



Installation and configuration manual

With SINENG SN Series

Pytes Lithium Battery HV48100

With SINENG inverter



WARNING:

HV48100 is a high voltage DC system and must be operated by authorized person only.

Warning

Before connecting

- 1) Please check products and components according to enclosed packing list after unpacking. Please contact PYTES if there is any damage or missing of products and / or components.
- 2) Make sure power sources are cut off and battery system is powered off before installation.
- 3) Wiring correctly by identifying positive and negative cables to ensure no short circuit with external devices.
- 4) It is forbidden to connect the battery directly with AC power.
- 5) Battery system must be well grounding and the resistance must be less than 0.1Ω ; _
- 6) Make sure the electrical parameters of battery system are compatible with related equipment.;
- 7) Keep the battery away from water and fire.

In Operation

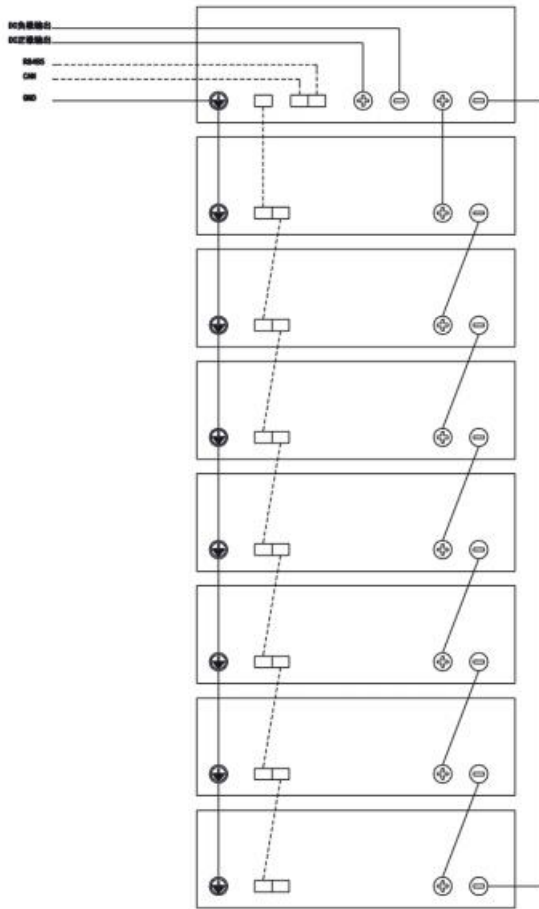
- 1) Battery must be physically powered off in case of any move or repair.
- 2) It is forbidden to connect HV48100 to other types of battery;
- 3) It is forbidden to connect the battery to a faulty or incompatible inverter;
- 4) It is forbidden to disassemble the battery (QC label removed or damaged);
- 5) In case of fire, only dry powder fire extinguisher can be used, liquid fire extinguishers are prohibited ;
- 6) Please do not open, repair or disassemble the battery other than staffs from Pytes or authorized by Pytes. Pytes do not undertake any consequences or related responsibility caused by violation of safety operation or design, production and equipment safety standards;

Caution

- 1) Please read this manual carefully before installation and any operation.
- 2) Charge the battery every 6 months to keep battery SOC > 90% if long term storage.
- 3) Battery must be charged within 12 hours when low voltage alarm triggered.
- 4) Battery DC output voltage exceeds 48V. It is vital to pay attention to personal safety in any case when operating.
- 5) All battery terminals must be disconnected before maintenance.
- 6) Please contact with Pytes within 24 hours if there is anything abnormal.
- 7) Battery being damaged directly or indirectly by above cases will result in warranty failure.

Note :This part only includes the battery and inverter installation part.

Please refer to other documents for the battery installation part.



CONTENTS

BOM LIST	3
1. Communication Cable Connection	8
2. Power Cable Connection	9
3. Set The DIP Switch	11
4. Start up the system	13
5.Set up the inverter	15
6.Check the battery information on inverter	17

Prepare tools for installation

Wear the safety gears listed in the installation manual at all time.

		
Wire Cutter	Crimping Modular Plier	Cable Ties
		
Screw Driver Set	Electric Screw Driver	Insulating Gloves
		
Adjustable Wrench	1500VDC Isolating nut drivers	2000VDC Multimeter

It is recommended to wear the following safety gears when dealing with the system.



