Steltec Battery (STE-BWO-16000) Instructions

Website: www.steltec-ess.com

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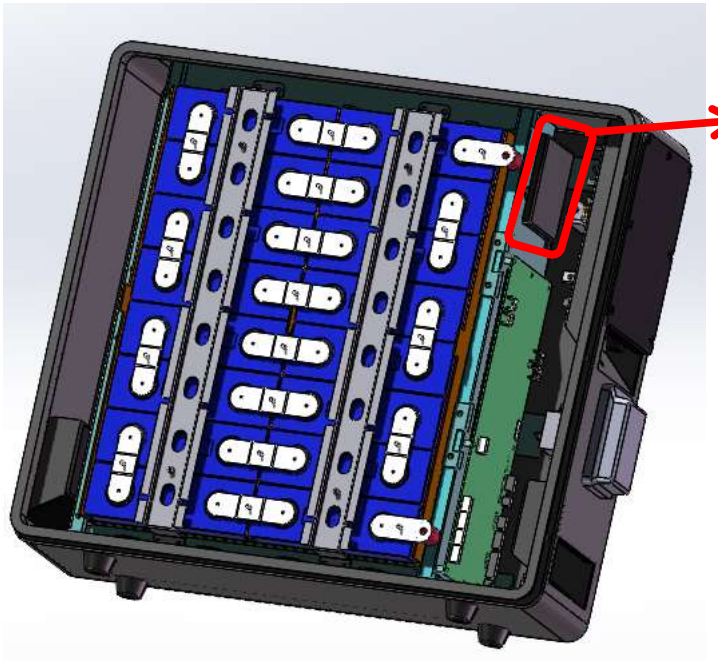
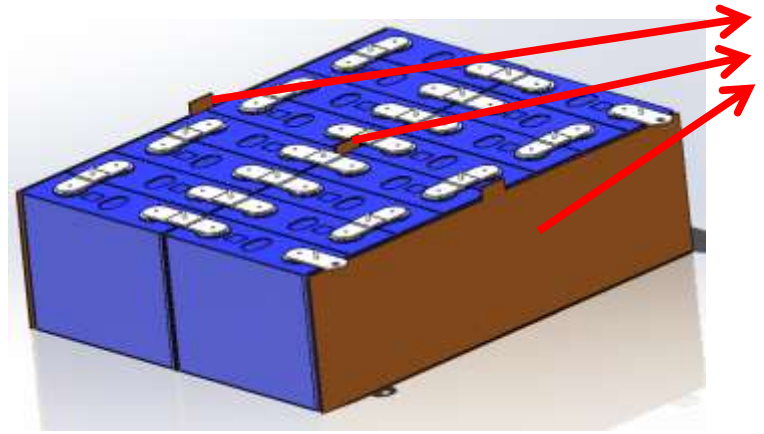
01 Battery Features

- IP65 protection grade
- Built-in heating system
- Built-in fire protection system
- Built-in WiFi , support APP OTA upgrade
- Compatible with main inverter brands

01 Battery Features

Product Type	Flex-L4
Battery Model	STE-BWO-16000
Battery System Capacity	16.07kWh
Cell Technology	Li-ion(LFP)
Battery Cell Capacity	314Ah
Configuration	1P16S
Nominal Voltage	51.2V
Operating Voltage Range	45.6~56.2V
Dimension(W*D*H)	480*245*957(mm)
Net Weight	137kg
Scalability	Max. 15 systems in parallel operation
Installation	Wall mounted or floor mounted
Depth of Discharge	90%
Charge/Discharge Current(Recommended)	157A
Charge/Discharge Current(Max)	200A
Cooling Method	Natural convection
Communication Port	RS232, RS485, CAN
Protection Class	IP65
Environment	Indoor or Outdoor Eaves
Charging Temperature	-20°C~55°C (with heating) 0°C~55°C (without heating)
Discharging Temperature	-20°C~55°C
Humidity	5%-95%
Max. Operating Altitude	2,500m
Cycle Life	>6000 @25°C, 0.5C, 90% DOD
WI-FI Module	Built in Wi-Fi module, APP OTA function
Extended Functions	Thermal aerosol fire extinguishing device(standard) Wheels(standard), Heating system (optional)
Certificates	IEC62619 / IEC61000 / CE / UN38.3 / MSDS





02 Compatible Products List

STELTEC

JIANGSU STELTEC ENERGY TECHNOLOGY CO., LTD
Room 401, Building 7, No. 2, Xinkaihe Road, Lujia Town,Kunshan City, Jiangsu Province - China
www.steltec-ess.com

Compatible Products List V2.1

Release Date: 06 Feb 2026

Inverter brand	Model	Communication port	Application
LV series : Focus-L1/Focus-L2/Basic-L1/Flex-L1/Flex-L2/Flex-L3/Flex-L4			
Deye(Sunsynk)	sun-(5-8) K-sg01LP1 series	CAN	on/off grid
	sun-(3.6-6) K-sg03LP1 series	CAN	on/off grid
	sun-(3-6) K-sg04LP1 series	CAN	on/off grid
	sun-(3.6-8) K-sg05LP1 series	CAN	on/off grid
	sun-(5- 12) K-sg04LP3 series	CAN	on/off grid
	sun-(12- 16) K-sg01LP1 series	CAN	on/off grid
Senergy	SE(4.6-6) KH8-60/ 120	CAN	on/off grid
	SE(4.6-6)KAC	CAN	on/off grid
Solis	S6-EH1P(3-6)K-L-PRO	CAN	on/off grid
	S6-EH1P(3-6)K-L-EU	CAN	on/off grid
	S6-EH1P8K-L-PRO	CAN	on/off grid
	S6-EH1P(3-10)K-L-PLUS	CAN	on/off grid
	S6-EH1P(9.9-18)K03-NV-YD-L	CAN	on/off grid
	S6-EH3P(8-15)K02-NV-YD-L	CAN	on/off grid
Hoymiles	HYS-(3.0-6.0)LV-EUG1	CAN	on/off grid
LUXPOWER	LXP Hybrid 3-6K	CAN	on/off grid
Afore	AF（3-6）K-SL	CAN	on/off grid
Solax	X1-HYB-LV 3-6K	CAN	on/off grid
	X1-LITE-LV 8-12K	CAN	on/off grid
	X3-NEO-LV 5-15K	CAN	on/off grid

03 Battery installation

STE-BWO-16000 Packing List

No.	Part no.	Part name/size	Quantity	Photo	Used for
1	1.02.003	Battery pack	1		Battery box
2	3.01.0105	Fixed support SPCC T=2.5mm,572*490*30(L*W*H), fine sand grain	1		Wall mounting bracket
3	3.01.0133	Expansion bolt M10*80mm/8.8 grade /304 stainless steel expansion screws	8		Lock wall pendant
4	3.01.0034	Screw Cross outer hexagon three combination screws _M6*15mm_8.8 grade 304 stainless steel	1		Grounding screw
5	3.01.0137	Yellow-green two-color grounding Cable	1		Grounding Cable
6	3.01.0138	Power cord, SC70-8 at one end, SC70-10 at the other end, AWG0# PVC cord 11627, L=1500mm, red color	1		Power cable +
7	3.01.0139	Power cord, SC70-8 at one end, SC70-10 at the other end, AWG0#PVC cord 11627, L=1500mm, Black	1		Power cable -
8	3.01.0098	Flat gasket M8 * 20 * 1.5mm_8.8 grade 304 stainless steel	2		Accessory gasket
9	3.01.0004	Waterproof Cable Gland M25(13-18) (Single Hole)	2		Water intrusion prevention for equipment connectors
10	3.01.0005	Waterproof Cable Gland M25(13-18) (Three Holes)	1		Water intrusion prevention for equipment connectors
11	3.01.0134	SC70-8_Purple Copper Tinned Terminals	2		To parallel with multiple packs

