

2. Wiring the RSD initiation switch

- Install RSD switch wire to the COM input, use appropriate conduit fittings and bond where necessary. Run the signal wire.
- Connect the wire to the RSD switch as shown.
- Reinstall the RSD initiation switch cover and tighten the plastic screws to secure.
- Remove the 3-pin connector from terminal CN17 and remove the jumper across the pins.
- Insert the wire in the 3-pin conductor's positions 1 and 3, as shown.
- Replace the connector in the terminal CN17 and replace the inverter wire box cover.

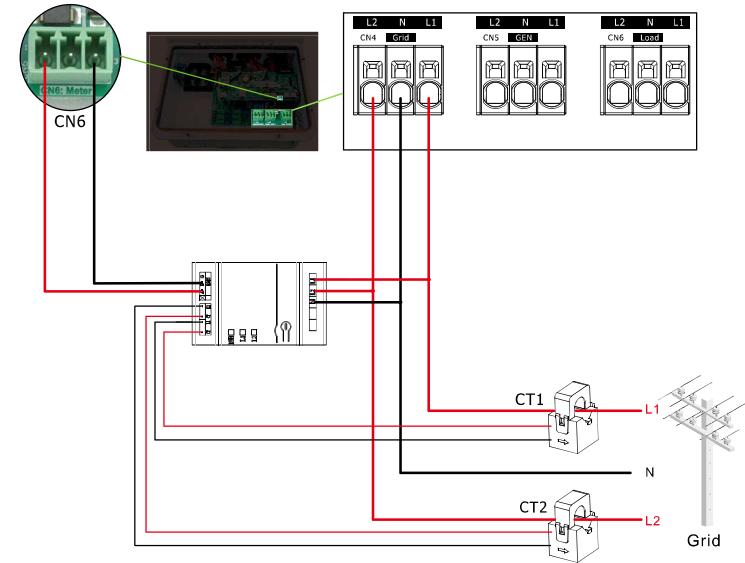


2.6 Meter or CT Connection

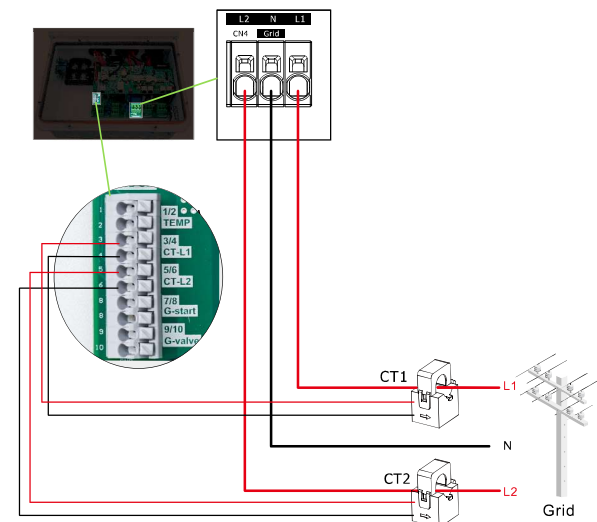
Meter Connection

Cable	Meter	Inverter	Type	Conductor cross-sectional area range
AC wire-L1	ΦL1	n/a	solid or stranded	6AWG
AC wire-L2	ΦL2		wire but not fine	
AC wire-N	N		stranded wire	

Ground	PE symbol			
CT-ΦL1	L1 CT +/-	n/a	n/a	n/a
CT-ΦL2	L2 CT +/-			
Communications cable	RS485 A+ RS485 B-		Min. 3-wire shielded twisted pair	0.2-1 mm²/ 24-18 AWG



CT Connection



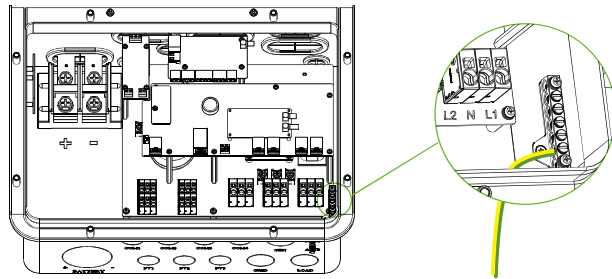
2.7 Earth Connection(Mandatory)

Ground cable shall be connected to ground plate on grid side this prevents electric shock.