绝缘手套



安全护目镜



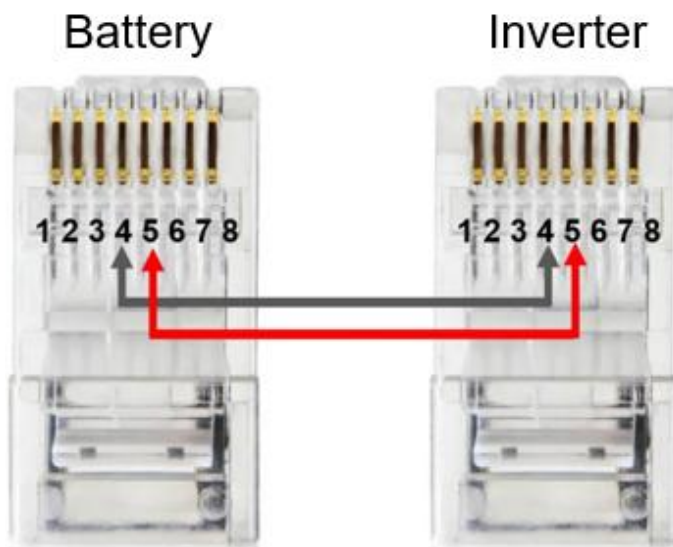
安全鞋

BOM LIST

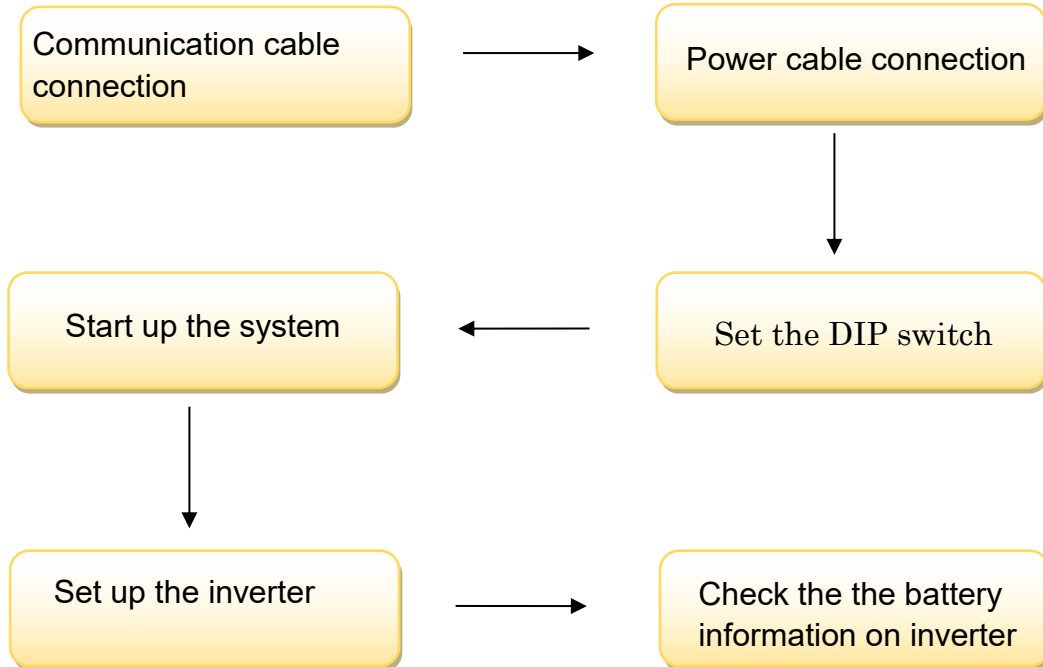
Before installation, you should prepare following items.

Item	Remarks	Quantity
Power Cable (DC)	☐ Cable diameters: 4awg(≥ 25 mm) ☐ Only copper cables may be used. ☐ The DC cables must be sized for the maximum battery voltage and the maximum battery current (see battery manufacturer documentation).	1pair
Earthing cable		1
Com. Cable	CAN communication or RS485 communication	1
Battery	HV48100 series	Depends on the number of Battery module
Inverter	SINENG SN hybrid	1

Definition of RJ45 Port Pin for BMS is as follow. **CAN port** definition



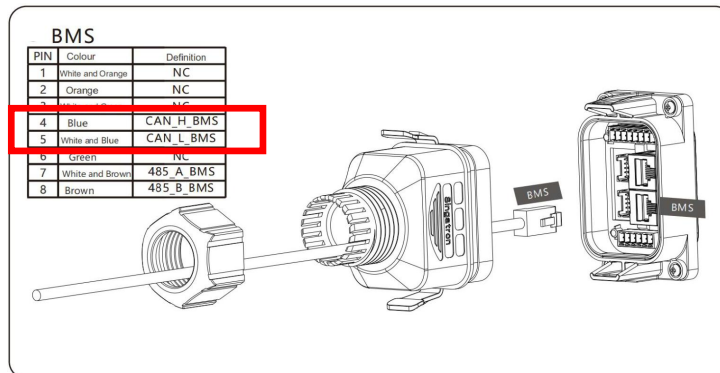
HOW TO INSTALL



CAUTION: If you want to get more inverter-related settings, please refer to the inverter user manual first.

