

How to instal AS1 & B1

**Before installing please
check whether the
assembly parts are
complete according to
the packaging list.**



The Masterpiece

- Applicable to Solar On-Grid
- Modular Design, MAX. 20.4 kWh Storage
- High Quality Li-Fe-Po Battery Integrated
- Bluetooth and 4G Wireless Control
- UPS Standard, 0.01 sec switching
- Load Consumption Monitoring
- Smart Energy Management
- Durable & Reliable IP65



AS1-3KS-5.1

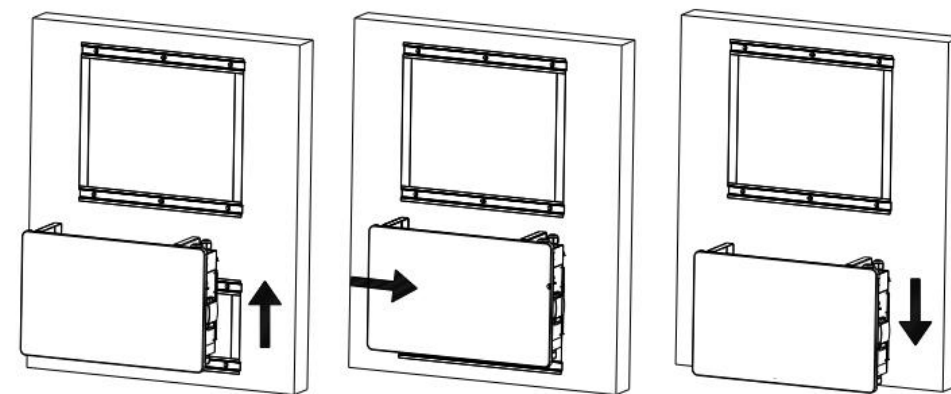
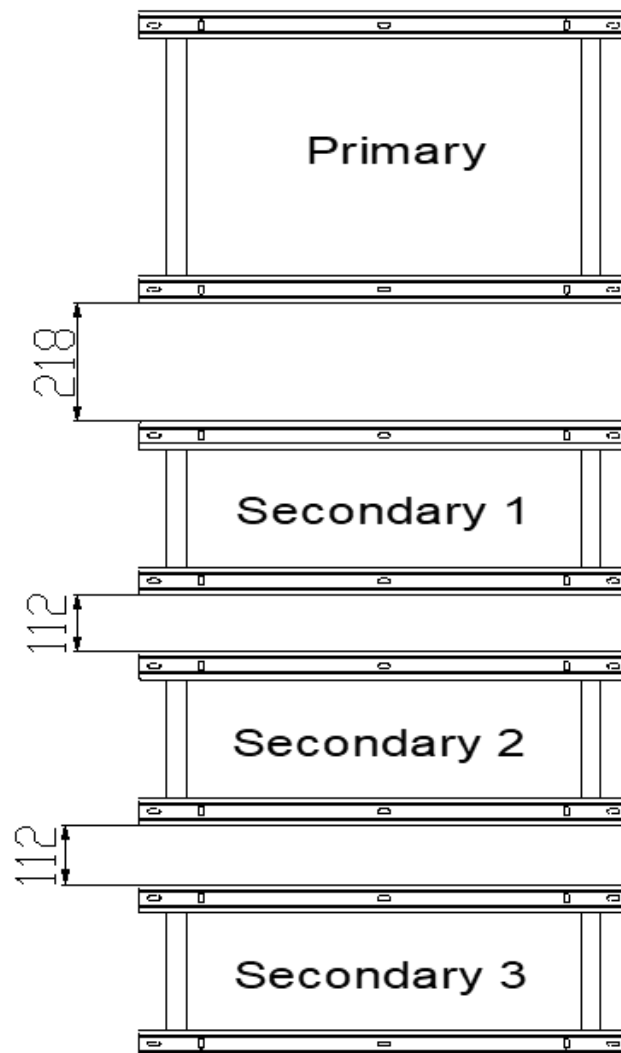


B1-5.1-48

Mounting AS1 & B1 (1)

While you need to install multi slave battery packs **B1-5.1-48**, there is a minimum distance required between rear panels, as shown on the right. (unit in mm)

And you need to mount the slave battery pack from bottom to top, and mount **AS1-3KS-5.1** on the top at the end.



Mounting AS1 & B1 (2)

Remove the cover of battery and communication port before mounting another device above B1.

https://www.youtube.com/watch?v=q4duvnyC_hw.

Kan je bekijken .. Algemene instelling... niet voor CT klemmen!!!



Mounting AS1 & B1 (3)

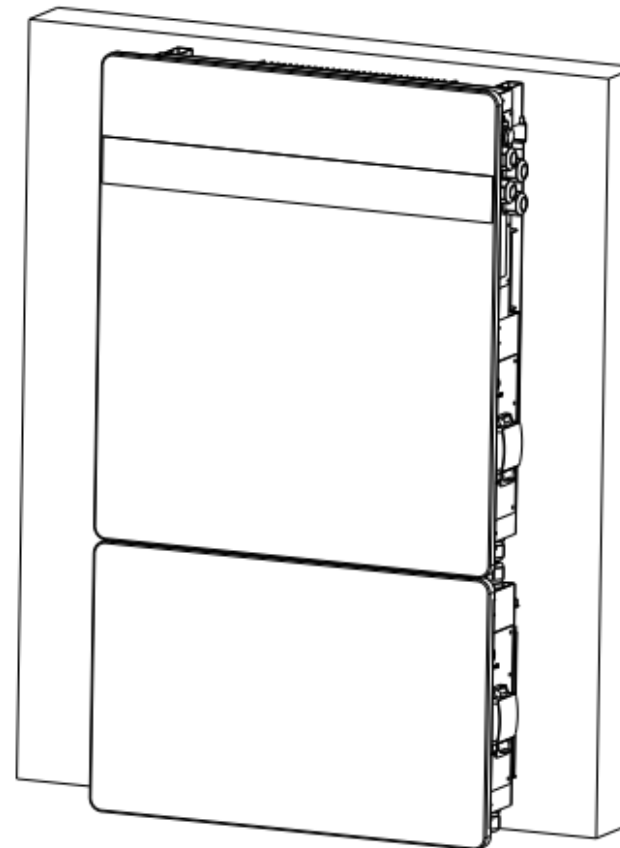
Before mounting next device above the current device, remove the cover of battery and communication port as well.



Mounting AS1 & B1 (4)

After remove the cover of each port, you can mount the device above B1.

On the right, this is a sample diagram with a AS1 and B1 device.



Cabling and Setup (1)

Before opening the cover of AS1/B1 to do cable connection, please check the battery switch is OFF (no BLUE Ring) and the circuit breaker is DOWN on both AS1 and B1 device.

If BLUE Ring is ON, hold the button for about 5 sec to turn OFF, the switch OFF the circuit breaker.



It is
BLUE if
it is ON

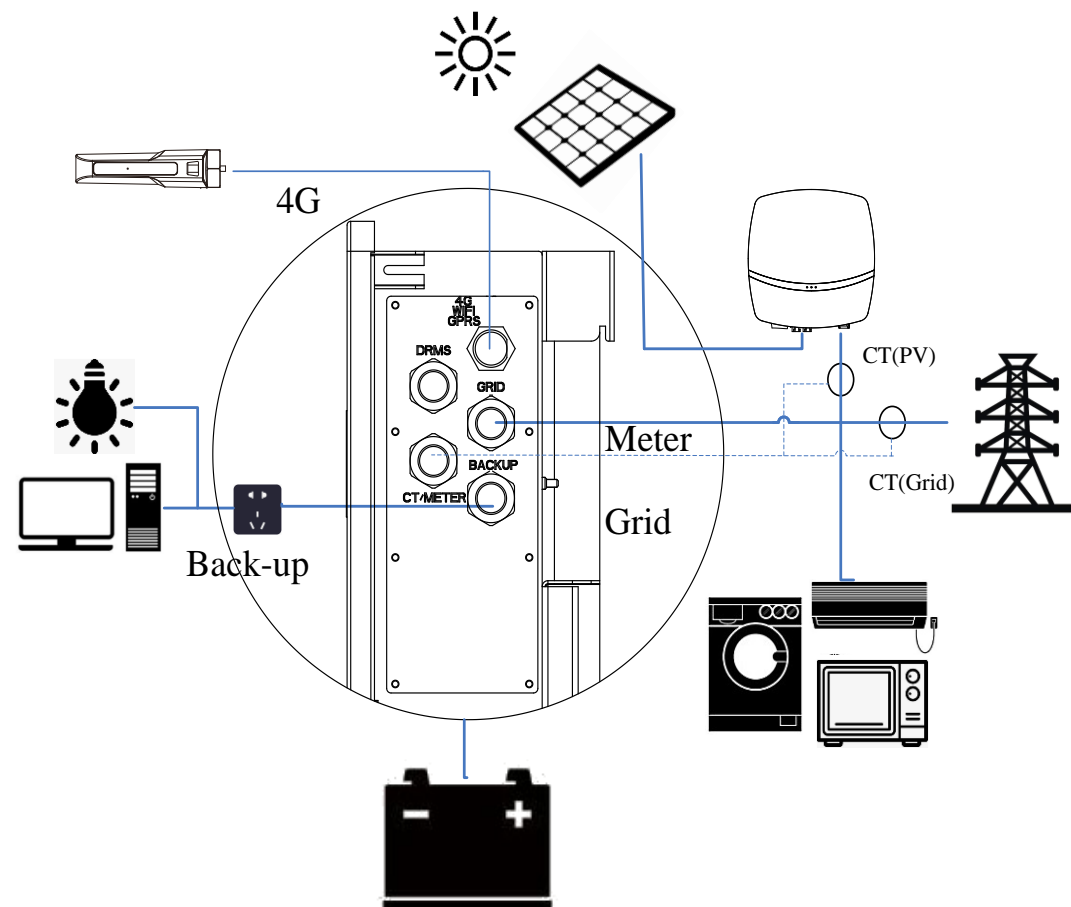


Cabling and Setup (2)

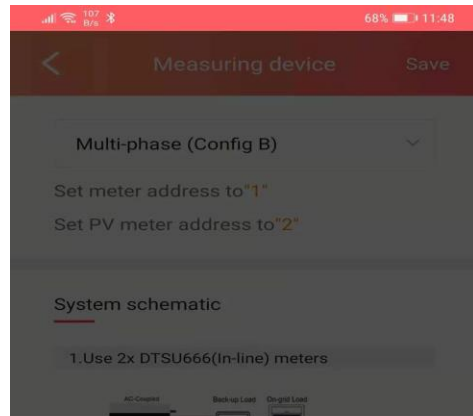
For AS1 normal operation, you need to connect GRID, CTs and Monitoring Module correctly.

If you need UPS function, you can connect load to BACKUP port.