STE-BWO-16000 Packing List

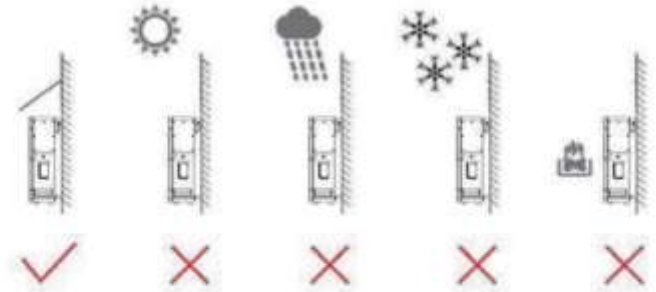
No.	Part no.	Part name/size	Quantity	Photo	Used for
12	3.01.0084	T568B Lan cable _Line length 2000mm_ RJ45 crystal plug	1		Communication cable between master pack and inverter or for parallel of multiple packs
13	3.01.0089	RJ45 Crystal head	2		RJ45 Crystal head
14	3.01.0094	Desiccant 2g moisture-proof desiccant	2		Moisture-proof
15		Waterproof Hole Plug	8		Prevent water leakage and dust accumulation
16		Outgoing Inspection Report	1		Outgoing Inspection Report
17		Battery Networking Guide	1		Battery Networking Guide
18		Quick Installation Guide	1		Quick Installation Guide

Caster Accessory Kit Packing List

No.	Part no.	Part name/size	Quantity	Photo	Used for
1	3.01.0034	Screw Cross outer hexagon three combination screws _M6*15mm_8.8 grade 304 stainless steel	16		Grounding screw
2	3.01.0010	Swivel wheel with brake	4		4 casters bearing capacity 800kg

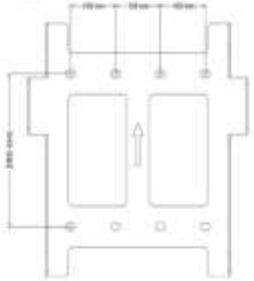
Check packing list

03 Battery installation



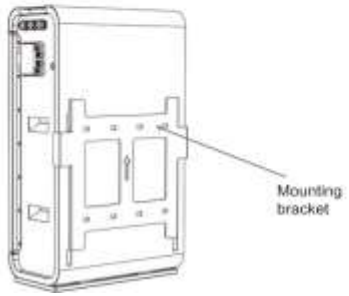
STEP 1

Drill the hole with an 14mm dirll bit as follows and fix the wall bracket to the wall.



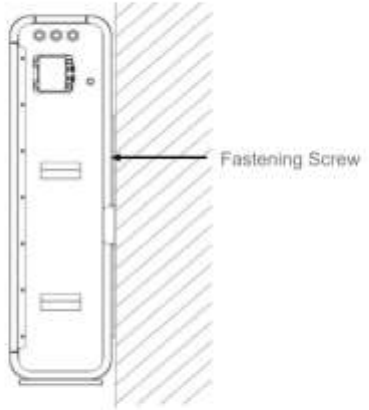
STEP 2

Secure the mounting bracket.



STEP 3

Hang the battery on the wall mounting bracket and secure it tightly.



Wheel-mount installation (alternative to Step 1- 3)

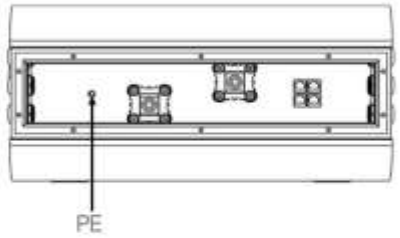
STEP 1

Install four lockable swivel wheels on the battery.
Place the battery on flat and firm ground, and lock the swivel wheels after positioning.

03 Battery installation

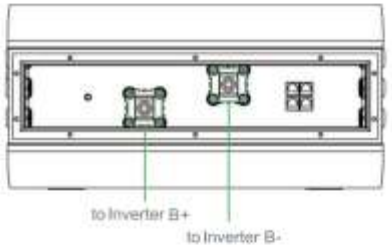
STEP 4

Connect to ground.



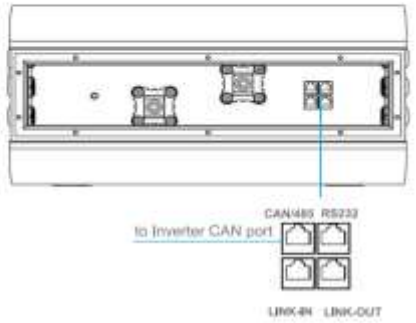
STEP 5

Connect power cable.



STEP 6

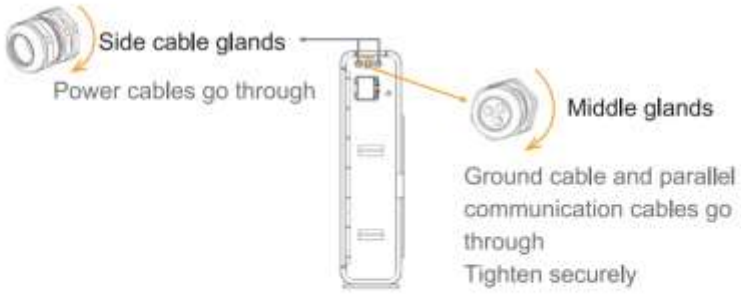
Connect communication cable.



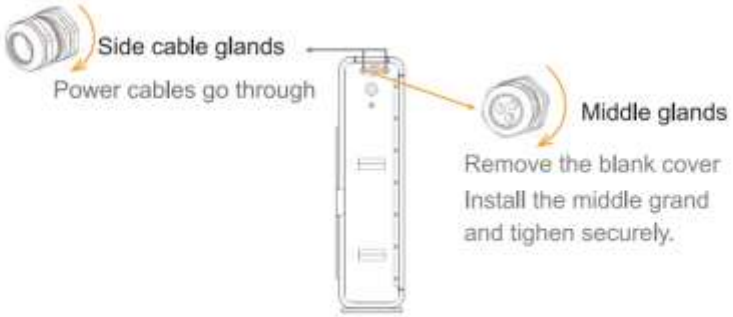
STEP 7

Route cables as follows:
1. Power cables go through the side cable glands.
2. Ground and communication cables go through the middle glands.(The remaining opening must be sealed with the provided plug and tightened.)
3. Tighten all glands after routing.

For parallel operation, remove the blank cover on the other side and install the gland from the accessory kit.
Tighten securely after installation.



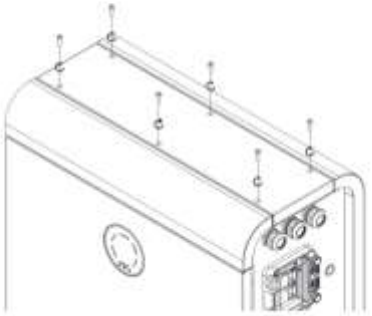
For Parallel Operation



Step 8
Connect in parallel with other batteries(Wiring diagram is in next page)

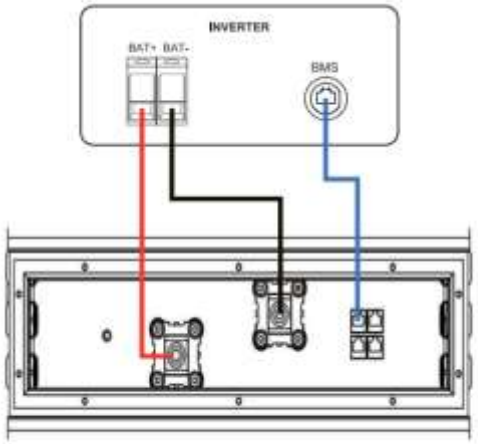
STEP 9

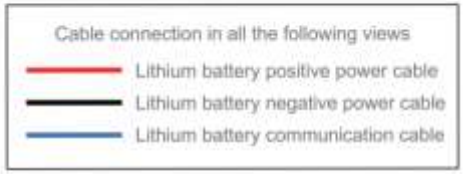
Install the cover and fully tighten all srews.