1. Communication Cable Connection

Plug the one end of communication cable to BMS port of inverter. Pin sequence battery(4H,5L) to inverter (4H,5L).

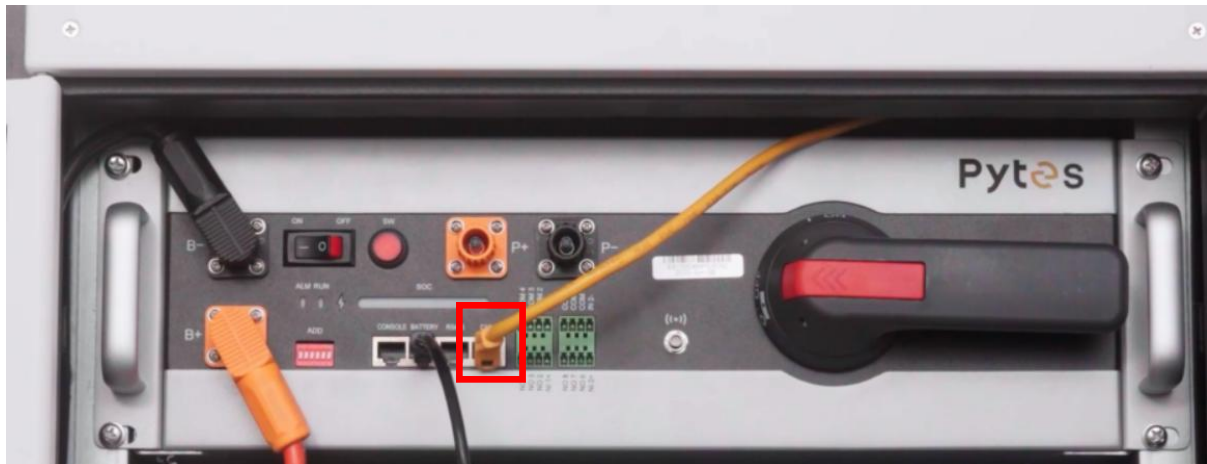


BMS network cable is a standard part, no need to process separately.



Pic 1.1.1

Connect the other end of the cable to the BCUs **CAN** port as shown in pic 1.1.2. (Ensure the correct sequence of communication cable)

