SUNGROW
Clean power for all

Quick Installation Guide

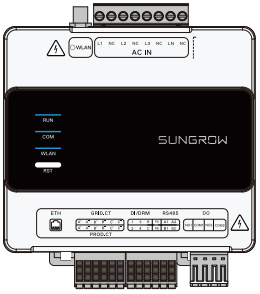
Smart Meter

iHomeManager

Validity

This document is valid for the below product:

- iHomeManager



Safety

- 1. This guide may be updated or revised from time to time, without prior notice, due to the needs of product development. Under no circumstances should this guide be taken as a substitute for the user manual or the relevant instructions provided on the product.
- 2. Be sure to read through, fully understand, and strictly follow the instructions specified in the product's user manual and other related regulations. You can scan the QR code on the back cover of this guide for the user manual.
- 3. Operations must only be performed by qualified personnel. The qualified personnel must be trained for electrical system installation and commissioning and emergency response, and have a good knowledge of the manual and the local regulations and directives.
- 4. Before installation, check that the contents of the package are intact and complete against the packing list. Contact SUNGROW or the distributor in case of any damages or missing items.
- 5. The cables must be intact and well insulated. Operation personnel must wear proper personal protective equipment (PPE) all the time.
- 6. Failure to observe the instructions may result in device damage, personal injuries, or even death and will void the warranty.

EU Declaration of Conformity

within the scope of the EU directives

- Restriction of the use of certain hazardous substances 2011/65/EU and 2015/863/EU (RoHS)
- The radio equipment directive 2014/53/EU (RED)

SUNGROW confirms herewith that the products described in this document are in compliance with the fundamental requirements and other relevant provisions of the abovementioned directives. The entire EU Declaration of Conformity can be found at support.sungrowpower.com.

Radio technology	WLAN 802.11b/g/n20/n40/ax
Radio spectrum	802.11b/g/n20/n40/ax 2412 MHz ~ 2484 MHz
Maximum transmission power	≤ 20 dBm

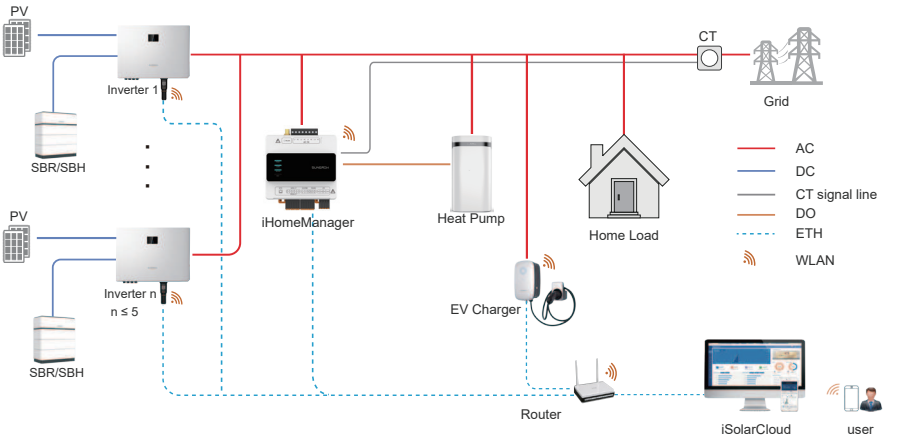
The iHomeManager is not an energy meter for power consumption in the sense of the EU directive 2004/22/EG (MID). The iHomeManager may not be used for billing purposes. The data collected by the iHomeManager relating to the power generated by your PV system may deviate from the data of the main energy meter, which is used for billing purposes.

Technical parameters listed above apply to EU countries only.

Manufacturer :
Sungrow Power Supply Co., Ltd.
No 1699. Xiyou Road,Hefei 230088.P.R.China
For EU only
EU/EEA Importer: Sungrow Deutschland GmbH
Balanstraße 59, 81541 München, Germany

