Inverter Operation Guide

SMA-SUNNY ISLAND 4.4M / 6.0H / 8.0H

Contents

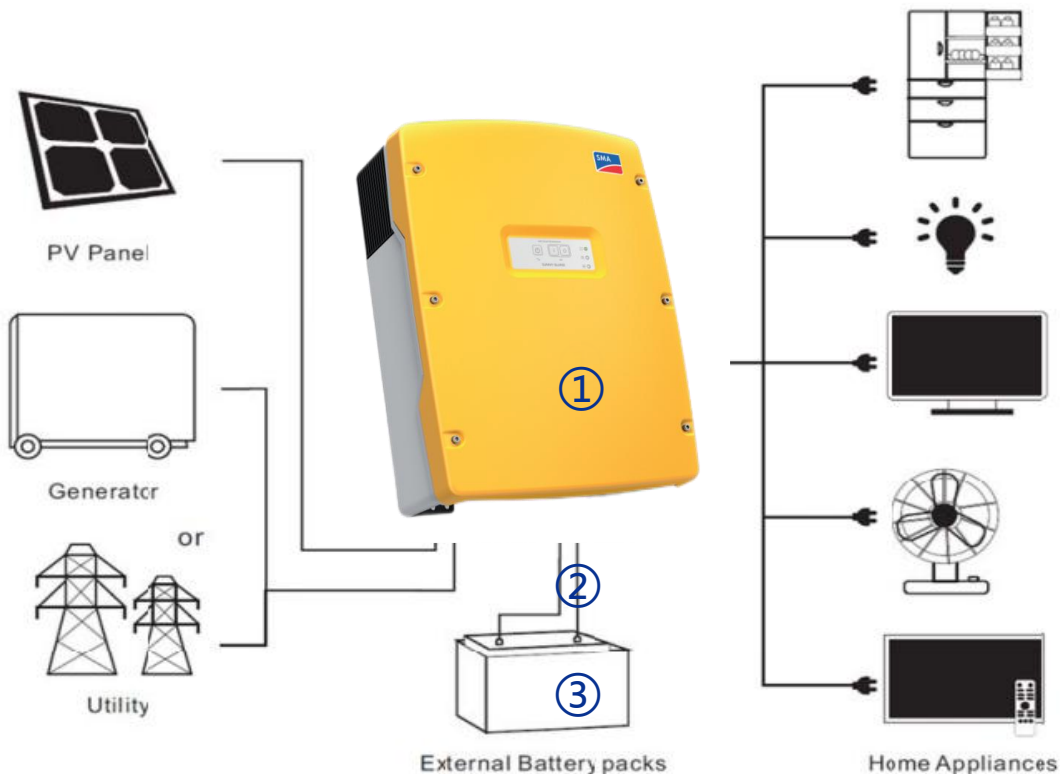# Scenario

Simple home storage scenario

PV Panel

Generator

or

Utility

①

②

③

External Battery packs
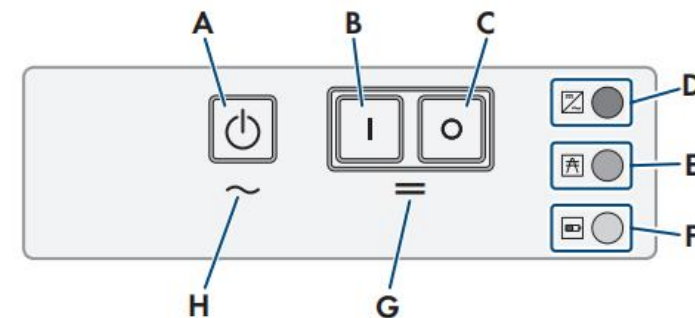
Home Appliances

Key elements

① **Invter** : SMA-SUNNY ISLAND 4.4M / 6.0H / 8.0H

② **Interconnection cable**：Customized communication cable

③ **Battery**：The Li-ion Battery Pack composed of 16 strings of cells

PCS Control Panel

Object	Icon	Description
A	⏻	Start-stop button
B	I	"On" button
C	○	"Off" button
D	⌇	Inverter LED
E	木	Grid LED
F	▣	Battery LED
G	=	Standby
H	~	AC operation

PCS Interfaces and Connection

PCS Interfaces
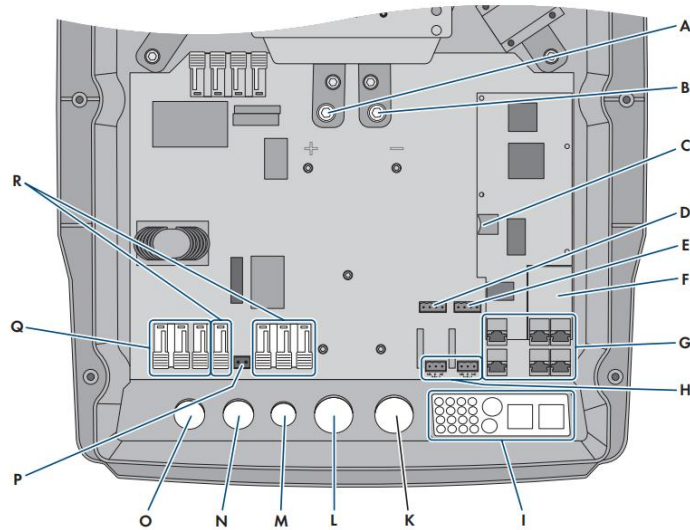
Object	Description	Object	Description
A	DC+ connection	K	Enclosure opening for DC-
B	DC- connection	L	Enclosure opening for DC+
C	Slot for optional micro SD card	M	Enclosure opening ExtVtg
D	BatTmp and BatCur connections	N	Enclosure opening AC2
E	BatVtgOut and DigIn connections	O	Enclosure opening AC1
F	Slot for optional communication interfaceSI_x0002_SYSCAN.BGx4)	P	ExtVtg connection
G	Connecting the communication unit	Q	AC1 connection
H	Relay1 and Relay2 connections	R	AC2 connection
I	Cable feed-through plate		