***Smart meter is also available to install instead of CTs, please refer to Section 6 – Extra.



Chint measurement setup



Single-phase (Config A)

Single-phase (Config B)

Multi-phase (Config A)

Single-phase (Config C)

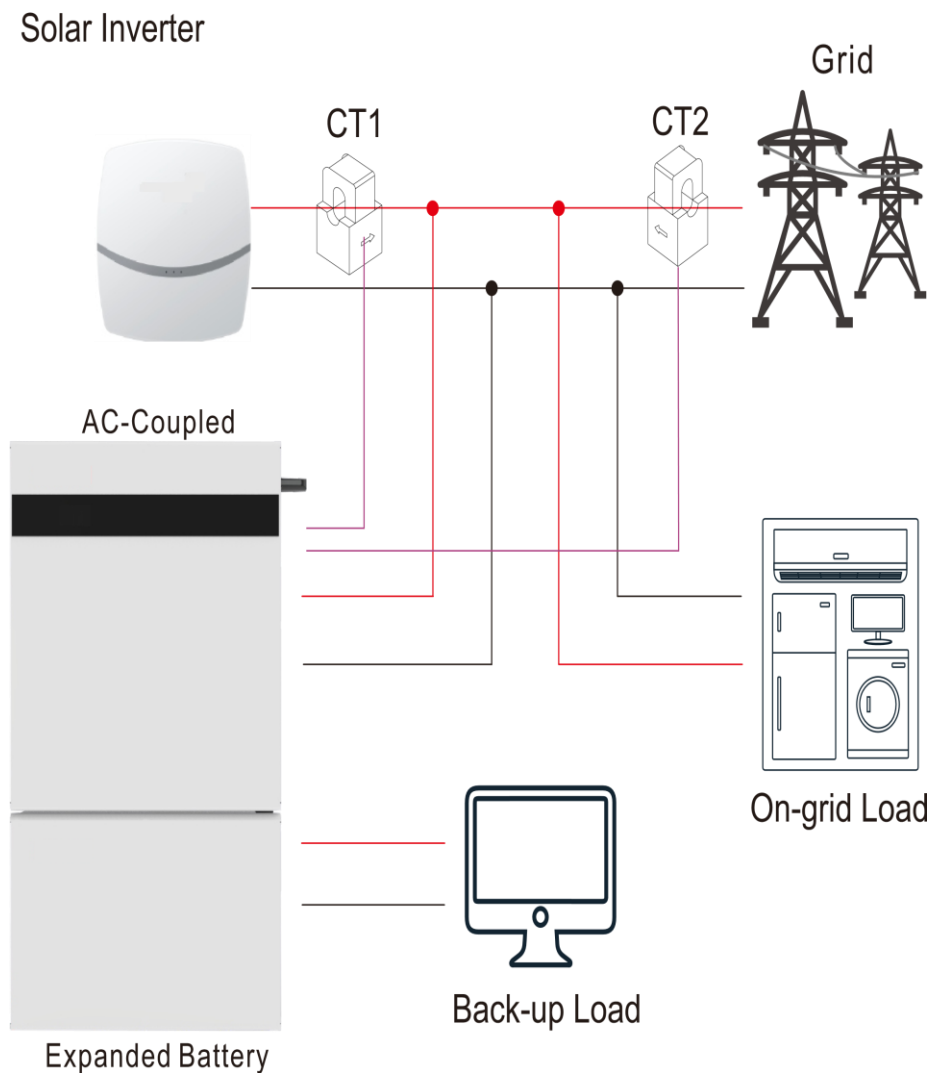
Multi-phase (Config B) ✓

Multi-phase (Config C)



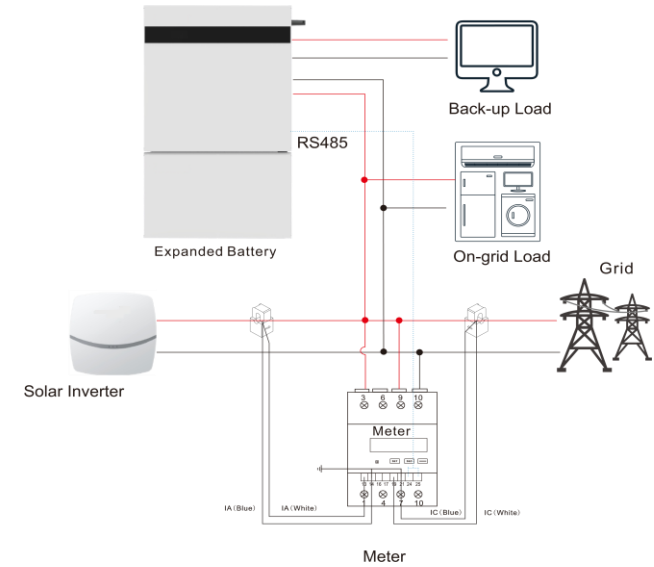
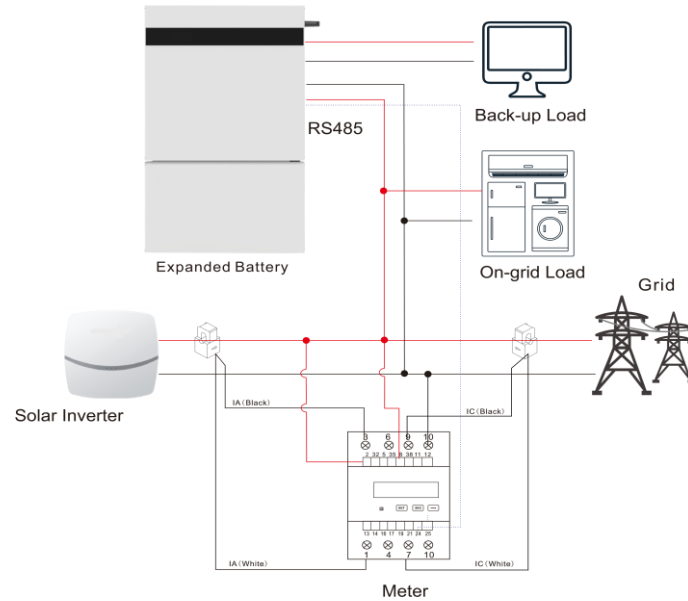
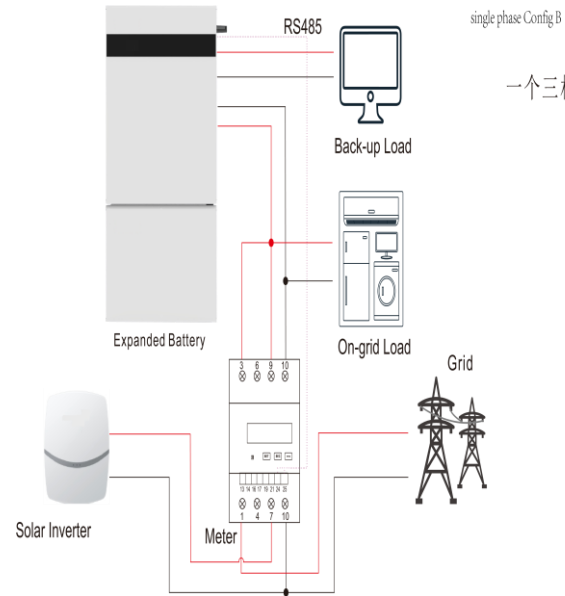
1. CT clamps :

single phase Config A

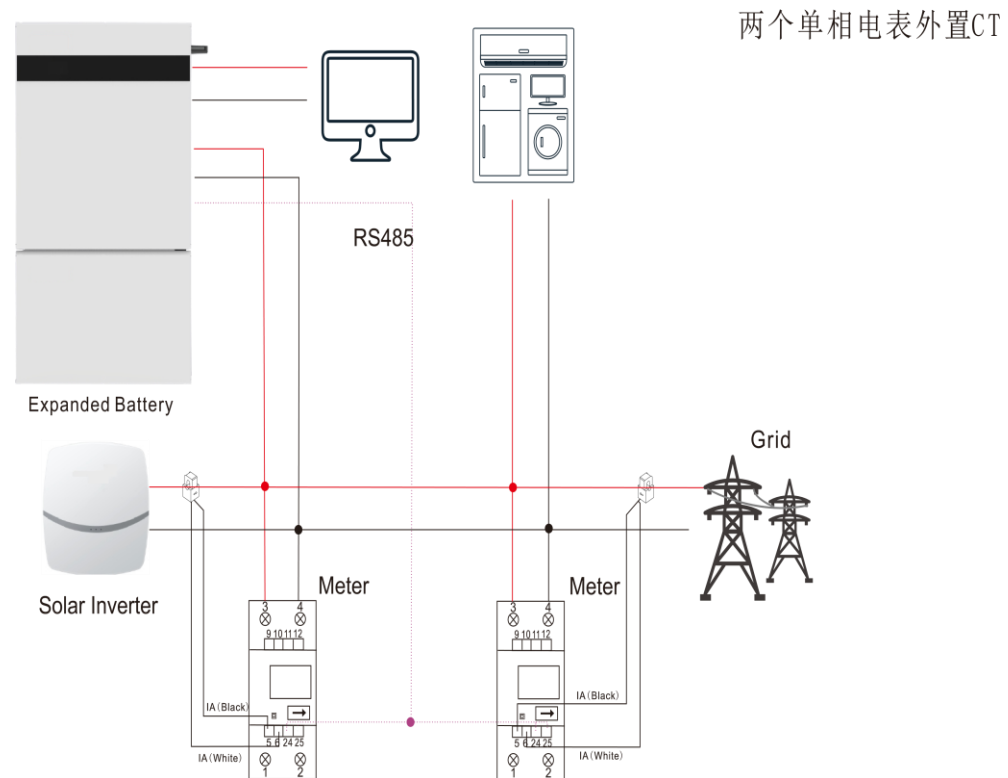
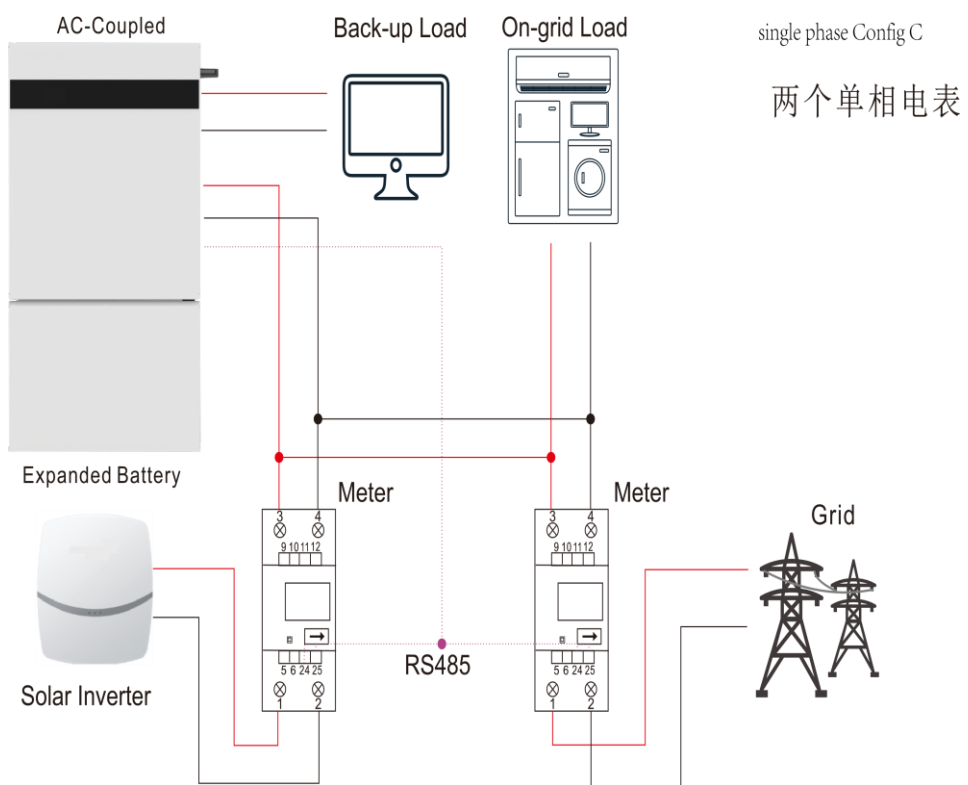