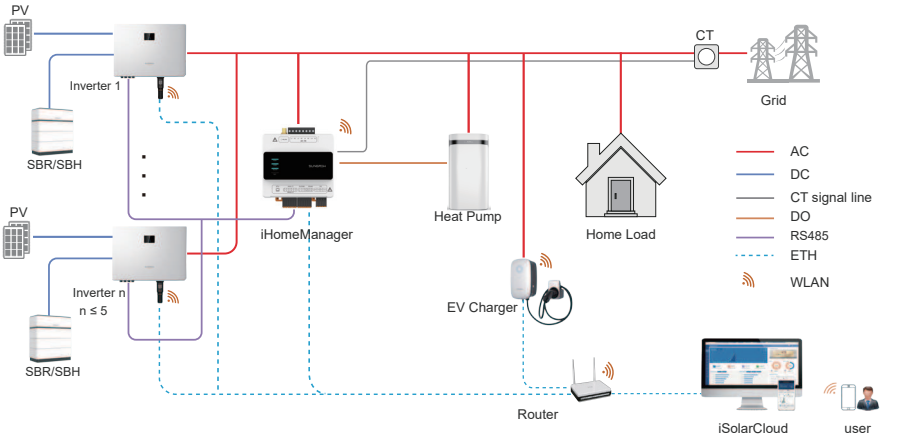
1. Typical Application

1.1 Residential PV-ESS-EV charging system (WiNet)



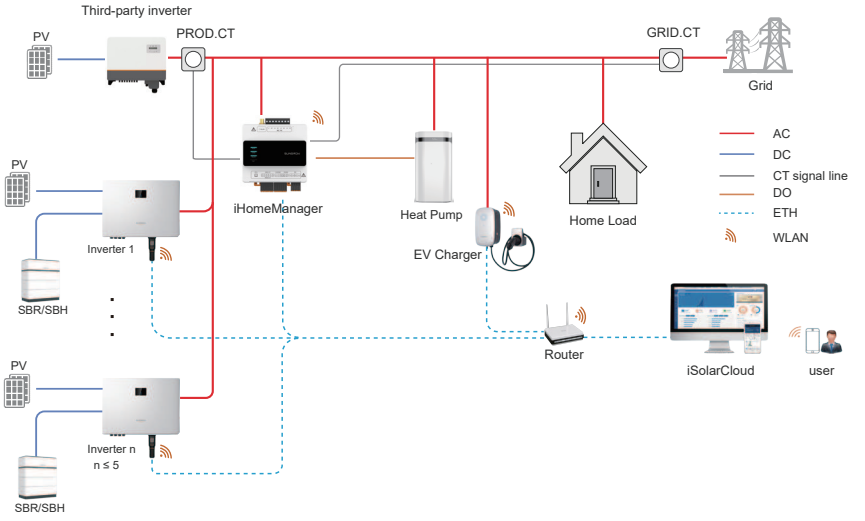
Inverter	Battery RACK	EV Charger
SH5.0/6.0RS SH8.0/10RS, SH5-25T	SBR SBH	AC22E-01

1.2 Residential PV-ESS-EV charging system (RS485)



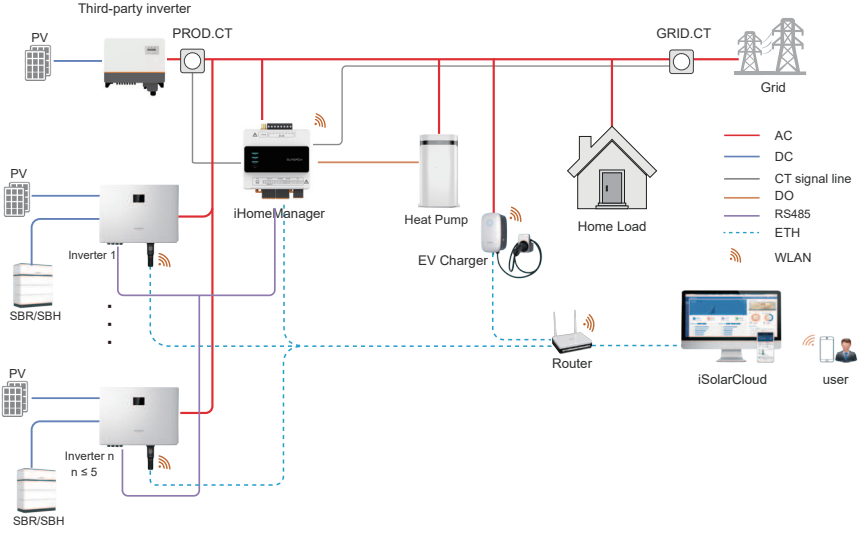
Inverter	Battery RACK	EV Charger
SH5.0/6.0RS SH8.0/10RS, SH5-25T	SBR SBH	AC22E-01