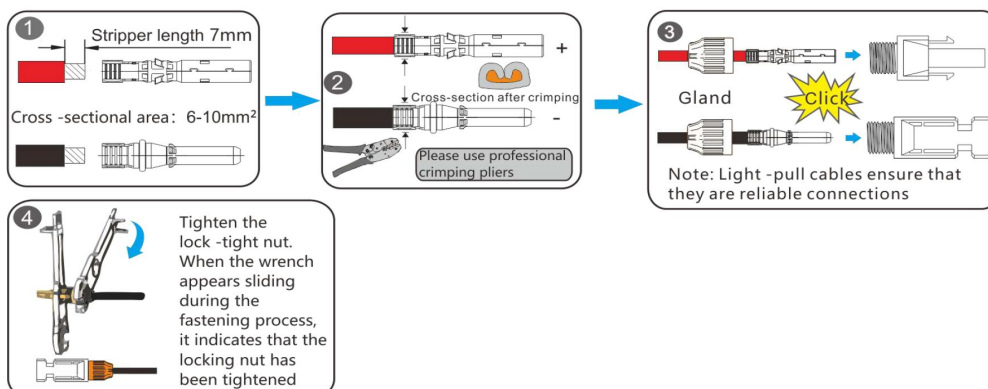


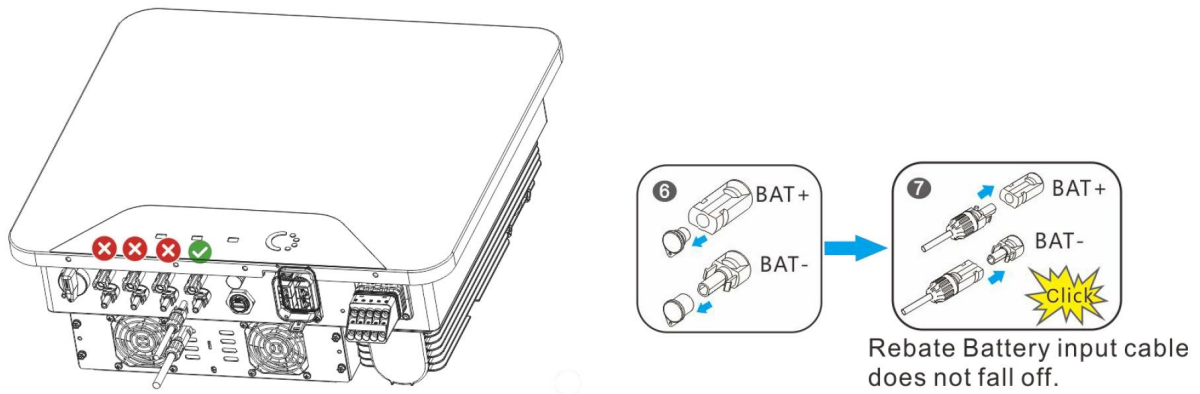
Pic 1.1.2

2. Power Cable Connection

Step.1

Install red and black power cables into battery terminals (provide in inverter package) respectively, and terminals must be compressed and locked tightly. Then plug battery terminals into the “P+” and “P-” of the inverter respectively as shown in Pic 1.2.1.

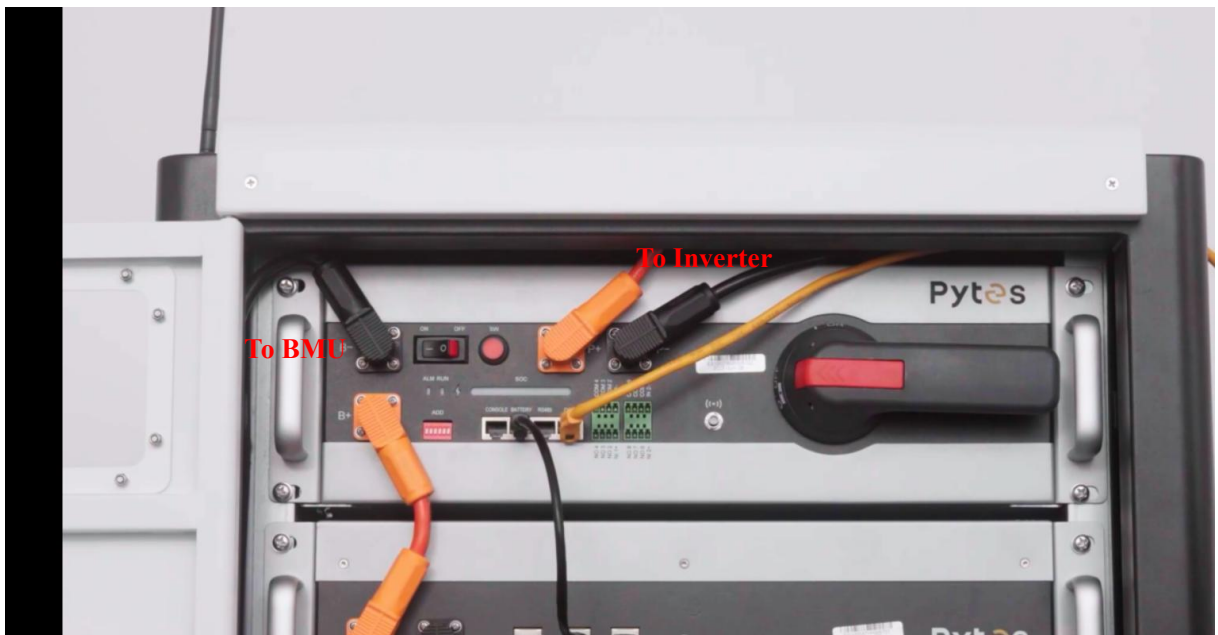




Pic 1.2.1

Step.2

At the other end of the cable, connect to the battery as shown Pic 1.2.2. (Ensure that the battery power switch is off)



Pic 1.2.2

3. Set The DIP Switch

Before set the DIP switch, make sure the isolation switch is in the off state.



Pic 1.3.1

Set up the DIP switch to down,down,up,down,down,up. As show in Pic 1.3.2.