2. Chint Meters:

single phase Config B



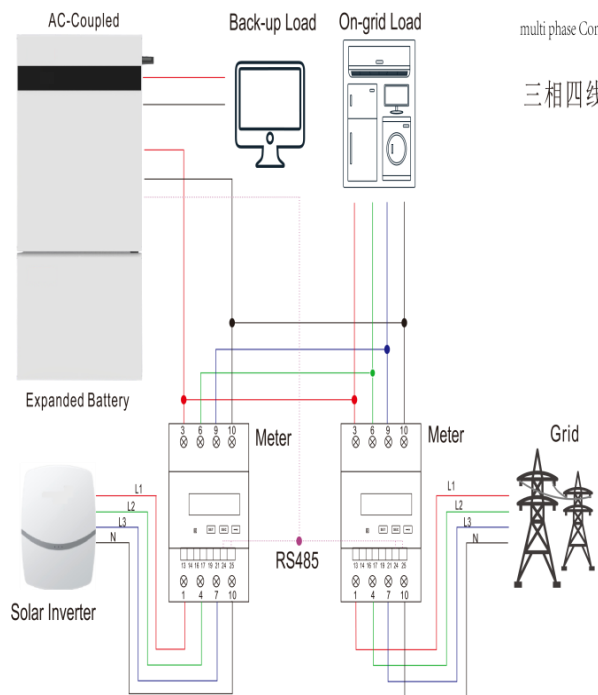
single phase Config C



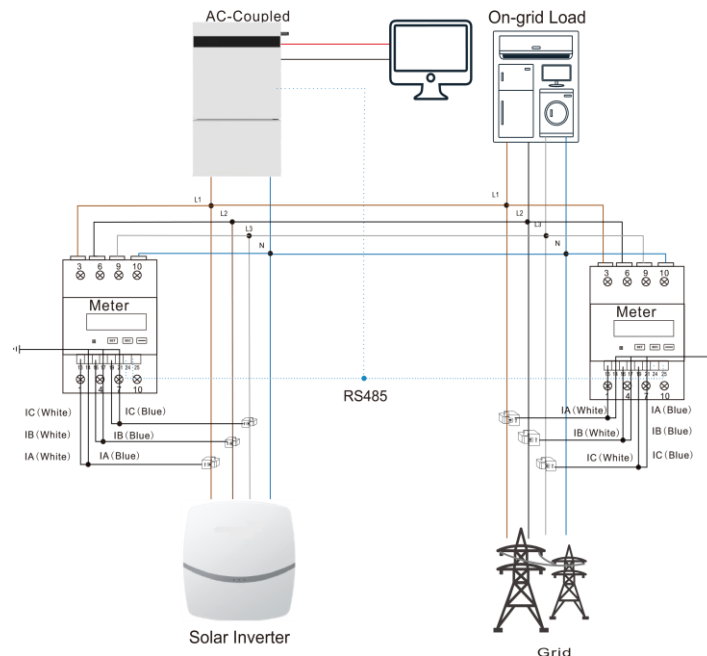
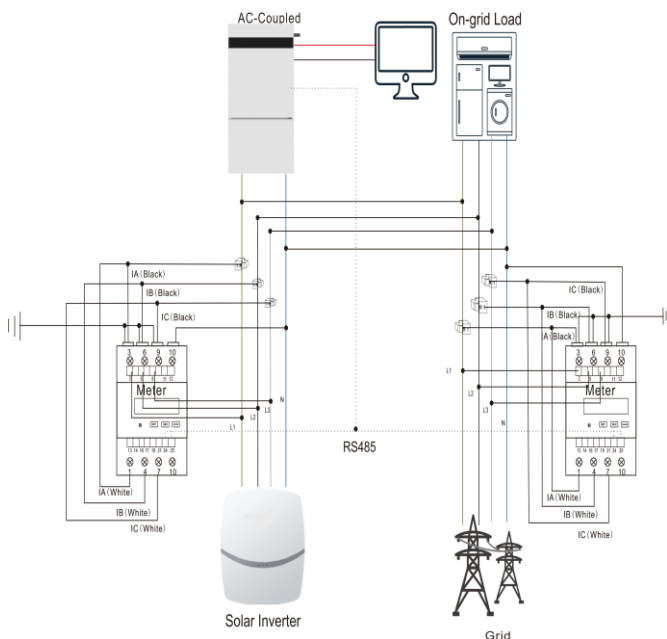
ONLY L1 BALANCE

Multi phase Config A

Not to use in
Belgium

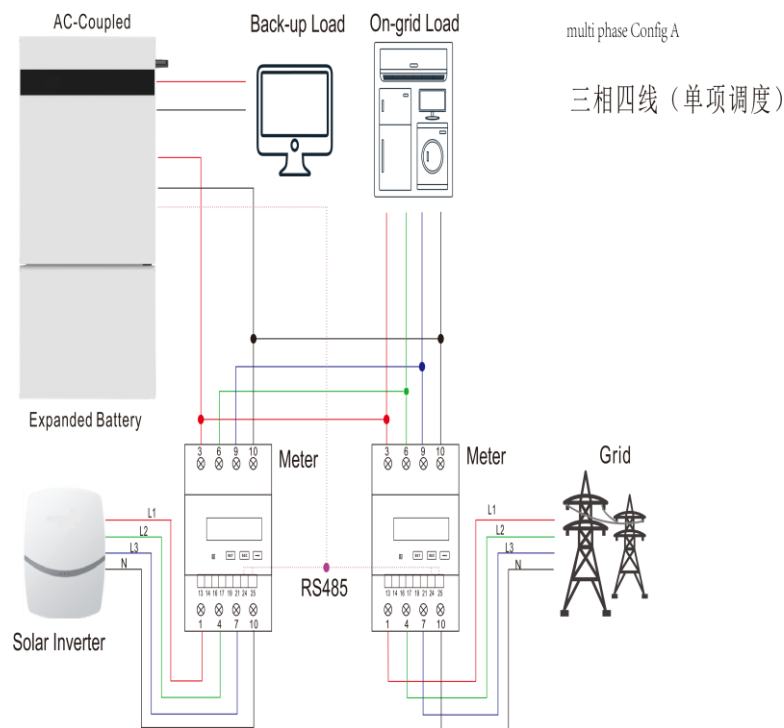
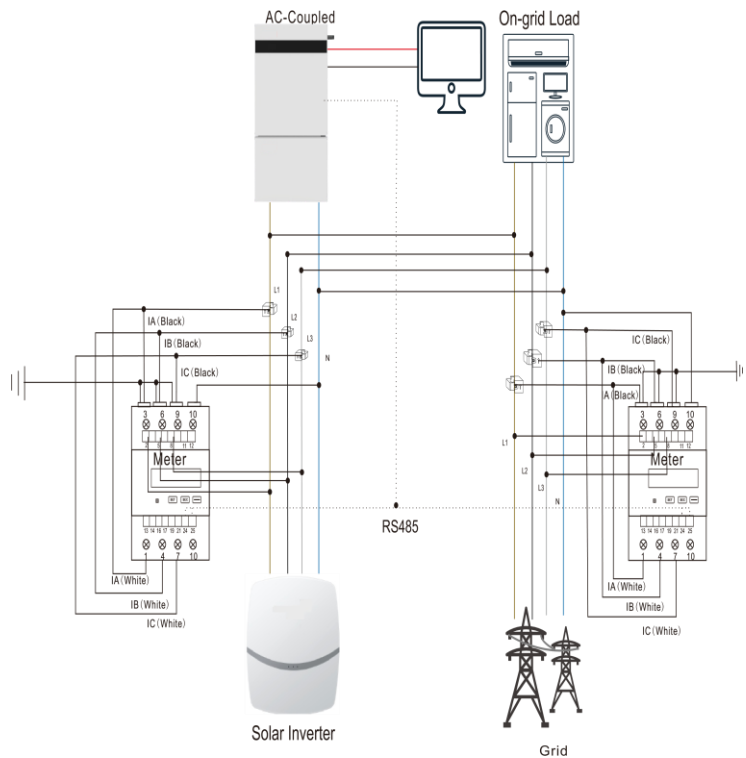


multi phase Config A
三相四线 (单项调度)



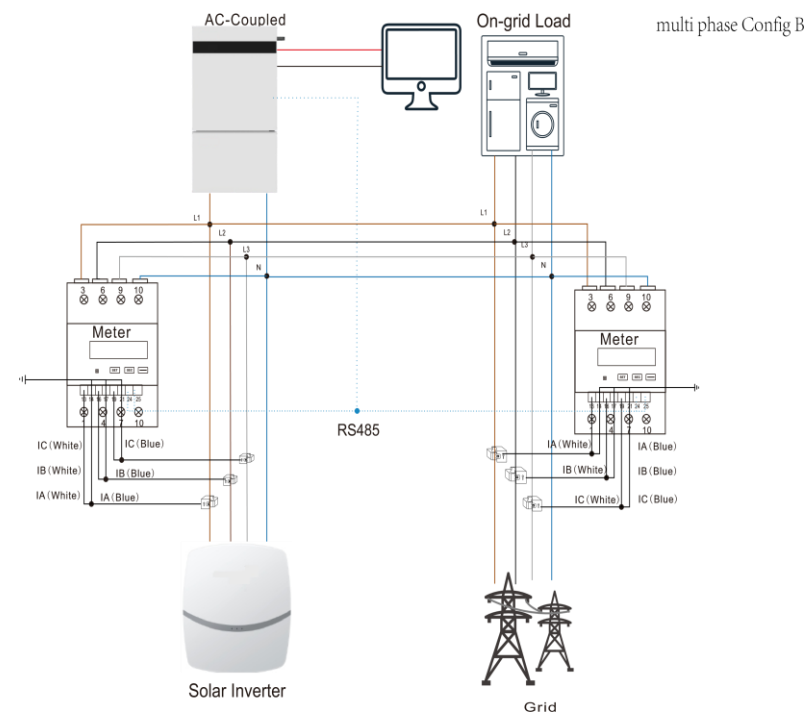
Multi phase Config B

MP B : ALL PHASES IN BALANCE (L1 + L2 + L3)