1.3 Retrofit system with third-party inverter (WiNet)



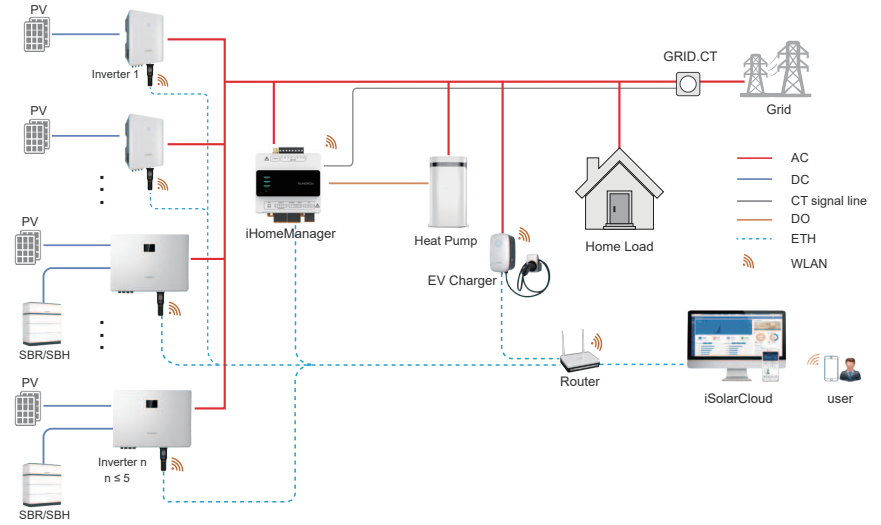
Inverter	Battery RACK	EV Charger
SH5.0/6.0RS SH8.0/10RS, SH5-25T	SBR SBH	AC22E-01

1.4 Retrofit system with third-party inverter (RS485)



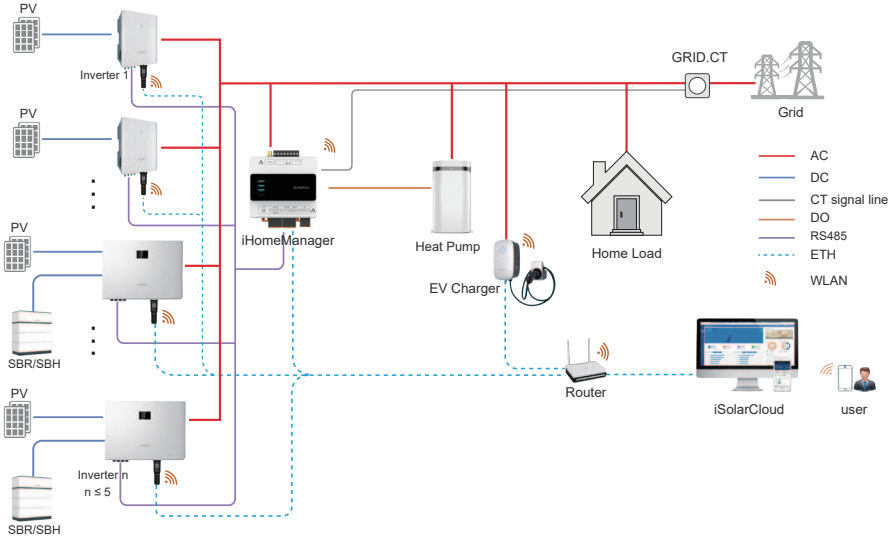
Inverter	Battery RACK	EV Charger
SH5.0/6.0RS SH8.0/10RS, SH5-25T	SBR SBH	AC22E-01

1.5 Retrofit system with SUNGROW inverter (WiNet)



Inverter	Battery RACK	EV Charger
SH5.0/6.0RS SH8.0/10RS, SH5-25T	SBR SBH	AC22E-01

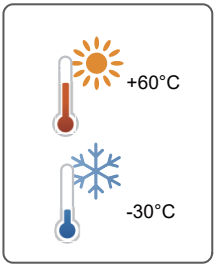
1.6 Retrofit system with SUNGROW inverter (RS485)

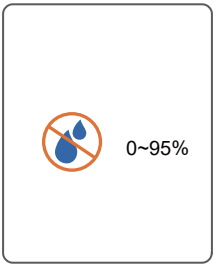


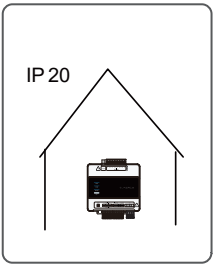
Inverter	Battery RACK	EV Charger
SH5.0/6.0RS SH8.0/10RS, SH5-25T	SBR SBH	AC22E-01