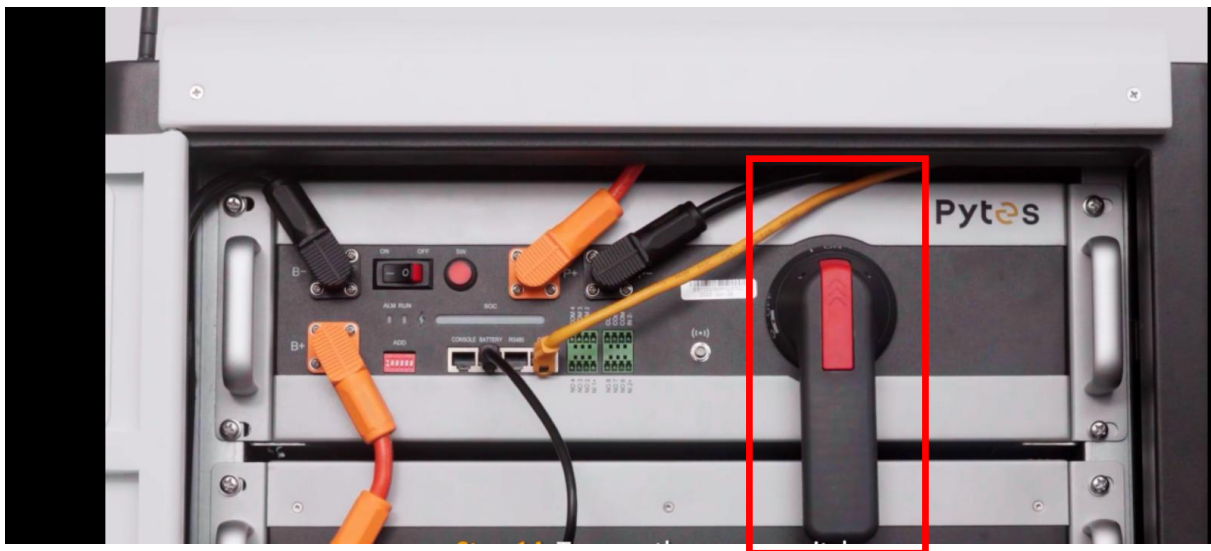
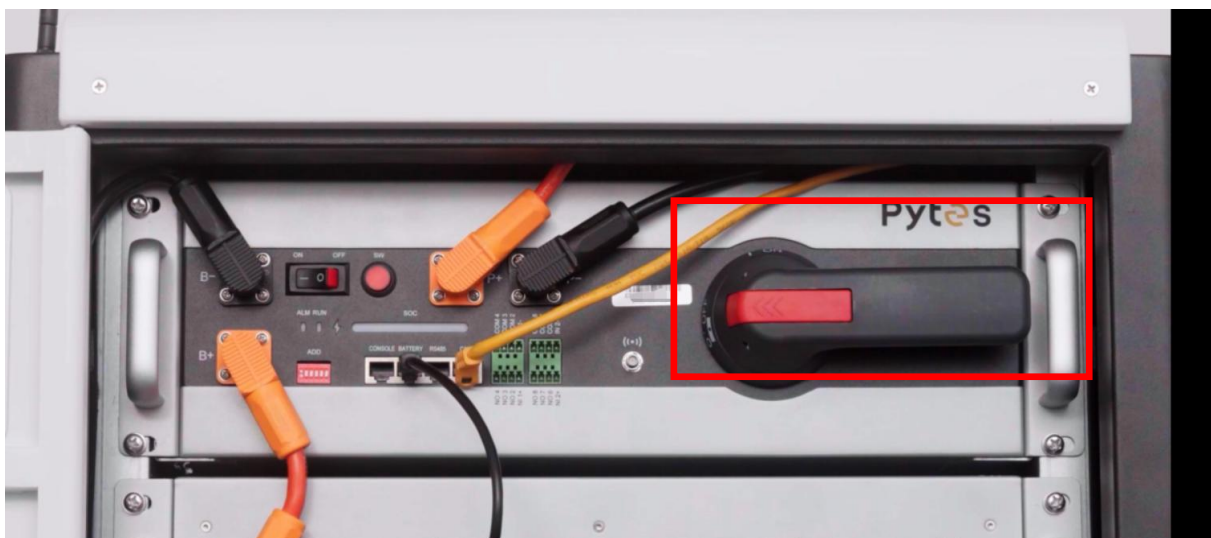


Pic 1.3.2

4.Start up the system

Before start up the inverters and batteries,make sure the wires are connected correctly.

Step.1 Turn on the isolation switch.