multi phase Config A

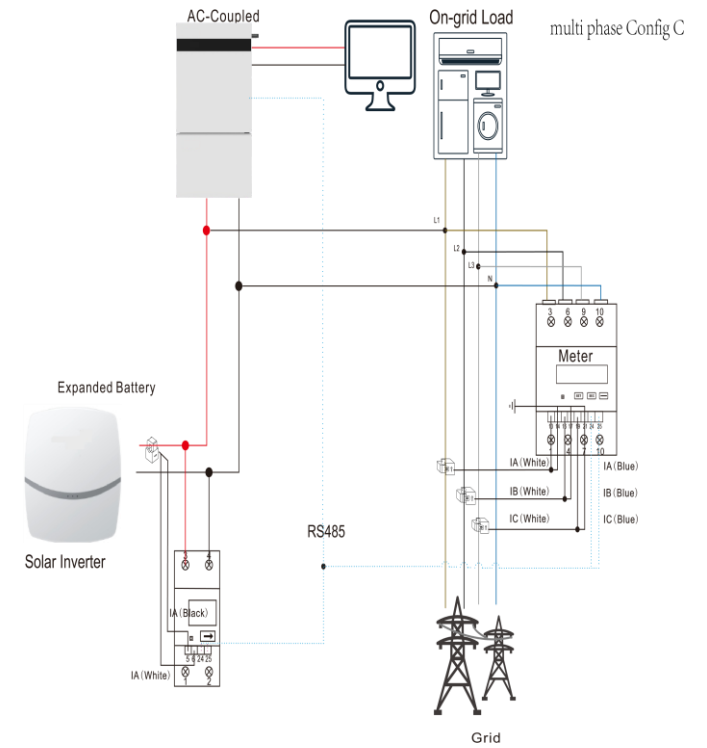
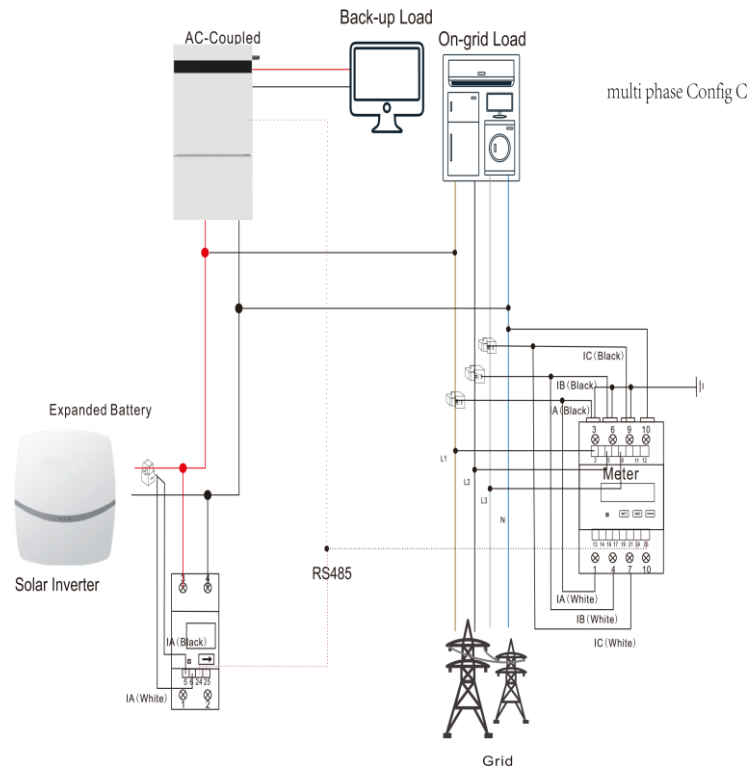
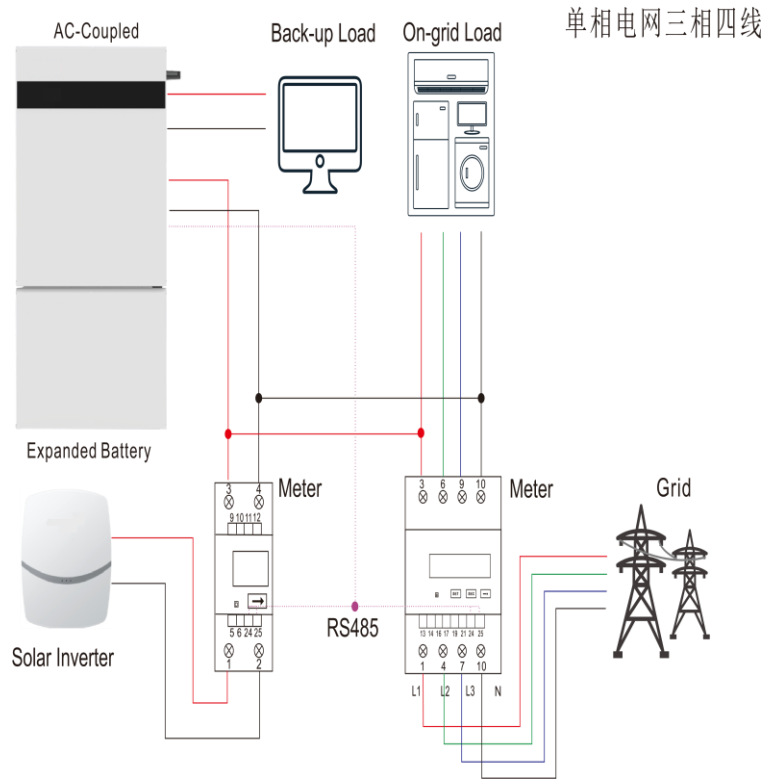
三相四线 (单项调度)



multi phase Config B

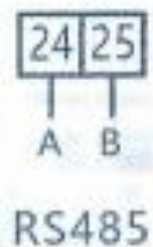
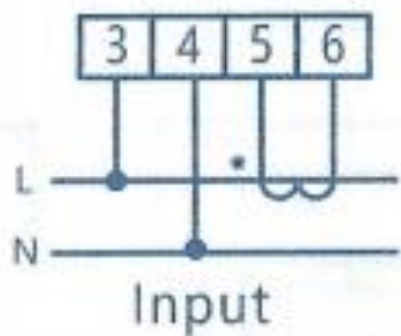
Multi phase Config C

MP C : MIXED MONO & 3 PHASE



Chint Meters with CT clamps

Mono phase



3 phase

6.3. Typical wiring

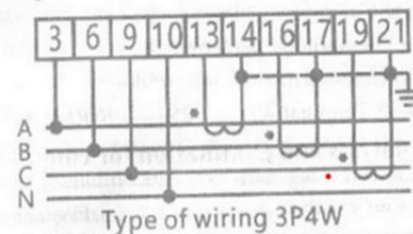


Figure 10 Three phase four wire: Connection through current transformers

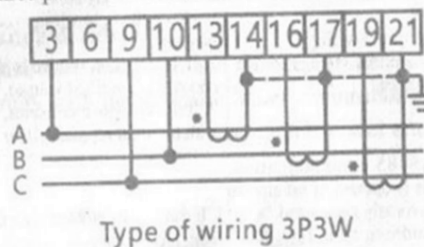


Figure 11 Three phase three wire: Connection through current transformers

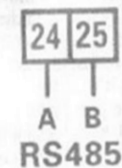


Figure 12 RS485

ADDRESS SETTING

ADDRESS 1 = GRID

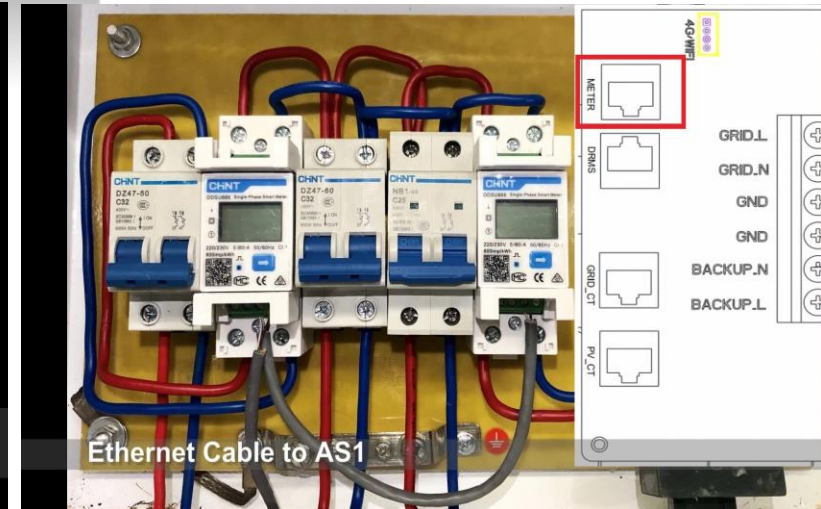
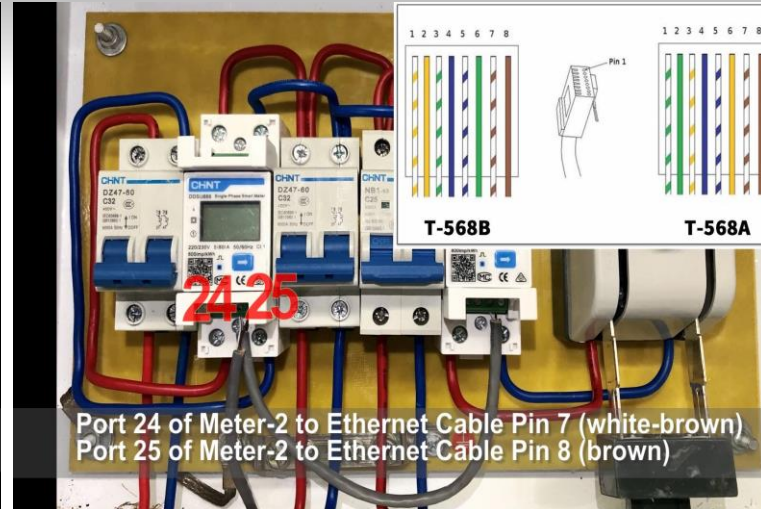
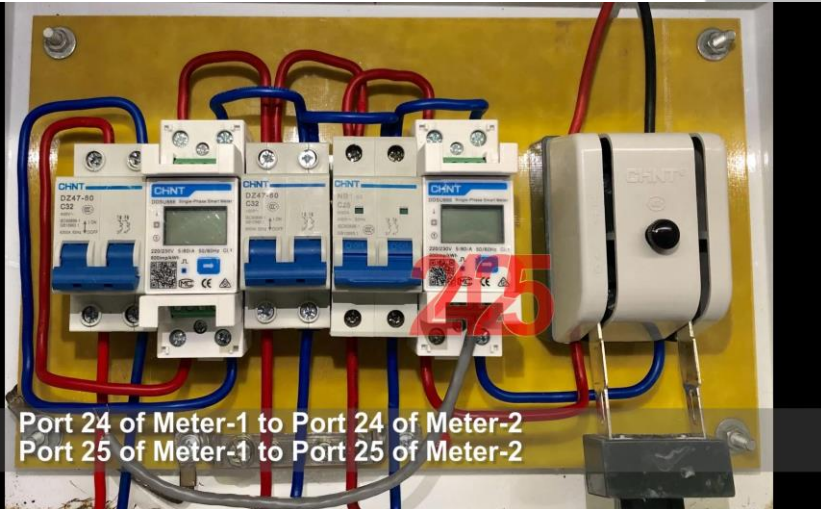
ADDRESS 2 = PV

YOUTUBE LINKS :

<https://www.youtube.com/watch?v=Cd8EBQNCb2Q>

https://www.youtube.com/watch?v=Z2M_uyQQ5i0

Set The Single-phase Meter Address





Press and hold the button to enter meter switching interface.

PRESS AND HOLD
THE BUTTON TO
ENTER METER
SWITCHING
INTERFACE.

Select 8n1 and wait for 2s to enter meter address page automatically.



Select 8n1 and wait for 2s to enter meter address page automatically.

