Powercool-WLL005I1
Series Operation Manual



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The material furnished in this manual is believed to be accurate and reliable. The information and recommendations in this manual do not constitute commitments or warranties in the form of assignments. The information in this document is subject to change without notice.

This manual mainly describes the product information, guidelines for installation, operation, maintenance and troubleshooting. And this manual applies to the Powercool-WLL005I1 system, including the hybrid inverter. Please keep the Manual properly and operate in strict accordance with all safety and operating instructions in this manual. Please do not operate the product before reading through the manual.

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This Manual introduces Powercool-WLL005I1 system and hybrid inverter manufactured by our company. Please read this manual before you install the product and follow the instructions carefully during the installation process. Our company shall not be liable for any consequences resulting from the violation of the storage, transportation, installation, and operation regulations outlined in this document. Should you have any confusion, please contact our company for advice and clarification.

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1 Introduction

1.1 Content and Structure of this Manual

This manual is valid for Powercool-WLL005I1 Series Energy Storage System.

This manual describes the product information, and guidance for installation, as well as Inverter operation.

Observe all manual that accompanies the product, keep them in a convenient place and available at all times.

Illustrations in this manual are reduced to the essential information and may deviate from the real product.

1.2 Target Group

This manual is intended for qualified persons and end users. Only qualified persons are allowed to perform the operations marked with a warning symbol in this manual. Tasks that do not require any specific qualifications will not be marked and can be performed by the end user. Qualified persons must have:

- Knowledge of working principle of Li-ion battery.
- Knowledge of how to deal with the dangers and risks associated with installing and using electrical devices, batteries and systems.
- Knowledge of the installation and commissioning of electrical devices and systems.
- Knowledge of the applicable standards and directives.
- Understood and complied with this document, including all safety precautions.
- Understood and complied with the documents of the battery and inverter manufacturer, all safety precautions included.

1.3 Levels of Warning Messages

DANGER

DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.

WARNING

WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION

CAUTION indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

NOTICE

NOTICE indicates a situation which, if not avoided, can result in property damage.

1.4 Marks

	Warning electric shock.		Do not operate until 10 minutes after discharge
	Warning Fire		Read the product and operation manual before operating the battery system!
	Do not reverse connect the positive and negative		CE mark
	Do not place near open flame		Recyclable
	Do not place at the children or pet touchable area		Grounding

1.5 Definition of Abbreviations and Nouns

Abbreviation	Noun
AC	alternating current
BAT	battery
BMS	battery management system
DC	direct current
INV	inverter
PV	photovoltaic
SOC	state of charge
SOH	state of health

2 Safety Instruction

This product is designed and tested in accordance with international safety requirements CE and UN38.3, but as with all electrical and electronic equipment, certain precautions must be observed when installing and operating the product. To reduce the risk of personal injury and ensure the safe installation and operation of the product, more attention should be paid on following all instructions, cautions and warnings in this Manual.

2.1 Battery precautions



WARNING

It is important and necessary to read the user manual carefully before installing or using battery. Failure to do so or to follow any of the instructions or warnings in this document can result in electrical shock, serious injury, or death, or can damage battery, potentially rendering it inoperable.

- If the battery is stored for long time, it is required to charge it every six months, and the recommended SOC should be 50%~55%, If the battery is to be stored for more than 1 month, make sure the storage temperature falls within 0 - 35 ℃. If the battery is to be stored for not more than 1 month, make sure the storage temperature falls within -20~45℃.
- Battery needs to be recharged within 12 hours after being fully discharged.
- Do not have the product installed in any environment that falls outside the range of temperature or humidity set out in the Manual.
- All the power terminals must be disconnected for maintenance.
- Please contact the supplier within 24 hours in case of anything abnormal.
- Do not use cleaning solvents to clean battery.
- Do not expose battery to flammable or harsh chemicals or vapors.
- Do not paint any part of battery, include any internal or external components.
- Do not connect battery with PV solar wiring directly.
- Any foreign object is prohibited to insert into any part of battery.
- The warranty claims are excluded for direct or indirect damage due to above reasons.

➢ Recycle batteries in accordance with local regulations.

2.2 Emergency situation


DANGER

This product is designed with multiple safety strategies to prevent hazards resulting from failure. However, hazards and dangers could emerge in few uncertain situations.

Fire

The battery PACK may catch fire when heated over 150°C.

Ensure an ABC or carbon dioxide extinguisher nearby the battery, and do not use water to extinguish the fire.

If a fire breaks out where the battery is installed, perform the following actions:

- Extinguish the fire before the battery catches fire.
- If the battery has caught fire, do not try to extinguish the fire. The fired battery will produce poisonous gases, please evacuate people immediately.

Leaking

If the battery PACK leaks, avoid contact with the leaking liquid or gas.

Electrolyte is corrosive and contact may cause skin irritation and chemical burns. If one is exposed to the leaked substance, perform the following actions:

Inhalation: Evacuate the contaminated area and seek medical attention immediately.

Eyes contact: Rinse eyes with flowing water for 15 minutes and seek medical attention immediately.

Skin contact: Wash the affected area thoroughly with soap and water and seek medical attention immediately.

Ingestion: Induce vomiting as soon as possible and seek medical attention immediately.

Wet battery

If the battery is wet or submerged in water, do not try to access it. Contact customer service for technical assistance.

Damaged battery

Damaged battery may emit toxic gas or/and flammable gas, which could cause hazards to lives or property. If the battery is damaged, please keep away from the battery and contact customer service for help as soon as possible.

3 System Introduction

3.1 Parameters of energy storage system

Product Name	Rechargeable Li-ion Battery System
Battery Module	Powercool-WLL005I1
Total Energy (kWh)	5.32
Usable Energy (kWh)*	5.06
Voltage Range (V)	44.8~57.6
Rated Capacity (Ah)	104
Nominal Voltage (V)	51.2
Charging Voltage Declared by Manufacturer (V)	57.6
V_{trip} : The Trip Voltage of Overcharge Protection Voltage Control (V)	58
V_{trip} : The Trip Voltage of Over-discharge Protect (V)	44
Nominal Charging Current (A)	50
Max. Continuous Charging Current (A)	100(Last for 30 minutes)
Nominal Discharge Current (A)	50
Max. Continuous Discharging Current (A)	100(Last for 30 minutes)
T_{trip} :The Trip Temperature of Overheating Protection (℃)	57
DOD (%)	97%
Communication Interface	CAN/RS485/WIFI
Max Parallel Quantity	15
WIFI Frequency Range	2412MHz~2472MHz
WIFI Maximum Transmission Power	20dBm
Power Heating Film(Optional) (W)	130
Display Screen	LED

Dimension(L*W*H) (mm)		(418±2)*(160±2)*(610±2)
Net Weight (kg)		(45±1)
Operating Condition		Indoor
Storage Temperature Range*		-30~35℃(30%～50%SOC)
Operating Temperature	Charging	0~55 ℃
	Discharging	-15~55 ℃
Humidity		15% ~ 85%RH(No Condensation)
Cooling Type		Natural
IP Rating of Enclosure		IP20
Configuration		16S
Class of Protection		Class I
Installation Method		Wall-mounted or floor-standing
Supply Connection		Fixed power cord
Authentication Level		CE/UN38.3
Warranty		5 free warranty

*Testing conditions based on temperature 25℃ at the beginning of life. Total Energy/Usable Energy are measured with a standard test method: 0.2C Charge and Discharge. As per the characteristics of lithium batteries, such parameters as the charge/ discharge current and efficiency listed above are subject to change. The final right of interpretation is reserved our company.

*When the storage time is less than three months, it is recommended to store at a temperature of 0-45 ℃, ≤ 90% RH, and an SOC range of 20%-50% SOC.

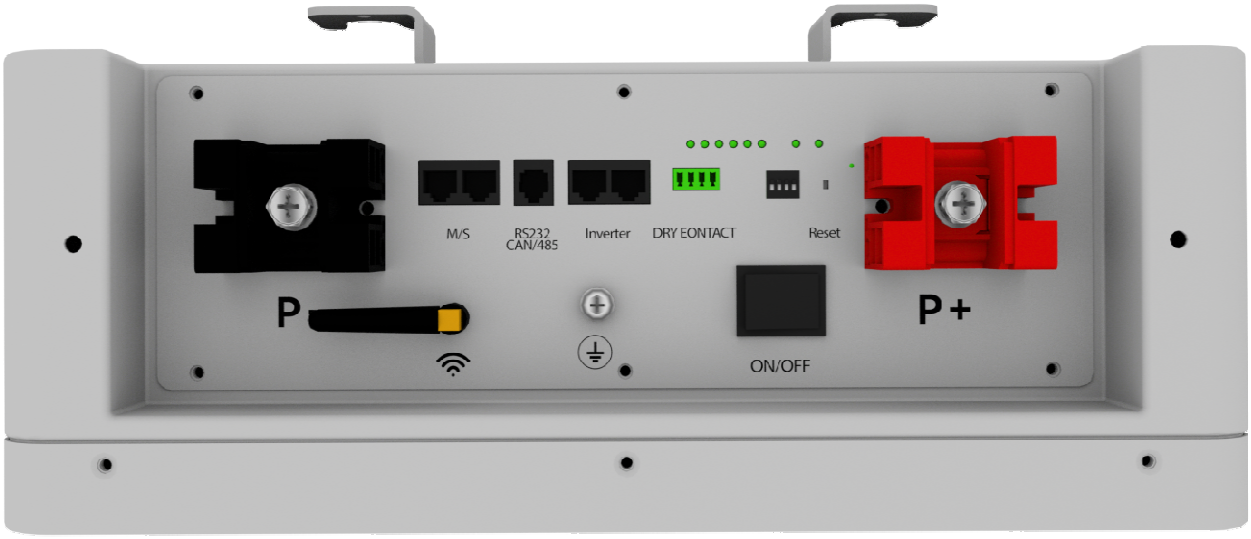
When the storage time is more than three months, it is recommended to store at a temperature of 15-30 ℃, ≤ 90% RH, and an SOC range of 20%-50% SOC.

When the storage time exceeds 6 months, it is necessary to adjust the SOC of the battery cell to 20- 50% SOC, ≤ 90% RH, and the recommended storage temperature is 5℃-25 ℃.

High SOC (>50% SOC) storage is not allowed during storage, and full charge storage is prohibited.

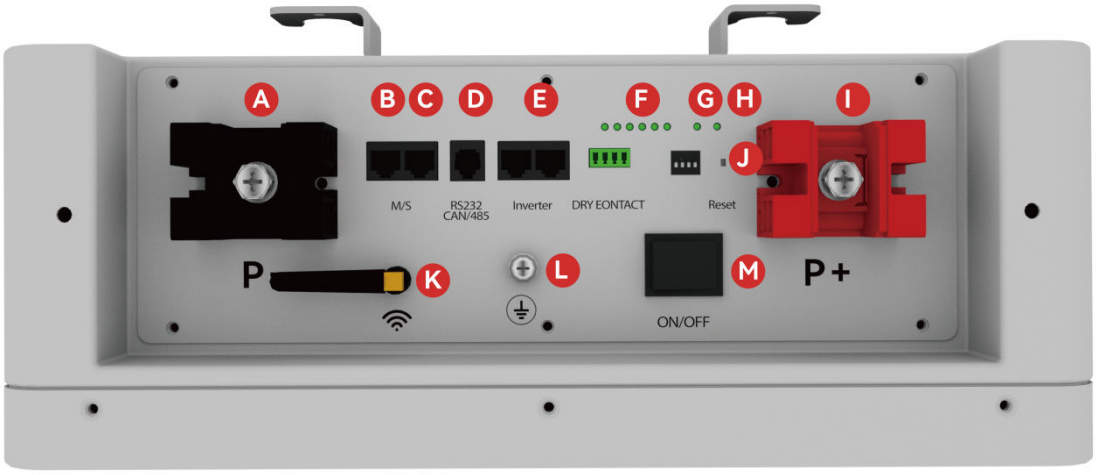
3.2 Product Appearance


05I1


M/S
RS232
CAN/485
Inverter
DRY EONTACT
Reset
P
P+
ON/OFF

3.3 Battery Interface Instruction

All the ports and indicators are shown in the Fig. below and detailed in the following table.