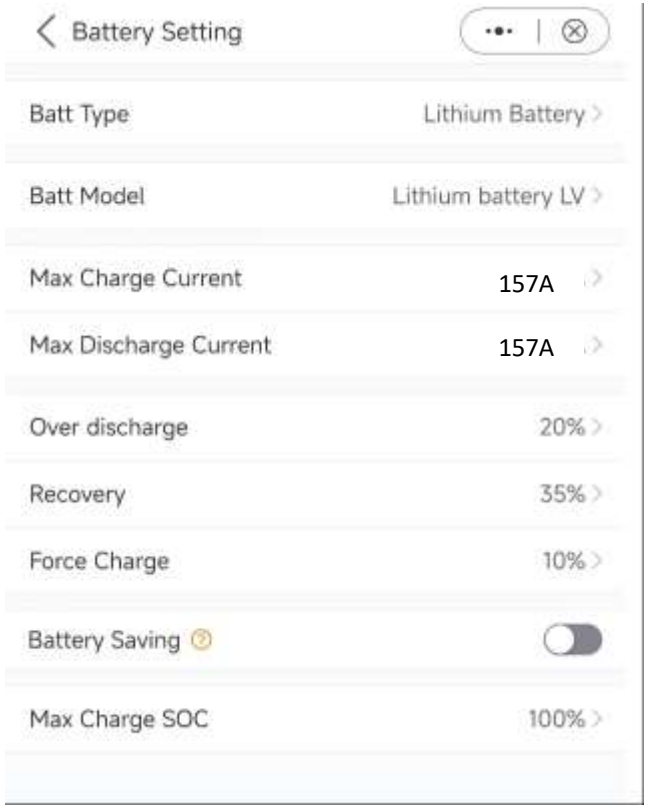


04 Wiring diagram

Wiring method of 1 units module with power below 10kW

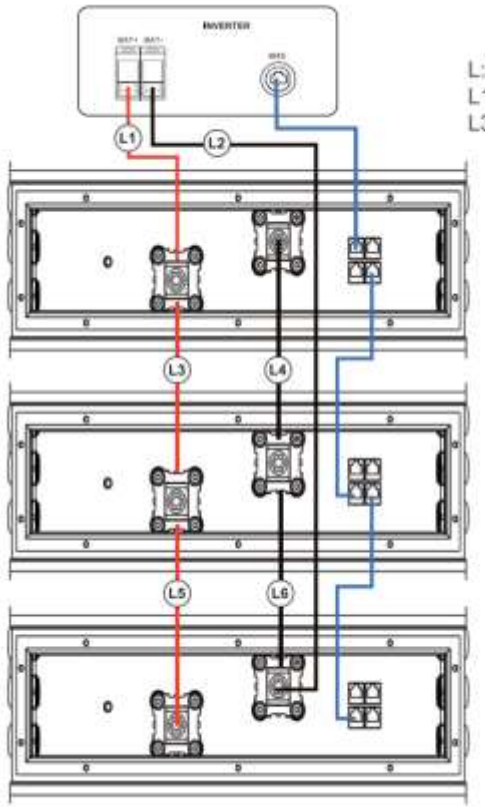






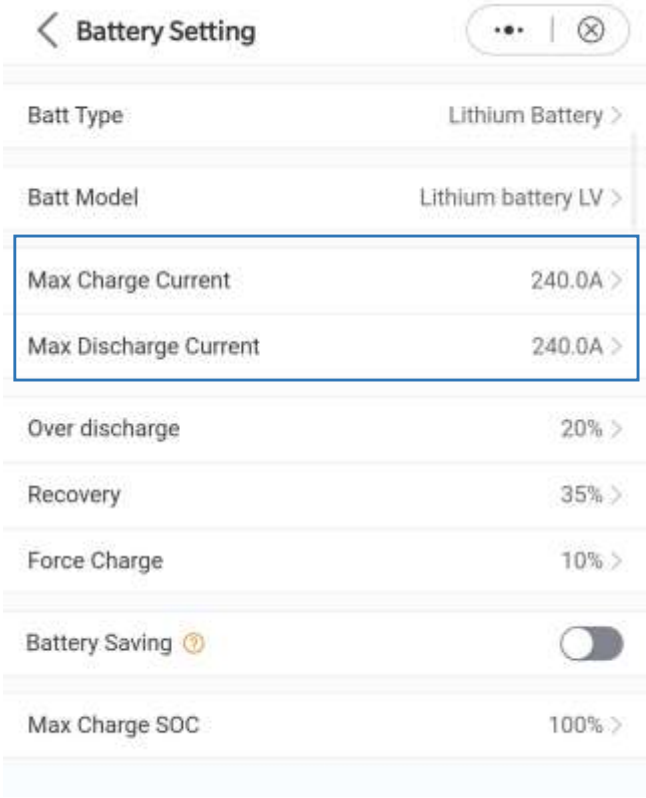
Recommend setting Max Charge&Discharge current 157A by Inverter

04 Wiring diagram



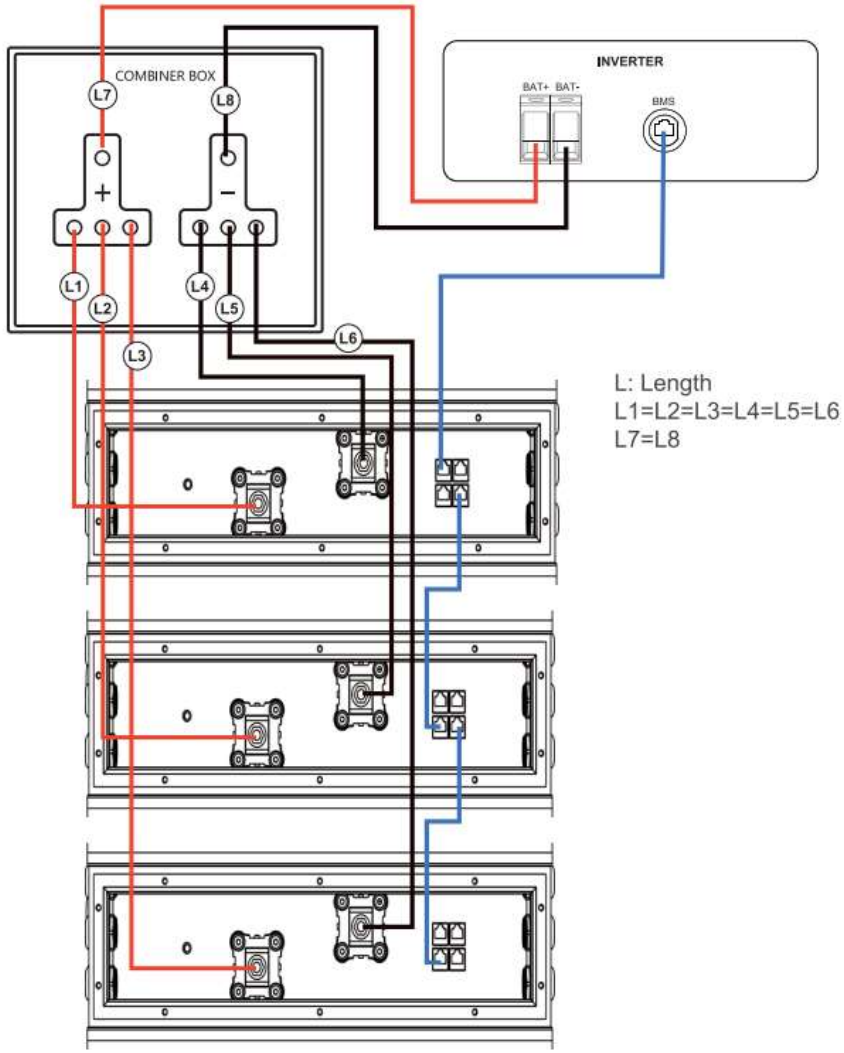
L: Length
L1=L2
L3=L4=L5=L6

For 2 to 15 units: Use the single-layer module configuration with power of 12 kW or below.
All positive and negative cables between the inverter and battery must be of equal length.
Equal cable length is necessary for proper system balance and reliable operation.
Note: The number of intermediate units is omitted in the diagram for simplicity.