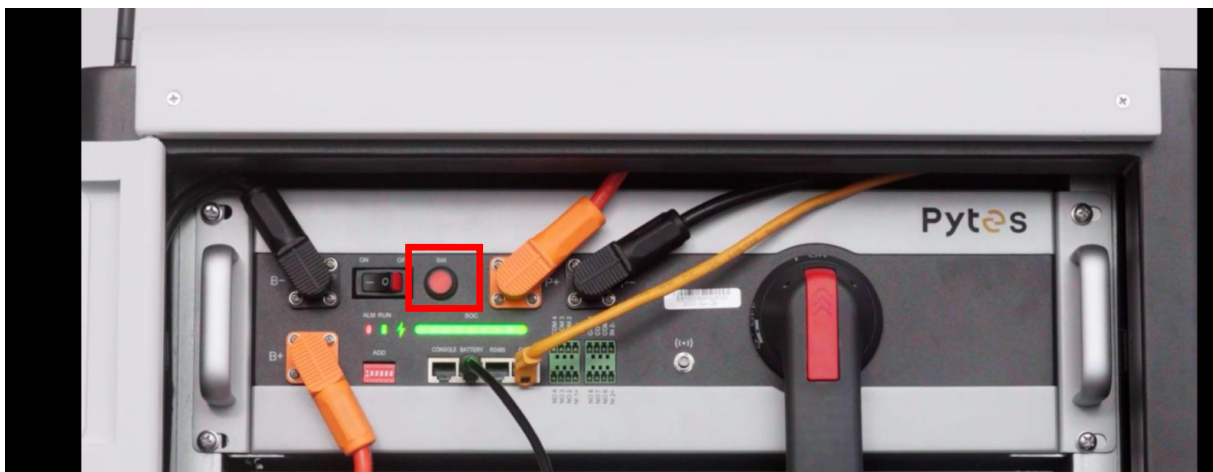
Pic 1.4.1

Step.2 Turn on the power switch .



Pic 1.4.2

Step.3 Short press the **red SW** button, the RUN light on main control will flicker.



Step.4 Start the inverter.



5.Set up the inverter

※ **CAUTION:** If you want more details about the batteries settings, please check the operating manual of inverters.

Step1.

Scan the QR code and download SINENG's mobile app.

