51.2V

LiFePO4 Battery

LFP48100P~48300P

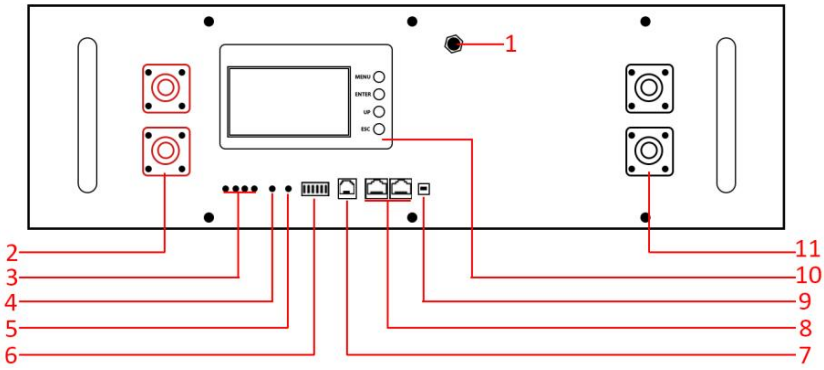
USER MANUAL

CONTENT

1. Safety Instructions

1. Please confirm the package is in good condition after getting the product. If there is any damage, please take photos to record and contact the supplier in time.
2. Because this is an electronic energy storage product, please handle it gently, and please pay attention to safety when moving products.
3. After unpacking, please check whether the product appearance is intact, press the ON/OFF switch to start the battery, confirm whether it can be turned on normally, and whether the LCD screen is displayed normally.
4. Please connect to other devices in the correct way with the battery power off.
5. After devices connected, before turning on the battery, please turn off the loads (including the inverter). If it is turned on with loads, it may trigger the BMS short-circuit protection mechanism.
6. Charge as required, take 51.2V products as an example: normal charging voltage is 57.6V-58.4V, recommend current 0.2C. Mismatched current and voltage will cause damage to the circuit system, shorten the service life of the battery, and even bring safety hazards.
7. Charge rate should not exceed 0.5C, discharge rate should not exceed 0.7C.
8. Avoid using it in humid environments and in areas where it will be exposed to sunlight.
9. When not in use for a long time, it should be charged regularly, and it is best to keep half-charged storage (40%-60%).
10. Battery should be recharged within 12 hours after being fully discharged.
11. When different batches of batteries are installed in the same system, all batteries should be balanced to the same voltage (the voltage difference within 0.3V) by charging and discharging individually.
12. Do not disassemble the equipment without professional assistance.
13. Do not connect batteries with different brands or different capacities.

2. Product Overview



No.	Item	Function
1	Power Switch	ON/OFF Switch
2	Positive Terminal	Charge & Discharge
3	SOC	Indicators for Capacity
4	ALM	Indicator for Alarms
5	RUN	Indicator for Running Status
6	ADD	DIP Switch of Communication
7	RS485A/CAN Interface	For Communicating with Inverter or Upper Computer
8	RS485B Interface * 2	For Communicating between Multiple Batteries
9	Reset	Activate/Hibernate/Reset the BMS
10	LCD Screen	Display Battery Information
11	Negative Terminal	Charge & Discharge

3. Battery Specifications

Nominal Parameters			
Model No.	LFP48100P	LFP48120P	LFP48150P
Nominal Voltage	51.2V	51.2V	51.2V
Nominal Capacity	100Ah	120Ah	150Ah
Energy	5.12KWh	6.14KWh	7.68KWh
Dimensions (without handles) (L*W*H mm)	480*440*160	480*440*200	480*530*180
Weight (KG)	Approx 45	Approx 52	Approx 55
Built-in BMS	16S 100A	16S 100A	16S 200A
Electrical Parameters			
Overall Over Voltage Alarm Value	57.6VDC		
Overall Under Voltage Alarm Value	44VDC		
Overall Over Voltage Protection Value	58.2VDC		
Overall Under Voltage Protection Value	40VDC		
Recommend Charge & Discharge Current	0.2~0.5C		
Max. Cont. Discharge Current	100A	100A	150A
Basic Parameters			
Life Time(25°C)	10+ years		
Communication Interface	RS485 / CAN		
Display Method and Language	LCD, English		
Bluetooth & APP	Available		
Life Cycles (80% DOD, 25°C)	≥6000 times Cycles		
Charge Temp. Range (Cell)	0℃~55℃		
Discharge Temp. Range (Cell)	-20℃~60℃		
Environmental Temp. Range	-25℃~65℃		

Nominal Parameters			
Model No.	LFP48200P	LFP48230P	LFP48300P
Nominal Voltage	51.2V	51.2V	51.2V
Nominal Capacity	200Ah	230Ah	300Ah
Energy	10.24KWh	11.78KWh	15.36KWh
Dimensions (without handles) (L*W*H mm)	480*600*180	480*445*255	480*570*255
Weight (KG)	Approx 70	Approx 80	Approx 107
Built-in BMS	16S 200A	16S 200A	16S 200A
Electrical Parameters			
Overall Over Voltage Alarm Value	57.6VDC		
Overall Under Voltage Alarm Value	44VDC		
Overall Over Voltage Protection Value	58.2VDC		
Overall Under Voltage Protection Value	40VDC		
Recommend Charge & Discharge Current	0.2~0.5C		
Max. Cont. Discharge Current	200A	200A	200A
Basic Parameters			
Life Time(25°C)	10+ years		
Communication Interface	RS485 / CAN		
Display Method and Language	LCD, English		
Bluetooth & APP	Available		
Life Cycles (80% DOD, 25°C)	≥6000 times Cycles		
Charge Temp. Range (Cell)	0℃~55℃		
Discharge Temp. Range (Cell)	-20℃~60℃		
Environmental Temp. Range	-25℃~65℃		

4. List of Accessories

No.	Item	Picture	Qty	Remarks
1	Parallel Power Cable		2	For 51.2V 100AH~120AH: 6 AWG cable 0.3M For 51.2V 150AH~300AH: 4 AWG cable 0.4M
2	Parallel Communication Cable		1	RJ45 cable 0.5M
3	Upper computer Connecting Cable		1	RJ45 to USB cable 2M
4	Screws		4	M8

5. Connection

5.1. Battery Module

If there are multiple batteries to be connected in parallel, ensure that the voltage difference of all batteries is within 0.3V before proceeding. If the voltage difference is over 0.3V, discharge all batteries until the low voltage alarm and discharge stops. Confirm the voltage difference is within 0.3V, then ensure all battery modules are turned off. Connecting each battery module "+" (positive) and "-" (negative) terminal to "+" (positive) and "-" (negative) busbar. Connect all sources and loads to the busbar, observing proper polarity. Note: There may be fuses, contactors, switches, etc. between the busbar and the connected sources and/or loads.

