation, in-used communication ports will be displayed in disabled grey icons. Users can select "Allow scanned" to re-scan or "No scanning" to release communication ports based on requirements.

**Step 1:** Select MPPTracker configuration>> Com. port plug and play setting. Refer to Diagram 4-10.



#### Diagram 4-10

**Step 2:** Click "Refresh" to reload the status of com. ports.

**Step 3:** Click "No scanning" to stop scanning on this com. port. Click "Allow scanned" to start scanning on this com. port.

#### 4.2. Device control

#### 4.2.1. Parameter Setting

This page is to activate some features and set up parameters for solar charge controller.

Select Device Control >> Parameter Setting or select shortcut icon  $\square$ . Refer to Diagram 4-11.

ameters setting								
Battery type: AGM	-	Apply	Rated battery voltage:	Auto		•	Apply	
Battery absorption charging voltage:	14.3 V	Apply	BTS temperature	compensation ratio:	0	mV	Apply	
Battery Floating charging voltage:	13.4 <mark>-</mark> V	Apply	Batte	ery C.V. charge time:	150 🗧	Min.	Apply	
Max charging current:	60 🗧 A	Apply						
Battery equalization: 💿 Enable 💿 Battery equalized time		Min. Apply	Batter	ry equalized timeout:	5	Min.	Apply	
The max current of battery equalization	15	A Apply	Battery	equalization voltage:	14.6		Apply	
Equalization interval:								
							Clos	

#### Diagram 4-11

**Step 1** Activate/Shut down functions by clicking "Enable" or "Disable" button. Some

parameters are allowed to change the numbers by clicking up-down arrows or modify the numbers directly in the number column.

- **Step 2** Click "Apply" button to save the settings. Each function setting is saved by clicking each "Apply" button.
- Battery type: Select connected battery type. There are three options, AGM, Flooded and Customized. Please refer to product manual for charging parameters of AGM and Flooded battery. When "Customized" is selected in battery type, uses can modify and set up charging voltage in absorption and float stage by clicking up-down arrow.
- Rated battery voltage: There are four options to select: Auto, 12V, 24V and 48V. Please refer to product manual for correct setting value.
- Battery absorption charging voltage: Click up-down arrow to set up battery absorption charging voltage for each 12-V battery. The setting range is 12.00~15.00.
- Battery floating charging voltage: Click up-down arrow to set up battery floating charging voltage for each 12-V battery. The setting range is 12.00V~15.00V.
- Max charging current: Click up-down arrow to set up maximum charging current. Maximum charging current in different solar charge controller model may be different. Please refer to product manual for the details.
- BTS temperature compensation ratio: It will derate battery charging voltage based on this ratio when temperature is between 25°C and 50°C.

Derating battery charging voltage = (current temperature -  $25^{\circ}$ C) x battery numbers in series connection x BTS ratio

If BTS ratio is 1mV, current temperature is 30°C and it's 48VDC (12V x 4 pcs in series), the derating battery charging voltage is  $10mV = (30°C-25°C) \times 4 \times 1mV$ .

- Battery equalization: Enable or disable battery equalization function. It's necessary to enable this function in software before executing this function in device.
- Battery equalized time: Click up-down arrow to set up duration time for battery equalization. The setting range is 5~300 minutes.
- Battery equalized timeout: Click up-down arrow to set up the extended time to continue battery equalization. The setting range is 5~560 minutes.
- Equalization interval: Click up-down arrow to set up the cycle for battery equalization. The setting range is 0~60 days. When 0 is selected, it means this function is only activated by pressing power switch on the unit.
- Battery equalization voltage: Click up-down arrow to set up the battery equalization voltage for each 12V battery. The setting range is 12.00V ~ 15.50V.
- The max current of battery equalization: Click up-down arrow to set up the max.

current in equalized stage. The setting range is 5A~60A.

#### 4.2.2. Restore to the defaults

This function is allowed to restore all settings back to default value and clear all data in database.

Salact Davica control >>	Doctoro to the	dofaulte	Doforc to	Diagram 1 12
Select Device control >>		uerauits.	Refers to	Diayi ani 4-12

Restore to the defaults								
Battery type:	AGM		Battery equalization:	disable				
Rated battery voltage:	Auto	v	Battery equalizaed time:	60	Min.			
Max charging current:	60.0	А	Equalization Interval:	30	Days			
BTS temperature compensation ratio:	0.0	m٧	The max current of battery equalization:	15	A			
External battery voltage detect:	disable		Battery equalization voltage:	14.6	v			
Battery absorption charging voltage:	14.1	v	Battery C.V. charge time:	150	Min.			
Battery floating charging voltage:	13.5	v						
This operation will also clear all existed data stored here, and shall be used cautiously. Restore to the defaults								
					Close			

Diagram 4-12

#### 4.3. View

#### 4.3.1. Data

This function is to browse the working data of solar charge controller saved in table or chart format.

• Datasheets

Select View >>Data>>Datasheets or click shortcut icon . Refer to Diagram 4-17. Select browsed device and period to display in the screen. Click "Browse" to get result.