Model	Wire Size
SPH 10000TL-HU-US	12AWG

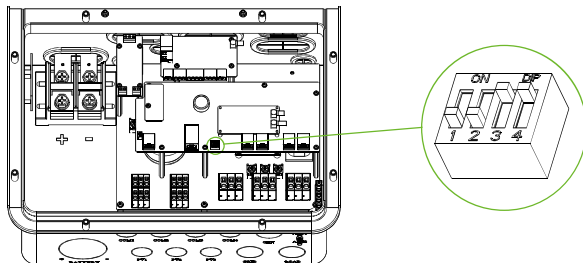
If the original protective conductor fails. Please follow below steps to implement Ground cable connection:

- 1.Remove insulation sleeve 10 mm for wire.
- 2.Loosen the screw, insert the ground wire and then tighten the screw. Please make sure that the ground cable is firmly connected to the ground bar.

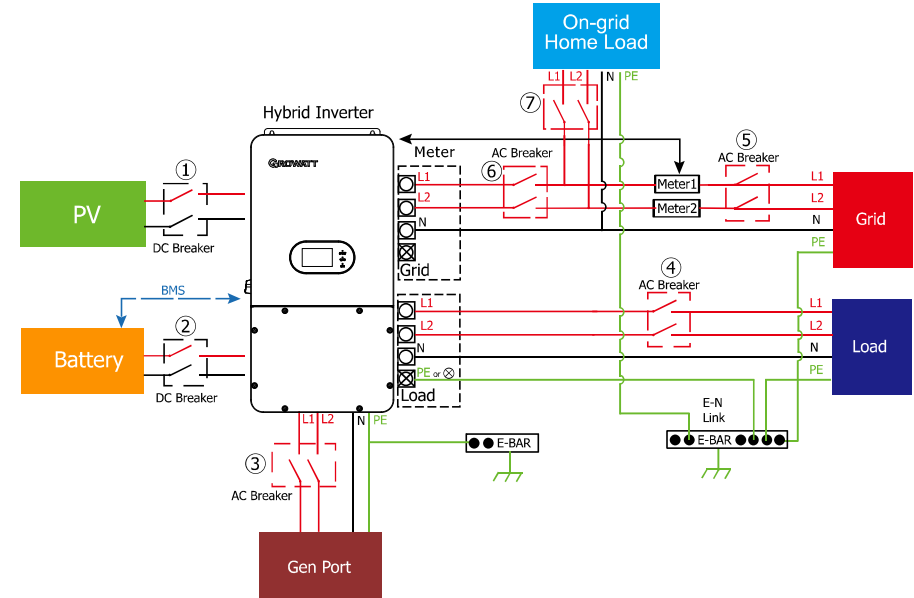


2.8 Dip Switch Status

Working condition	Switch status
Connect to the collector(Default)	3/4→ON; 1/2:OFF 
Local upgrade	3/4→OFF; 1/2:ON 