5.2. Communication Cable

When multiple batteries are connected in parallel, set the battery Address (or ID) of each battery according to page 14~15 (also ensure no duplicate address codes are used). Then connect one end of the provided RJ45 communication cable into a battery "RS485B"

interface and connect the remaining end of the RJ45 communication cable into another battery "RS485B" interface. Continue connecting communication cables until all batteries are connected.

For communication between the battery and the inverter, please contact your supplier for communication guidelines.

6. Working Mode

6.1. Basic Mode

6.1.1. Charging Mode

The BMS turns on the charging MOSFET for charging when it detects an external charging voltage, and the cell voltage and temperature are within the chargeable range. When the charging current reaches the effective charging current, it enters the charging mode. Both charging and discharging MOSFETs are on in charge mode.

6.1.2. Discharging Mode

The BMS enters the discharge mode when it detects that the load is connected and the cell voltage and temperature are within the dischargeable range and the discharge current reaches the effective discharge current. Both charging and discharging MOSFETs are on in discharge mode.

6.1.3. Hibernation and Wake Up Mode

The system enters hibernation mode when the following conditions are met:

1. Individual low-voltage protection or overall low-voltage protection has not been released within 30 minutes;
2. Press the reset button for 3 seconds and then release the button;
3. The minimum cell voltage is lower than the dormancy set voltage (default value 3350mV), and the duration reaches the delay time (the default value is 1440min, which meets the requirements of no communication and no charging and discharging current at the same time);
4. Compulsory shutdown through the upper computer software.

Before entering hibernation, make sure that the negative terminal is not connected to external voltage, otherwise it will not be able to enter the low power consumption mode.

* When the minimum cell voltage is lower than the under-voltage protection value -300mV,

the battery will be forced to enter hibernation mode after a delay of 10 minutes.

5. The wake-up conditions of hibernation mode:

1) Connect to the charger, and the input voltage of the charger must be greater than 48V;

2) Wake up by pressing the power switch button for 1S and releasing the button.

6.2. Description of Reset Button

When the BMS is dormant, press the button for 1S and then release it, the BMS will be activated and the LEDs will light on sequentially for 0.5 seconds starting from the “RUN”.

When the BMS is in the working state, press the button for 3S~6S and then release it, the BMS will enter dormant and the LEDs will light sequentially for 0.5S starting from "SOC4".

When the BMS is in the working state, press the button for ⩾10S and then release it, the BMS will be reset, and the LEDs will display according to the current electricity level.

7. Status Indicator Light

Four green capacity indicators, one red alarm indicator, one green running indicator.

SOC4● SOC3● SOC2● SOC1●	●	●
SOC	ALM	RUN

SOC Indicator Light

Status	Charge				Discharge			
SOC Indicator	SOC4●	SOC3●	SOC2●	SOC1●	SOC4●	SOC3●	SOC2●	SOC1●
0～25%	Flash 2	OFF	OFF	OFF	ON	OFF	OFF	OFF
25～50%	ON	Flash 2	OFF	OFF	ON	ON	OFF	OFF
50～75%	ON	ON	Flash 2	OFF	ON	ON	ON	OFF
75～100%	ON	ON	ON	Flash 2	ON	ON	ON	ON
RUN Indicator●	ON				Flash 3			

Description of Status Indicator Light

Status	Normal / Alarm / Protection / Fault	SOC				ALM	RUN
		●	●	●	●	●	●
OFF	OFF	ALL OFF					
Standby	Normal	ON according to battery capacity				OFF	Flash 1
	Alarm					Flash 2	Flash 1
Charge	Normal	ON according to battery capacity (The largest SOC LED Flash 2)				OFF	ON
	Alarm					Flash 2	ON
	Over Voltage Protection	ON according to battery capacity				OFF	Flash 2
	Over Current Protection (Enter current limit charging)	ON according to battery capacity (When there is charging current, the largest SOC LED Flash 2)				OFF	ON
	Temperature Protection	ALL OFF				ON	OFF
Discharge	Normal	ON according to battery capacity				OFF	Flash 3
	Alarm					Flash 2	Flash 3
	Low Voltage Protection					Flash 2	OFF
	Over Current Protection, Short Circuit Protection	ALL OFF				ON	OFF
	Temperature Protection	ALL OFF				ON	OFF
Fault	NTC fault, MOS fault, reverse polarity, differential voltage protection, ultra-low voltage protection	ALL OFF				ON	OFF

Note:

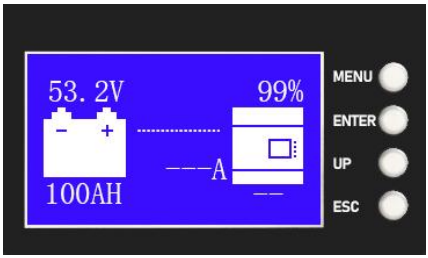
1. There are only normal and alarms in standby mode. Protection and faults are reported as charging and discharging status.
2. Alarms include: over voltage difference alarm, low capacity alarm, over voltage and low voltage alarm of single cell or whole battery, temperature alarms.
3. When charging over current protection occur, it will enter current limited charging. If

there is charging current, it will displayed as normal state; if no charging current, it will displayed as fault state, ALM ON and others OFF.