After entering the address page , please press button to set meter address

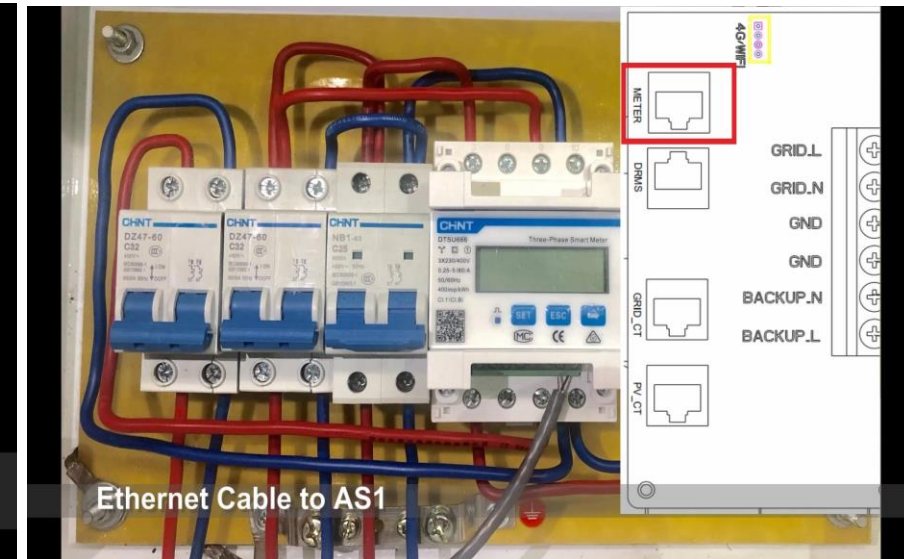
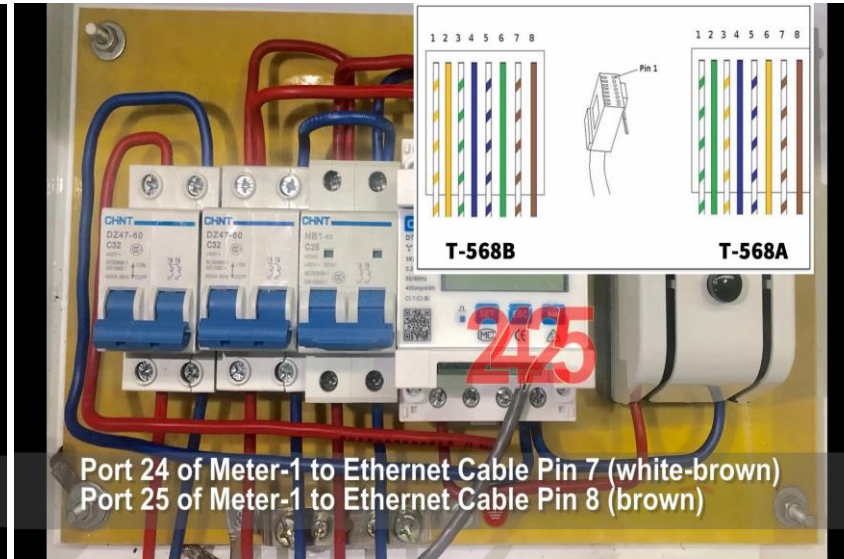
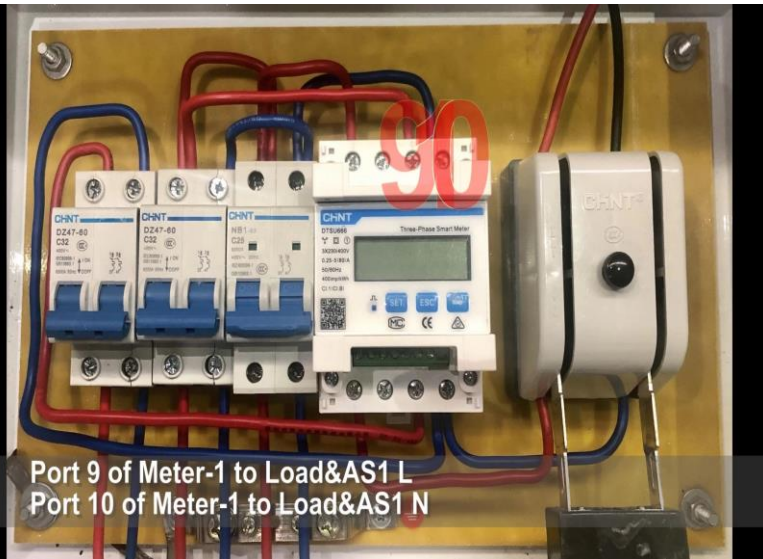




After the address set, the interface will jump to the initial display interface and please check if the address has been modified.

AFTER THE ADDRESS SET ,THE INTERFACE WILL JUMP TO THE INITIAL DISPLAY INTERFACE AND PLEASE CHECK IF THE ADDRESS HAS BEEN MODIFIED.

Set the three-phase meter address (CT Integrated)



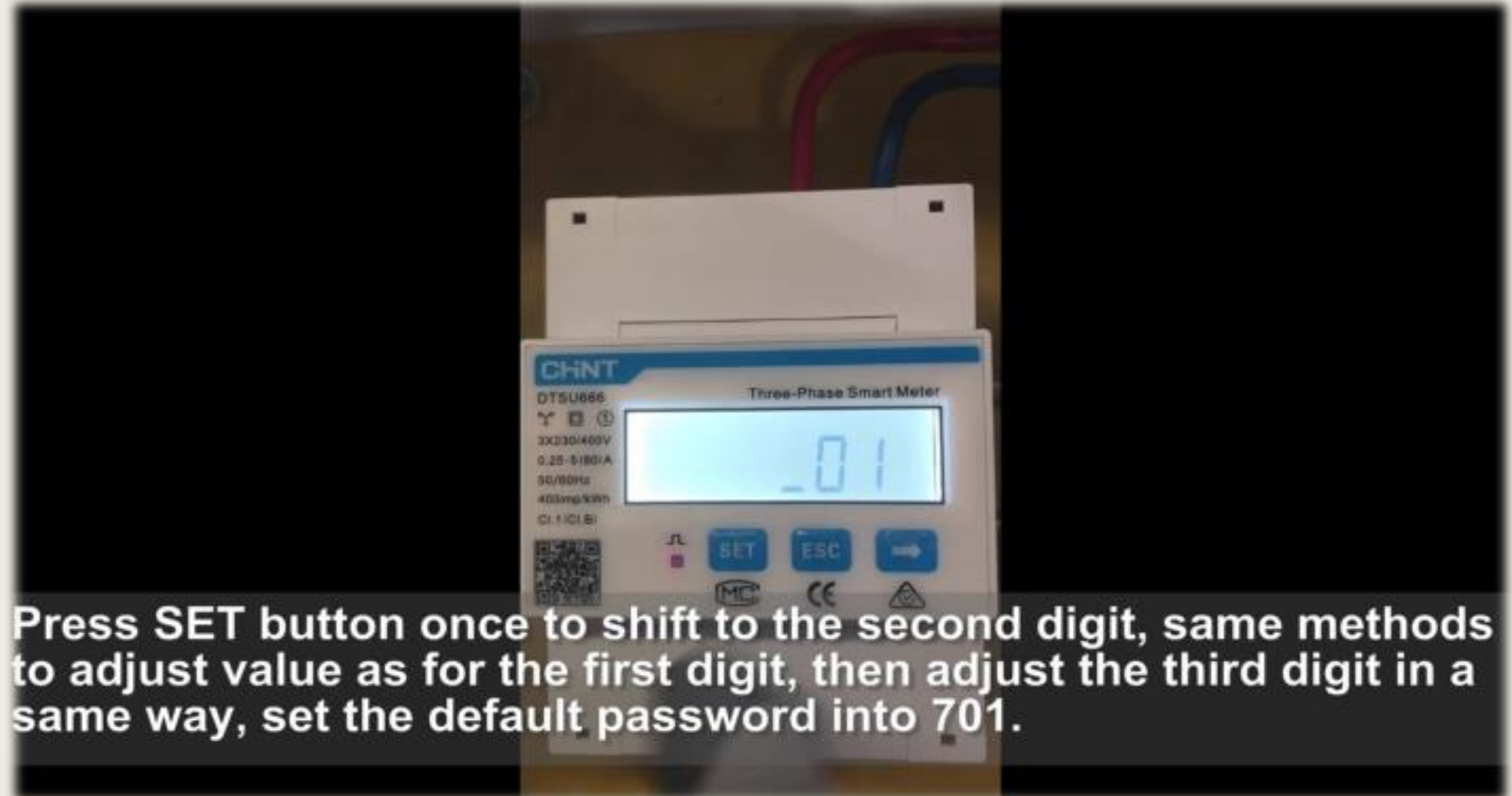


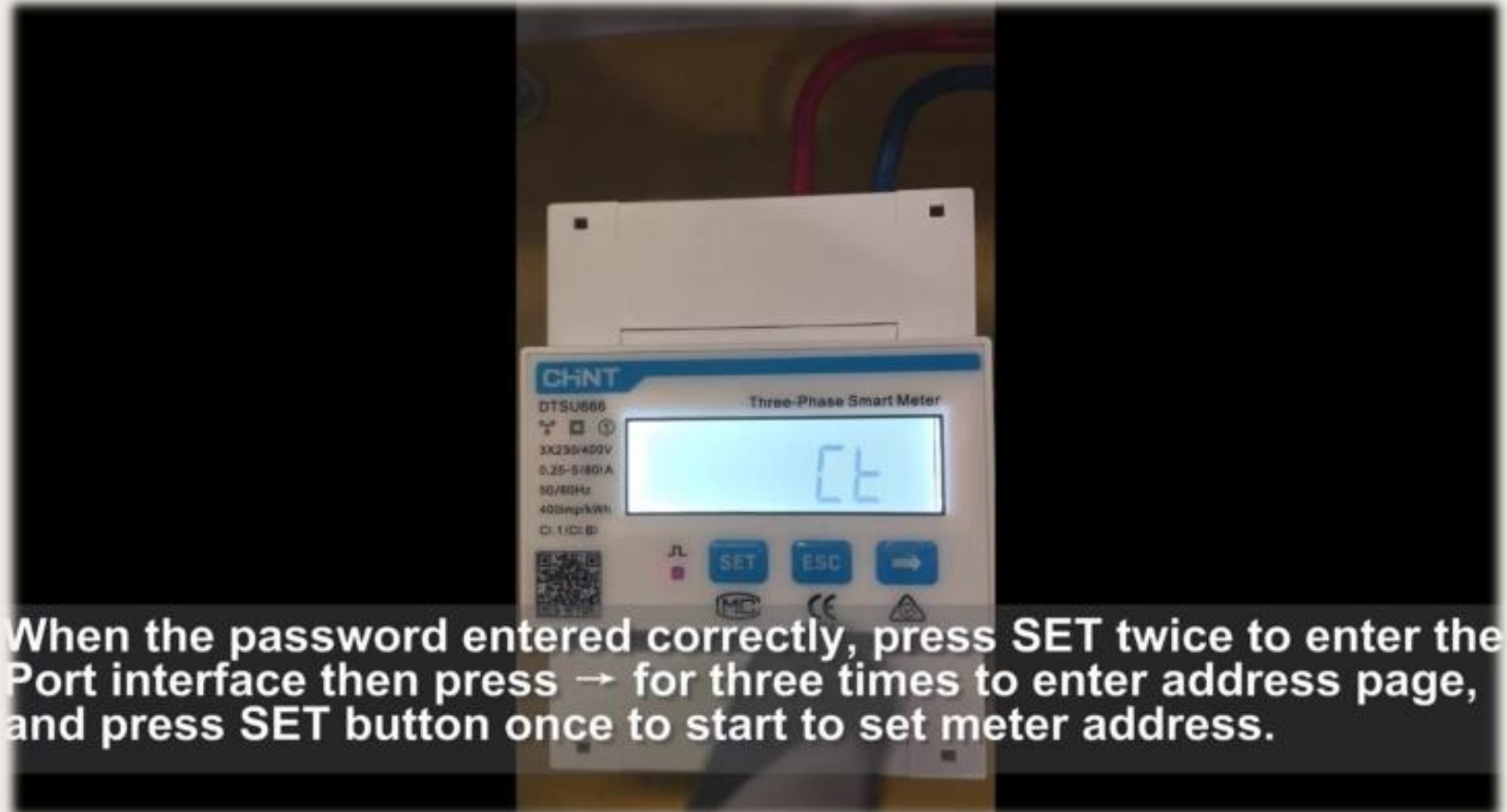
HOW TO SET
THE THREE-
PHASE METER
ADDRESS (CT
INTEGRATED)