Setting Max Charge&Discharge current ≤240A by Inverter

04 Wiring diagram



For 2 to 15 units where inverter power exceeds 12 kW:
Connect the positive and negative ports of each battery to the combiner cabinet as shown in the figure below.
All positive and negative connecting cables between each battery and the combiner cabinet must be of equal length.
Equal cable length is necessary to ensure equal current sharing and reliable operation.
Note: The number of intermediate units is omitted in the diagram for simplicity.

05 System starting Procedure

For system starting we recommend the following steps:

①Turn the Battery DC switch ON,and then power on the battery,wait until the battery LED is ON.

②Wait until the inverter LED is ON.

③Turn the PV DC switch of the inverter ON

④Turn the AC switch that is connected to the grid and EPS output of the inverter ON

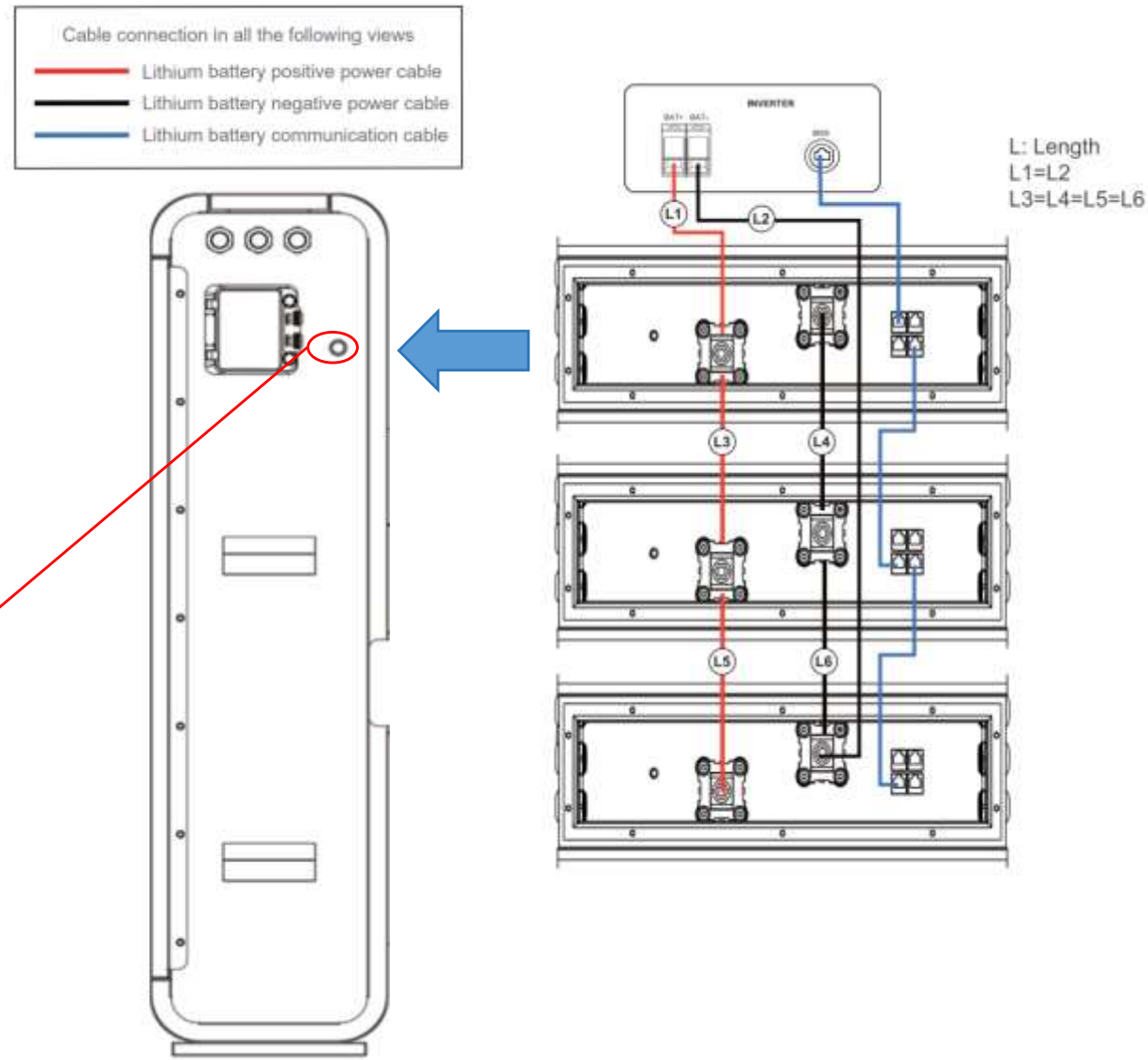
⑤Set-up the battery and the inverter using the App

05 Commissioning Procedure

How to power on the battery

Note: For multiple batteries in parallel, only the Master battery SOC LED will be on to show the whole system SOC level, slave battery SOC LEDS are off, but the Normal&Alarm LED will show normally.

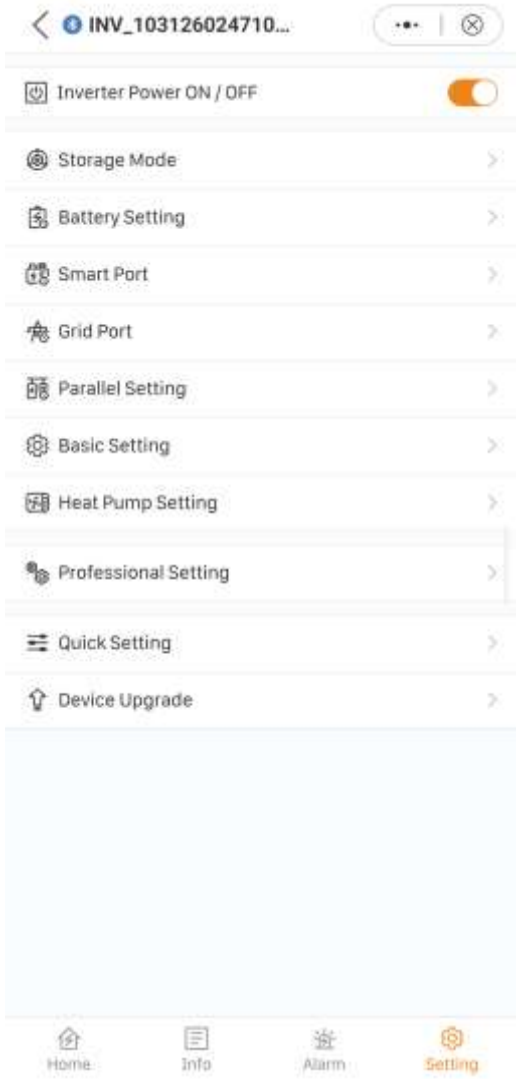
Long press the master battery button to control the battery system on and off.