Flash Type of Status Indicator light

Flash Types	ON	OFF
Flash 1	0.25 S	3.75 S
Flash 2	0.5 S	0.5 S
Flash 3	0.5 S	1.5 S

8. LCD Display Introduction



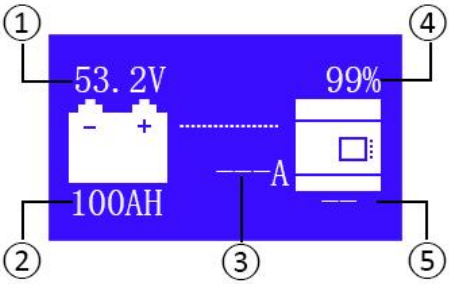
Button

MENU：Enter the main menu

ENTER：Enter to the sub-menu

UP：Cursor down or page down

ESC：Return to the previous menu



① Battery Total Voltage

② Battery Full Capacity

③ SOC

④ Current

⑤ Battery Protection Code

Note: When there is a protection status of the battery, it will show the corresponding protection code at ⑤position, otherwise, it will show ——.

Protection Code:

OV: Over Voltage	LT: Low Temp
LV: Low Voltage	OC: Over Current
OT: Over Temp	SC: Short Circuit

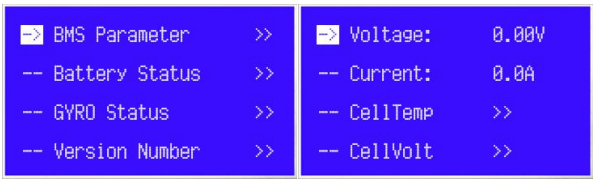
After 1 minute of no button operation in normal running, the display screen will be off (only the backlight is off). Pressing any button while the screen is off will allow the screen light and operate normally.

8.1. Main Menu

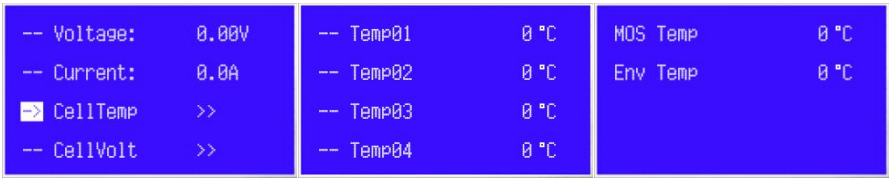
Press the "MENU" button to enter the main menu. You can see that there are 4 sub-menus, namely BMS Parameter, Battery Status, GYRO Status and Version Number.

8.2. Sub-menu 1: BMS Parameter

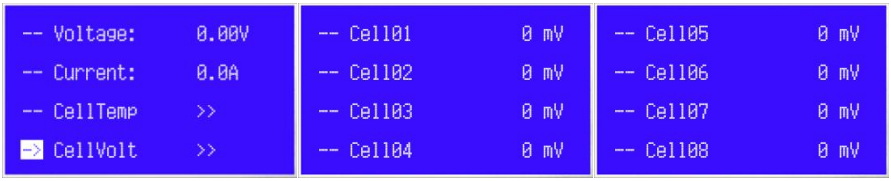
Access the “BMS Parameter” from the main menu.



Enter the “CellTemp”



Enter the “CellVolt”



-- Cell09 0 mV	-- Cell13 0 mV	SOC : 0 %
-- Cell10 0 mV	-- Cell14 0 mV	Nominal : 0.0 AH
-- Cell11 0 mV	-- Cell15 0 mV	Remain : 0.0 AH
-- Cell12 0 mV	-- Cell16 0 mV	BMS Cycles : 0

8.3. Sub-menu 2: Battery Status

Access the “Battery Status” from the main menu.

-- BMS Parameter >>	-> Status: IDEL
-> Battery Status >>	-- Alarm Status >>
-- GYRO Status >>	-- Protect Status >>
-- Version Number >>	-- Failure Alarm >>

Enter the “Alarm Status”

-- Status: IDEL	-- Over Volt : NO	-- Low SOC : NO
-> Alarm Status >>	-- Low Volt : NO	-- Diff Volt : NO
-- Protect Status >>	-- Over Temp : NO	-- Over Curr : NO
-- Failure Alarm >>	-- Low Temp : NO	-- Reverse : NO

Enter the “Protect Status”

-- Status: IDEL	-- Over Volt : NO	-- Over Curr : NO
-- Alarm Status >>	-- Low Volt : NO	-- Short Curr : NO
-> Protect Status >>	-- Over Temp : NO	
-- Failure Alarm >>	-- Low Temp : NO	

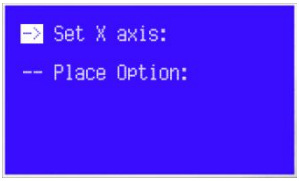
Enter the “Failure Alarm”

-- Status: IDEL	-- Sample Line: N	SC Times : 0
-- Alarm Status >>	-- Charge MOS : N	OverTempCNT: 0
-- Protect Status >>	-- DisCHG MOS : N	OverCurrCNT: 0
-> Failure Alarm >>	-- Sample Chip: N	OverChgCNT : 0

OverDchgCNT: 0

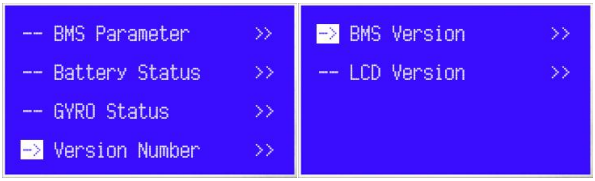
8.4. Sub-menu 3: GYRO Status

Access the “GYRO Status” from the main menu.



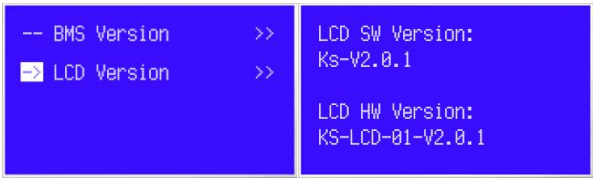
8.5. Sub-menu 4: Version Number

Access the “Version Number” from the main menu.



Enter the “BMS Version”

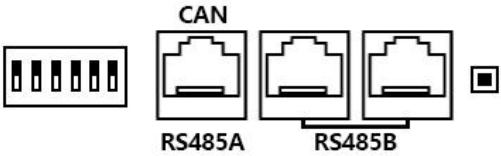
Enter the “LCD Version”

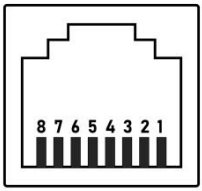


9. Serial Communication

With RS485 and CAN interface, which supports communicating with multiple battery modules in parallel, with inverter and with the upper computer. RS485 baud rate is 9600 defaulted, CAN baud rate is 500K defaulted.