Connection Between PCS and BMS
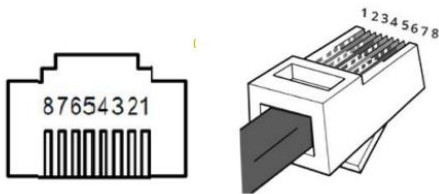
Inverter pin	Defined declaration
2	Ground
4	CAN-H
5	CAN-L

PCS Side
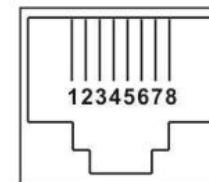
PIN1	**RS485-B**
PIN2	**RS485-A**
PIN3	GND
PIN4	**CAN-H**
PIN5	**CAN-L**
PIN6	GND
PIN7	RS485-A
PIN8	RS485-B

BMS Side

Matching Setting of Inverter and BMS-1
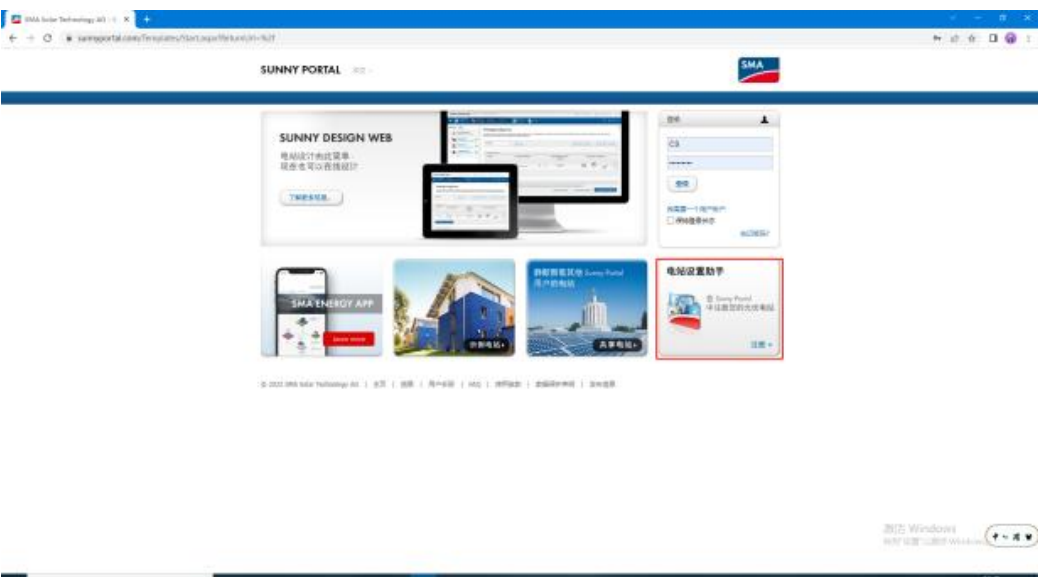
①