06 System debugging

Set the battery model

Setting->Battery Setting

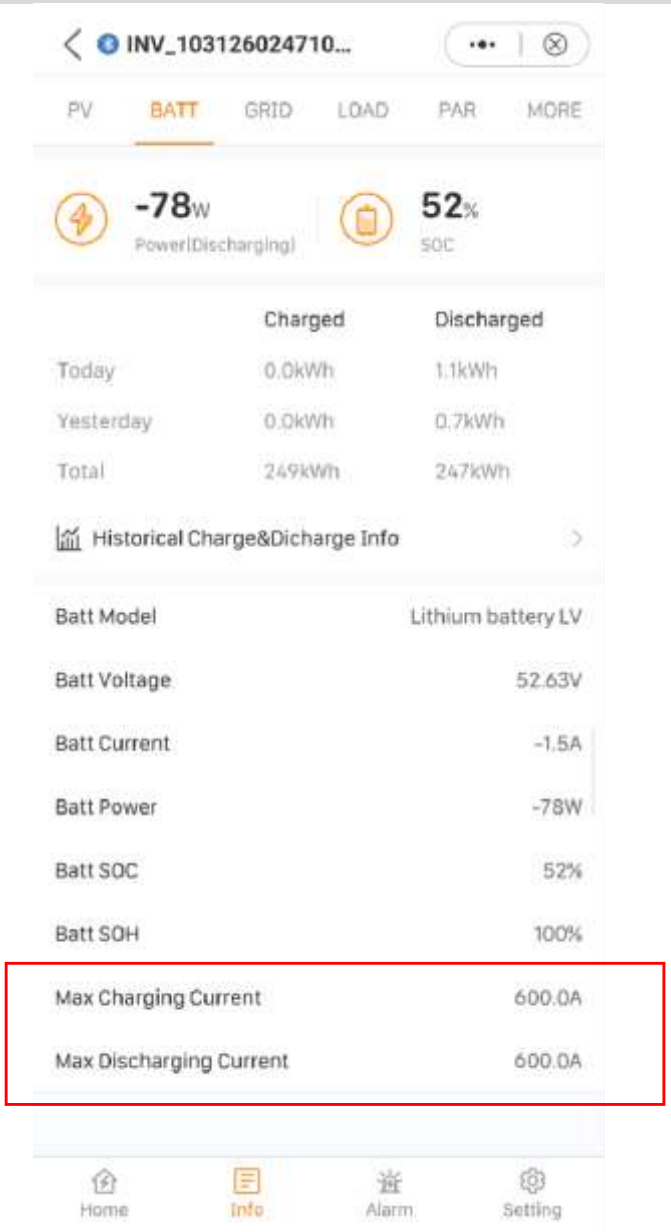


06 System debugging

Where to check the status on APP

Info->BATT

Charging current limit value ：200A * N
Discharge current limit ：200A * N

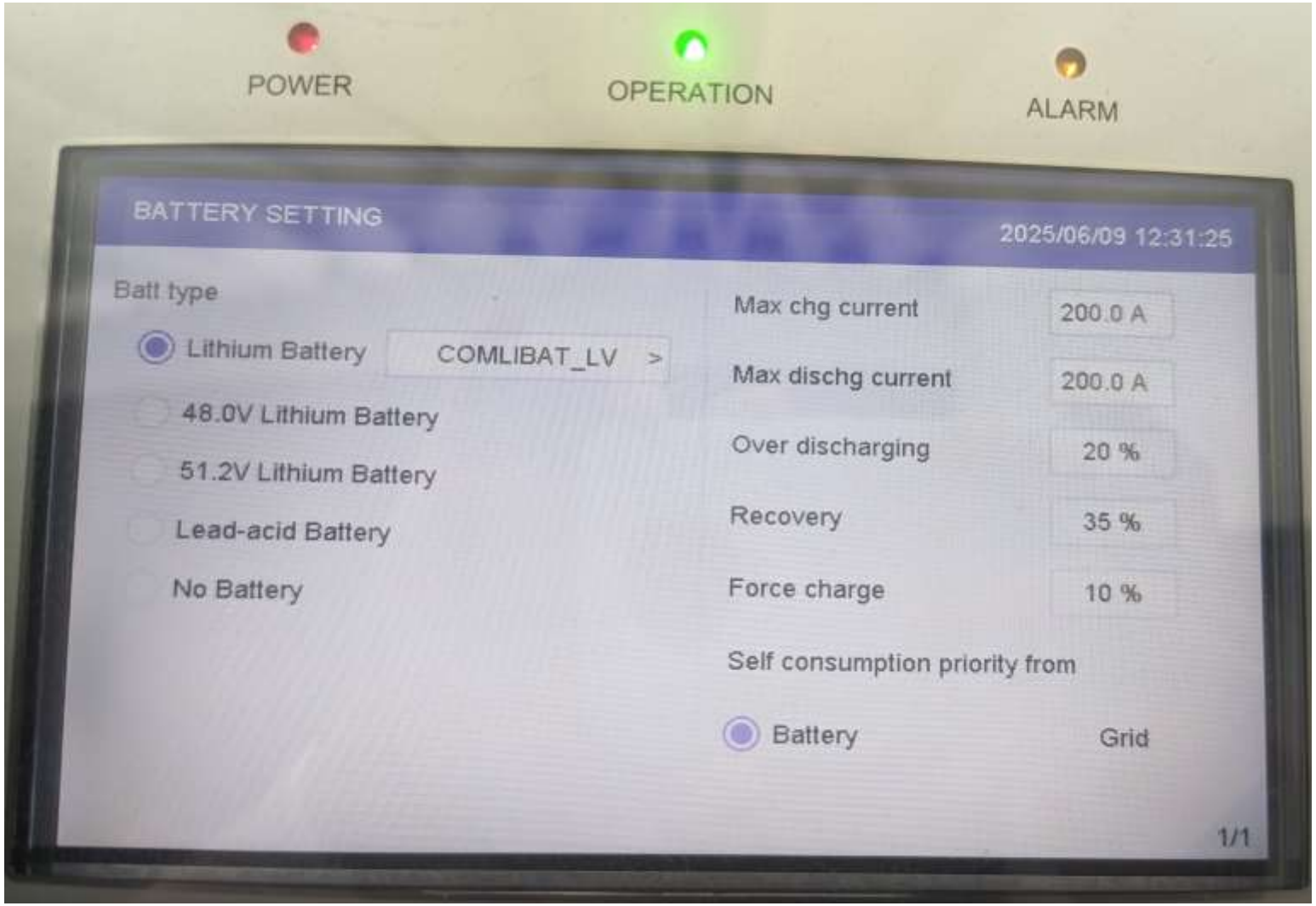


06 System debugging

Set the battery model

Enter ->System setting ->Battery setting

(The COMLIBAT_LV is in page 2!)