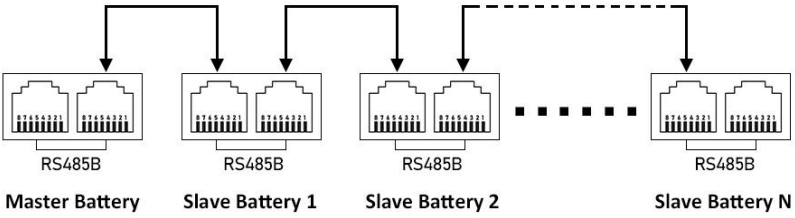
9.1. Pin Definition of Communication Interface





Pins	Definition	
	RS485A / CAN ports	RS485B port
1	RS485A_B1	RS485B_B2
2	RS485A_A1	RS485B_A2
3	/	/
4	CAN_H	/
5	CAN_L	/
6	GND	GND
7	RS485A_A1	RS485B_A2
8	RS485A_B1	RS485B_B2

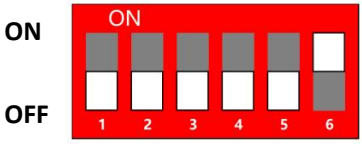
The multi-unit parallel connections are shown in the following figure.



9.2. DIP Switch Setting

Support battery modules parallel and inverter communication protocol selection.

When batteries are used in parallel, different batteries are distinguished by the dial address (or “ID”), and the ID of each battery in the entire battery group is unique.



There will be only one master battery and others will be slave batteries. The slave dialing address should be selected from 1 to 15, and the master dialing address should be selected from 0 or 16 or 32 or 48 according to the different communication protocol and inverter brand.

***Exception**: When batteries communicate with **Voltronic** inverter (by RS485 protocol) , there will be no master battery, all batteries are used as slaves, and all the dial code address should be selected from 1 to 15.

The reference table is as follows.

FOR MASTER BATTERY.

DIP SWITCH						ADD (ID)	REMARKS
1	2	3	4	5	6		
Communicate via CAN Communication Protocol							
OFF	OFF	OFF	OFF	OFF	OFF	0	Victron, SMA
OFF	OFF	OFF	OFF	OFF	ON	32	Pylon, Deye, Goodwe, Solis, Sofar, LXP
OFF	OFF	OFF	OFF	ON	OFF	16	AiSWEI
OFF	OFF	OFF	OFF	ON	ON	48	Growatt, Sacolor
Communicate via RS485 Communication Protocol							
OFF	OFF	OFF	OFF	OFF	ON	32	SRNE

FOR SLAVE BATTERY

DIP SWITCH						ADD (ID)	REMARKS
1	2	3	4	5	6		
ON	OFF	OFF	OFF	OFF	OFF	1	Slave Pack 1
OFF	ON	OFF	OFF	OFF	OFF	2	Slave Pack 2
ON	ON	OFF	OFF	OFF	OFF	3	Slave Pack 3
OFF	OFF	ON	OFF	OFF	OFF	4	Slave Pack 4
ON	OFF	ON	OFF	OFF	OFF	5	Slave Pack 5
OFF	ON	ON	OFF	OFF	OFF	6	Slave Pack 6
ON	ON	ON	OFF	OFF	OFF	7	Slave Pack 7
OFF	OFF	OFF	ON	OFF	OFF	8	Slave Pack 8
ON	OFF	OFF	ON	OFF	OFF	9	Slave Pack 9

OFF	ON	OFF	ON	OFF	OFF	10	Slave Pack 10
ON	ON	OFF	ON	OFF	OFF	11	Slave Pack 11
OFF	OFF	ON	ON	OFF	OFF	12	Slave Pack 12
ON	OFF	ON	ON	OFF	OFF	13	Slave Pack 13
OFF	ON	ON	ON	OFF	OFF	14	Slave Pack 14
ON	ON	ON	ON	OFF	OFF	15	Slave Pack 15

Note: The factory default settings support up to 16 batteries in parallel, if you need more than 16 batteries in parallel, please contact manufacturer to upgrade the software (supports up to 32 batteries in parallel).

***Exception**: When batteries communicate with **Voltronic** inverter, only support up to 15 batteries in parallel.

9.3. Settings for No Communication Situation

Without communication protocol, inverter cannot communicate with our battery. You need to make some setting on your inverter, for example, select the user-defined mode and set the corresponding voltage level (according to the inverter user manual), so that they can work together without communication.

Here are some commonly used battery parameters that need to be set, for reference. If need more advices about battery parameters settings, please contact the manufacturer.

Over Voltage Disconnect Voltage	57.6V
Charging Limit Voltage	58.4V
Equalizing Charging Voltage	56V
Float Charging Voltage	54V
Low Voltage Warning Voltage	45V
Cut-off Discharge Voltage	43.2V
Discharge Limit Voltage	40V

10. Bluetooth Communication

10.1. App Download

Scan the QR code below to download and install the APP **“Lithium Battery WiFi”** .

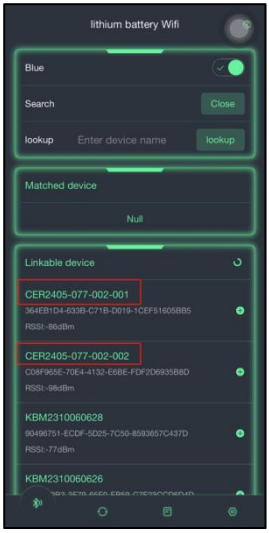
Lithium Battery WiFi **Android** **IOS**

10.2. APP Settings and Function Introduction

There are 4 main pages on the APP, "Search Devices", "Real Time Data", "Historical Data" and "Settings".

Search Devices **Real Time Data** **Historical Data** **Settings**

1. Open the APP, search for Bluetooth devices, you can connect to specific battery according to the product serial number. Note that the APP needs to obtain Bluetooth permissions and location permissions, if a pop-up window for obtaining permissions pops up when searching for Bluetooth devices, you need to allow the APP to obtain permissions in order to search for Bluetooth devices.



2. After the Bluetooth device is successfully connected, it will automatically jump to the "Real Time Data" page, you can see the battery real-time data.

3. You can view the basic information of battery in the “Settings” page. Swipe left or right under the Settings page to view more sub-pages.