Object	Name	Description
A	P-	Battery output cathode
I	P+	Battery output anode
B	M	Parallel signal input port
C	S	Parallel signal output port
D	RS232	Upper computer communication port
E	INV [1]	Communication port to inverter
F	SOC	SOC indicator LED
G	Run [3]	Operation indicator (Green)
H	Fault [2]	Fault indicator (Red)
J	Reset	Reset the configuration
K	WIFI	WIFI communication
L	GND	Ground protection
M	ON/OFF	The switch of the battery

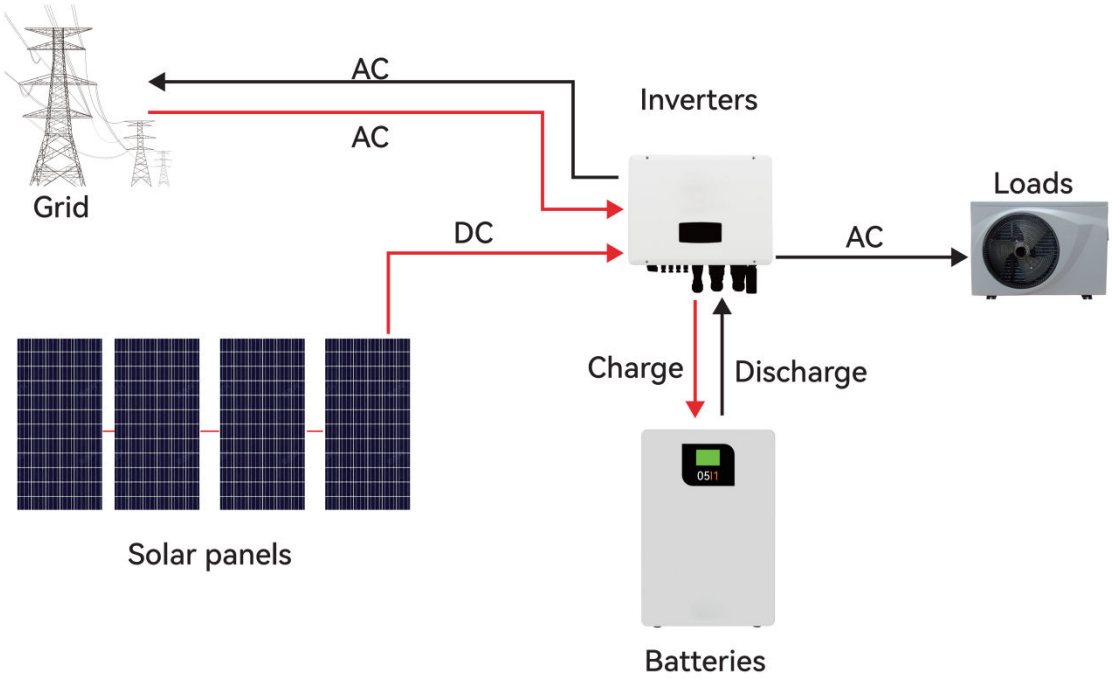
1: The one near the dry contact is RS485 communication, and the other is CAN communication.

2: The red light keeps flashing when fault occurs, such as overcharge, over-discharge, over-current, as well as over high/low temperature, etc.

3: The green light flashes slowly when the battery runs normally. The green light flashes quickly when turning on or off.

3.4 Application scenario

The Powercool-WLL005I1 series energy storage system(includes inverter and battery Powercool-WLL005I1) are designed to increase energy independence for homeowners. Energy management is based on time-of-use and demand charge rate structures, significantly reduce the amount of energy purchased from the public grid and optimize self-consumption. The system can be applied in DC-coupled systems and Off-grid (with Generator) systems.



3.5 Features

•The battery is non-toxic, pollution-free and environmental-friendly.

•Anode material is made from $LiFePO_4$ with safety performance and long cycle life.

•BMS has protection functions including over-discharge, over-charge, over-current and high/low temperature.

•Flexible configuration, multiple battery modules can be connected in parallel to increase storage energy.

4 Installation

4.1 Tools and safety gear

The displayed tools are recommended and could be used in the installation of batteries and

hybrid inverter. And the safety gear should be worn correctly during installation.

During operation, consider that the noise emitted based on the environment could possibly exceed the legal thresholds (less than 70 dB), therefore, suitable ear protection must be worn.

 Screwdriver	 Wire cutter	 Crimping modular plier
 Voltmeter	 Pocket knife	 Insulating tape
 Insulated gloves	 Safety goggles	 Safety shoes
 Socket wrench	 Percussion drill	 Measuring tape

4.2 Package Items

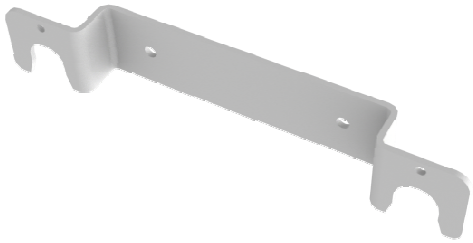
Unpacking

On receiving the products, please check to make sure the packing and all components are not missing or damaged. Please contact your dealer directly for supports if there is any damage or missing components.

A. Battery pack



B. Wall-mounting bracket*1



C. Metal pad*1



D. Mounting bolts

	
3* Cross recessed outer hexagonal combination screws/M6*20/A2-70/- SUS304	2*Hook-type expansion screws/M10*120/SUS304

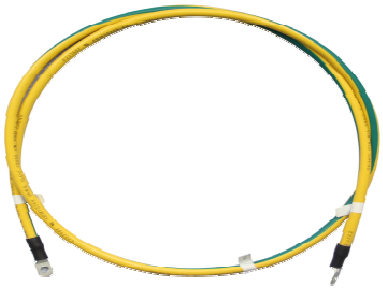
E. Power cables to inverter *2(4AWG，1.0m) - (Optional; used to be connected Master battery to Inverter or parallel connection)



F. RJ45 communication cable to inverter *1（1.0m）-(Optional; used to be connected Master battery to Inverter)



G. Ground wire *1(6AWG，1.0m）- (Optional; used for earthing of Master battery or parallel connection)



H. Panel cover*1(Optional extras)

G. User Manual and Warranty Card



4.3 Installation Locations

Make sure that the installation location meets the following conditions:

• The area is completely waterproof;

• The floor is flat and level;

• There are no flammable or explosive materials nearby;

• The ambient temperature is within the range from 0°C to 50°C;

• The temperature and humidity are maintained at a constant level (15%-85% (RH) no condensed water);

• There is minimal dust and dirt in the area;

• The distance from heat source is more than 2 meters;

• The distance from air outlet of inverter is more than 0.5 meters;

• The installation areas shall avoid of direct sunlight;

• There are no mandatory ventilation requirements for battery module, but please avoid of installation in confined area. The aeration shall avoid of high salinity, humidity or temperature.

• According to the on-site situation, the equipment should be fixed to the wall during installation against the wall.



CAUTION

If the ambient temperature is out of the operating range, the battery stops operating to protect itself. The optimal temperature for the battery pack ranges from 10°C to 40°C. Frequent exposures to harsh temperatures may deteriorate the performance and life of the batter

4.4 Requirements on Batter Supporter

1)The supporter shall be made from noncombustible materials and must be fire resistant;

2)The supporter shall be solid and strong enough to withstand the weight of batter system;

3)During installation, the batter shall be close to wall. Wall-mounting bracket shall be used to keep the batter from falling down.

4.5 Installation Direction

Recommended:



NOTICE

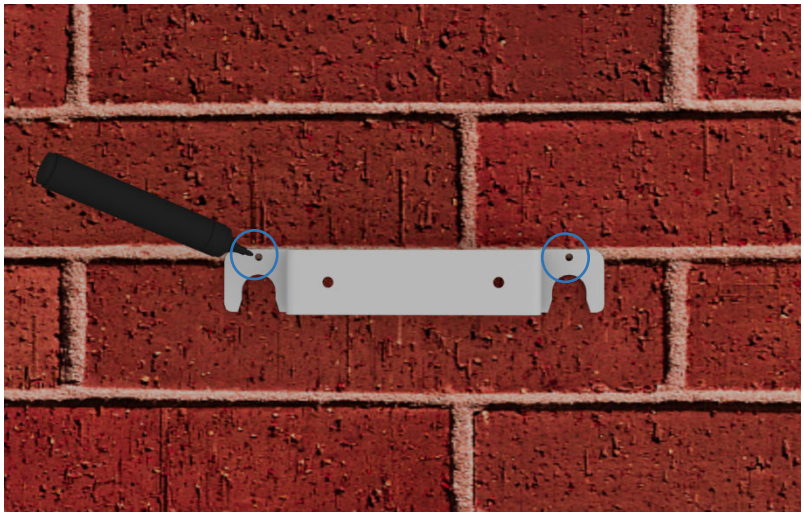
NOT ALLOWED	
	
Upside down	Sidelong

4.6 Single Batter Installation

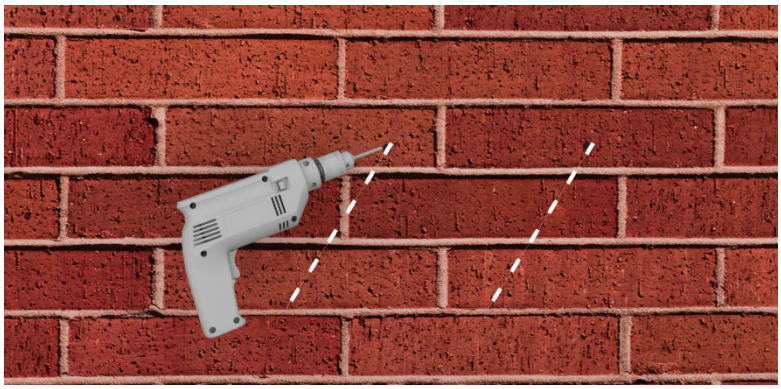
4.6.1 Wall Mount

Step 1:First, select the appropriate wall for installation as per the requirements. Take out the wall-mounting bracket from the cardboard box. Place the wall-mounting bracket tightly

against the wall and mark the drilling locations with marker, making sure that the two marking points are on the same horizontal line.

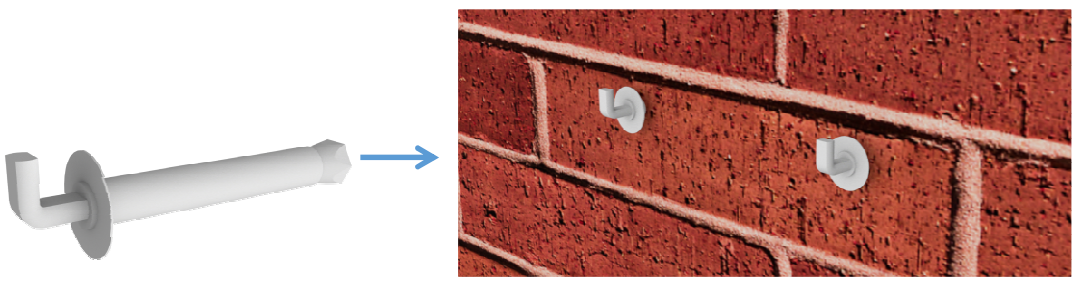


Step 2: Put away the wall-mounting bracket and drill holes (The drill bit specification is 16*200mm) with impact drill on the marked locations.

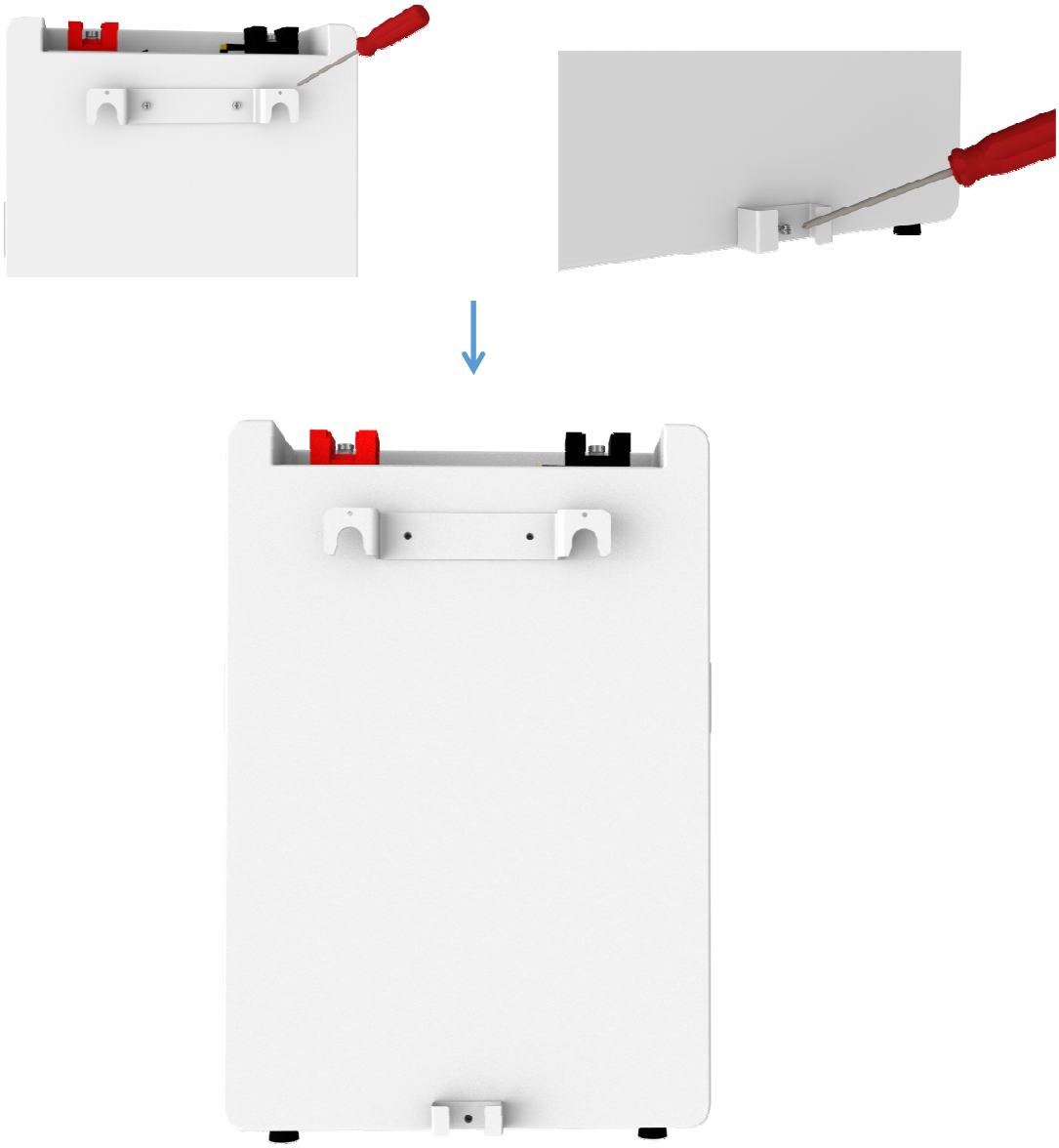


Note: Make sure that the thickness of the wall is greater than that of the expansion bolts. Do not choose hollow brickwork.