Log in to the website by Google:
https://www.sunnyportal.com/
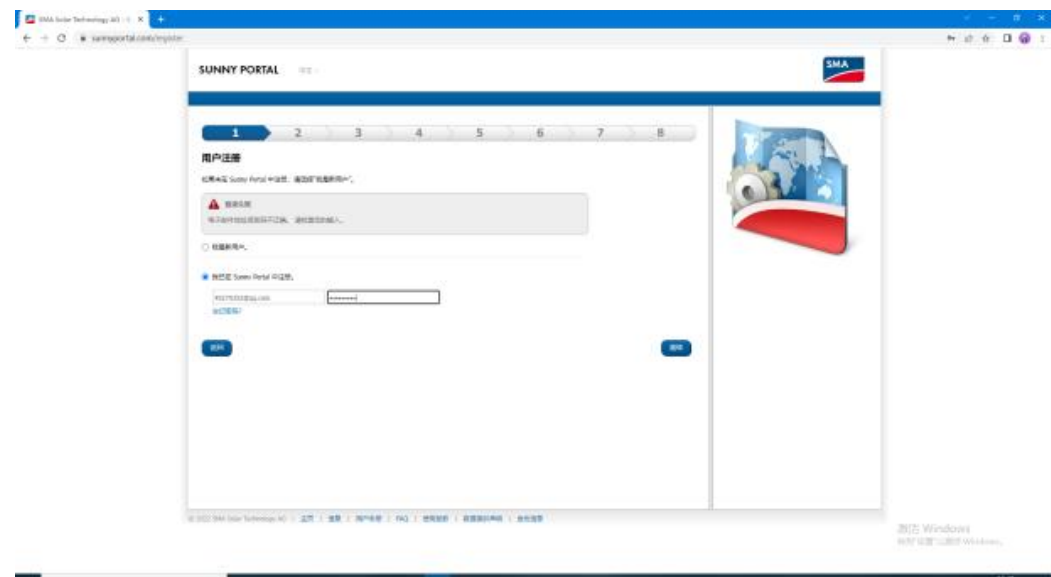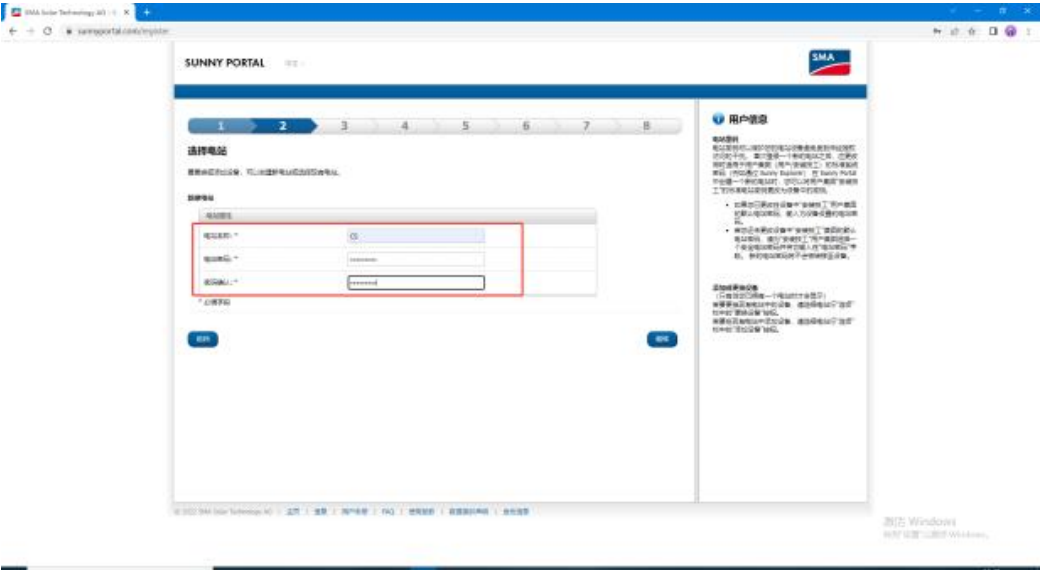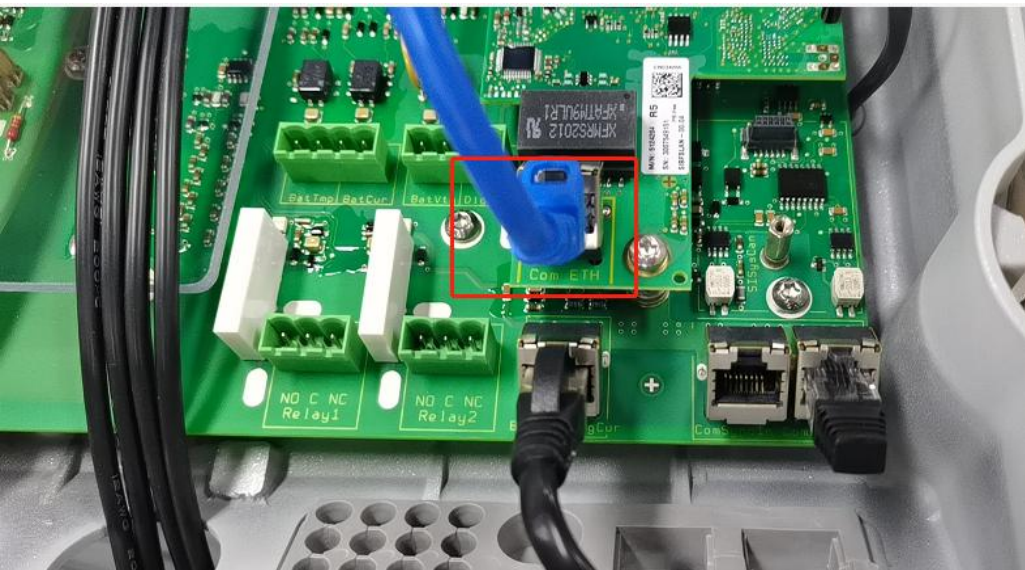