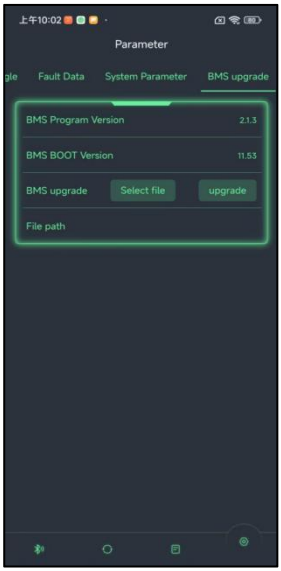
4. Upgrade the BMS

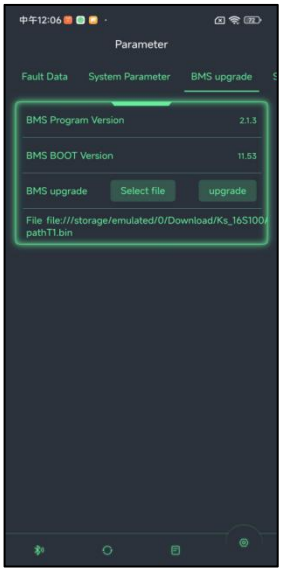
In the sub-page “BMS upgrade”, you can import the BMS upgrade file and upgrade the BMS

software via Bluetooth.

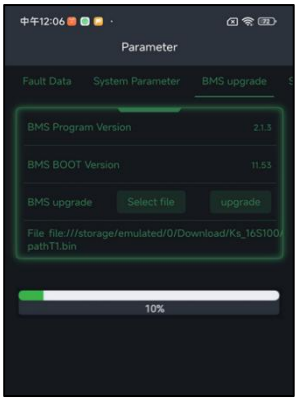
Step 1: In the sub-page “BMS upgrade”, click “Select file” to select the BMS upgrade file in the file management of the phone, after selecting, the path of the loaded file will be displayed on the APP, indicating that the file has imported.

***Note,** the app restricts the upgrade file name should start with "Ks" . The files shown in the picture are for reference only, the actual upgrade file should be obtained from the battery supplier.





Step 2: Click “upgrade”, there will be a BMS upgrade prompt pop-up window, click “Upgrade now”, then a progress bar will be displayed on the APP. Wait for the progress bar to finish running, the BMS upgrade will be completed.

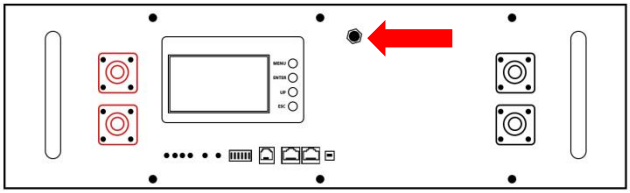


Note: Stable Bluetooth connection is required during the upgrade process. If the upgrade is interrupted due to Bluetooth disconnection, you need to restart the BMS upgrade process in the APP.

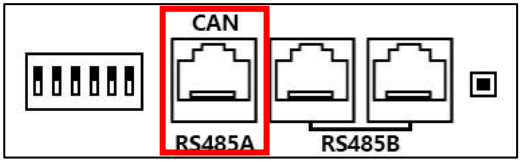
11. Upper Computer Monitoring

11.1. How To Communicate With Upper Computer

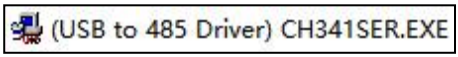
1. Turn on the battery by pressing the power switch.



2. Use the provided RJ45 to USB cable to connect the battery "RS485A" port to the computer USB port.

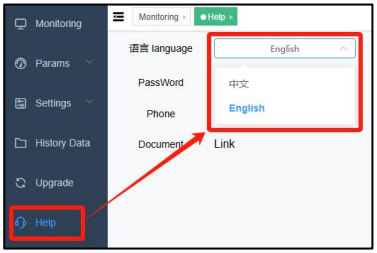


3. Download and install the driver on your computer.



4. Download the folder “KS software”, you will find a app “StartApp” in folder, double click and open it.

5. You can change the language to Chinese or English in “Help Center”.



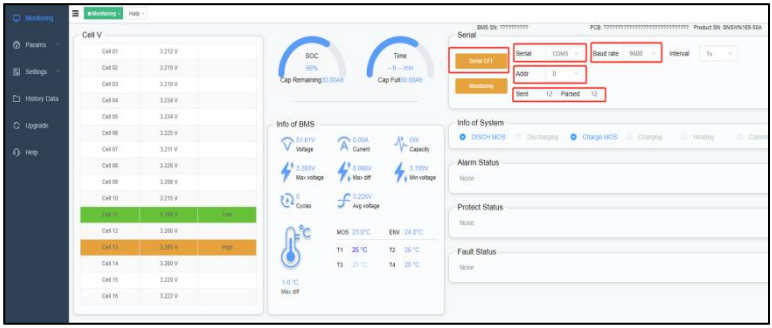
6. Back to Monitoring page,

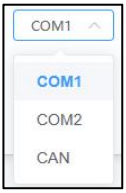
1) Click “Series ON”,

2) “Addr”: Select according to the battery ID (refer to the ID table in page 14~15),

3) “Baud rate”: Select as “9600”,

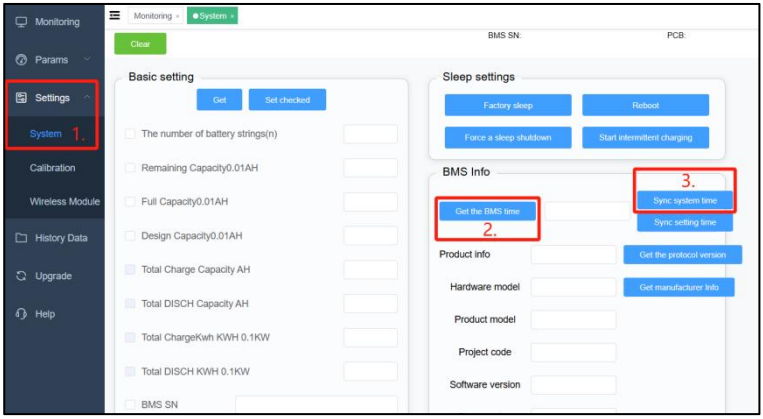
4) “Serial”: Select each COM one by one, until you see the number of "Sent" and "Parsed" both increasing, it means the battery and the computer communicate successfully.