2.9 Wiring System for Inverter



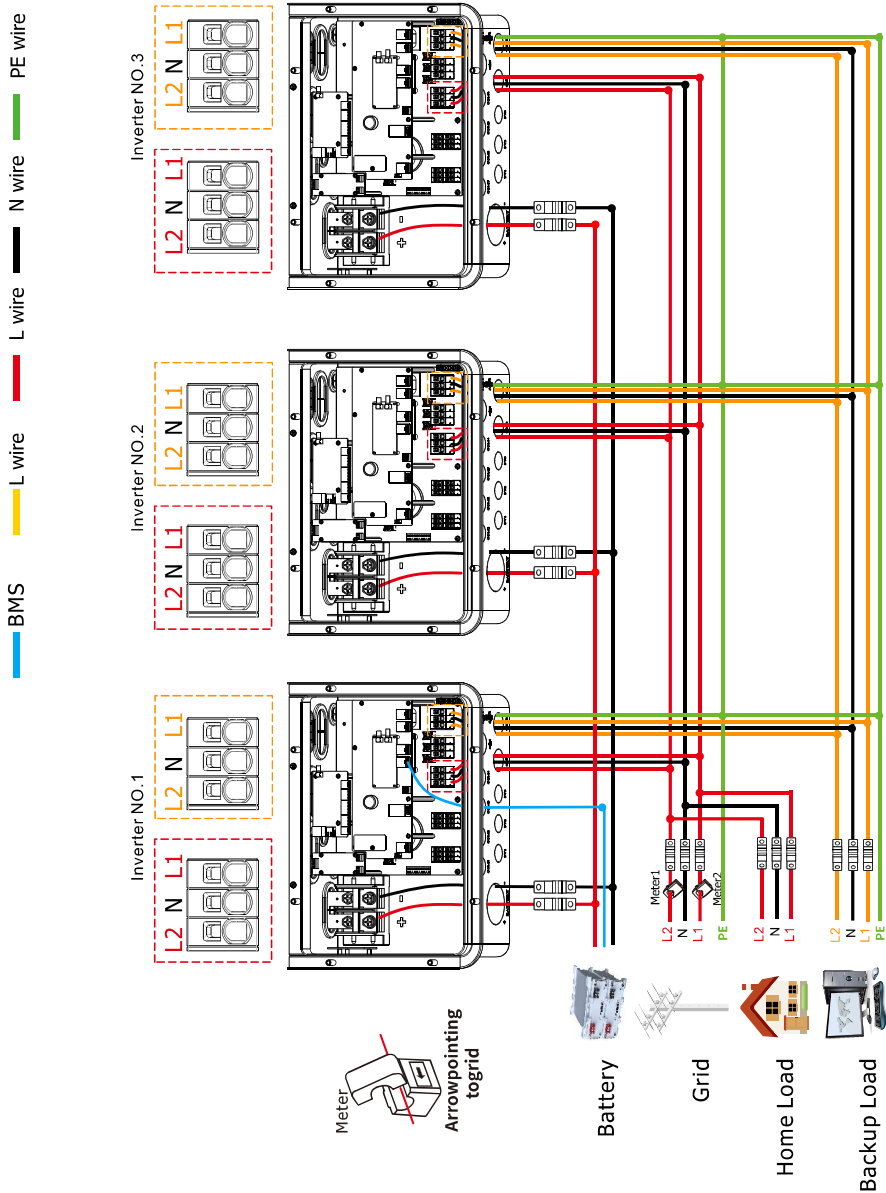
Breakers selection recommendation for both DC and AC.

Inverter Model	SPH 10000TL-HU-US
PV Breakers(①)	600V/30A
Integrated Battery Breaker(②)	80V/250A
Generator breaker(③)	400V/80A
Integrated Load Breaker(④)	400V/80A
AC Breaker(⑤)	400V/100A
AC Breaker(⑥)	400V/80A
On-Grid Home Load Breaker(⑦)	400V/100A

2.10 Split Phase(120/240Vac) Parallel Connection

Three inverters in parallel:

Power Connection



Advanced Functions

☒ Parallel	☐ Master	☐ Slave
Modbus SN 01		
☐ A Phase	☐ B Phase	☐ C Phase
☐ Ex_Meter For CT		
☐ A Phase	☐ B Phase	☐ C Phase

2/2

Advanced Functions

☒ Parallel	☐ Master	☐ Slave
Modbus SN 02		
☐ A Phase	☐ B Phase	☐ C Phase
☐ Ex_Meter For CT		
☐ A Phase	☐ B Phase	☐ C Phase

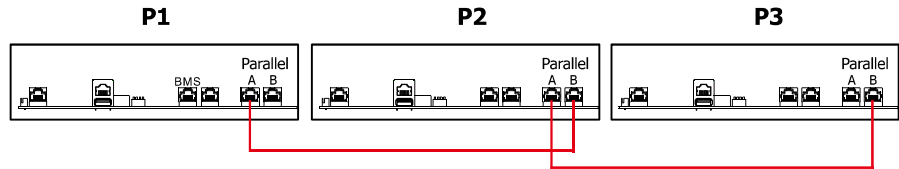
2/2

Advanced Functions

☒ Parallel	☐ Master	☐ Slave
Modbus SN 03		
☐ A Phase	☐ B Phase	☐ C Phase
☐ Ex_Meter For CT		
☐ A Phase	☐ B Phase	☐ C Phase