Press set button twice for
entering password 701

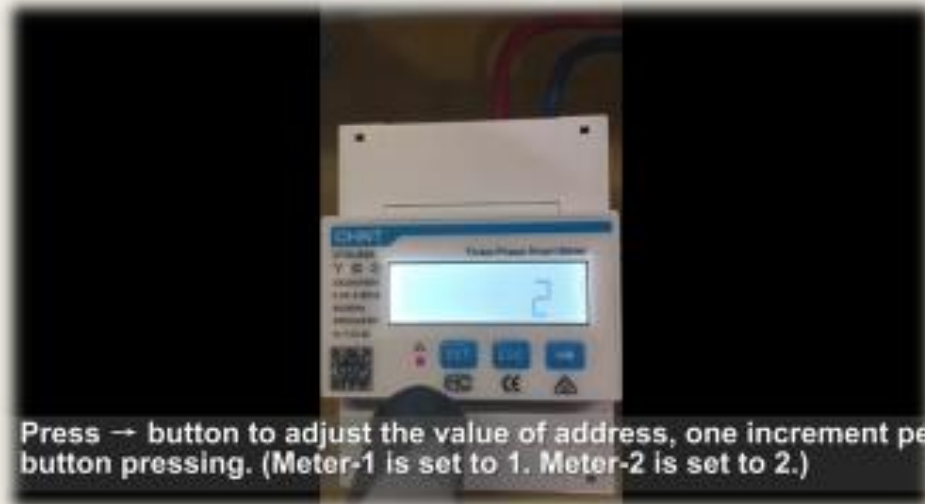


Press button once to adjust the value of the first digit, one increment per button pressing.





When the password entered correctly, press SET twice to enter the Port interface then press → for three times to enter address page, and press SET button once to start to set meter address.



Press → button to adjust the value of address, one increment per button pressing. (Meter-1 is set to 1. Meter-2 is set to 2.)



After the address set successfully, press ESC button twice to exit to measure display interface to check the address.

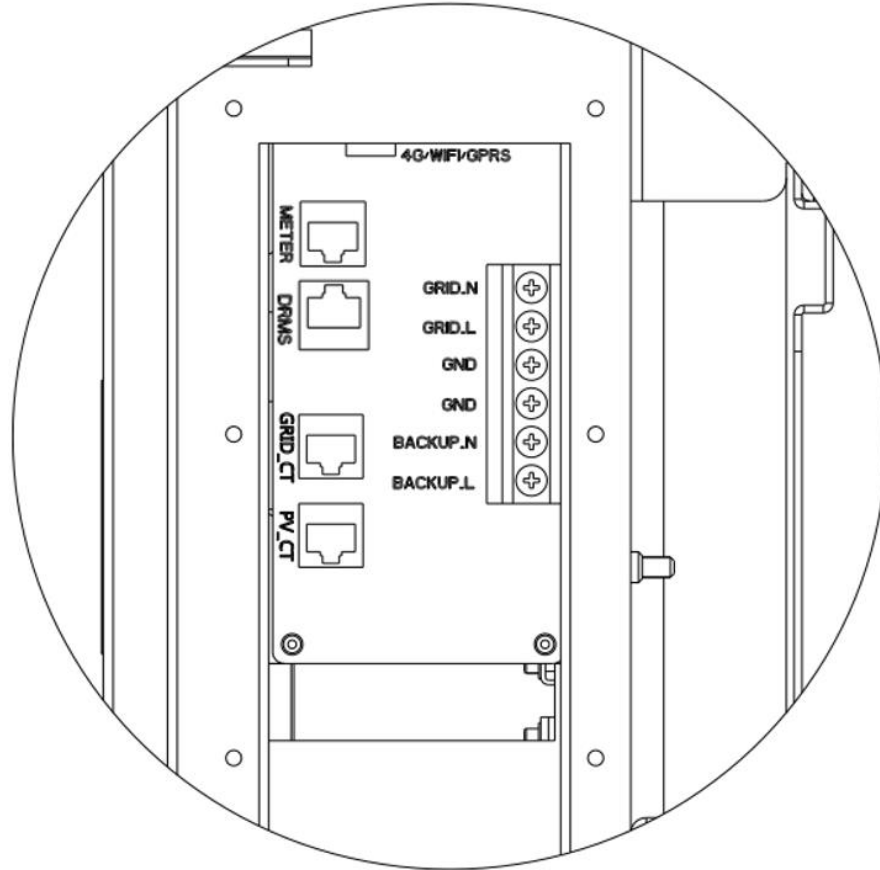
1. Press → button to adjust the value of address, one increment per button pressing.(Meter-1 is set to 1. Meter-2 is set to 2)
2. After the address set successfully , press ESC button twice to exit to measure display interface to check the address.

Cabling and Setup (4)

RJ45 ports on the left, it is METER, DRMS, GRID_CT and PV_CT from top to bottom.

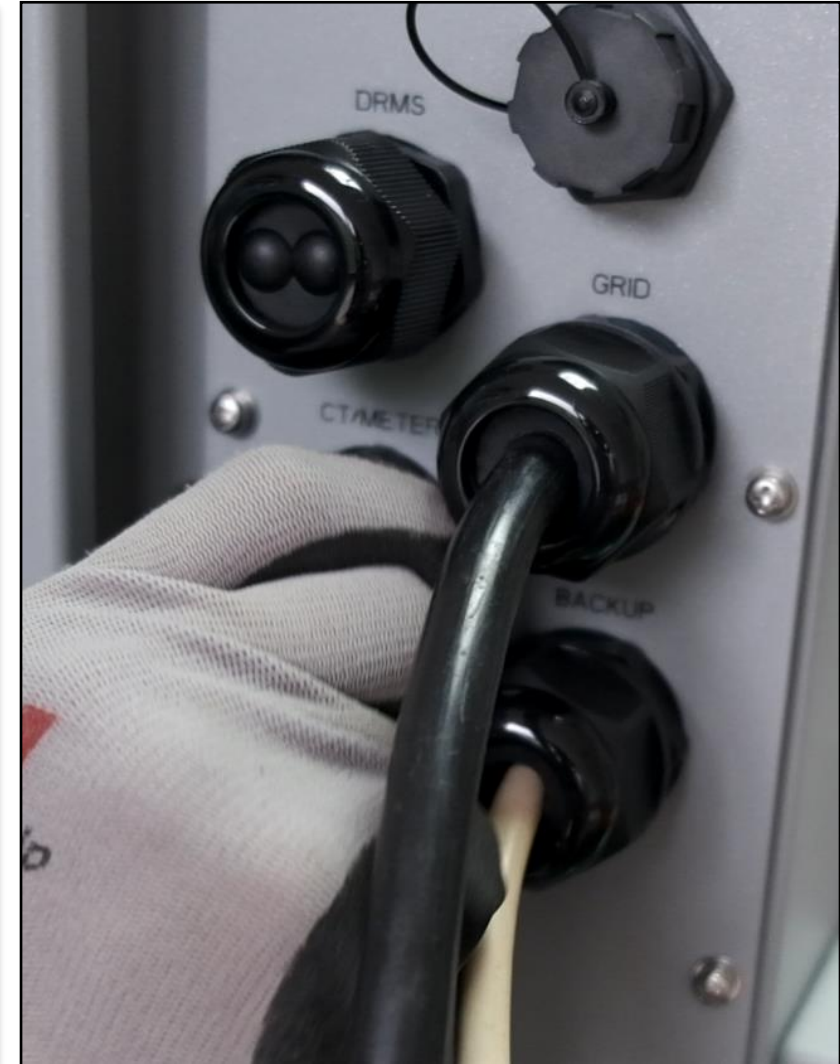
***DRMS is used in AU market.

Terminal block on the right, it is GRID_N, GRID_L, 2* GND for GRID and BACKUP, BACKUP_N and BACKUP_L.



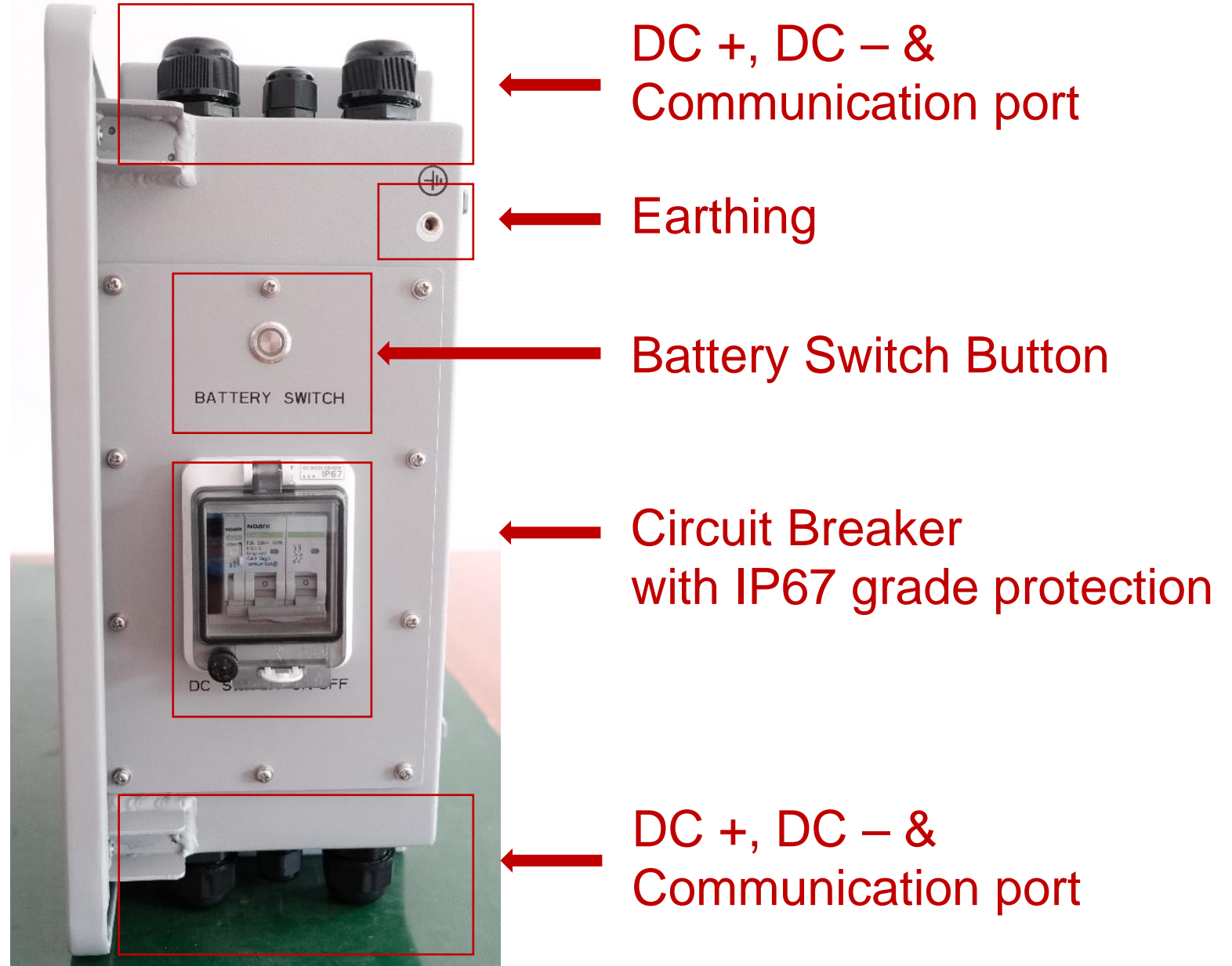
Cabling and Setup (5)

After power cable and CTs connection, you can put the cover back and fasten the port.