②

Register an account
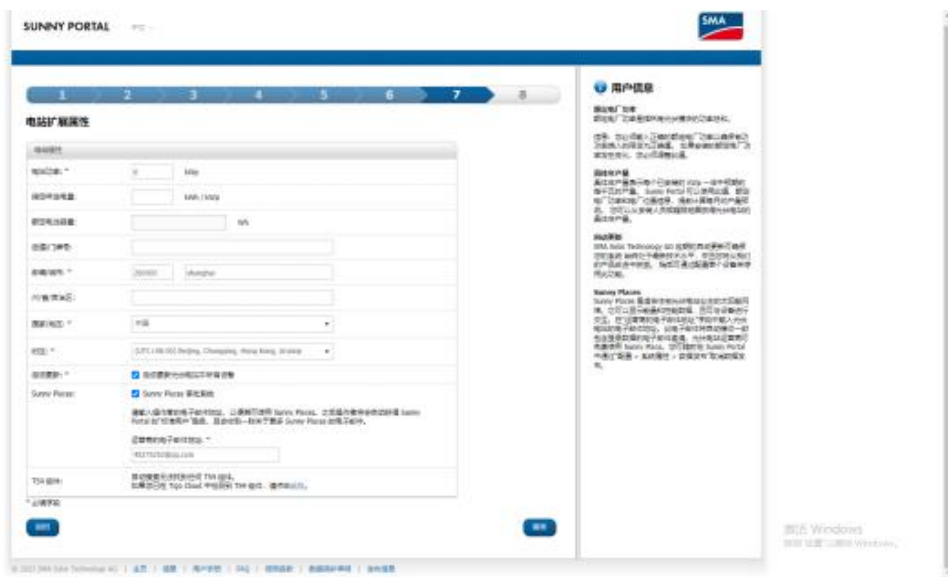(Account number: xxx@xxx.com Password: xxx)

Matching Setting of Inverter and BMS-2

③

④

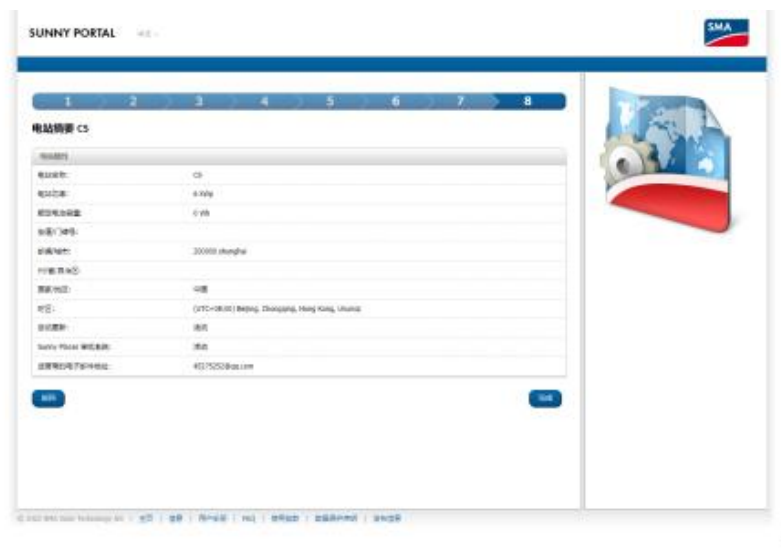Create a new power station
(Account: xx Password: xx)

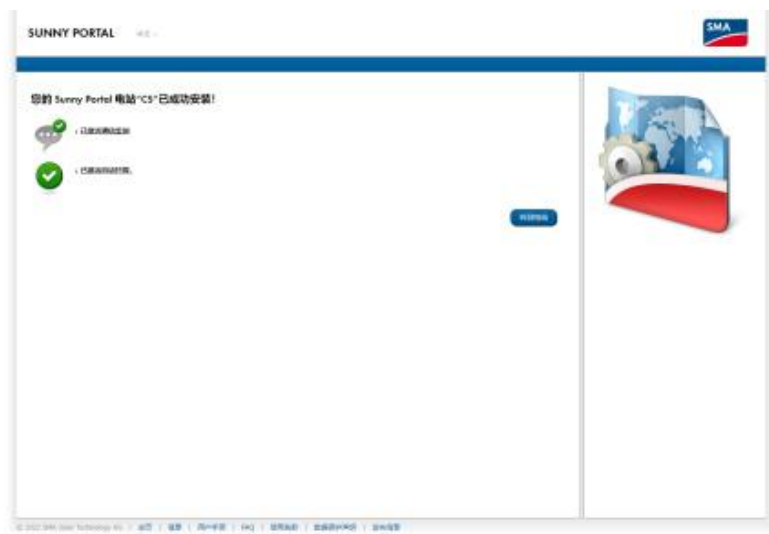Connect the inverter with a network cable and router