2. Installation Environment

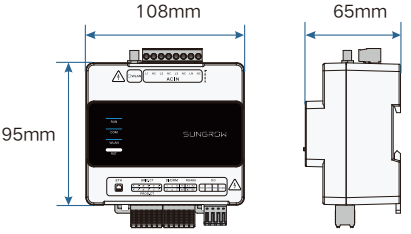
2.1 Installation Position



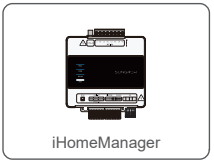




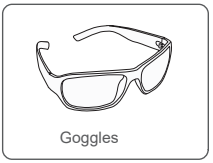
2.2 Dimensions

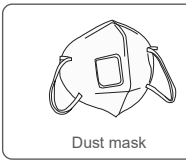


3. Scope of Delivery

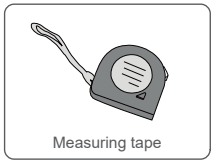


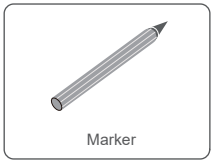
4. Installation tools

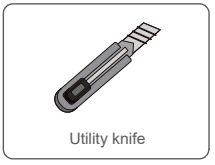

Goggles

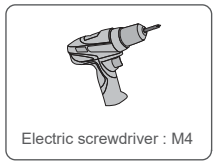

Dust mask


Protective gloves

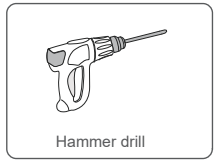

Measuring tape

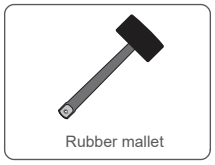

Marker

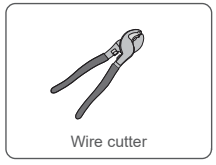

Utility knife

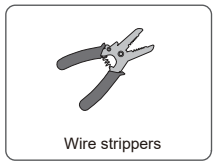

Electric screwdriver : M4


Phillips screwdriver


Hammer drill


Rubber mallet

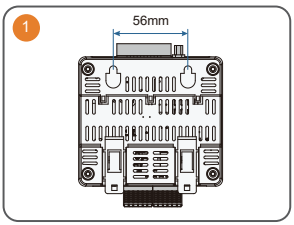