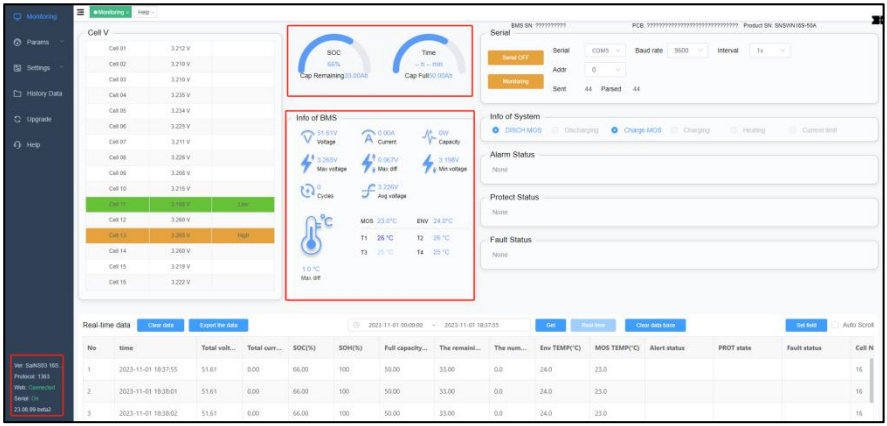


11.2. Upper Computer Software Introduction

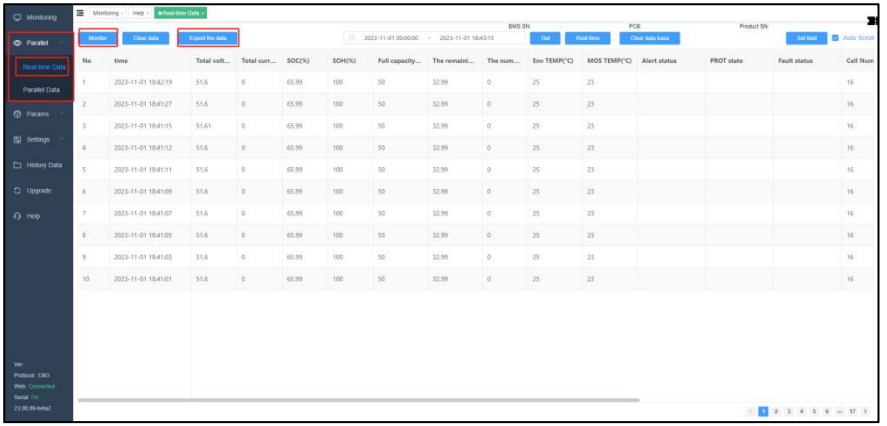
1. When you use the battery for the first time, please set the BMS time to your system time. Path: Settings -- System -- BMS Info -- “Get the BMS time” -- “Sync system time”.



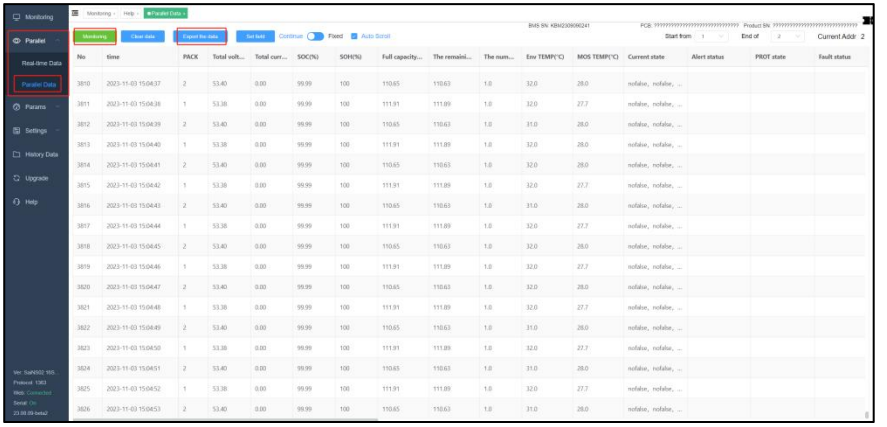
2. In the Monitoring page, you can monitor the basic parameters and status of the battery in real-time, including battery voltage, current, SOC, SOH, battery temperature, alarm status, protection status, etc.



3. You can view the real-time data storage of the BMS and export as excel tables.



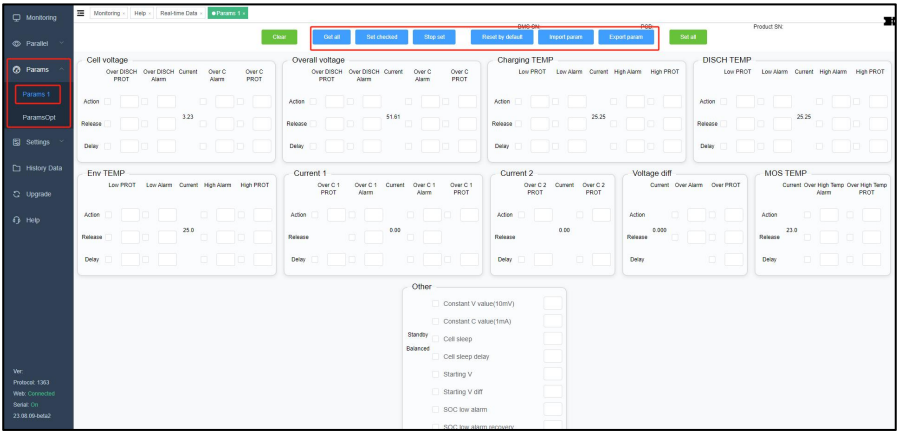
4. When monitoring multiple packs, you need to set the start and end address of packs manually, you can check and compare the data of each pack. And you can also export as excel table.



5. Parameters 1.

Click "Get All" when enter for the first time.