2/2

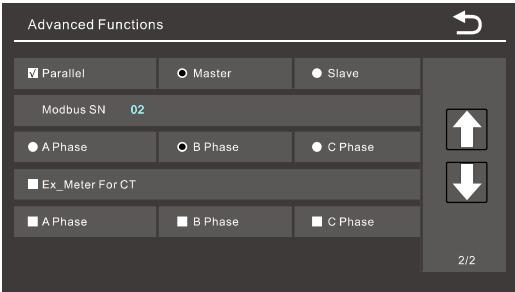
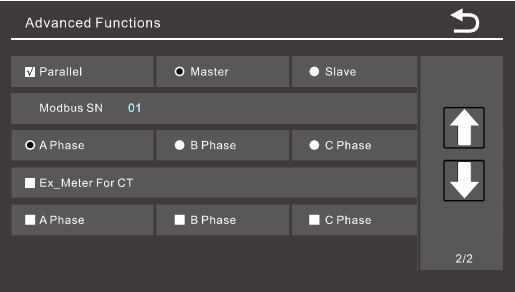
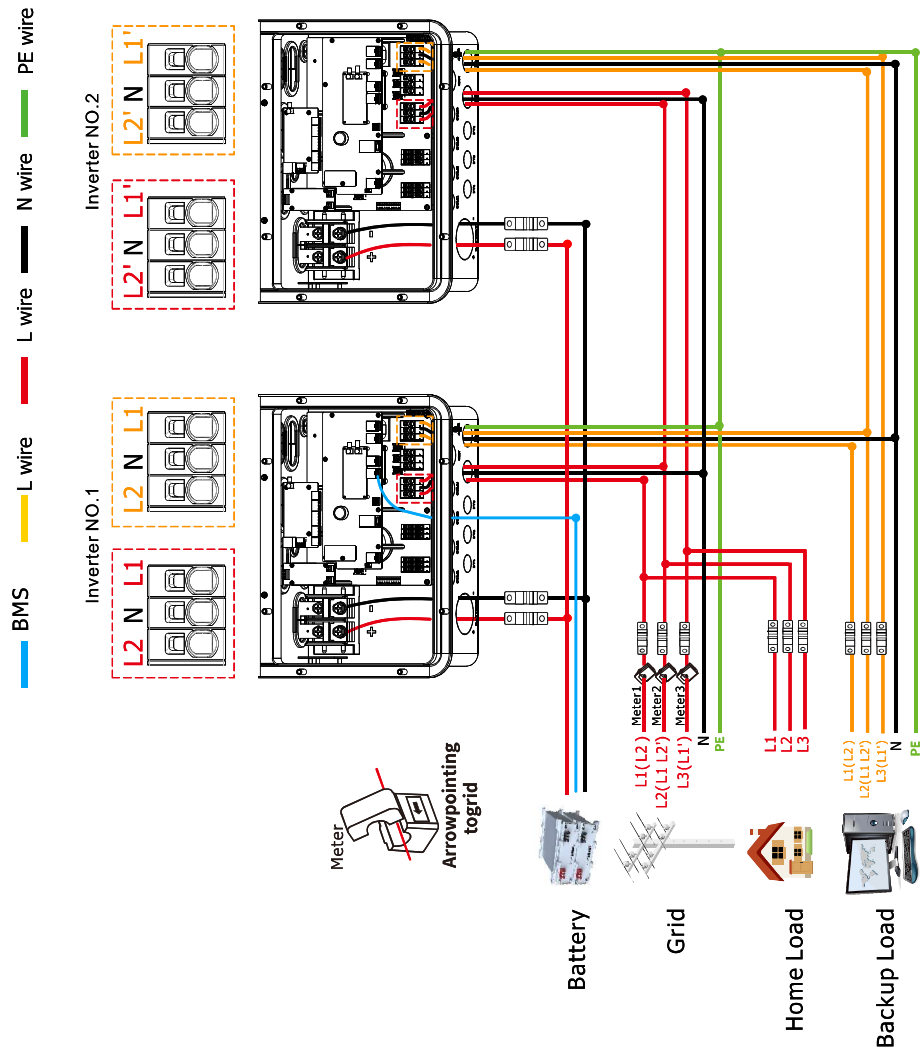
Communication Connection