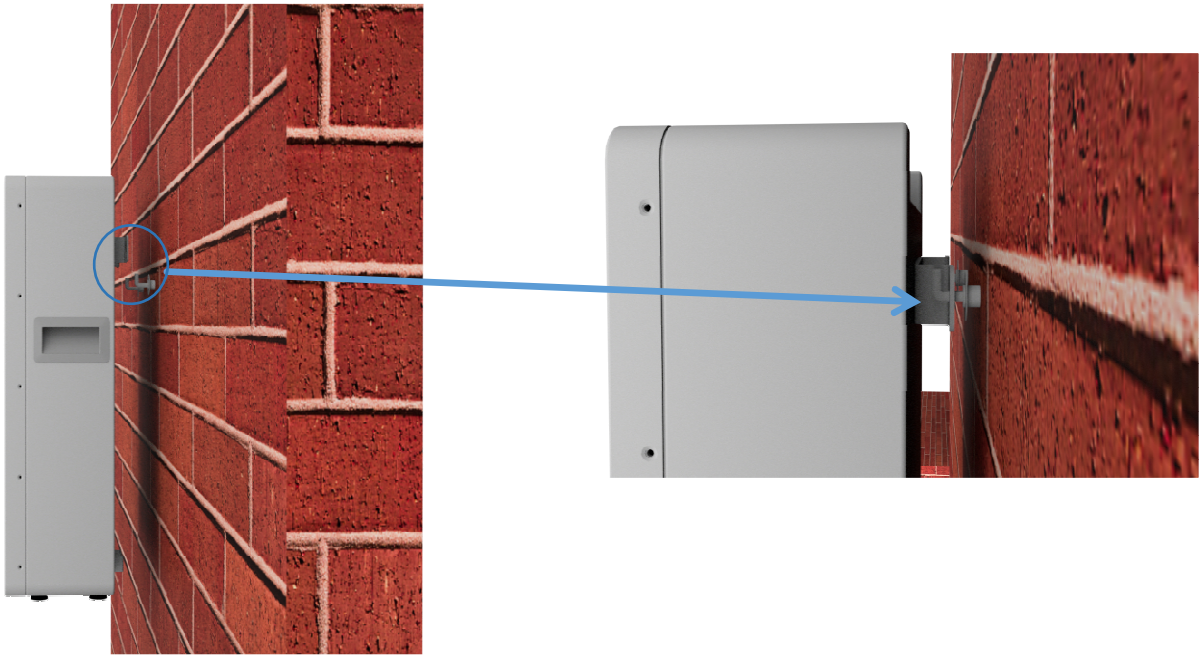
Step 3: Take out the Hook-type expansion screws/M10*120 from the cardboard box (the picture below is only a schematic diagram). Use a hammer to drive the screw into the wall until the circular washer is flush against the wall.



Step 4:Fix the wall-mounting bracket and the metal pad on the back of the battery using screws as shown in the diagram.



Step 5: Two professional installers lifted the battery and hung it on the Hook-type expansion screws.



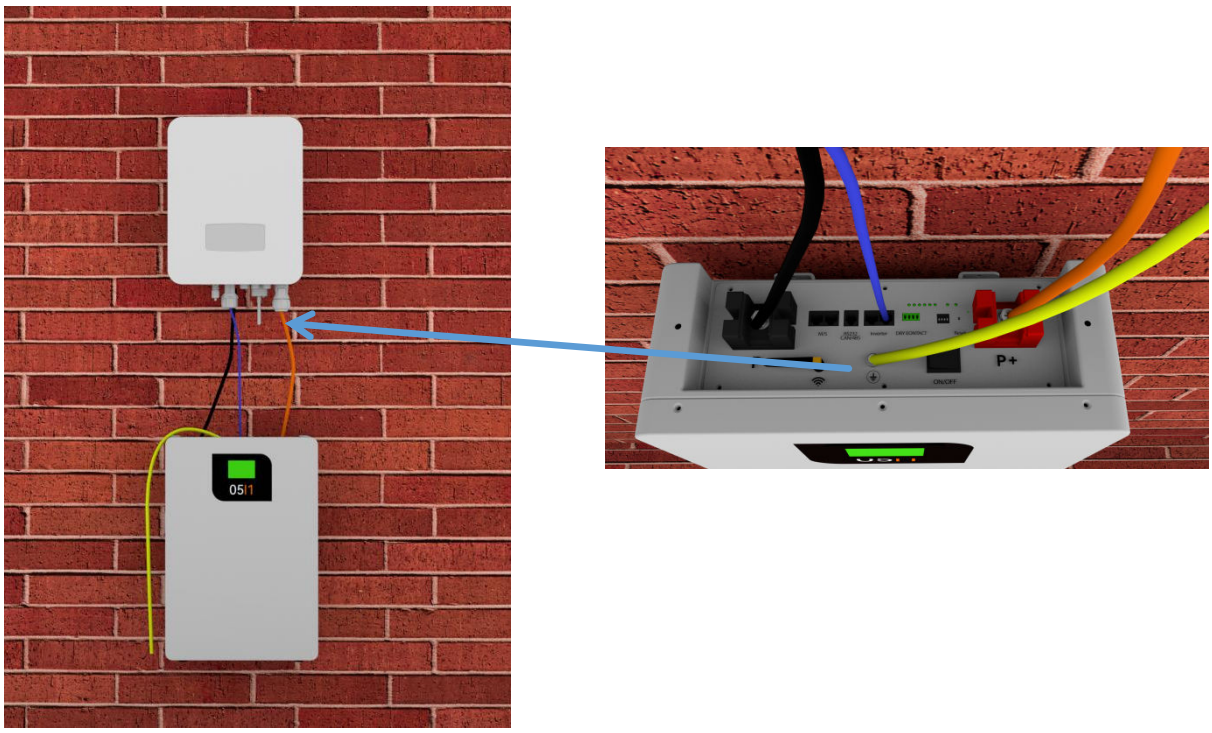
4.6.2 System Wiring

1)Connect the orange power cable(4AWG) of the batter to the corresponding port of inverter;

2)Connect the black power cable(4AWG) of the batter to the corresponding port of inverter;

3)Connect the communication cable from INV port to the corresponding port of inverter;

4)Earthing wire (6AWG) shall be connected to the ground point of each batter.



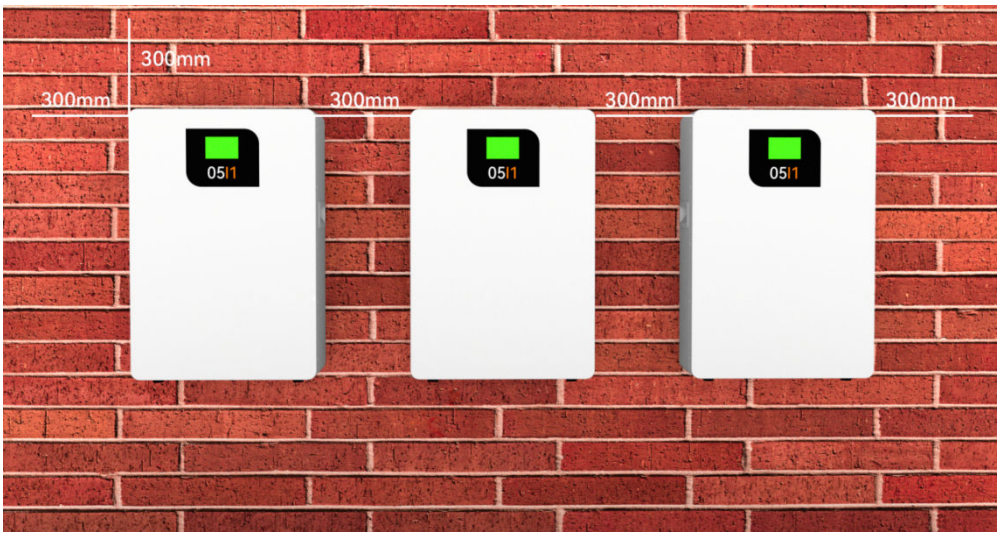
4.7 Parallel Connection

4.7.1 Wall Mount

Step 1: Please check the voltage of each batter and make sure the voltage difference is less than 2V.

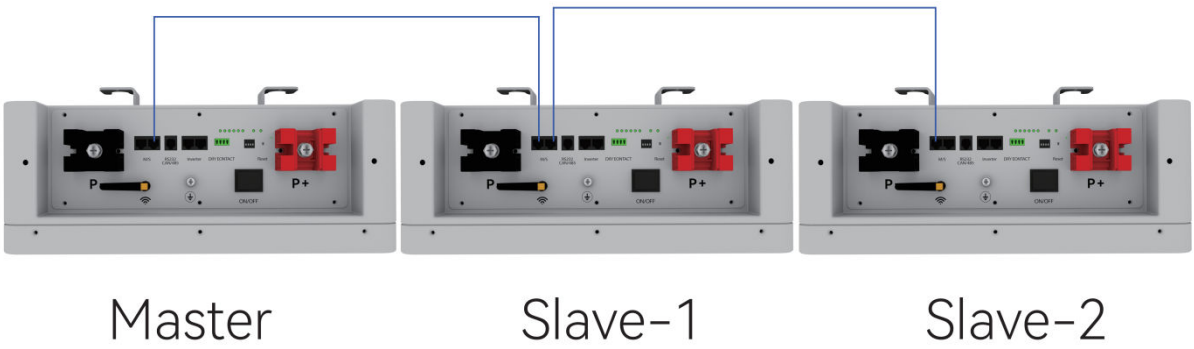
Step 2: Refer to Steps 1-6 for single batter installation

Step 3: the internal distance between adjacent batteries is a recommended one and shall be reasonably reduced as much as possible.

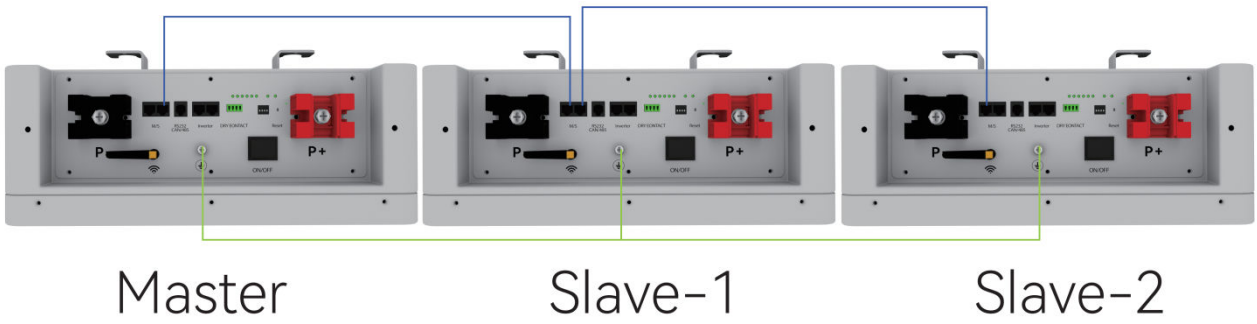


4.7.2 System Wiring for Parallel Connection

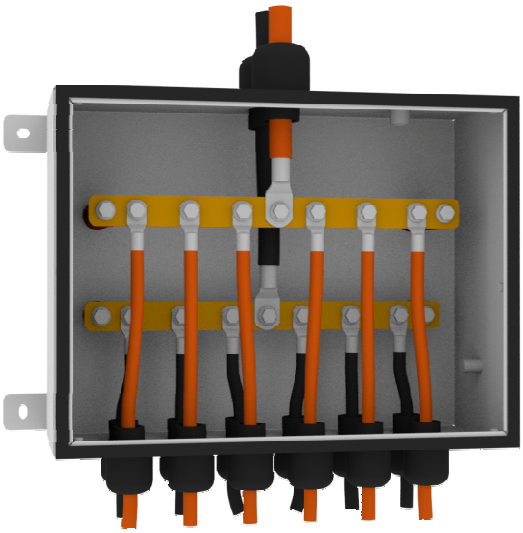
1） Connect the communication cable to the M/S communication terminals of adjacent batteries. Connect the RJ45 port marked with S of Master with a communication cable to the RJ45 port marked with M of Slave 1#; Connect the RJ45 port marked with S of Slave1# with a communication cable to the RJ45 port marked with M of Slave 2#.