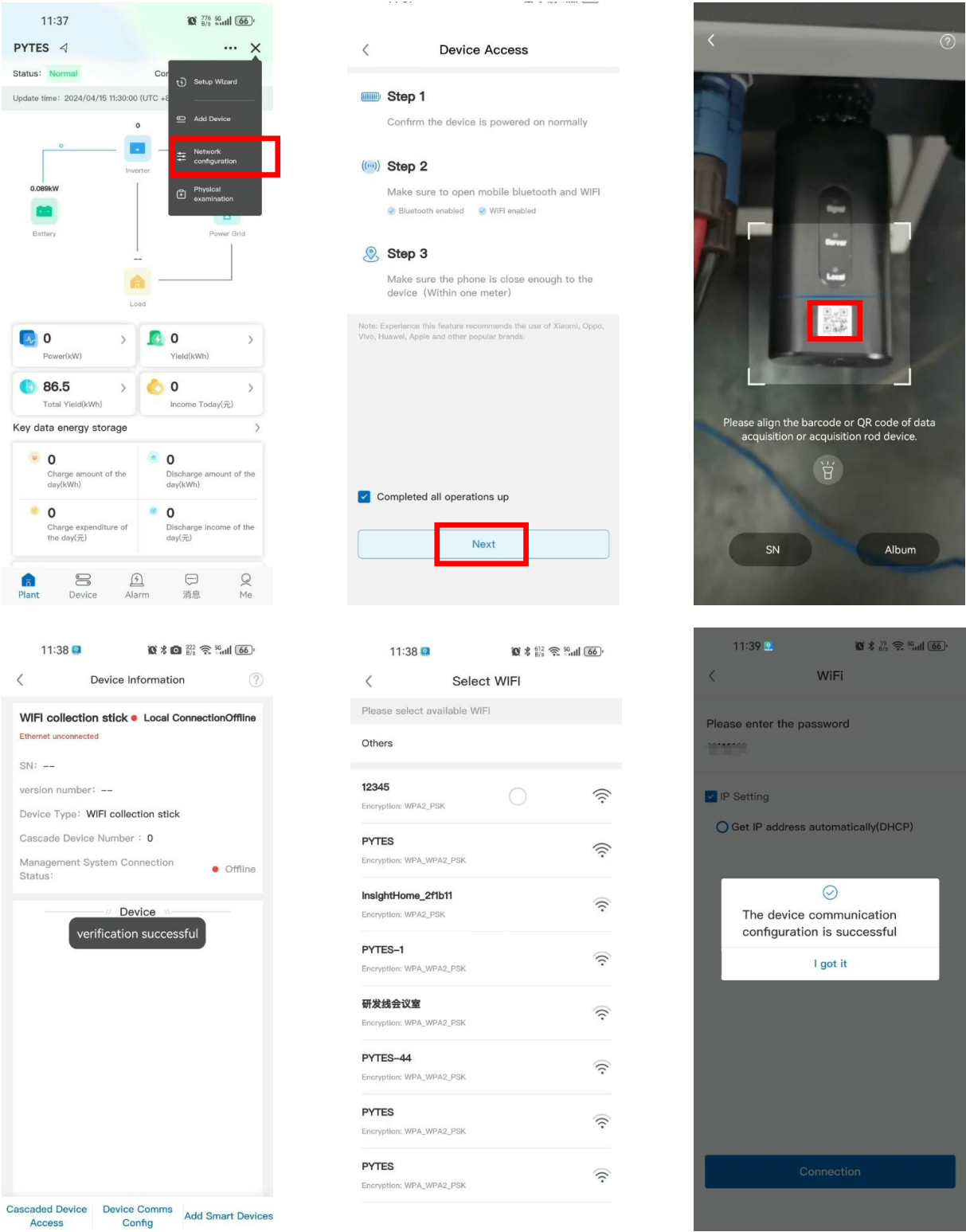


EnjoySolar

Pic 5.1.1

Step2.

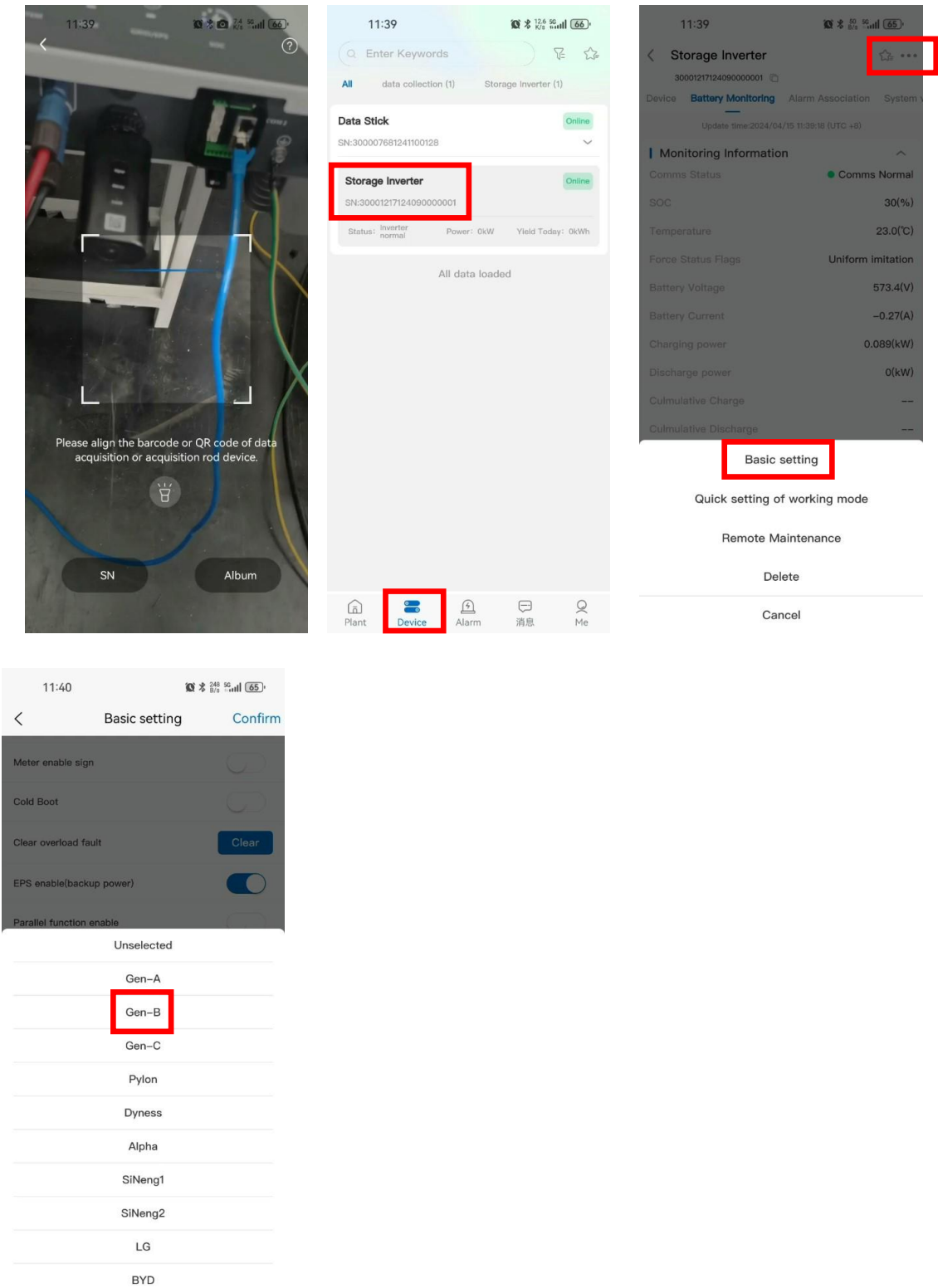
Connect to WIFI as follows.