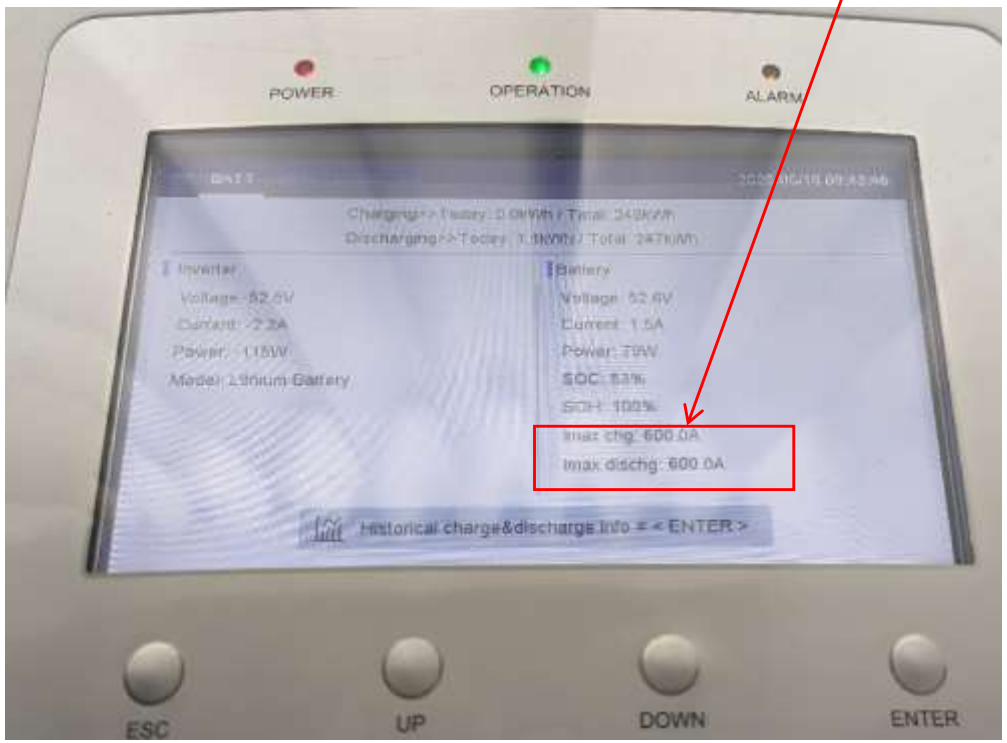


06 System debugging

Where to check the status on Inverter

Enter->PLANT INFORMATION->DOWN(page 2)->BATT

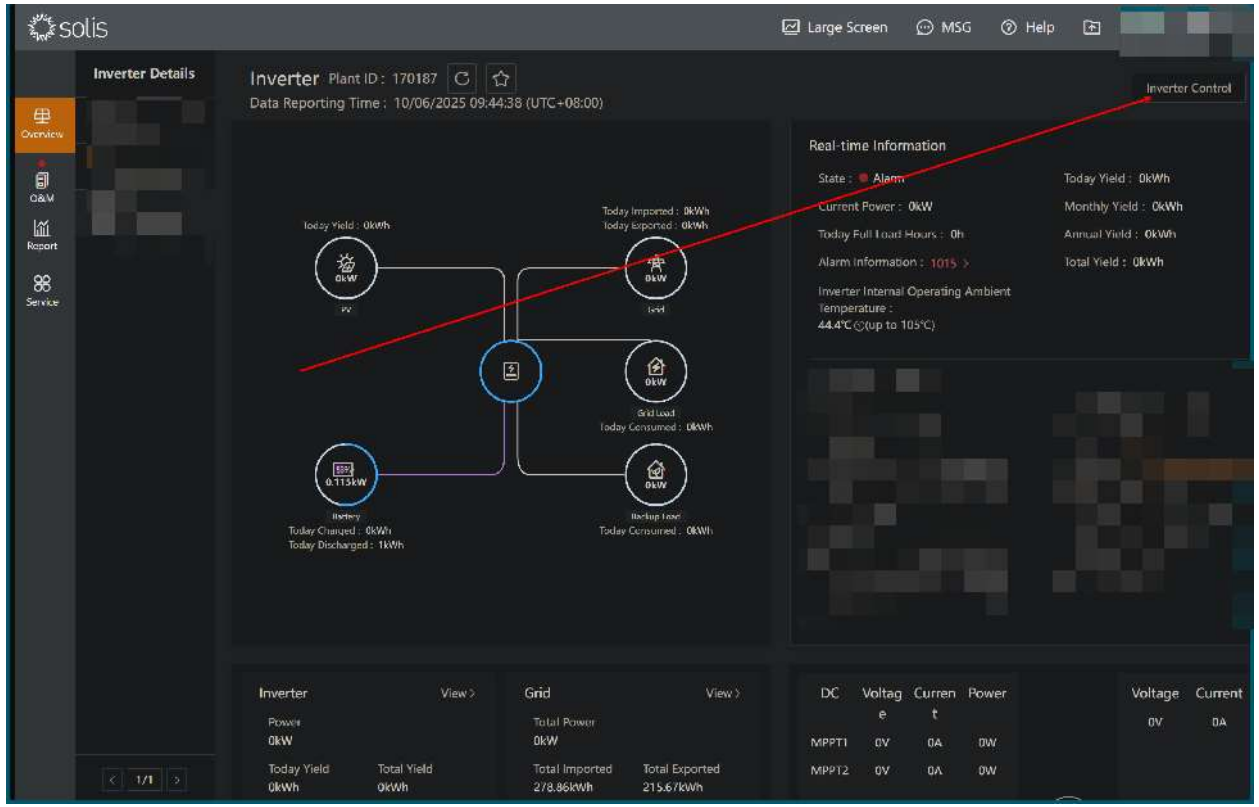
Charging current limit value：200A * N
Discharge current limit　　：200A * N