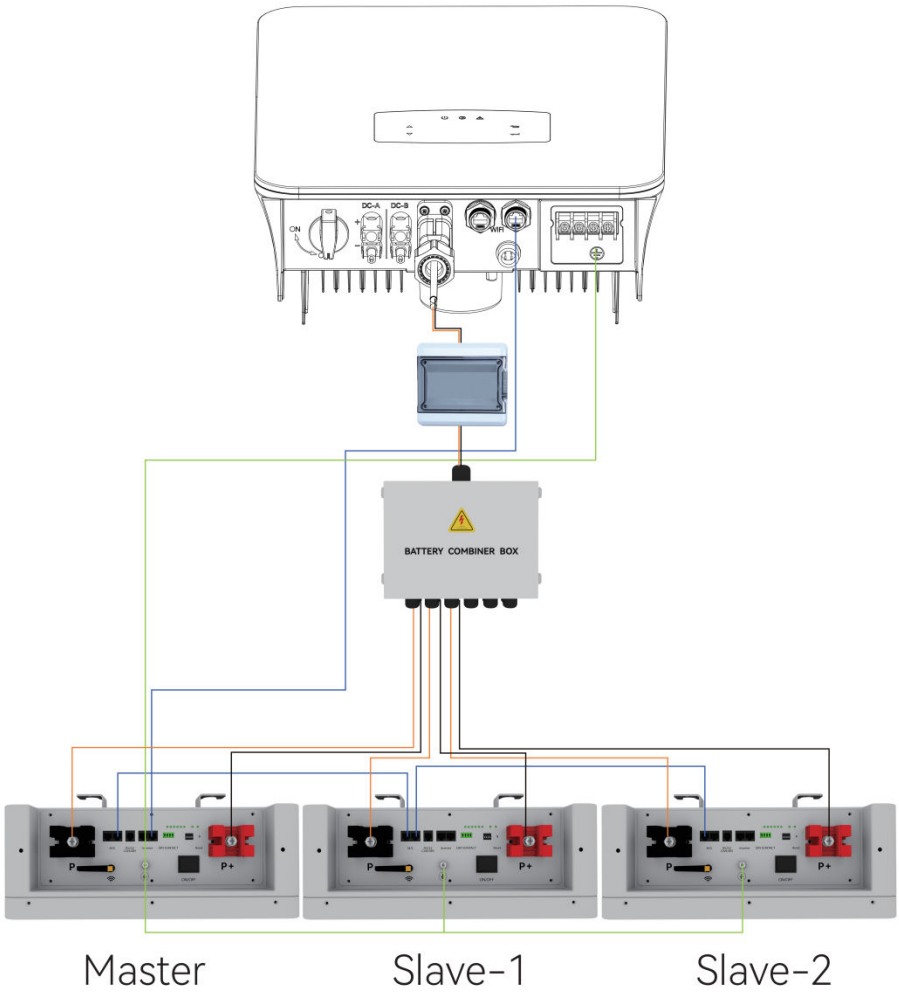
2）Connect the grounding protection points of each PACK with the yellow green grounding wire.

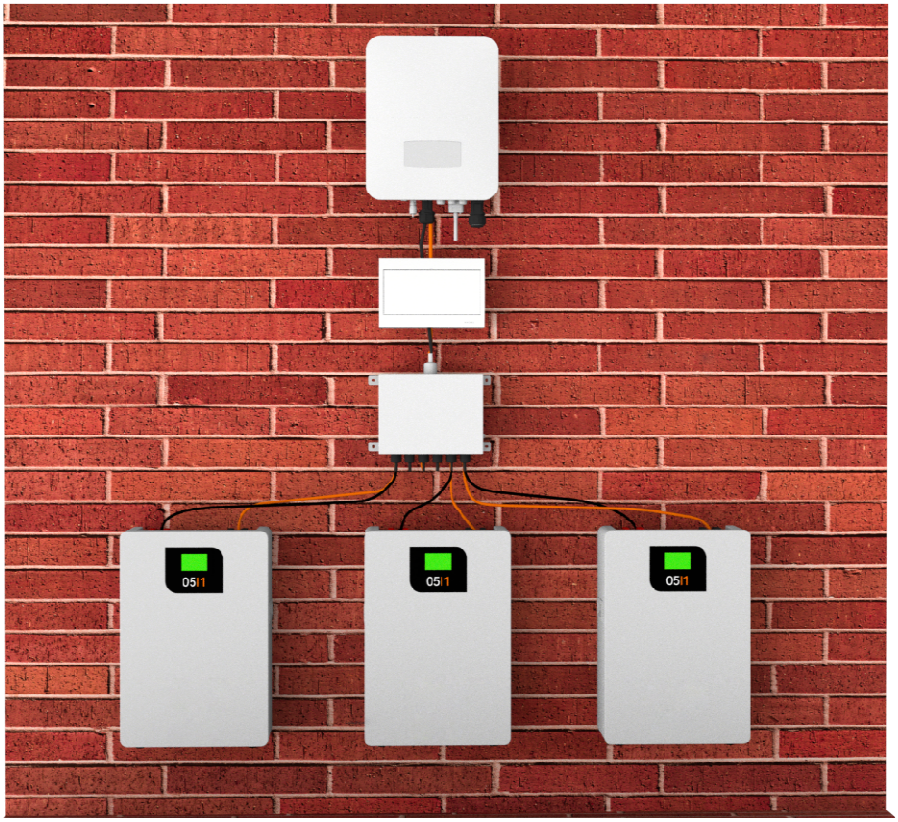


3）As shown in the figure below, connect the positive power line (orange, 4AWG) and the negative power line (black, 4AWG) of each battery from the bottom into the junction box, and then the current busbar extends from the top. It is essential to ensure that the battery power lines and the busbar have the same polarity.



4）Finally, connect the communication lines of the bus assembly, the main battery INV port to the corresponding ports of the inverter. At the same time, connect the grounding wire to the grounding point of the battery (6AWG).


BATTERY COMBINER BOX
Master
Slave-1
Slave-2



WARNING

I. For Australian market, an overcurrent and disconnection device that isolates all live conductors (positive and negative) is required between the battery system and the inverter.

II. In Australia installations should be conducted in accordance with AS/NZS 3000 and AS/NZS 5139.

4.8 Definition of communication Port Pin

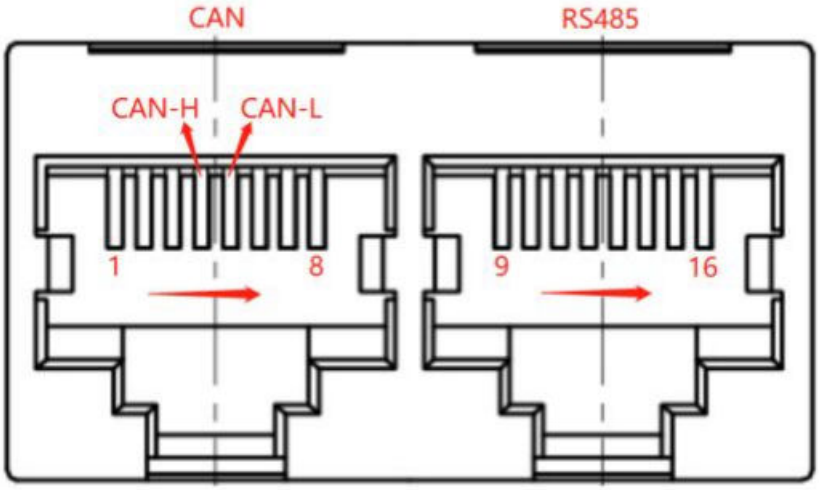
NOTICE

The Powercool-WLL005I1 battery is designed to support both CAN and RS485 communication with the inverter. Please verify the communication mode of the inverter and select the corresponding mode of the battery.

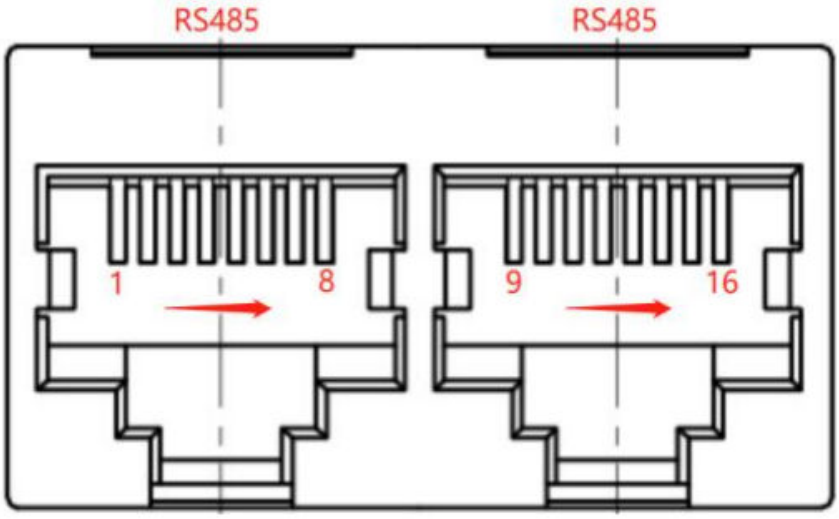
Definition of RJ45 Port Pin

Inverter communication ports-RJ45			
CAN		RS485	
PIN Number	Definition	PIN Number	Definition
1、3、6、7、8	NC	9、16	RS485-B1

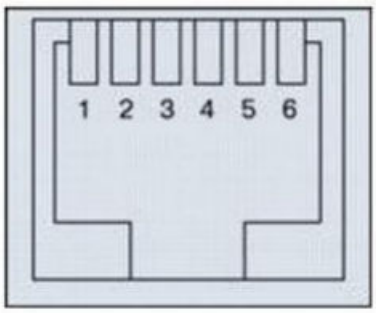
4	CAN-H	10、15	RS485-A1
5	CAN-L	11、14	GND
2	GND	12、13	NC



Parallel communication ports-RJ45			
S		**M**	
PIN Number	**Definition**	**PIN Number**	**Definition**
1、8	RS485-B	9、16	RS485-B
2、7	RS485-A	10、15	RS485-A
3、6	GND	11、14	GND
4	GND	13	UP_IN
5	DN_OP+	12	GND



RS232-RJ11	
PIN Number	**Definition**
1、2、6	NC
3	TX
4	RX
5	GND



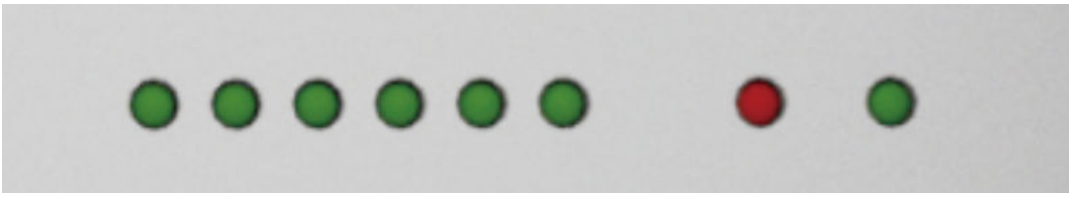
4.9 Power on

1) Check all the power cable and communication cable between batteries, and between battery and inverter.

2) Check the DIP setting for each battery.

3) Switch ON the disconnection device between battery and inverter if available.

4) Short press for 1 sec the master power switch, and then all the battery LED light(green) will be on, and buzzers of both master and slave batteries will ring at the same time.



4.10 Power off

Working status indication：

Status	Normal/ Alarm/ Protection	Run	Alm	SOC Indicators						State
				L6	L5	L4	L3	L2	L1	
		•	•	•	•	•	•	•	•	

<table>
<tr><td>Power Off</td><td>Hibernate</td><td>OFF</td><td>OFF</td><td>OFF</td><td>OFF</td><td>OFF</td><td>OFF</td><td>OFF</td><td>OFF</td><td>Total Indicator Runout</td></tr>
<tr><td rowspan="2">Standby</td><td>Normal</td><td>Blink 1</td><td>OFF</td><td colspan="6" rowspan="2">According to Battery Indicator</td><td>Standby Mode</td></tr>
<tr><td>Alarm</td><td>Blink 1</td><td>Blink 3</td><td>Low Voltage</td></tr>
<tr><td rowspan="4">Charging</td><td>Normal</td><td>ON</td><td>OFF</td><td colspan="6" rowspan="2">According to Battery Indicator
(Battery indicator Maximum LED Blink 2)</td><td rowspan="2">Maximum Power LED Blink (Blink 2), ALM does not Blink When the Overcharge Alarm is Generated</td></tr>
<tr><td>Alarm</td><td>ON</td><td>Blink 3</td></tr>
<tr><td>Overcharge Protection</td><td>ON</td><td>OFF</td><td>ON</td><td>ON</td><td>ON</td><td>ON</td><td>ON</td><td>ON</td><td>If Disconnected to City Grid, the Indicator shall turn to Standby Mode</td></tr>
<tr><td>Temperatur e, Over Current, Failure Protection</td><td>OFF</td><td>ON</td><td>OFF</td><td>OFF</td><td>OFF</td><td>OFF</td><td>OFF</td><td>OFF</td><td>Stop Charging</td></tr>
<tr><td rowspan="3">Discharging</td><td>Normal</td><td>Blink 3</td><td>OFF</td><td colspan="6" rowspan="2">According to Battery Indicator</td><td rowspan="2"></td></tr>
<tr><td>Alarm</td><td>Blink 3</td><td>Blink 3</td></tr>
<tr><td>Under-voltage protection</td><td>OFF</td><td>OFF</td><td>OFF</td><td>OFF</td><td>OFF</td><td>OFF</td><td>OFF</td><td>OFF</td><td>Stop Discharging</td></tr>
</table>

	Temperature, over current, short circuit, reverse connection, failure protection	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	Stop Stop Charging
Failure		OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	Stop Charging and Discharging

SOC Indicators

Status		Charging						Discharging					
SOC indicators		L6 ●	L5 ●	L4 ●	L3 ●	L2 ●	L1 ●	L6 ●	L5 ●	L4 ●	L3 ●	L2 ●	L1 ●
SOC (%)	0%～17%	OFF	OFF	OFF	OFF	OFF	Blink 2	OFF	OFF	OFF	OFF	OFF	ON
	18%～33%	OFF	OFF	OFF	Off	Blink 2	ON	OFF	OFF	OFF	OFF	ON	ON
	34%～50%	OFF	OFF	OFF	Blink 2	ON	ON	OFF	OFF	OFF	ON	ON	ON
	51%～66%	OFF	OFF	Blink 2	ON	ON	ON	OFF	OFF	ON	ON	ON	ON
	67%～83%	OFF	Blink 2	ON	ON	ON	ON	OFF	ON	ON	ON	ON	ON
	84%～100%	Blink 2	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON
Running indicator		ON						Blink (Blink 3)					

Blinking LED Indicators:

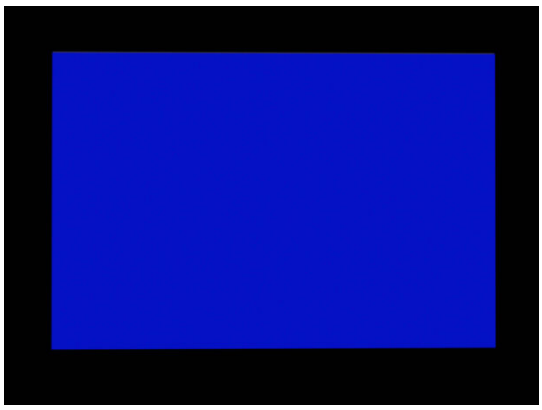
Blink Mode	ON	OFF
Blink 1	0.25S	3.75S
Blink 2	0.5S	0.5S
Blink 3	0.5S	1.5S

Switch the circuit breaker to ON, and then press the button switch K to ON, the battery system successfully started.
Press button switch K to OFF, then switch the circuit breaker to OFF, the battery system is closed.