⑤

PIC and RID on the right side of the inverter

⑥

Enter PIC and RID, then click on 'Identify' after input

⑦

Set power

⑧

Click Finish

⑨

Complete
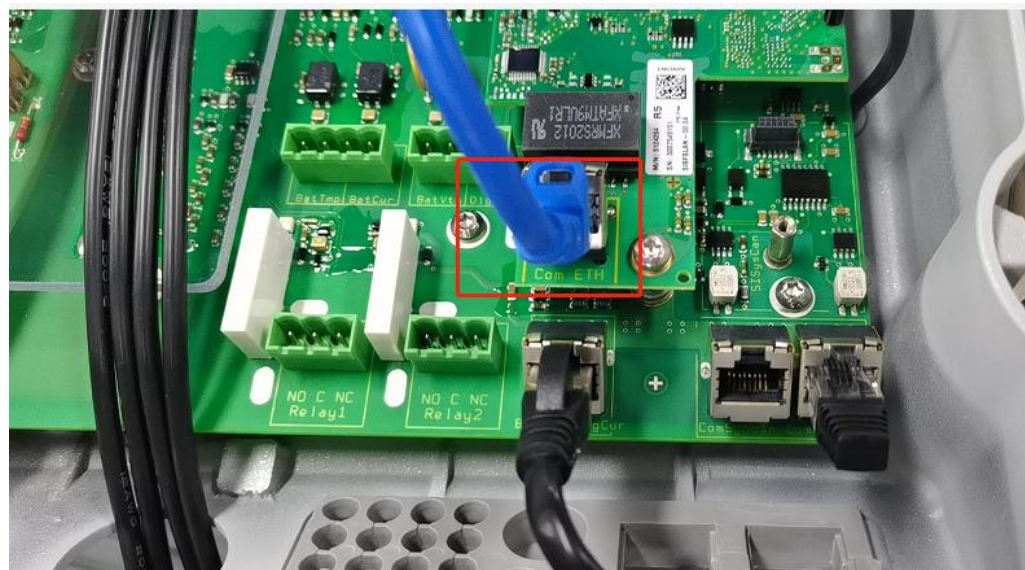
⑩

Log in to website 169.254.12.3 and plug the inverter network cable directly into the computer

Matching Setting of Inverter and BMS-6

⑪

⑫

Set password
(xxx, the next duplicate password)
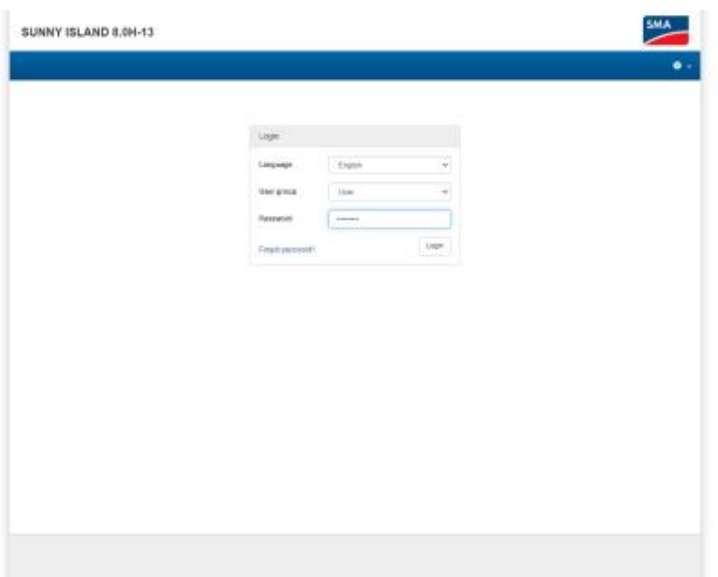
Select a user account with password xxx (as above)

⑬

⑭
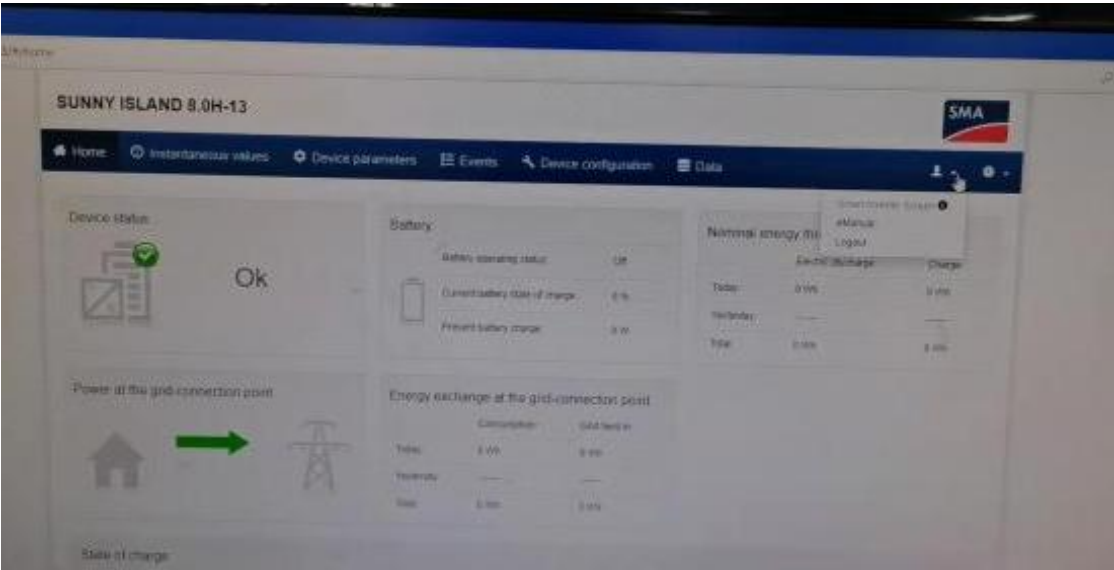
After logging in, there is no data available.
You need to select 'logout' on the head
side and then install 'to log in
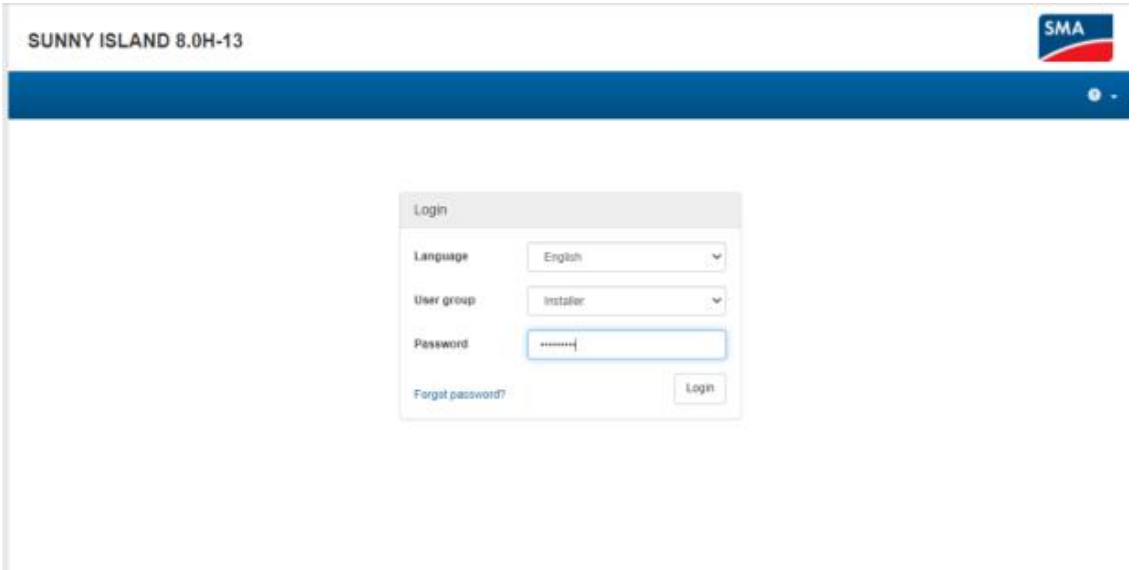
Select the installer account and login password xxx (as above)