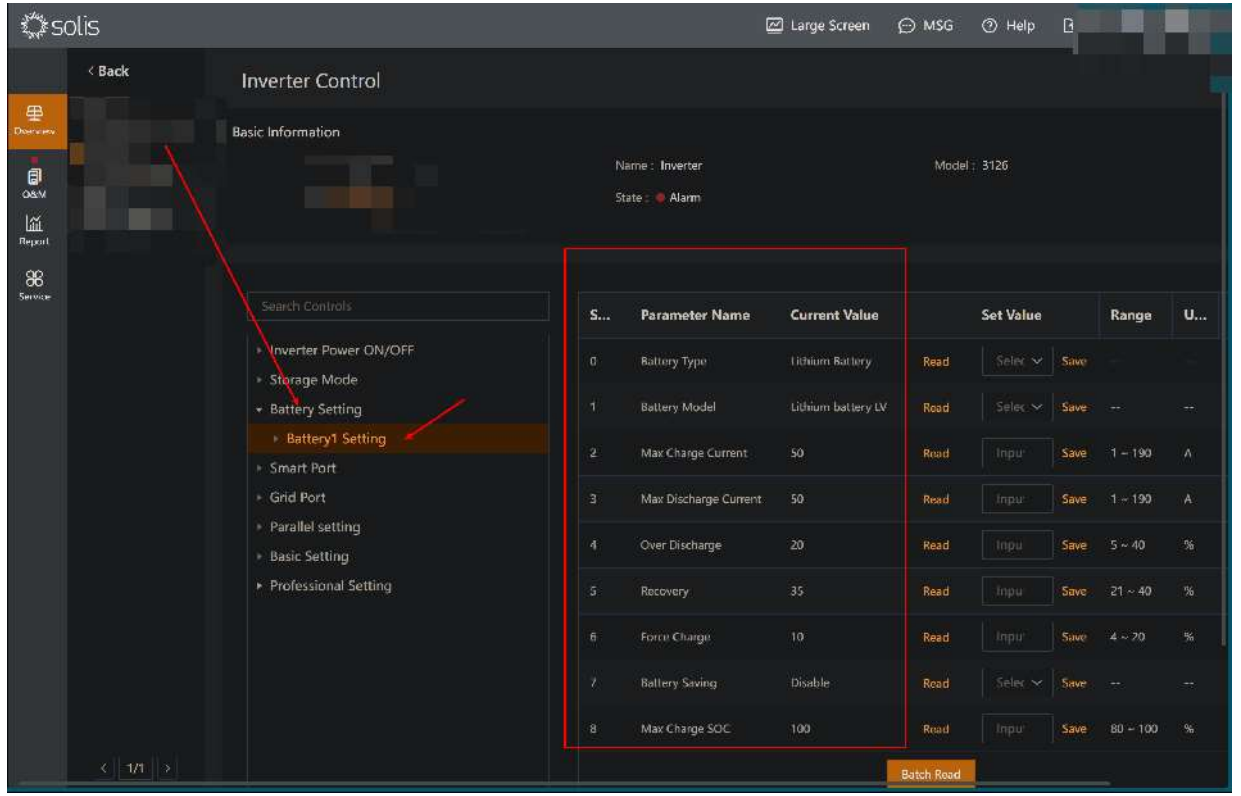


06 System debugging

Set the battery model

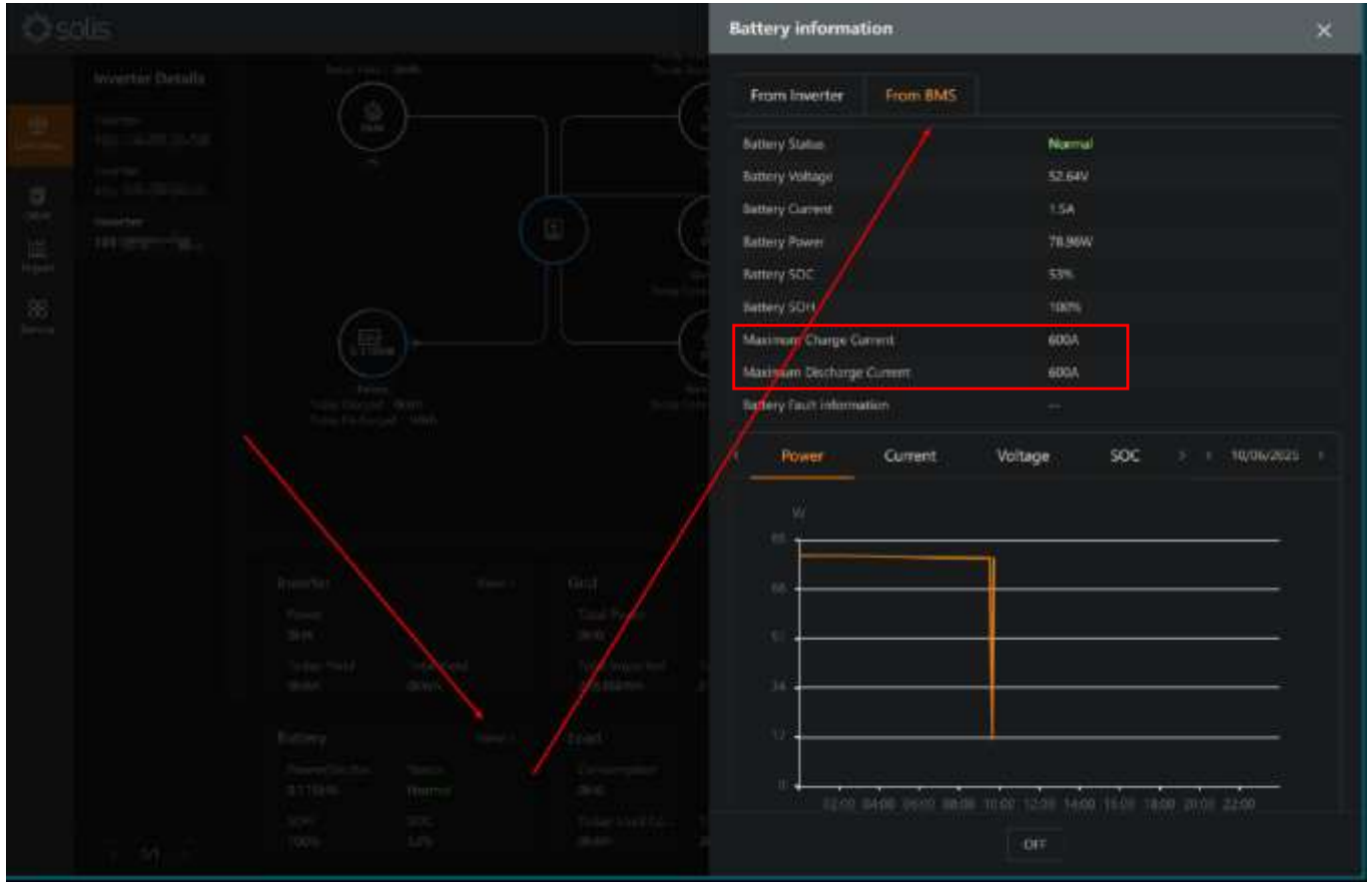
Click the inverter control and find the battery setting





06 System debugging

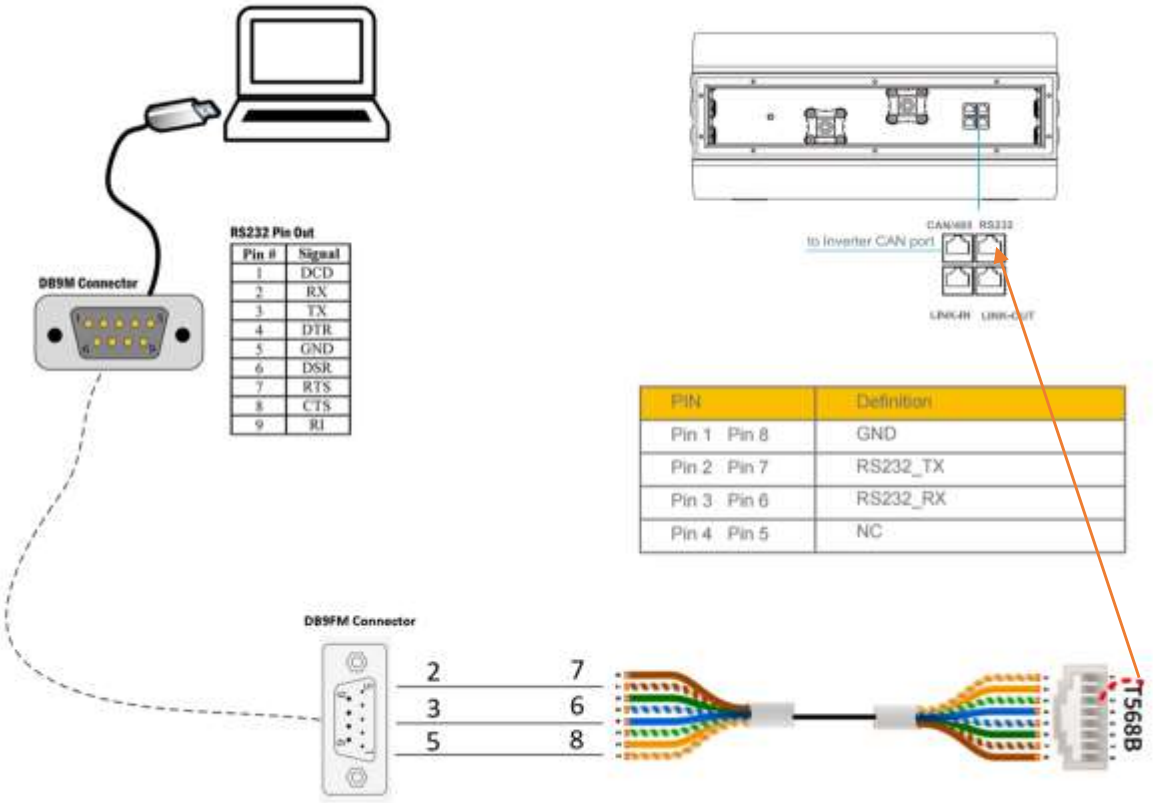
In the device overview panel,click the view button in the battery area and click the ‘From BMS’ you can see the current info of the battery