\

4.11 Screen key description

Screen appearance



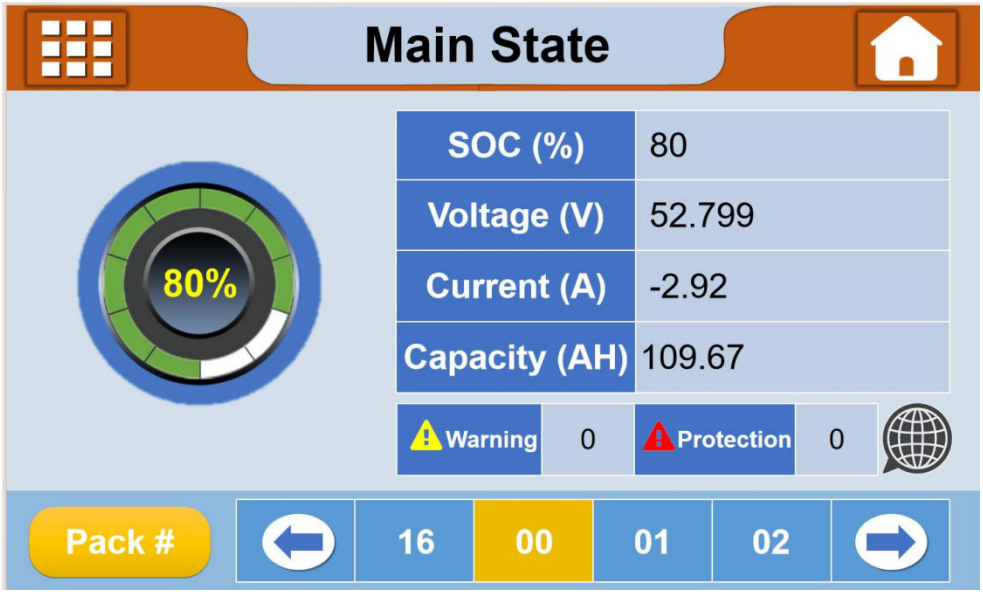
(1) Interface Introduction

The startup screen of the device



Note: The welcome interface remains on for 3 seconds after startup, used for program preparation and for exchanging data with the BMS motherboard; then it transitions to the main status interface.

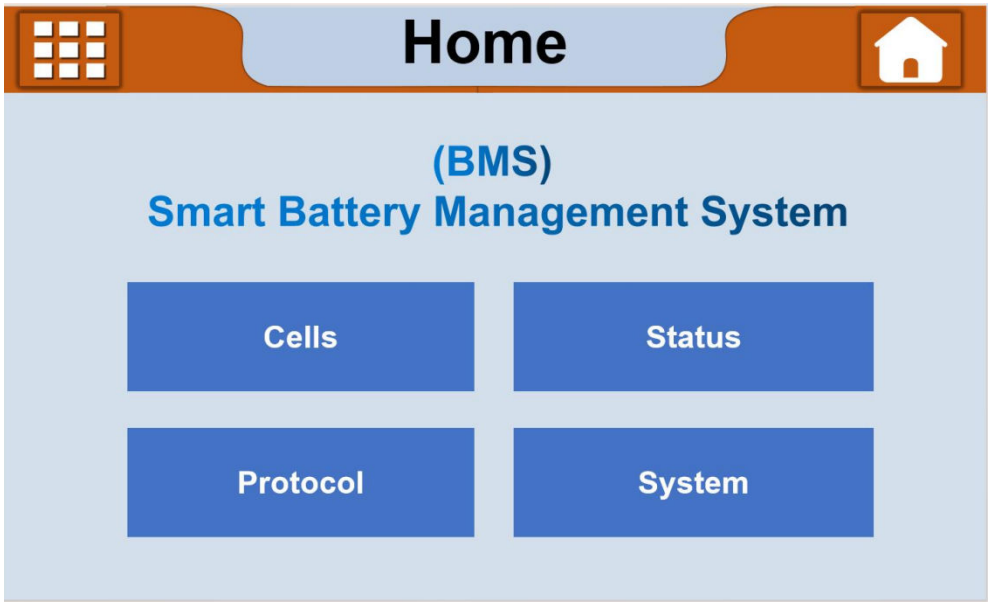
Main Status



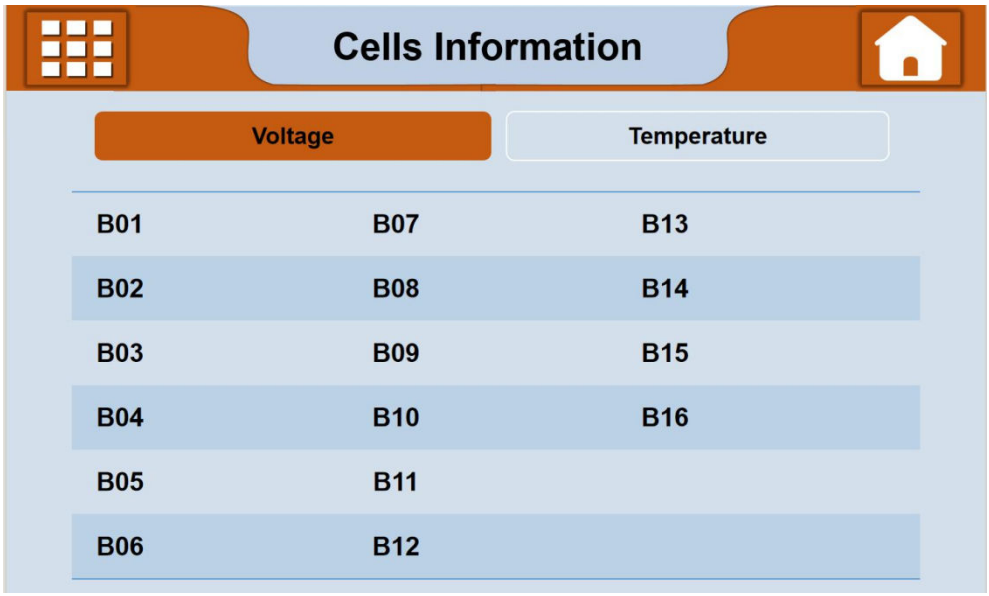
Icon description

	Main menu icon - Click to enter the main menu interface called "HOME"
	Main status icon - Click to enter the Main State interface
	System Settings / Language Selection.

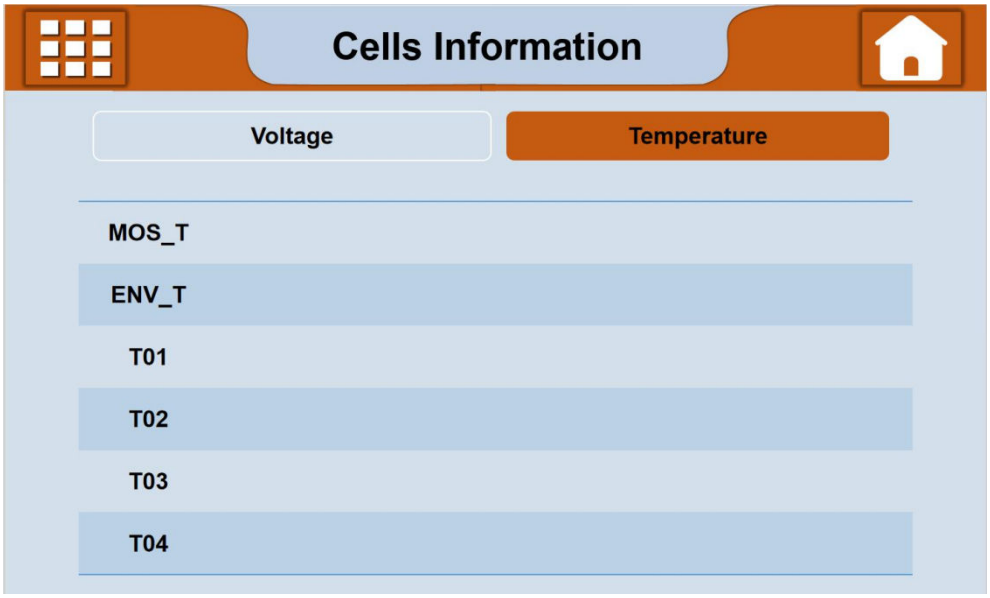
HOME page



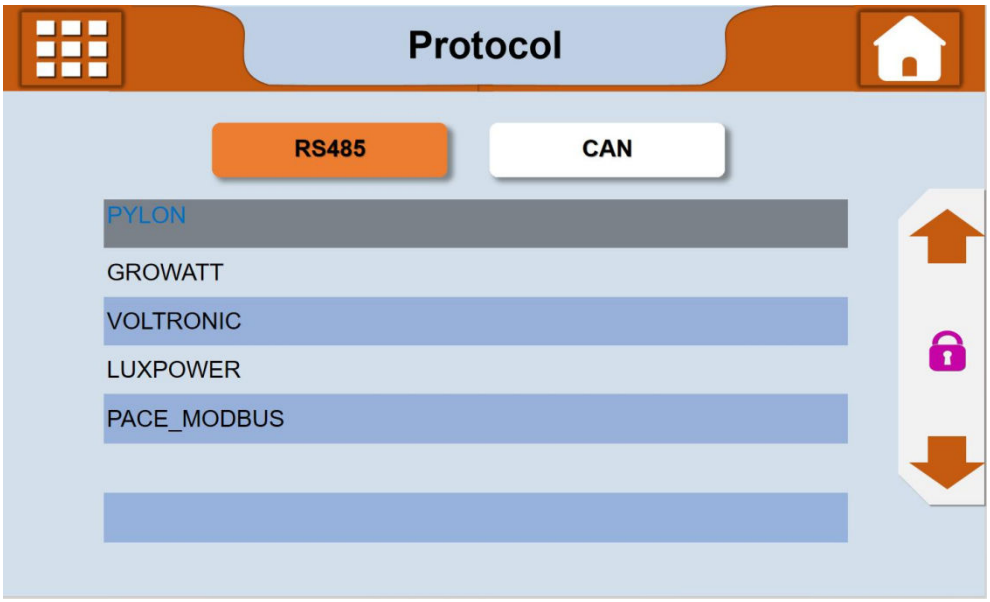
Battery cell page



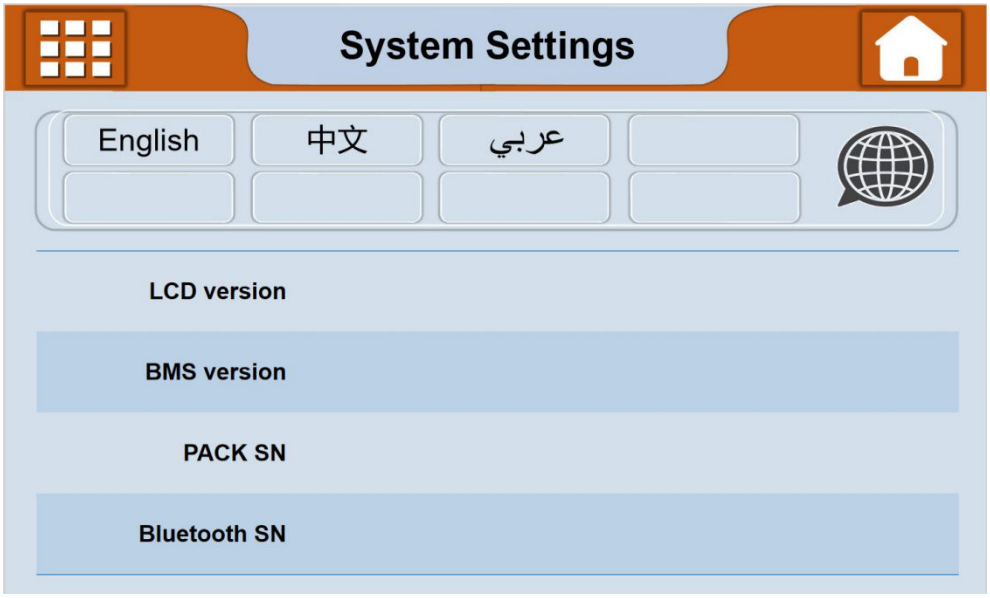
Temperature page



Protocol Selection Page



System Settings Page



Menu

- Menu
- min state page
  - SOC(Total)
  - Current
  - Voltage
  - Parral data
    - SOC(each pack)
    - Current
    - Voltage
    - BMS INFO
- HOME
  - PACK Info(Pack cell data)
    - Voltage
    - Temperature
  - BMS Status
    - Warning
    - Protect
    - Fault
    - Record
  - PROTOCOL(Selection of communication protocol)
    - CAN
    - RS485
  - SYSTEM
    - Language select(English, Chinese, Arabic)
    - PACK SN

- BLUETOOTH SN

(2) Sleep/Shutdown

Under normal operation, if there is no key operation for 3 minutes, the system will enter the sleep/shutdown state. In the sleep/shutdown state, clicking on any position on the color screen will activate the display and enter the main interface, and at the same time, the authorization will be reset.