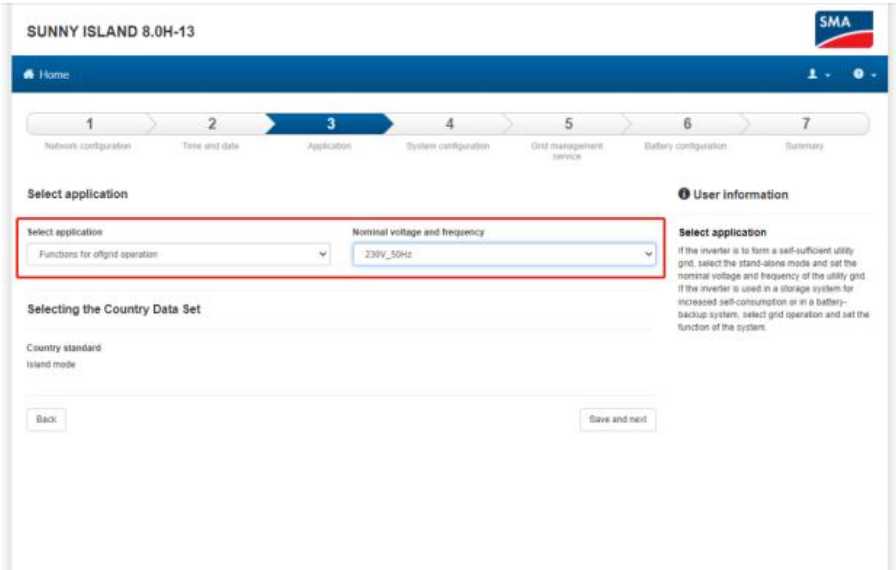⑮
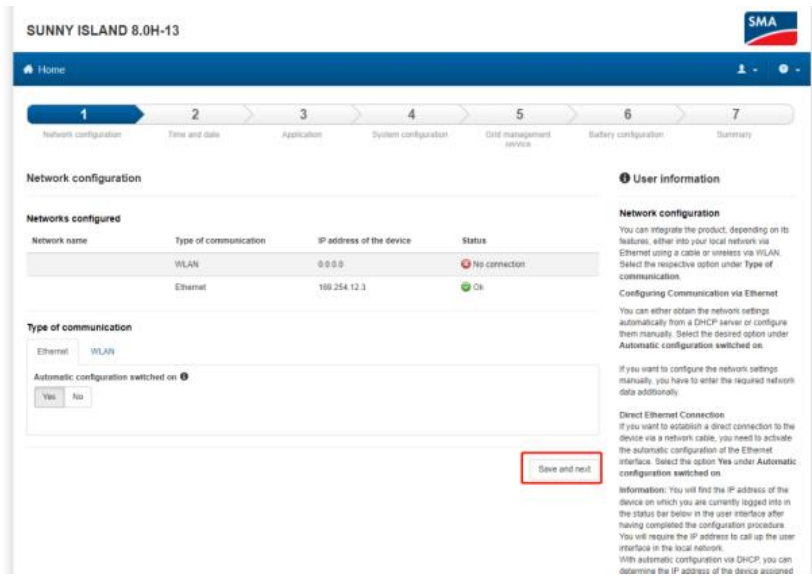
Will enter the settings, select save and next