Cabling and Setup (6)

This is a side view of B1, all configuration will be performed on this side.



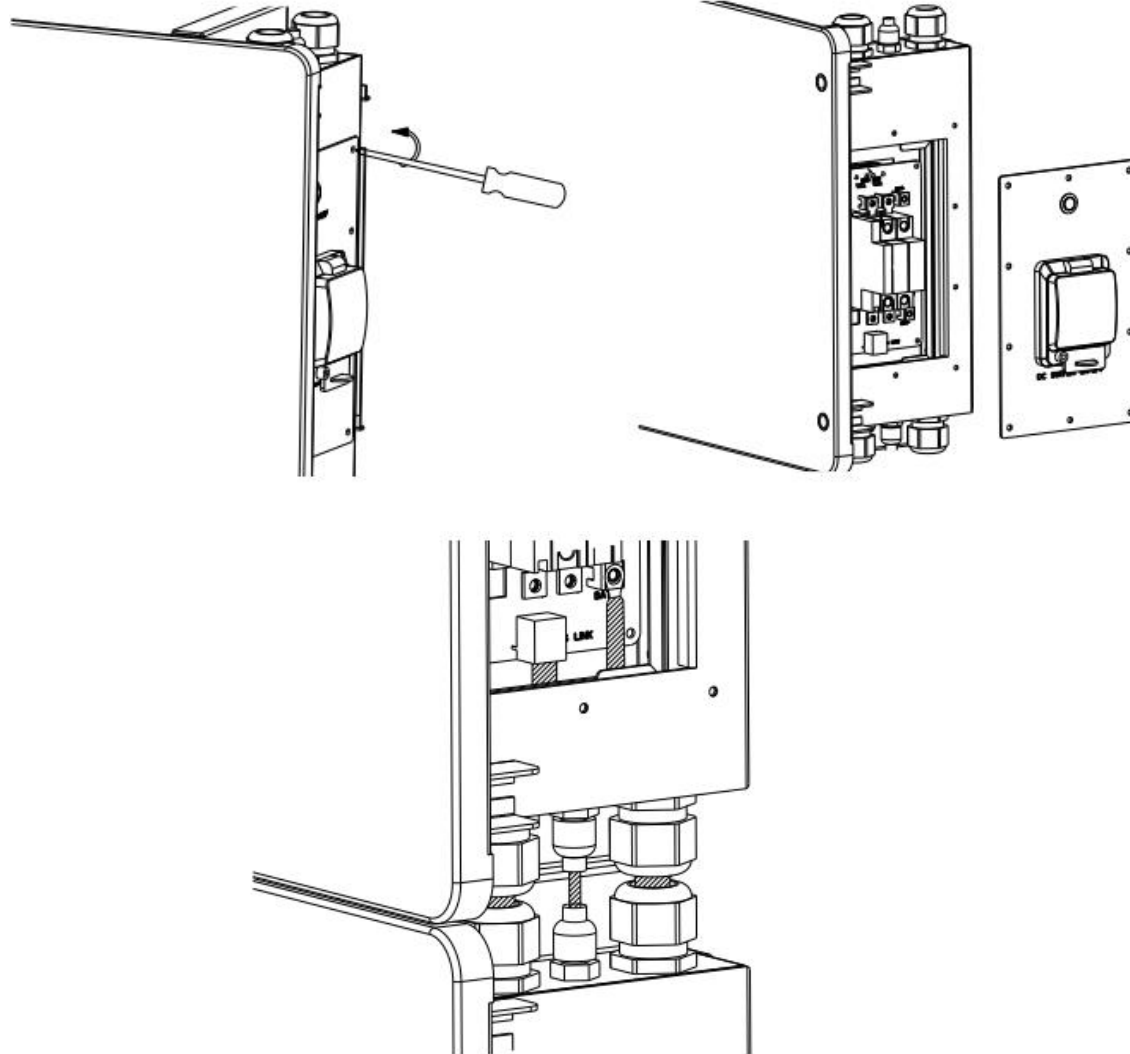
Cabling and Setup

(7)

Release 10 screws on the cover and take it out.

You may need to plug out the battery switch control cable for easier battery cable connection.

*****Please remember to connect it back.**

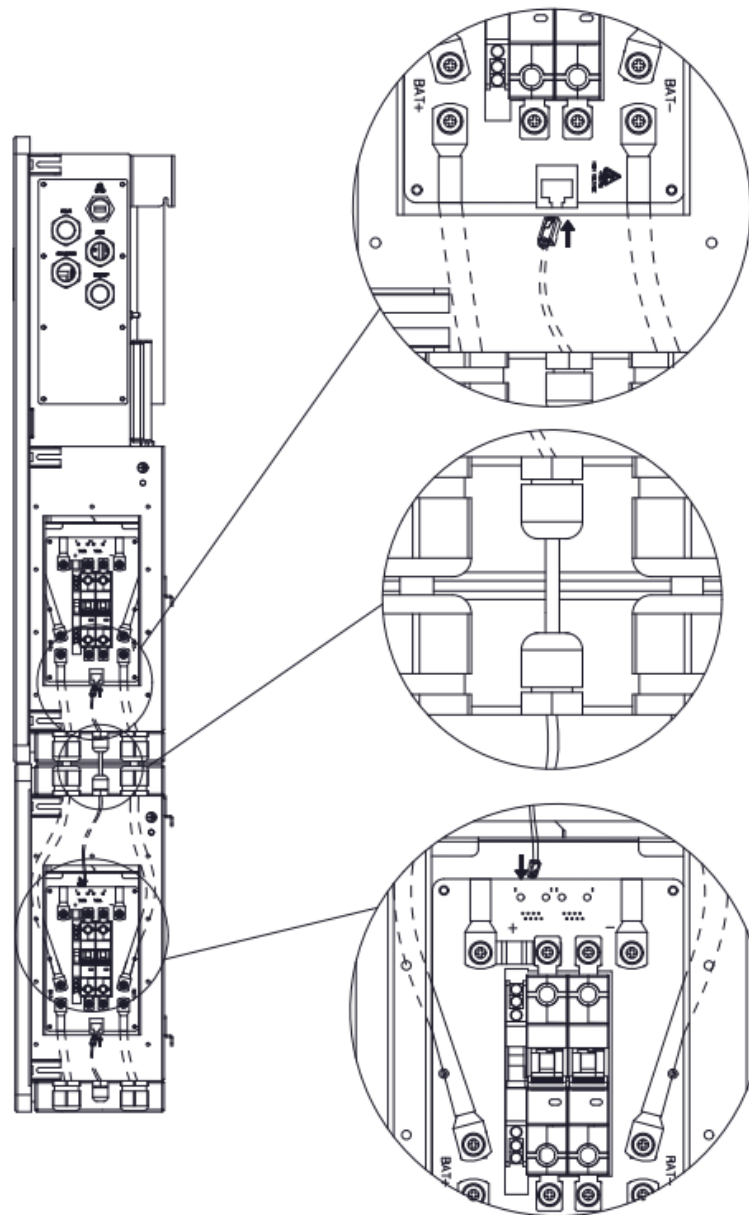


Cabling and Setup (8)

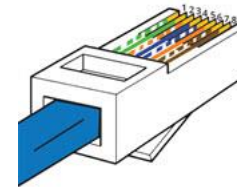
Then you can connect AS1 and B1 with the Battery + and – cable, as well as communication cable as the photos on the right.

Correct pin order is important for Battery Management System.

The connection between multi B1 are similar.



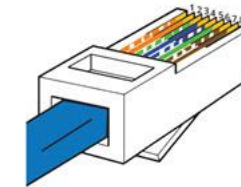
RJ45 Pinout
T-568A



- | | |
|-----------------|----------------|
| 1. White Green | 5. White Blue |
| 2. Green | 6. Orange |
| 3. White Orange | 7. White Brown |
| 4. Blue | 8. Brown |



RJ45 Pinout
T-568B



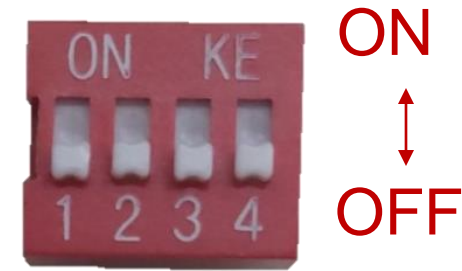
- | | |
|-----------------|----------------|
| 1. White Orange | 5. White Blue |
| 2. Orange | 6. Green |
| 3. White Green | 7. White Brown |
| 4. Blue | 8. Brown |

Pin Number	Name
1	NC
2	NC
3	NC
4	NC
5	NC
6	NC
7	RS485_A
8	RS485_B

Cabling and Setup (9)

Dip Switch Setting

There is a dip switch next to Circuit Breaker in each AS1 and B1 device, it is used for Master and Slave device address control.



Cases		Dip Switch on AS1	Dip Switch on B1 No. 1	Dip Switch on B1 No. 2	Dip Switch on B1 No. 3
1PC AS1	Not using B1	ALL OFF	-	-	-
1PC AS1	1PC of AS1	ALL OFF	1 ON; 2, 3, 4 OFF	-	-
1PC AS1	2PCs of AS1	ALL OFF	1 ON; 2, 3, 4 OFF	2 ON; 1, 3, 4 OFF	-
1PC AS1	3PCs of AS1	ALL OFF	1 ON; 2, 3, 4 OFF	2 ON; 1, 3, 4 OFF	3 ON; 1, 2, 4 OFF

Turning ON

Press and hold the Battery Switch button for 5 seconds to turn on AS1 and B1,



Turning OFF

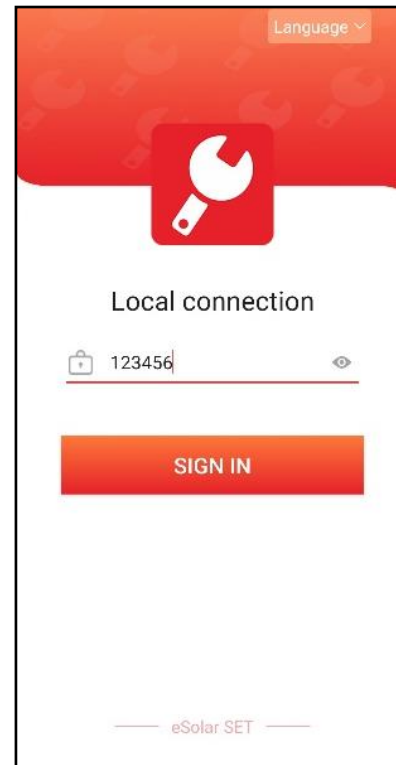
If AS1 need to be switched OFF,
Turn OFF loads first, then press and hold the battery switch button on B1 (from the device at bottom to the one at top, and switch OFF AS1 at the end.