4.12 Maintenance

Annual Inspection

Ever year after installation. The connection of power connectors, grounding points, power cables and screws are to be checked. Make sure there is no loosening, fracture or corrosion at any connection point. Check the installation environment such as dust, water, insect etc. and make sure it is suitable for IP20 batter system.

5.APP configuration and commissioning

5.1 Download our APP

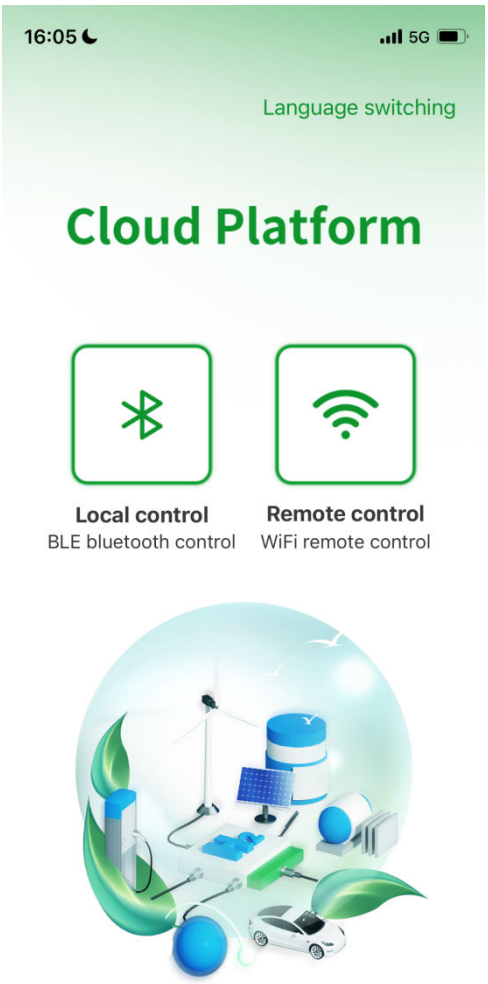
Scan the QR code below to downloads in the App Store.

5.2 APP dynamic permission

Install the APP, click the start button and start smoothly. For the first start, you will request the user to confirm and authorize the following authority: Camera permission: Add WIFI devices in remote control Location permission: search for nearby Bluetooth devices in local control and identify current network information in remote control Equipment status information: to detect the operation status of the equipment Photos and audio: The code scanning interface in the remote control system can directly identify the local photo album.

5.3 Control method

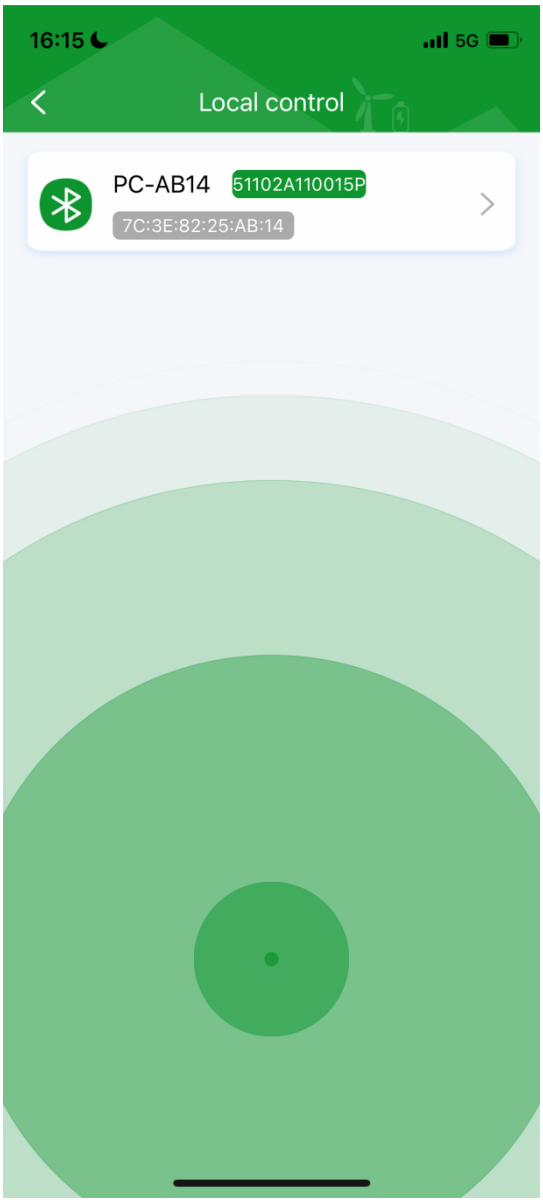
You can select the Local control mode or Remote control mode after the page is displayed.



Local control: BLE Bluetooth communication, directly search for the nearby Bluetooth signal, a pair of continuous connection, control devices, no account login, do not do binding records, that is, ready to use Remote control: WIFI communication, which realizes the purpose of controlling the device rather than in the same geographical location. It requires account registration and login, records the binding between the account and the device, and requires distribution network operation.

5.4 Local Control (BLE)

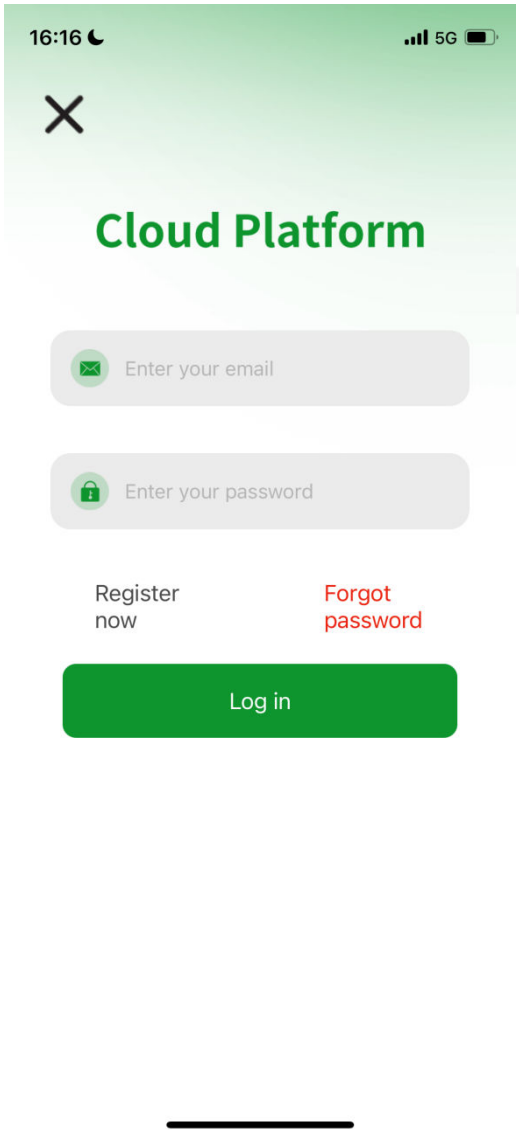
When the device is in the distribution network state, click the local control button to search the device on the local control page, and click the device to enter the device control page.



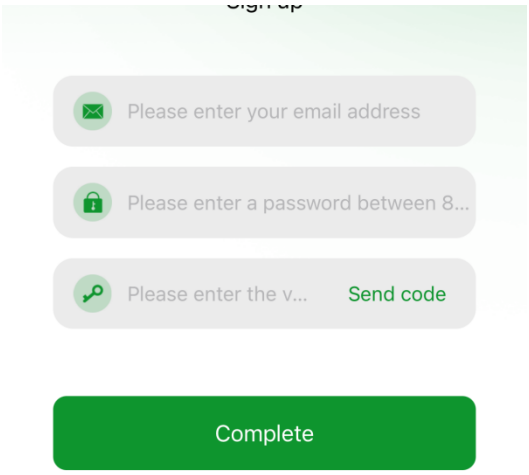
5.5 Telecontrol

5.5.1.Account registration and login

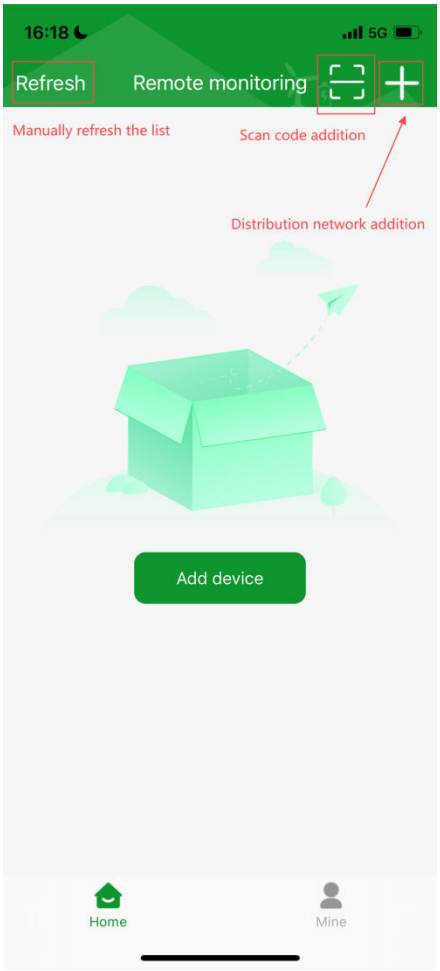
Registration: Create the new account by means of email account, password and verification code. Note: Please select the real country and region according to the actual situation. This is very important. Once selected and created successfully, the devices added through the account distribution network will automatically connect to the server node with the same account Login: Log in with the registered account number and password Forget your password: You can reset your password through your email number.


16:16
5G
Cloud Platform
Enter your email
Enter your password
Register now
Forgot password
Log in


3:22 PM
1.8KB/s
Select Country/Region
China
A
Afghanistan
Aland Islands
Albania
Algeria
Andorra
Angola
Anguilla
Antarctica
Antigua and Barl
OK
Argentina
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z



5.5.2.List of equipment



5.5.3. Equipment added

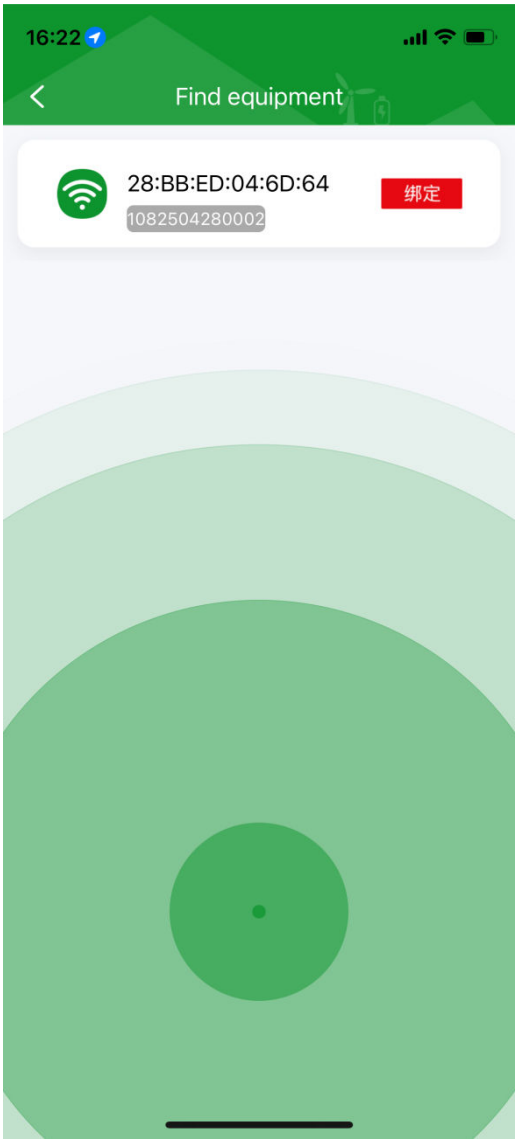
The WIFI module is put back in the factory:

The WIFI module restores the factory so that the device is in a discoverable state :

Long press the reset button 10-13 s, the specific operation of the LED lamp is shown as : long press the button to make the water lamp run one.