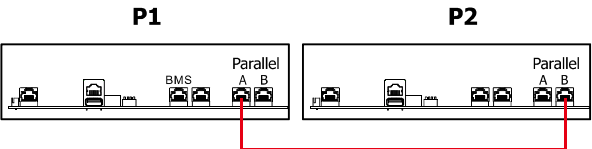
2.11 2Pcs Parallel Connection for 120/208 Three Phase

Two inverters in parallel:

Power Connection



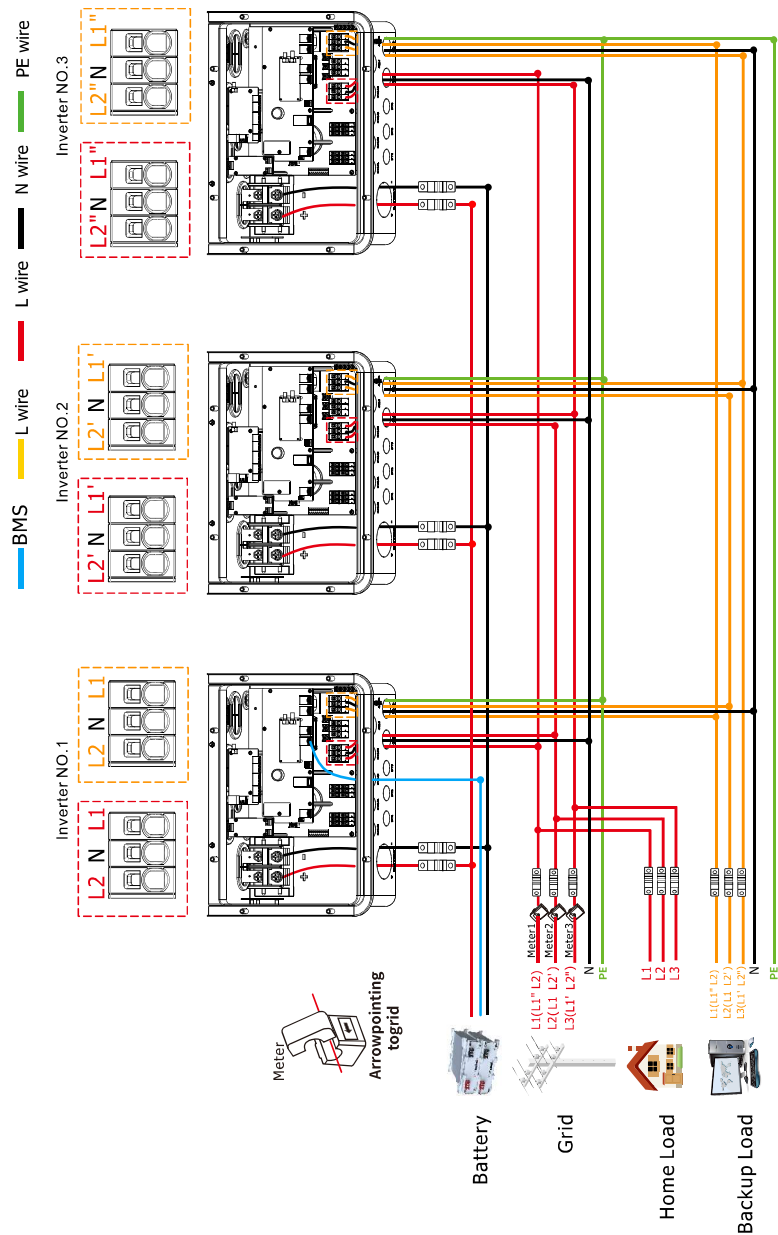
Communication Connection



2.12 3Pcs Parallel Connection for 120/208 Three Phase

Three inverters in parallel:

Power Connection



Advanced Functions

☒ Parallel	☐ Master	☐ Slave
Modbus SN 01		
☐ A Phase	☐ B Phase	☐ C Phase
☐ Ex_Meter For CT		
☐ A Phase	☐ B Phase	☐ C Phase

2/2

Advanced Functions

☒ Parallel	☐ Master	☐ Slave
Modbus SN 02		
☐ A Phase	☐ B Phase	☐ C Phase
☐ Ex_Meter For CT		
☐ A Phase	☐ B Phase	☐ C Phase