Monitoring Setup

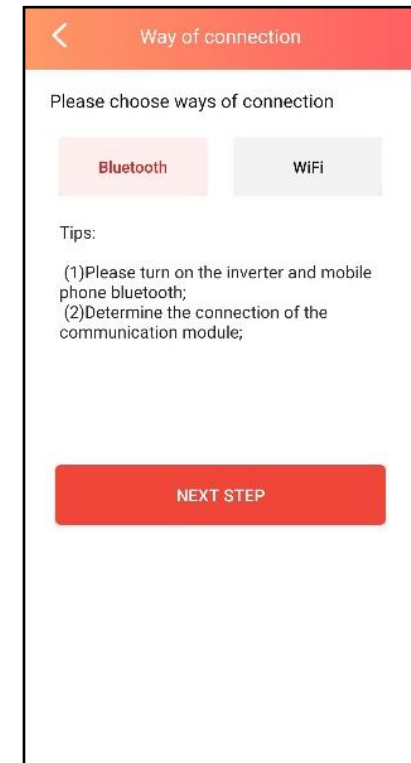
Download eSolar SET from Play Store or App Store



Open the App and sign in with password 123456

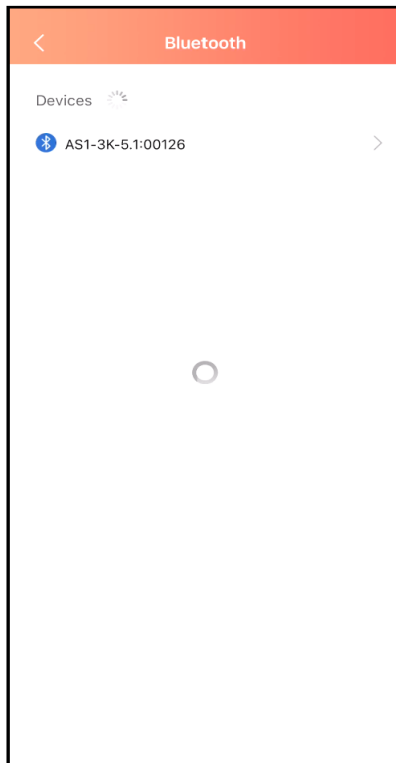


Turn ON GPS and Bluetooth function on your phone to connect eSolar 4G module

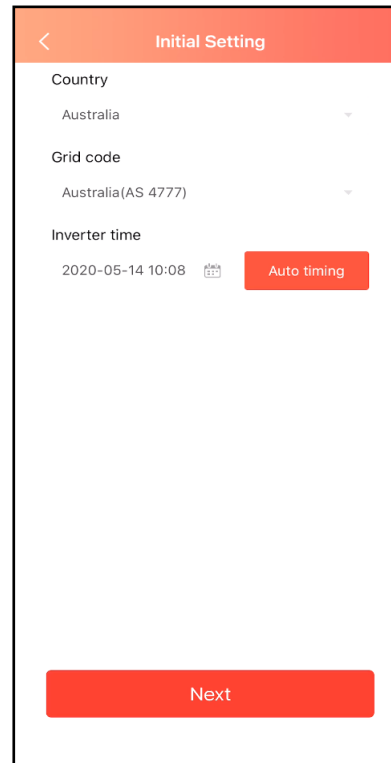


Monitoring Setup

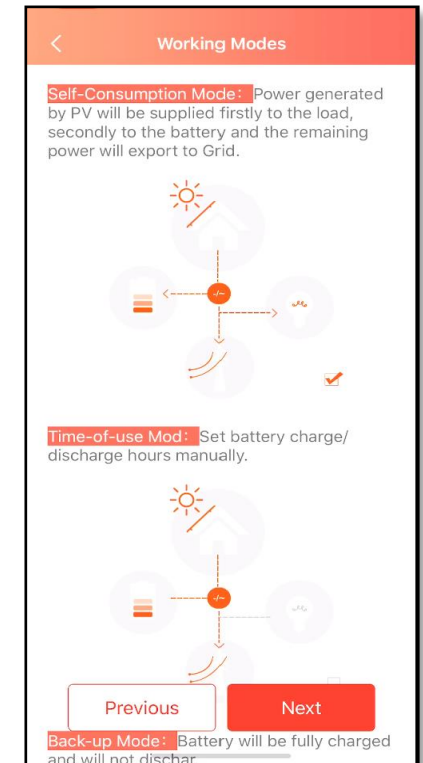
Enter Bluetooth device list and select AS1-3K-5.1:xxxxx
xxxxx is the last 5 digits of SN
of device



After connection, do initial
setup of country code,
date and time.

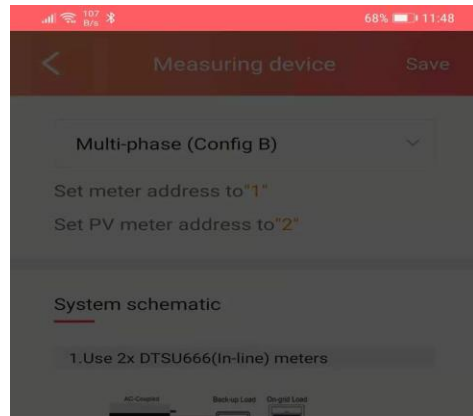


Select working mode.



Monitoring Setup

Select a sampling device.
CT/Single-phase
meter/Three-phase meter



Single-phase (Config A)

Single-phase (Config B)

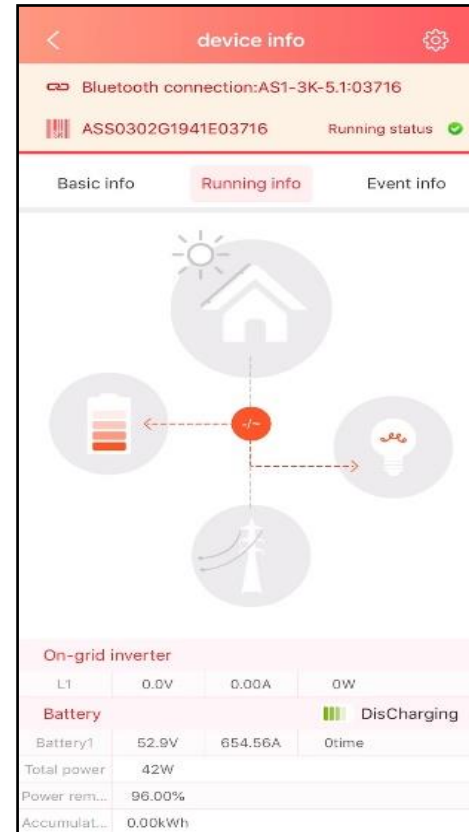
Multi-phase (Config A)

Single-phase (Config C)

Multi-phase (Config B) ✓

Multi-phase (Config C)

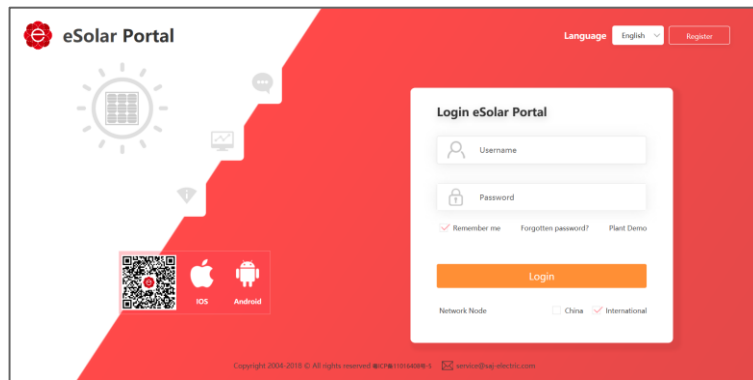
Complete setups



eSolar Portal Setup

eSolar Portal (Web)

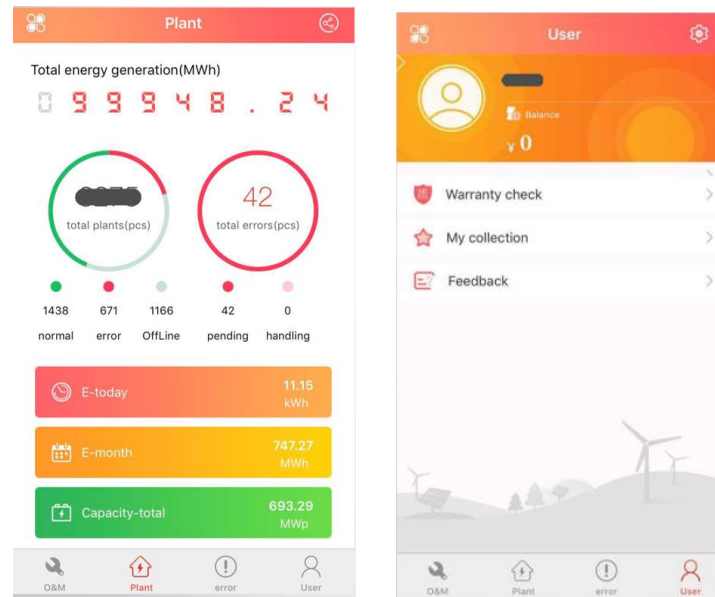
A web monitoring portal for all SAJ inverter users.



Please refer to eSolar Portal guide for more instructions.

eSolar O&M (APP)

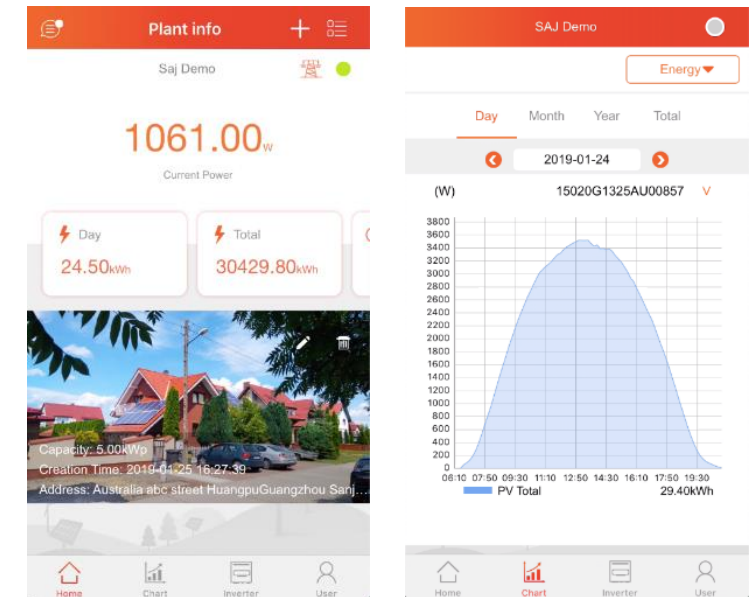
IOS/Android APP for installers.



- Remote configuration
- Error alarm push notice
- Trouble shooting instructions

eSolar Air (APP)

IOS/Android APP for end users.



- Easy to use
- Friendly interface
- Basic monitoring data

THANK
YOU