⑯

Set date and time

⑰
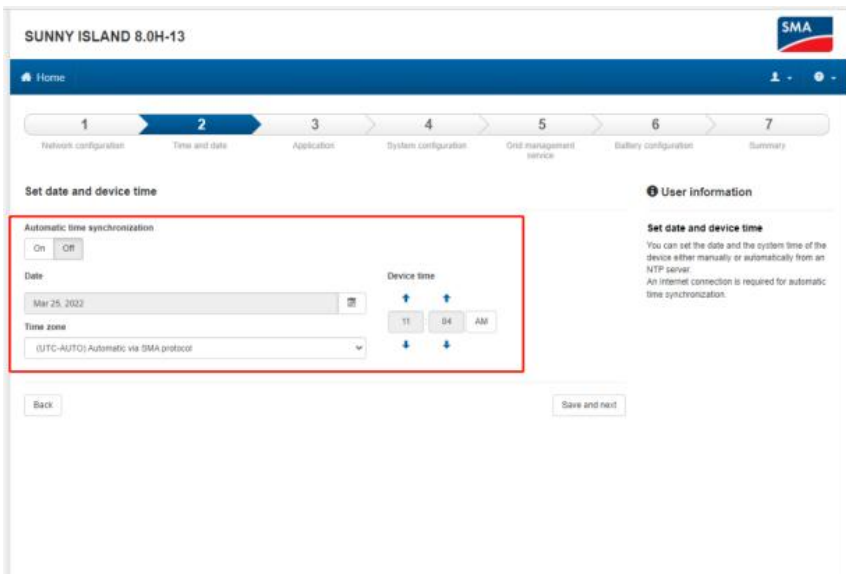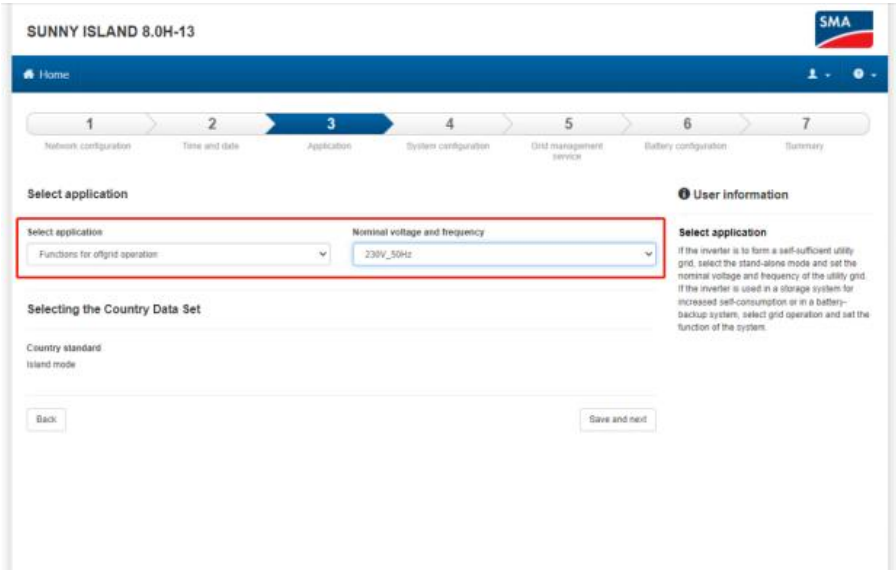
Select Functions for OffGrid operation,
230V/50Hz

⑱
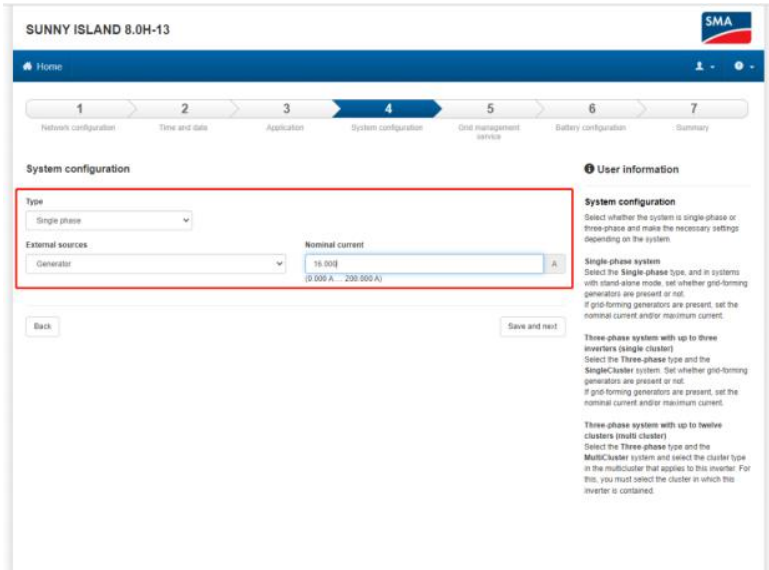
Select Single Phase, External Source can be selected as
Generator