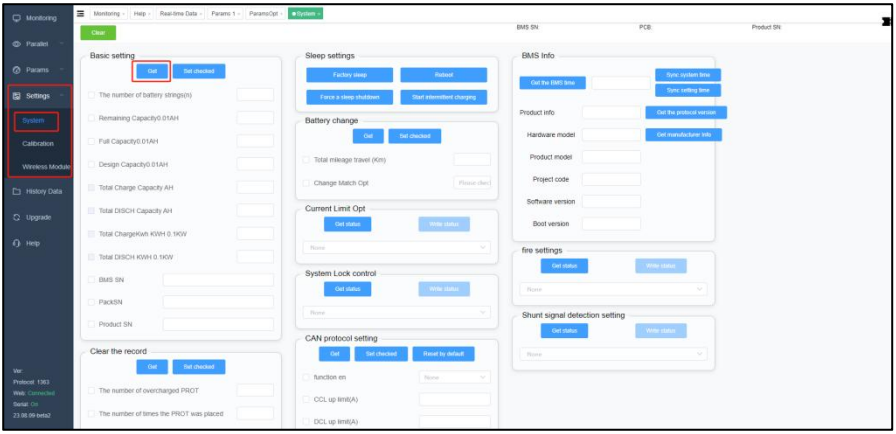
This section includes reading basic parameter information, restoring default parameters, writing individual parameters, writing all parameters, importing parameters and exporting parameters (it is not recommended to manually modified default parameters).



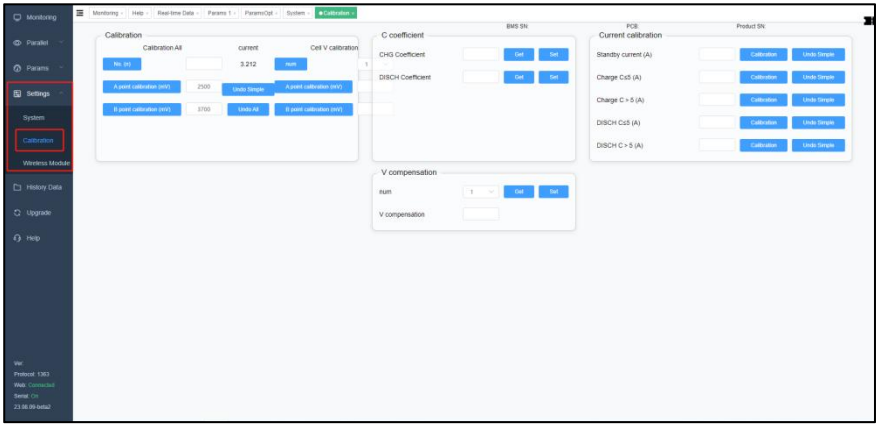
6. System parameter setting.

Click "Get" when enter for the first time.

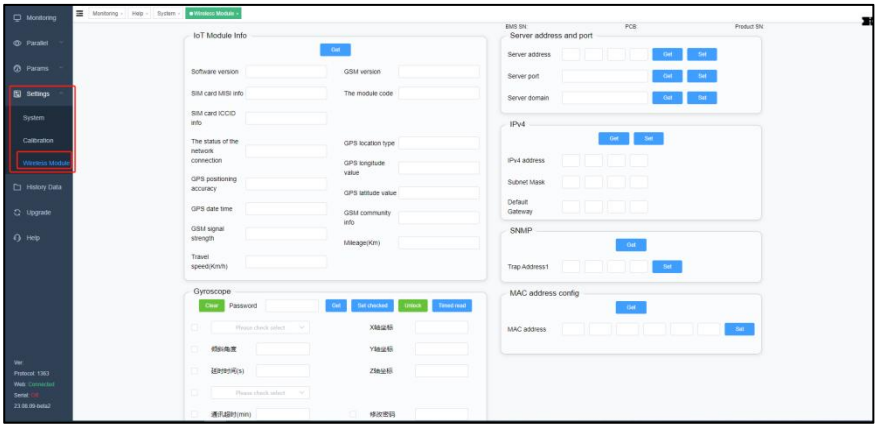
You can monitor the BMS parameters configuration, sleep settings and BMS information (it is not recommended to manually modified default parameters).



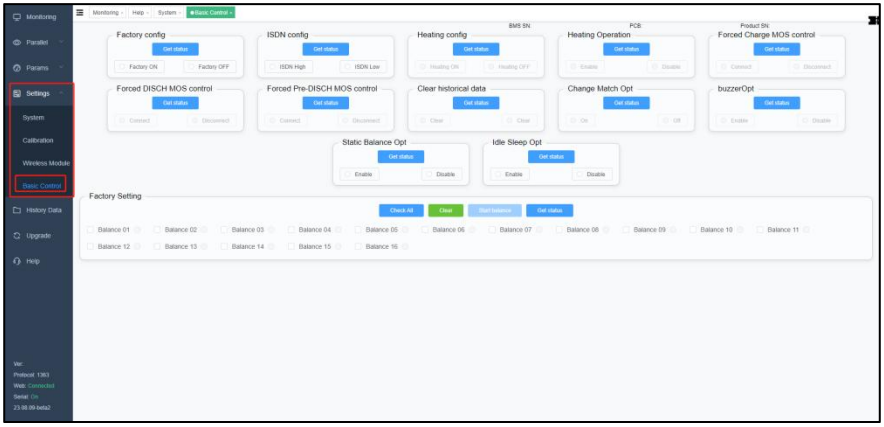
7. Calibration: Here is calibration content of BMS data (all has calibrated by factory, not recommended for private calibration).



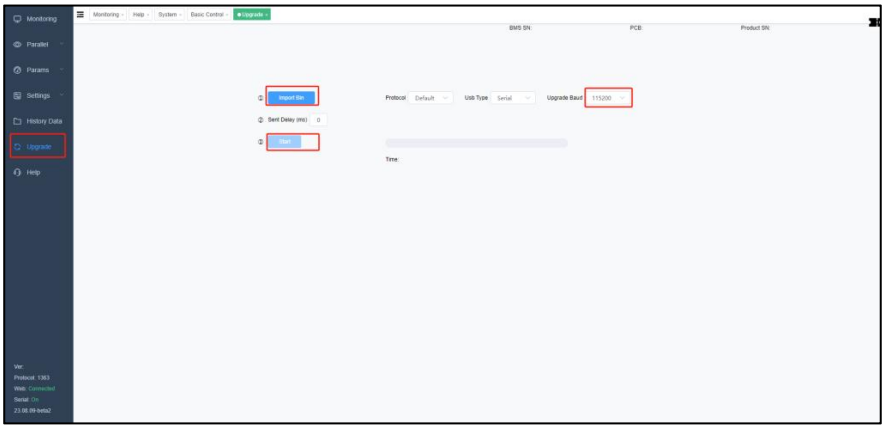
8. Wireless module: Here will contains information about some additional functional modules.