- > "**Print**": Print the listed data table.
- "Delete": Select specific data and click "Delete" button to delete the record. Otherwise, the record can not be deleted.
- > **"Delete all":** Click "Delete All" button to delete all records in the listed table.
- > **"Export":** Click "Export" button to save listed table to local PC in .PDF file.

Data Datasheets Charts							X
Device:	🖵 Display i	tem: 🔽 Time	Time period:	2014-04-15	<b>;</b> 2014-04-15	🛗 Browse	
	PV input voltage	Battery voltage	Charging current	Charging power	Unit Temperature	Remote battery voltage	Remote battery temperature
Total: 0 row(s)						Export	Delete Delete all Close

#### • Charts

Select View >>Data>>Charts. Refer to Diagram 4-18.

Select browsed device and period. Then, click "Browse" to get the result.

Diagram 4-17

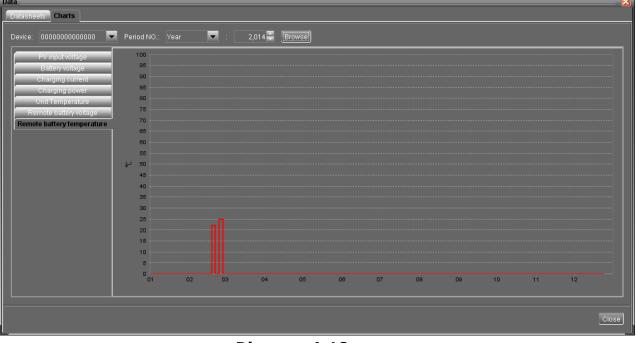


Diagram 4-18

#### 4.3.2. Event log

Select View >>Event log or click shortcut icon **Lieu** to enter event log.

It's to browse history events according to time duration selected. It lists all detailed information and statistics for history events. Refer to Diagram 4-20.

> "**Delete**": Select specific data and click "Delete" button to delete the record.

- > "Delete all": Click "Delete All" button to delete all records in the listed table.
- > "Export": Click "Export" button to save listed table to local PC in .PDF file.

ID	Level	Time Event		Level		Event	Number of tim
020	Warning	2014-02-26 14:45:22 PV low loss	4020	Warning	PV low loss		134
020	Warning	2014-02-26 14:45:19 PV low loss					
020	Warning	2014-02-26 14:45:15 PV low loss					
020	Warning	2014-02-26 14:45:12 PV low loss					
1020	Warning	2014-02-26 14:45:09 PV low loss					
020	Warning	2014-02-26 14:45:06 PV low loss					
020	Warning	2014-02-26 14:45:04 PV low loss					
020	Warning	2014-02-26 14:45:01 PV low loss					
020	Warning	2014-02-26 14:44:58 PV low loss					
020	Warning	2014-02-26 14:44:54 PV low loss					
020	Warning	2014-02-26 14:44:51 PV low loss					
1020	Warning	2014-02-26 14:44:48 PV low loss					
020	Warning	2014-02-26 14:44:45 PV low loss	14	0		134	
1020	Warning	2014-02-26 14:44:42 PV low loss					
020	Warning	2014-02-26 14:44:38 PV low loss	8 10	0			
020	Warning	2014-02-26 14:44:35 PV low loss	of time	0			
020	Warning	2014-02-26 14:44:33 PV low loss					
020	Warning	2014-02-26 14:44:30 PV low loss	Number 9	o			
020	Warning	2014-02-26 14:44:27 PV low loss	<u> </u>				
1020	Warning	2014-02-26 14:44:24 PV low loss	4	0			
020	Warning	2014-02-26 14:44:21 PV low loss					
020	Warning	2014-02-26 14:44:17 PV low loss		o			

Diagram 4-20

#### 4.4. Log in and Log out



Click icon solution and enter password to login the software. The default password is "administrator". Refer to Diagram 4-22.

configuration Device control View Help	p Guest Monitored device: COM1_00000000000000				
🦻 fu-jia-nb.vcn.vol.corp		Basic information	20.2 V	Temperature:	30.0 °C
		Battery voltage:	13.49 V	External battery voltage:	0.06 V
		Charging current:		External battery temperature:	26.0 °C
		Charging power			0 day
	Product Information Serial number: 0000000000000	Please login first		Ficat voltage	: 13.5 V
	CPU: 00002.01	Nominal charging current:		Battery type	

Diagram 4-22

Click icon to log out. Then, the status will become to "guest". Refer to Diagram 4-23.

configuration Device control View Hel	p		
💯 fu-jia-nb.vcn.vol.corp		Basic information	
🔍 🔍 СОМ1_000000000000			
		Battery voltage: 13.49 V	External battery voltage: 0.06 V
		Charging current: 0.64 A B	
	🐬 - 🔚 -	Charging power 8.0 W	
	2 2		
	Product Information	Rated information	
		Nominal battery voltage: 12.0 V	
			Battery type: AGM

Diagram 4-23

#### 4.5. Help

- **About**: Click "Help" menu and select "About" item. It represents the copyright information about software
- **Help**: Click "Help" menu and select "Online help" item. It will open the help manual. Before operating software, please read manual carefully.