5.5.4. Click "Add" and "+" to enter the search page and search for the device

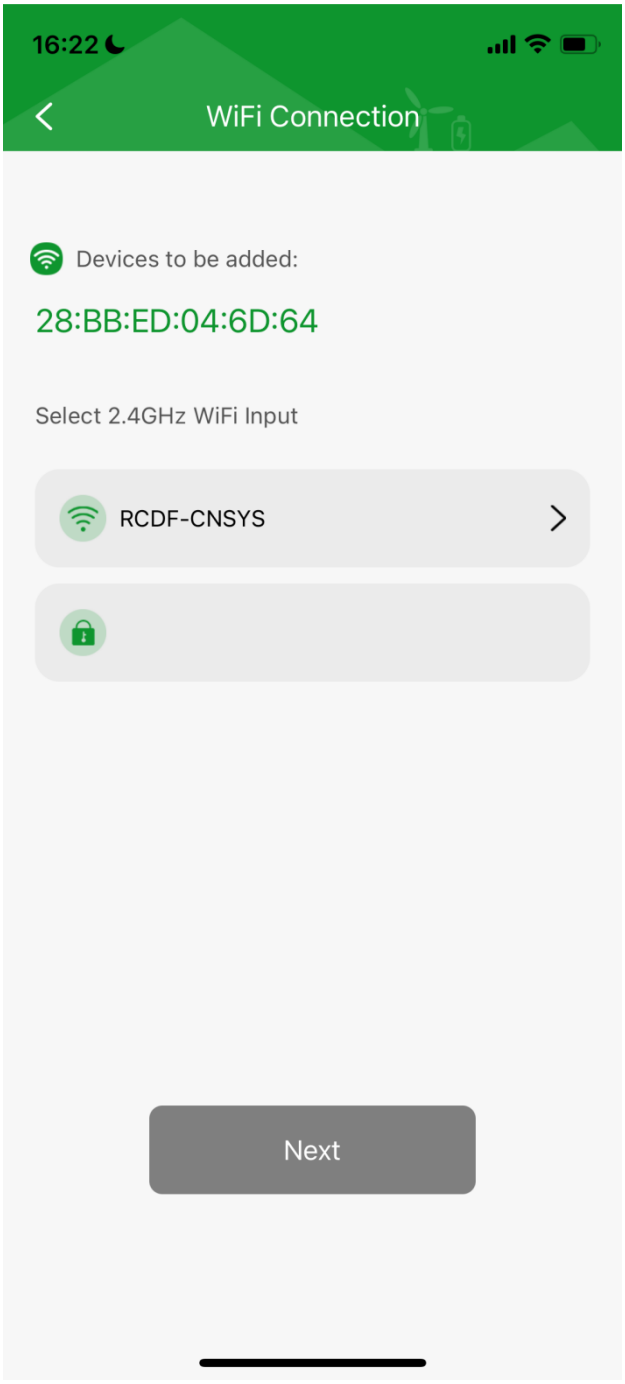
Note: This step requires the phone to open the "Bluetooth", "Positioning" and "WIFI" functions, otherwise the search and subsequent distribution network operation cannot be completed.



5.5.5.Fill in the distribution network information

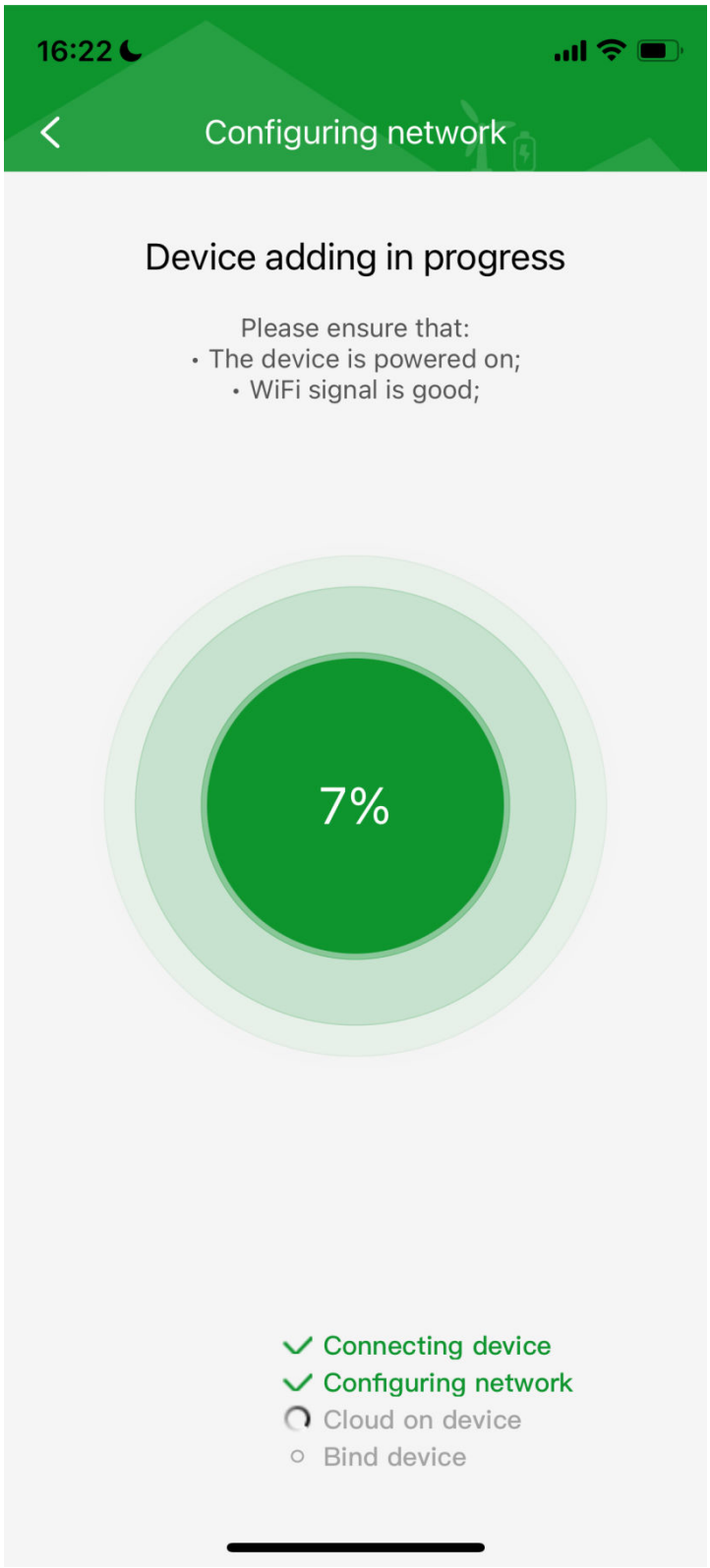
Click the device found in 5.3.2, jump to the distribution network information page, fill in the WiFi account and password of the device to be connected, or change the WiFi. After confirming that the password is correct, click "Next" to enter the distribution network waiting page.

Note: The mobile phone should be connected to the WiFi first, and the module only supports 2.4G WiFi, please identify it by yourself.



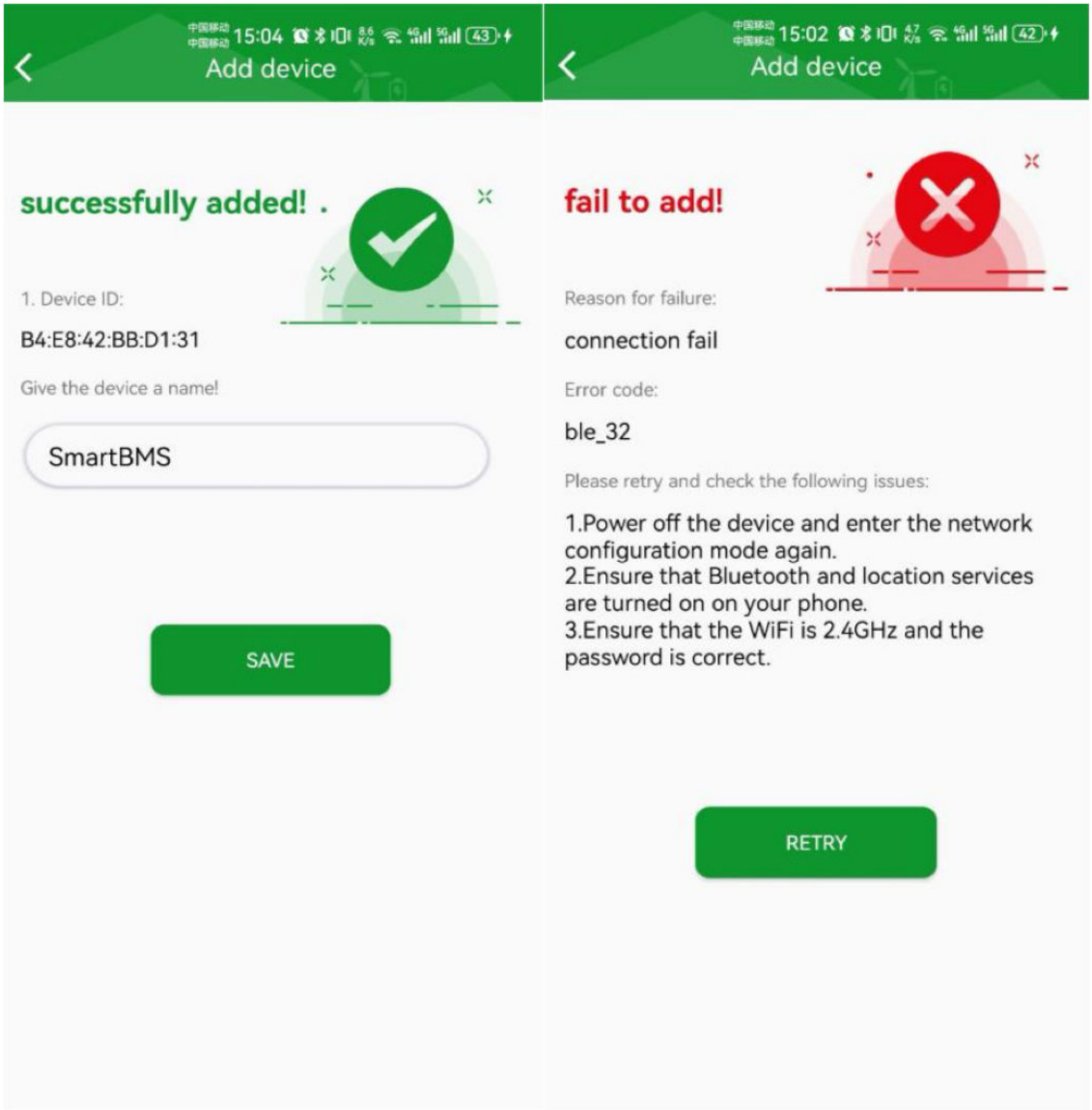
5.5.6. Execute distribution network operation

APP and device will automatically perform "Connect device", "Configure network", "device cloud" and "bind device" operations. Please wait patiently.



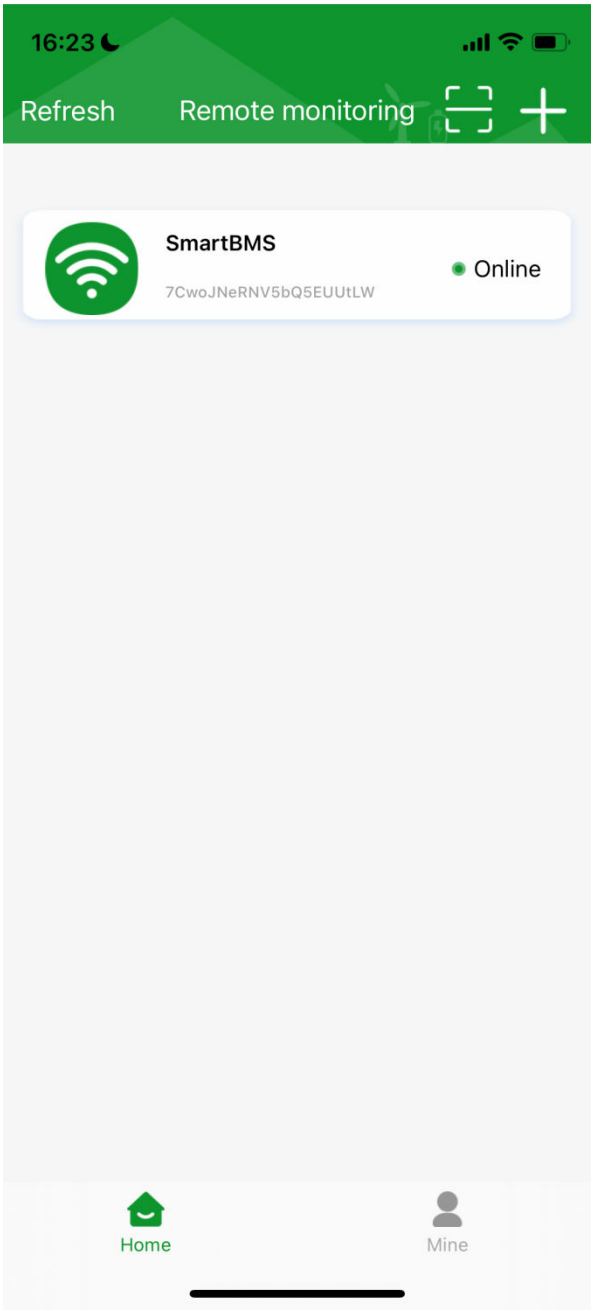
5.5.7.Distribution network results

When the distribution network is over, it will jump to the page, click Save to successfully add and automatically jump back to the device list page; If the network fails, please follow the prompts of the APP, and start from step 5.3.1 after inspection. If the network still fails for many times,please save the error page and contact the after-sales personnel!