⑲

Battery selection Lithium-ion

⑳
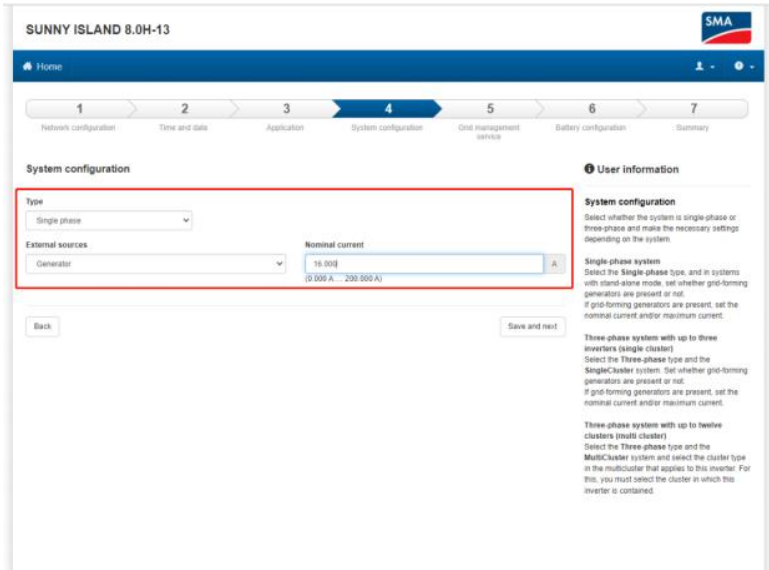
Finally, continue and complete the setup

㉑

㉒
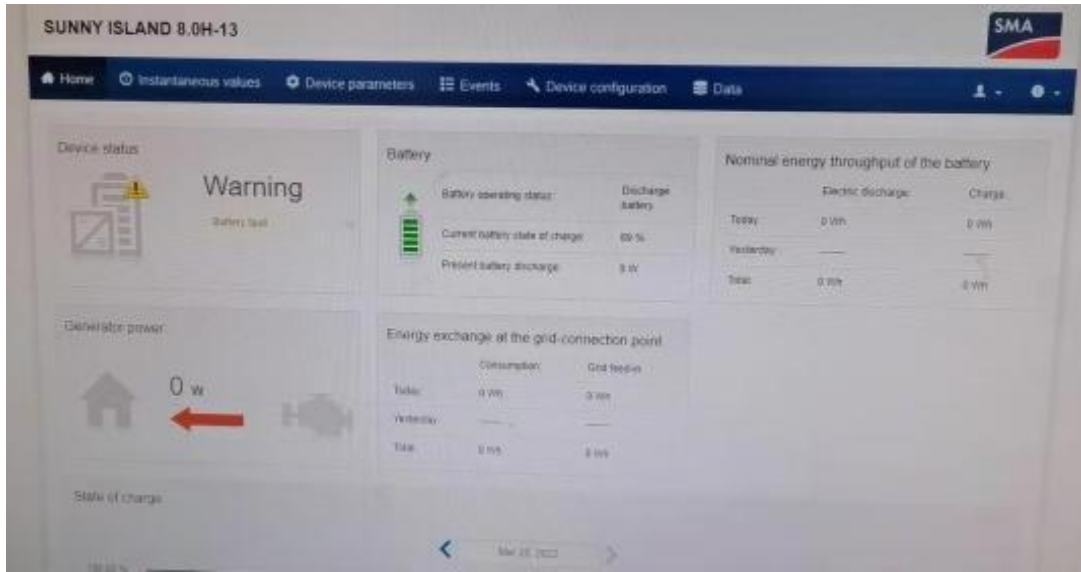
After completion, the data upload is normal
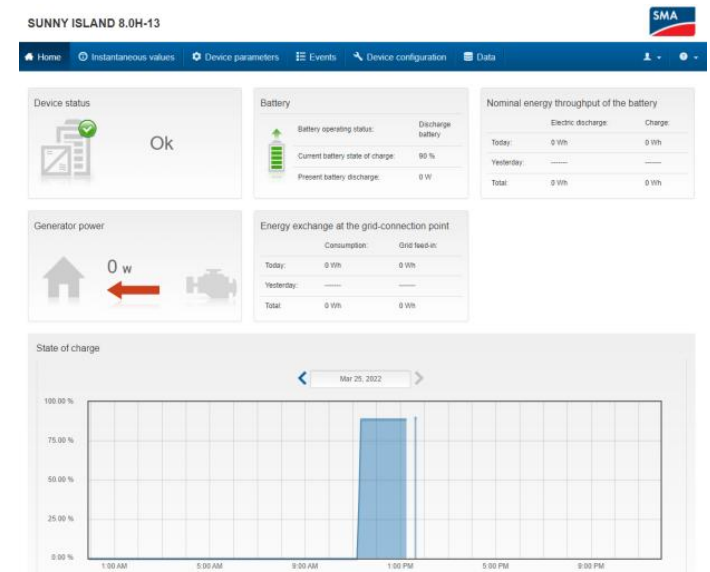
APP数据页面

Matching Setting of Inverter and BMS-12

⑳㉓

Instantaneous values
(Select battery data in Battery)

⑳㉔

The Battery data in Instantaneous values is uploaded by BMS
(Battery: SOC, temperature, battery voltage, current)

㉕

The Battery data in Instantaneous values
is uploaded by BMS (Charge: request
charging voltage -1), and the inverter itself
-1

㉖

Device parameters
(Select battery data in Battery)

The Battery data in Device parameters is uploaded by BMS (Battery charge: charging request current, Battery discharge: discharge request current)