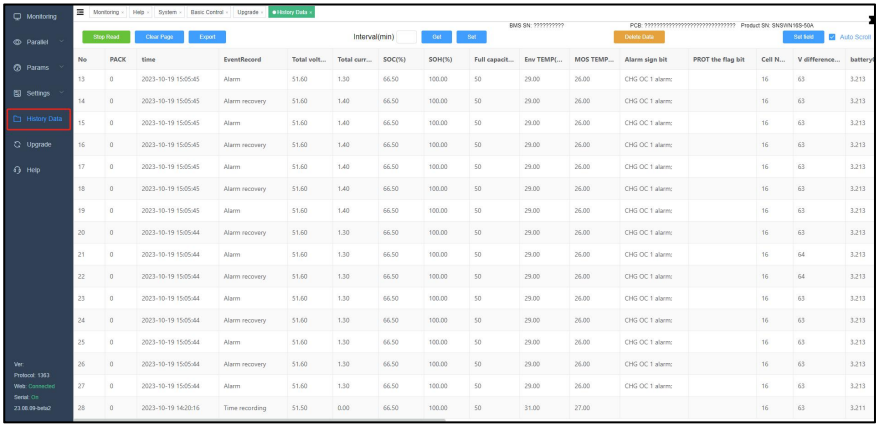
9. Basic control: Here includes the control of charging and discharging MOS, heating and other states (please consult the manufacturer for operation).



10. Upgrade: software online upgrade function of BMS (please consult the manufacturer for operation).



11. Click "Read Data" to get historical data and export data.



12. Warranty Policy

We offer a standard factory warranty that is valid for 5 years for battery products, starting from the date of purchase or no more than 5.5 years from the delivery date from the factory.

1. Product Quality Standards and Warranty

1) Our batteries comply with safety transportation regulations, including UN38.3 and MSDS.

2) The battery warranty terms are determined by the manufacturer and its distributor.

3) Once the products leave the factory, any appearance damage (e.g., scratches, rust, chemical damage) is not covered under the warranty.

2. Warranty Exceptions

1) Battery failure caused by non-compliant inverters or chargers, such as abnormal charge voltage or unqualified inverters/chargers.

2) Battery malfunction or damage resulting from installation or handling by non-professional or unqualified personnel.

3) Failure to follow the user manual, installation guide, or maintenance regulations.

4) Product malfunction or damage due to non-compliance with relevant laws, regulations, or technical requirements in power plant design, construction, or installation.

5) Connecting a high-voltage inverter to a low-voltage battery or vice versa.

6) Product malfunction or damage due to installation on movable devices or in environments subject to vibration.

7) Failure or damage caused by corrosion, lightning, other natural events, or force majeure.

8) Unauthorized alteration or disassembly of the product.

9) Damage or malfunction caused by other equipment, such as surge damage from switching high-power generators on or off.

3. **Repair and Replacement**

In the event of a failure, users should check the screen display and record the error code, protection values, and any necessary information.

Once the dealer or manufacturer confirms that the issue is due to a product quality problem, the faulty product will be repaired or replaced with spare parts.

The manufacturer is responsible only for troubleshooting, repair, and replacement of its products. The manufacturer does not assume liability for any special, consequential, or incidental damages (including loss of profits, loss of goodwill, loss of business reputation, delays, etc.).

This warranty does not affect the customer's rights under any other applicable laws and regulations related to the sale of consumer goods in the host country or region.

4. **Force Majeure**

Force majeure refers to unavoidable and insurmountable objective conditions that cannot be prevented even with the use of reasonable precautions and measures. It includes, but is not limited to, the following events:

1. Natural Disasters: Earthquakes, floods, fires, storms, and other natural calamities.
2. Hostile Actions: War, invasion, blockade, and other acts of armed hostility.
3. Civil Disturbances: Revolutions, rebellions, and riots.
4. Labor Actions: Strikes and labour disputes.
5. Government Actions: Orders, prohibitions, and other governmental directives.
6. Epidemics: Outbreaks of infectious diseases.
7. Third-Party Actions: Negligence and misconduct by third parties beyond the manufacturer's control.

5. **Warranty Disclaimer**

We make no representations or warranties regarding the Product other than those expressly stated in this Limited Warranty. These Limited Warranties are exclusive and replace all other express and implied warranties. We specifically disclaim any implied warranties of merchantability or fitness for a particular purpose.

To the fullest extent permitted by law, we shall not be liable, whether in contract, tort (including negligence and strict liability), or otherwise, for any damages exceeding the Product’s purchase price. Additionally, we shall not be liable for any indirect, incidental,

special, or consequential damages of any kind, including, but not limited to, loss of revenue, profits, business, information, data, or any other financial losses arising out of or in connection with the use or inability to use the Product.

6. **Legal Rights**

Some countries and/or states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above limitations may not apply to you. This warranty provides you with specific legal rights, which may vary from country to country and/or state to state.

This warranty shall be governed by and interpreted by the laws of China. It constitutes the exclusive agreement between the parties regarding the subject matter herein. No employee or representative is authorized to make any warranty beyond those expressly stated in this agreement.

7. Product Sustainability Guarantee

As a LiFePO4 battery pack manufacturer, we prioritize sustainability by investing in products and processes that minimize waste, enhance performance, and improve environmental and safety standards. We develop innovative solutions using recycled or renewable materials and ensure recyclability.

Our collaboration with suppliers and partners supports responsible environmental management and sustainability. We are dedicated to maintaining a safe workplace and delivering value in the renewable energy sector.

*** The right to interpret this manual is owned by the manufacturer, and the manufacturer reserves the right to modify the manual without prior notice.**

Warranty Card

User Information

Company / User Name:

Address:

Telephone:

Email:

Project installation location:

Product Information

Product Model:

Serial No :

Invoice Number / Order Number:

Purchase Date:

Dealer:

Commission date:

Fault/Error Description