Pic 5.1.2

Step 3.

Scan the QR code again and set up battery Parameters.

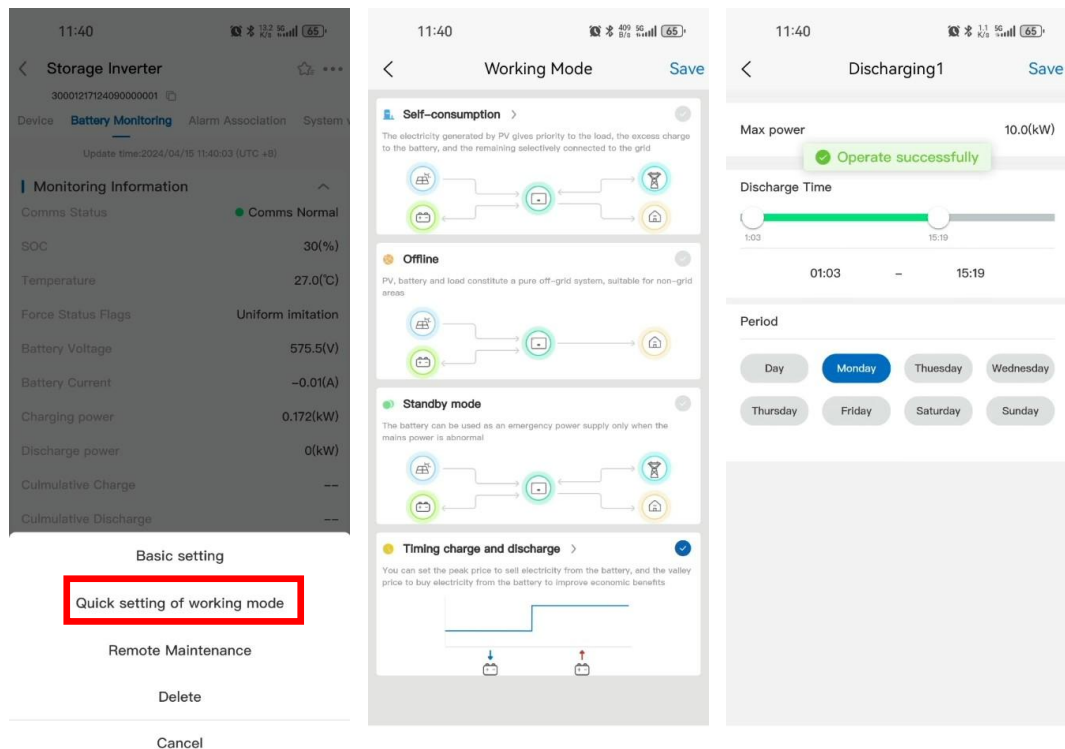


Pic 5.1.3

6. Check the battery information on inverter

Step.1

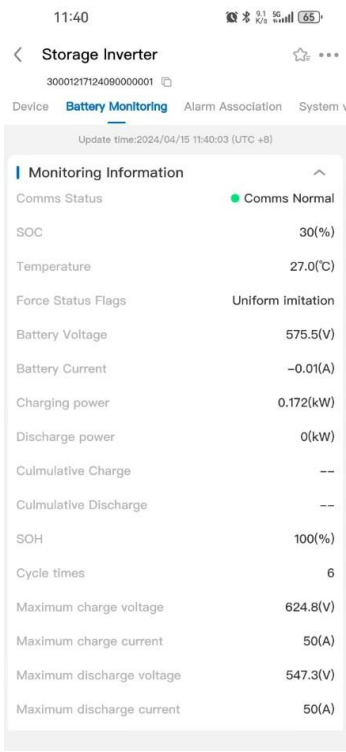
Set up the work mode and charging/discharging time.



Pic 6.1.1

Step.2

Check battery soc and other info .



Pic 6.1.2

If you want more details about system setting, please check user manual of inverters.

-END-