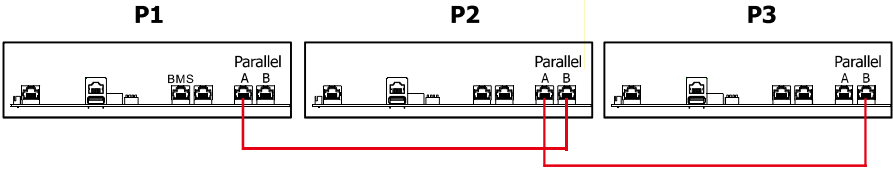
2/2

Advanced Functions

☒ Parallel	☐ Master	☐ Slave
Modbus SN 03		
☐ A Phase	☐ B Phase	☐ C Phase
☐ Ex_Meter For CT		
☐ A Phase	☐ B Phase	☐ C Phase

2/2

Communication Connection



3 Operations on The ShineTools App

3.1 Overview

ShineTools is a smart APP that could realize the inverter system local commissioning function via the smart phone. It communicates with the inverter through internal Bluetooth or data logger to realize real-time status monitoring, alarm query, parameter configuration, intelligent diagnosis and other routine maintenance functions, is a convenient local configuration platform.

- Real-time status monitoring: Grasp the real-time status of inverters and data loggers timely.
- Alarm query: There are easy-to-operate alarm function and flexible alarm display mechanism could help obtain fault location information quickly, and convenience for customers to take countermeasures timely, improve the efficiency of operation and maintenance.
- Parameter configuration: Simple and safe parameter configuration, and one-stop unified configuration can be realized through the data logger.

3.2 APP Download

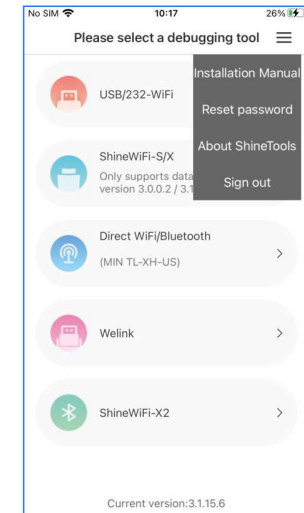
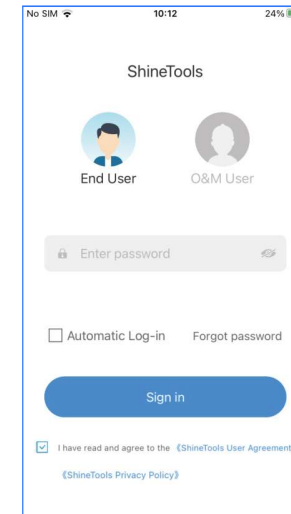
Scan the QR code or search for "ShineTools" in Google Play or Apple Store to download and install the APP;



3.3 Login

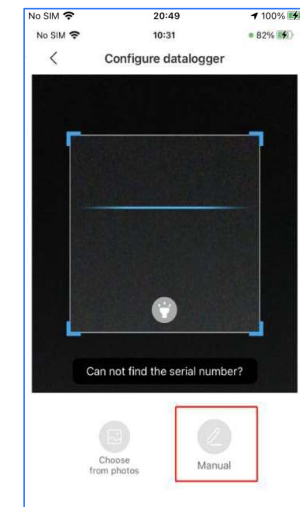
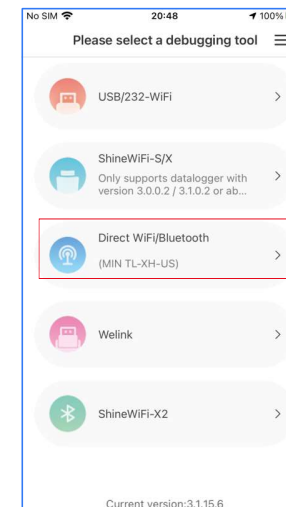
Start the APP.