5.6.Device editor

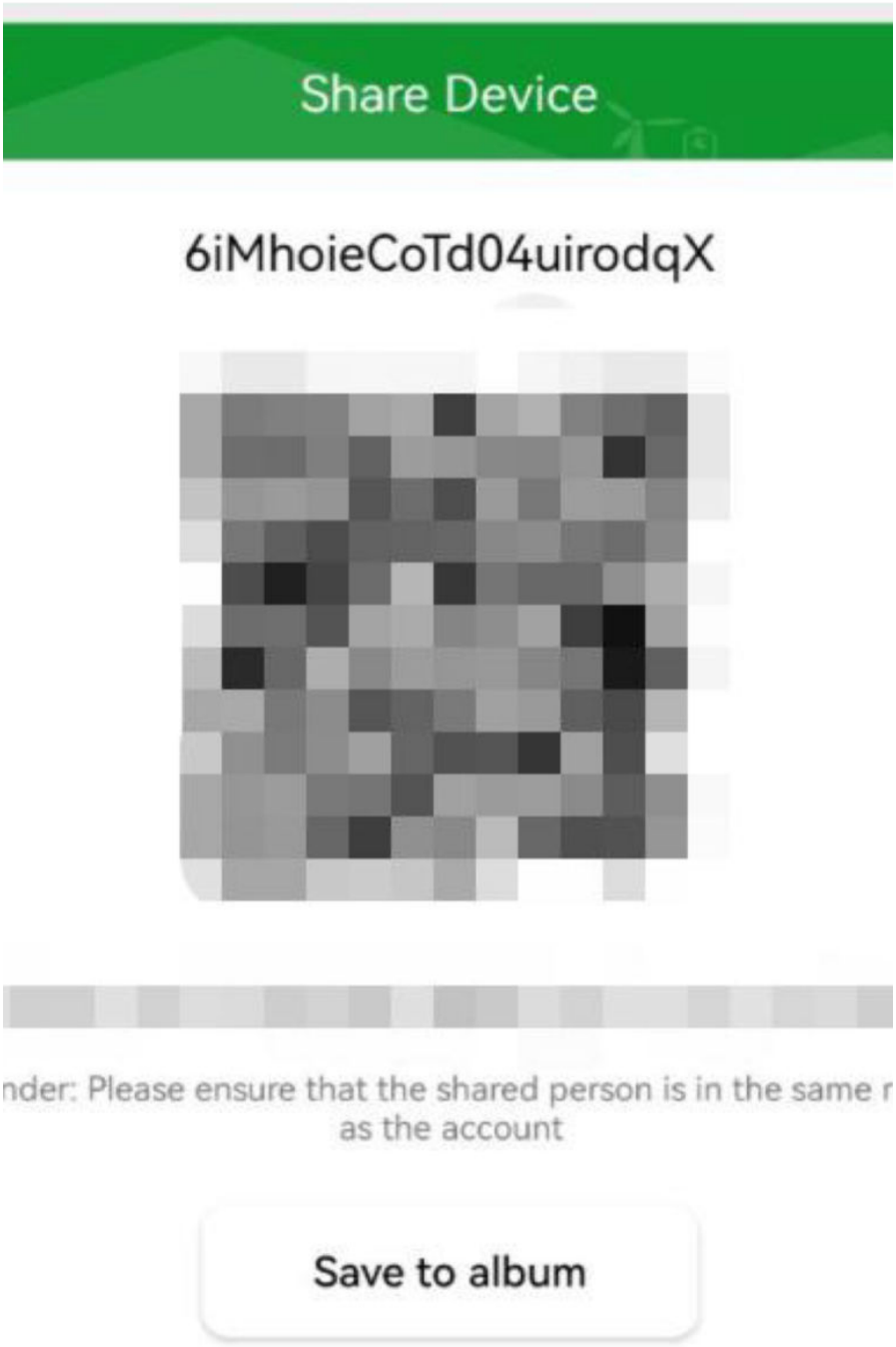
Long press the device item, and the edit menu will pop up at the bottom Rename: Modify device nickname to use Delete: unbinding with the device, the next use need to scan the code or add the network.



5.7.Device sharing

Long press the device item, when you are the device administrator (the first account bound to the first distribution network), the device can generate a QR code for other users to scan the code to add.

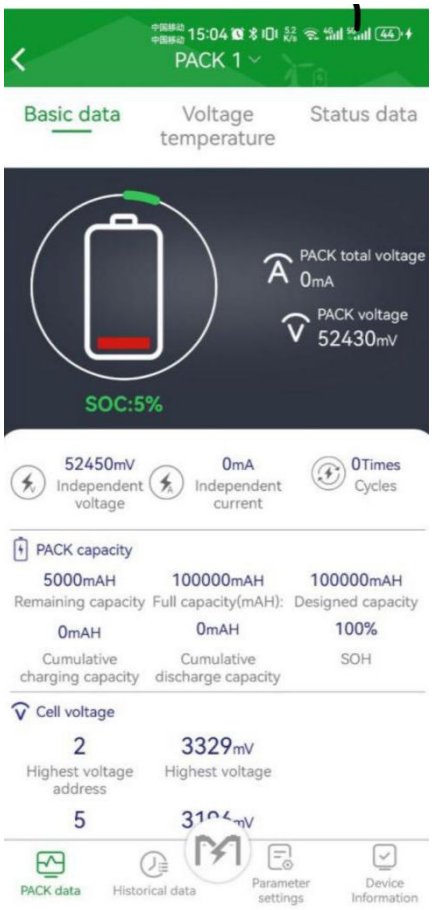
Note: Non-administrators cannot share twice. The QR code generated each time can only be scanned once, and the time of scanning the code is limited (30 minutes).

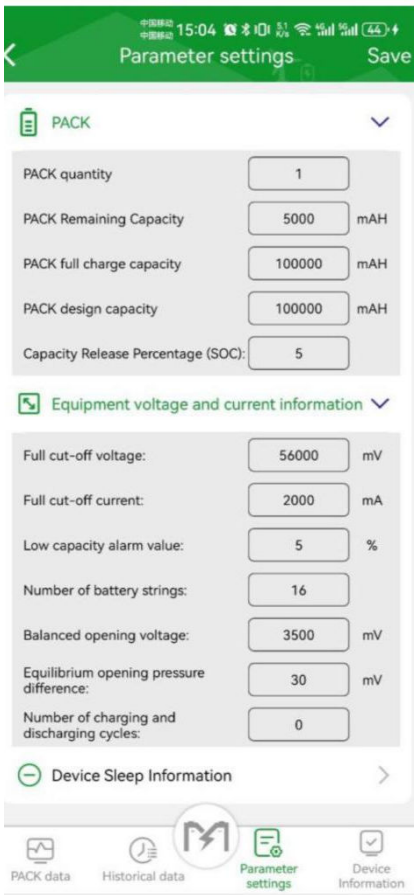


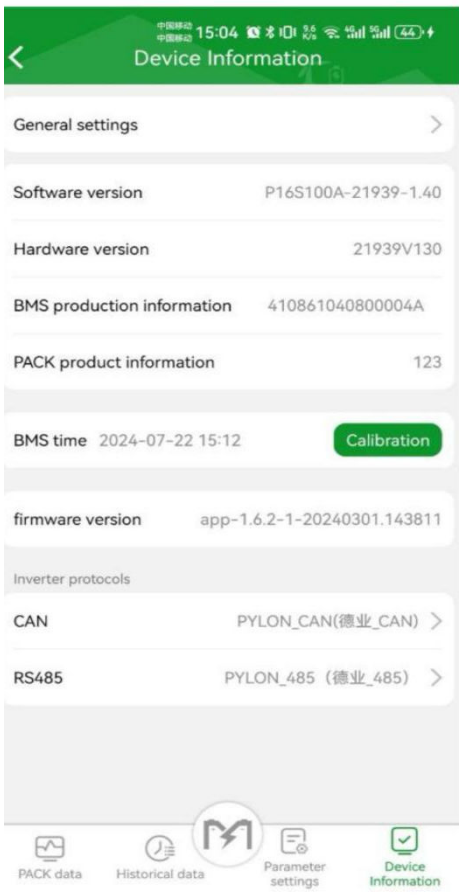
5.8.Device control

According to the functions supported by serial port protocol 0.0.9, except for the protocol itself, the summary interface, basic data, voltage and temperature, state data, historical data, parameter setting, equipment information, general setting, etc.


Summary data
Summed current
0mA
summed voltage
52430mV
SOC:5%
1
PACK parallel number
0
Cycles
Reported capacity
5000mAH
Remaining capacity
100000mAH
Full capacity
100000mAH
Designed capacity
0mAH
Cumulative charging capacity
0mAH
Cumulative discharge capacity
100%
SOH
Cell voltage
1
Highest voltage (PACK)
2
Highest voltage address
3329mV
Highest voltage
1
Lowest voltage (PACK)
5
Lowest voltage address
3196mV
Lowest voltage
Cell temperature
PACK data
Historical data
Parameter settings
Device Information

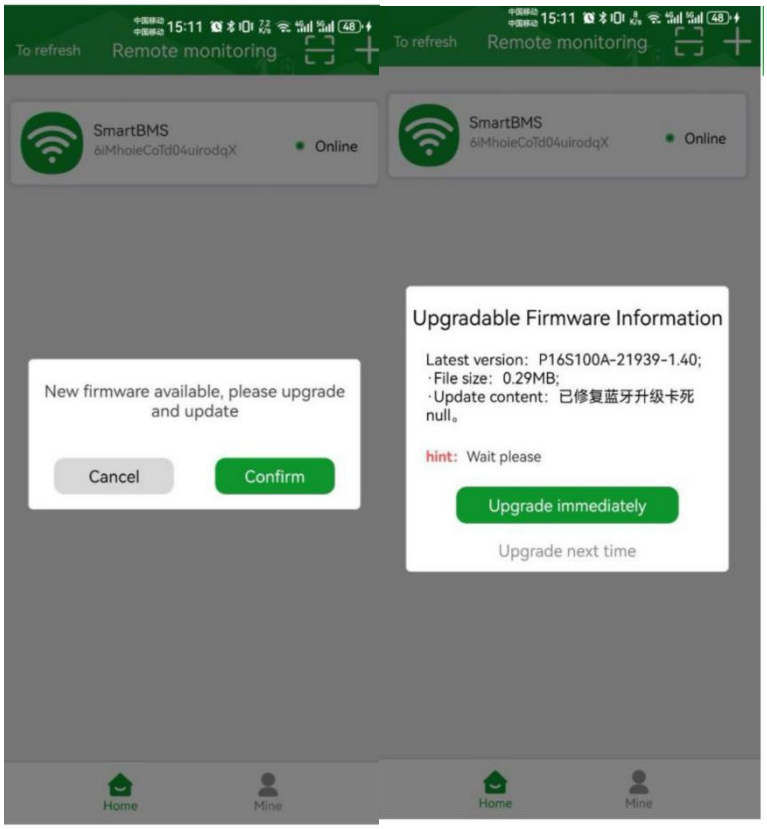

PACK 1
Basic data
Voltage temperature
Status data
PACK total voltage
0mA
PACK voltage
52430mV
SOC:5%
52450mV
Independent voltage
0mA
Independent current
0Times
Cycles
PACK capacity
5000mAH
Remaining capacity
100000mAH
Full capacity(mAH):
100000mAH
Designed capacity
0mAH
Cumulative charging capacity
0mAH
Cumulative discharge capacity
100%
SOH
Cell voltage
2
Highest voltage address
3329mV
Highest voltage
5
PACK data
Historical data
Parameter settings
Device Information


Parameter settings
Save
PACK
PACK quantity
1
PACK Remaining Capacity
5000
mAH
PACK full charge capacity
100000
mAH
PACK design capacity
100000
mAH
Capacity Release Percentage (SOC):
5
Equipment voltage and current information
Full cut-off voltage:
56000
mV
Full cut-off current:
2000
mA
Low capacity alarm value:
5
%
Number of battery strings:
16
Balanced opening voltage:
3500
mV
Equilibrium opening pressure difference:
30
mV
Number of charging and discharging cycles:
0
Device Sleep Information
PACK data
Historical data
Parameter settings
Device Information


Device Information
General settings
Software version
P16S100A-21939-1.40
Hardware version
21939V130
BMS production information
410861040800004A
PACK product information
123
BMS time
2024-07-22 15:12
Calibration
firmware version
app-1.6.2-1-20240301.143811
Inverter protocols
CAN
PYLON_CAN(德业_CAN)
RS485
PYLON_485（德业_485）
PACK data
Historical data
Parameter settings
Device Information

5.9.OTA upgrade

When there is an updated version of firmware in the background, the APP clicks on a device to pop up the upgrade popup, click upgrade immediately, and the firmware will be upgraded. Click the next time to enter the device parameters display, Settings and other pages.





5.10.Account exit and logout

Account exit: after exit, you can switch to other accounts for login Account cancellation: Once cancelled, all the information and binding relationship of the account will be cleared, and you need to be re-registered next time.