Charging current limit value：200A * N
Discharge current limit ：200A * N

06 System debugging

------Mornitor the BMS detail information on Computer

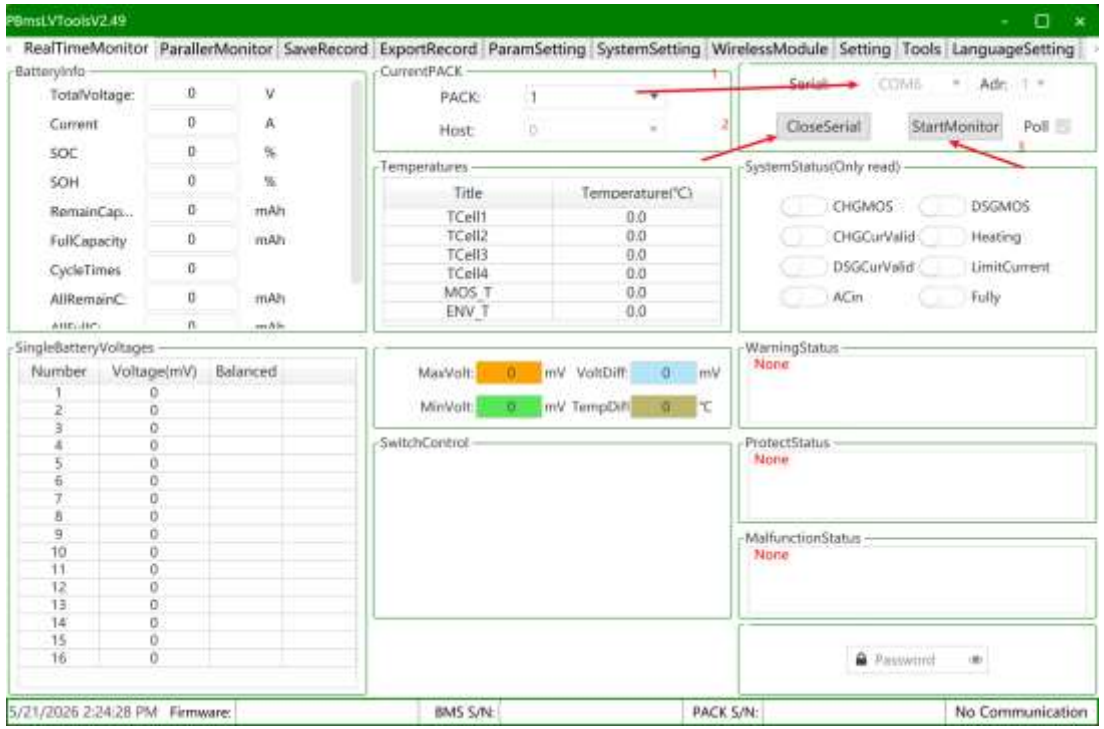


1.Connect the communication cable according to the picture

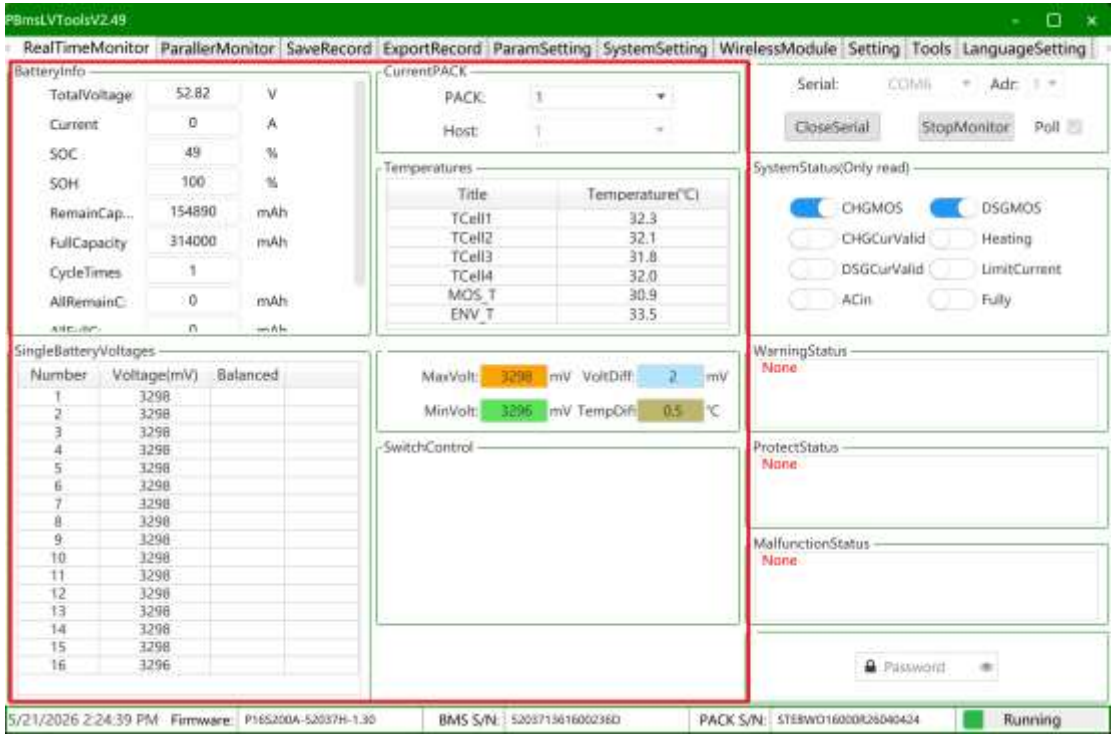
06 System debugging

------Mornitor the BMS detail information on Computer

2.Open the software ‘PBmsLVTools’



3.Select serial port ,open serial and tart monitor



4.Connection successful

06 System debugging

1 Download & Install App

Step 1: Download the APP "BMS-TOOL"

① Android
Search for BMS-TOOL in the play store.

iOS
Search for "BMS-TOOL" in the App Store.

BMS

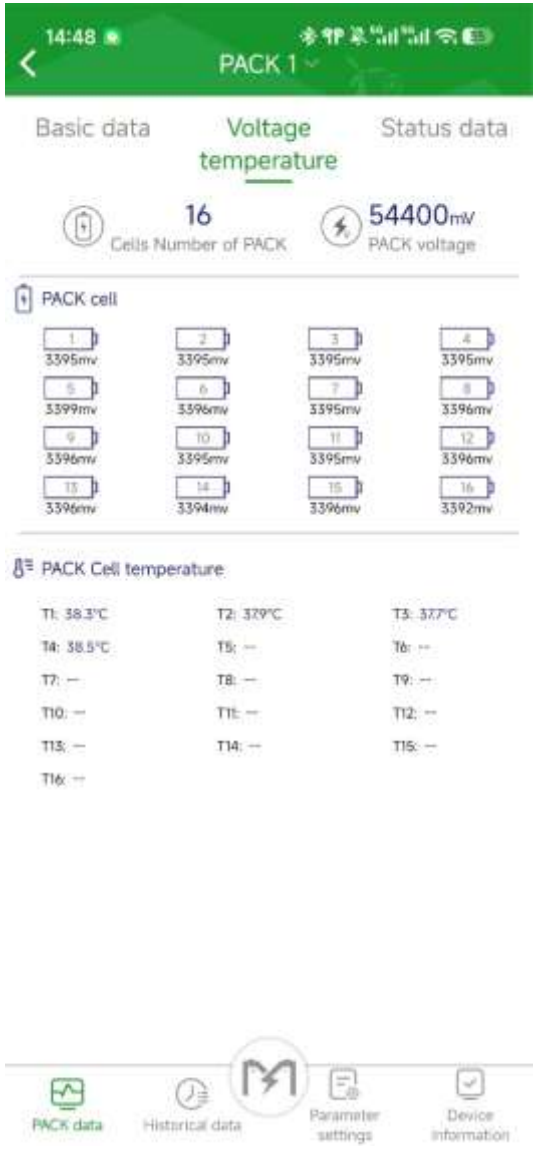
② Store or scan the QR code in **P1/P2** to download.

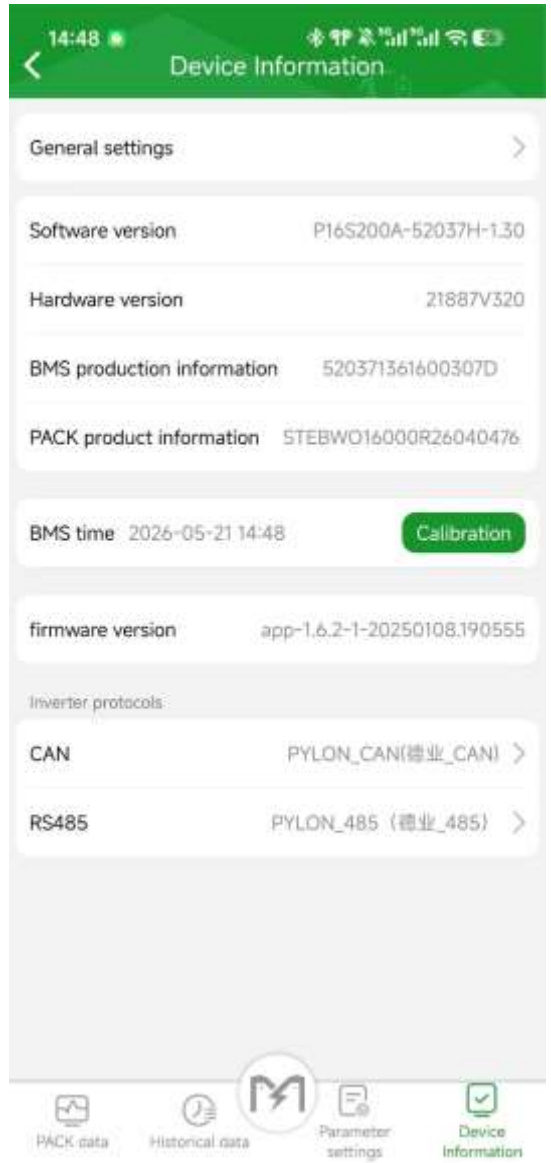
For iOS devices **P1**

For Android devices **P2**

Step 2: Install the downloaded app "BMS Tool" on your phone.

------Mornitor the BMS detail information on APP





thanks