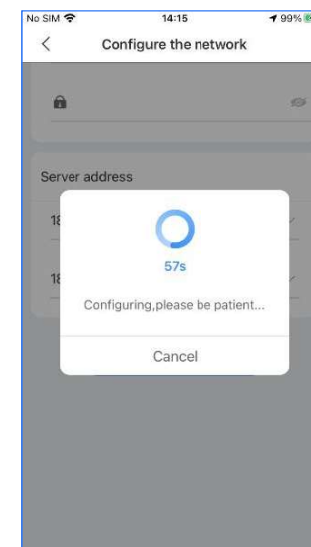
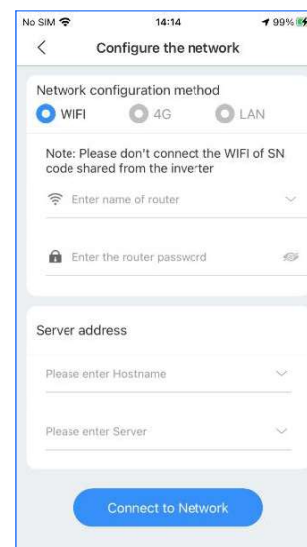
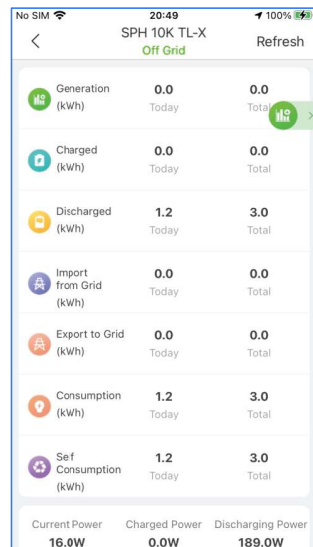
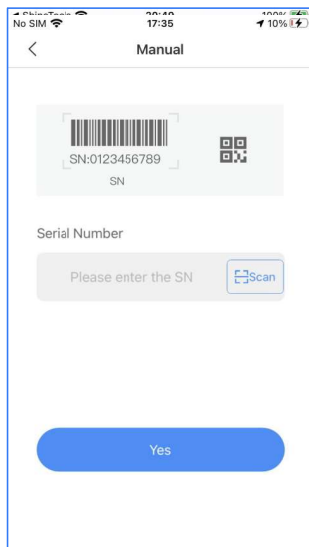
- Choose the end user or O&M account.
- Enter the account and password and log in.
- After login successfully, you can check the "Installation Manual".



3.4 Direct WiFi/Bluetooth Commissioning Tool

- Select the Direct WiFi/Bluetooth Channel.
- Select the corresponding model.
- Scan the device serial number barcode on the right side of the inverter to configure Bluetooth. You can also configure Bluetooth by manually entering the device serial number.
- Enter the Local Commissioning interface.





3.5 Commissioning of SPH 10000TL-HU-US

Local Commissioning> Quick Setting> Network Type

-Select/fill network, enter the password, and select the server address.

-Choose the network configuration method-WiFi.

-Click to connect to the network.

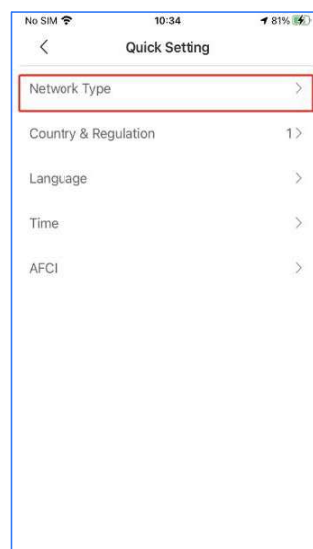
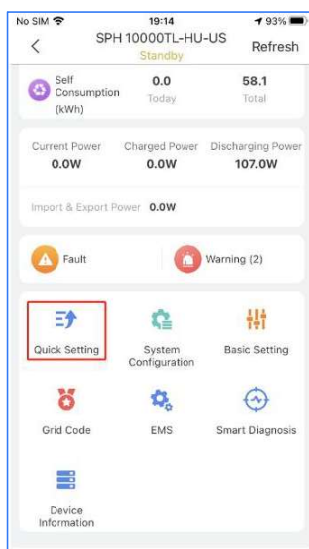
Tips:

The router name and password cannot contain space characters.

Only support English input mode characters.

1.Supported punctuation: . , ? ! : @ ; + = # / () _ - ` ^ * & . \$ < > [] { } .

2.Unsupported punctuation: ... • € ' % ¥ \ .



3.6 Parameter Setting (Specific to the App display setting items)