Wire cutter

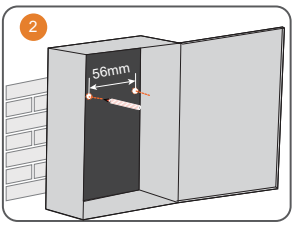

Wire strippers

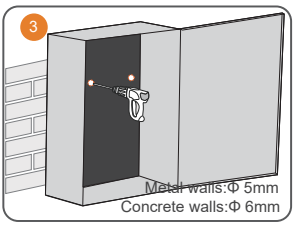

Vacuum cleaner

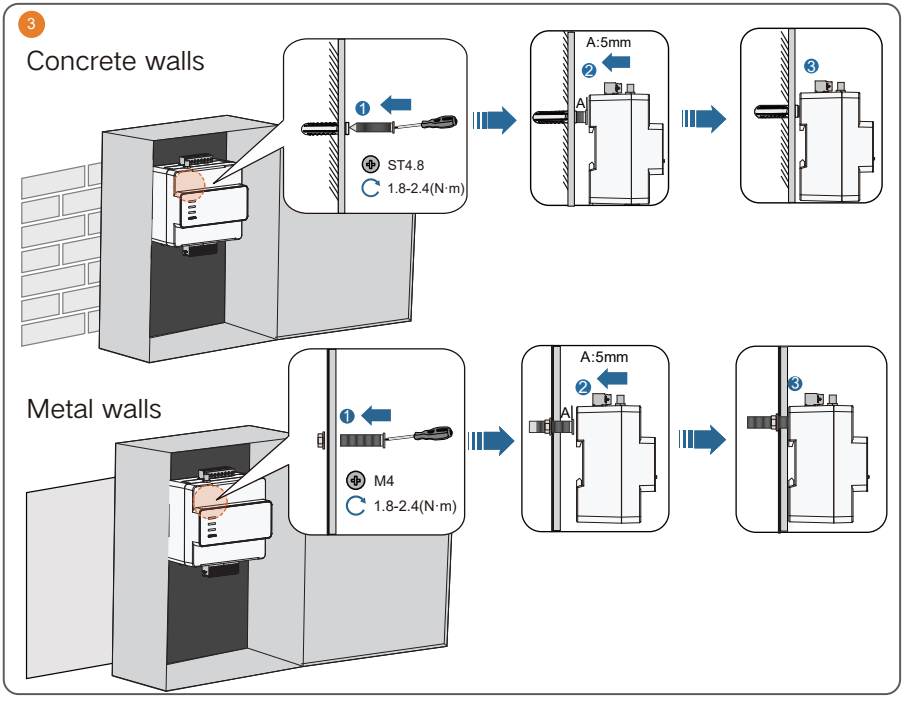
5. Mechanical Mounting

5.1 Mounted on a Wall

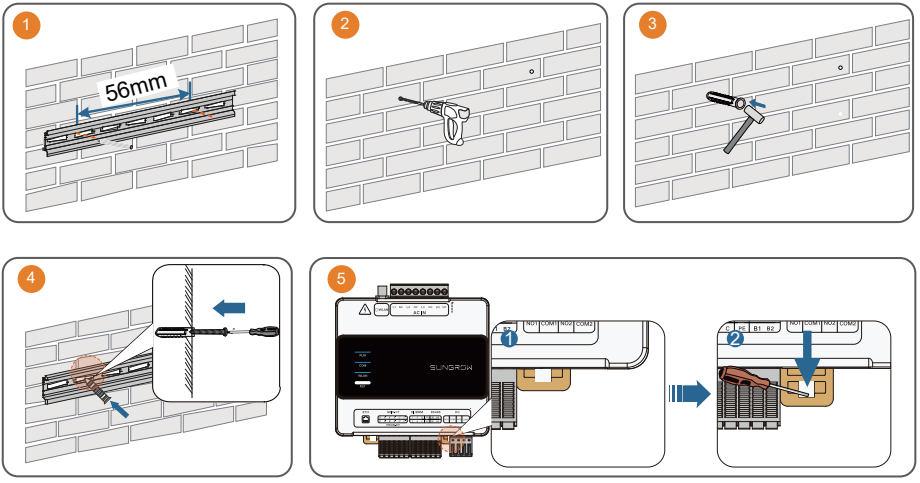


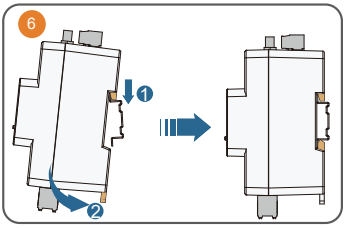


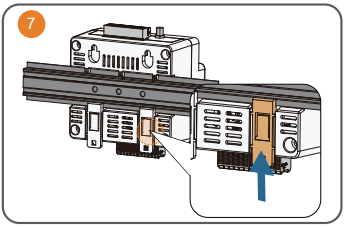


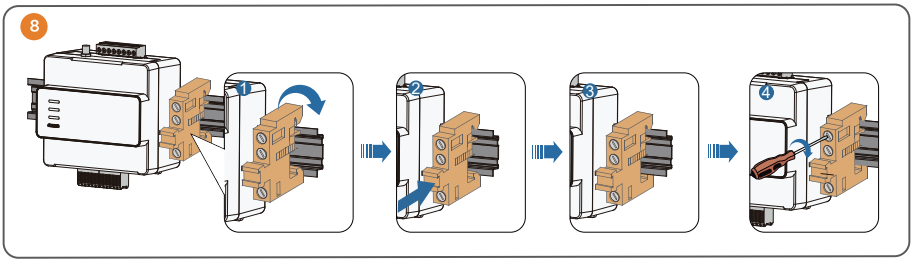


5.2 Mounted on a Guide Rail

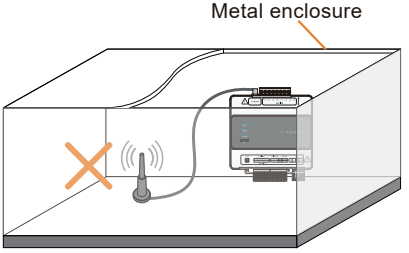


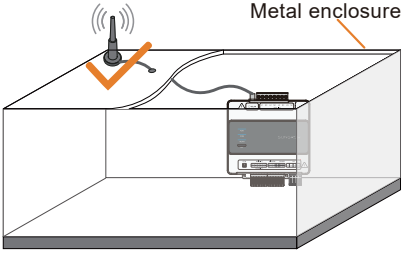






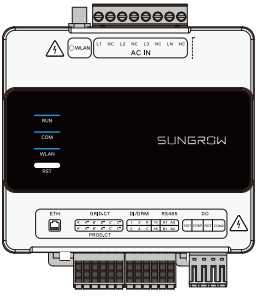
5.3 Antenna Installation





6. Electrical Connection

6.1 Terminal Overview



Terminals

Terminal	Definition	Description
AC IN	AC power supply	Single phase: 240Vac (L-N) Split phase: 102–120Vac (L-N) Three-phase three-wire: 415Vac (L-L) Three-phase four-wire: 415Vac (L-L), 230Vac (L-N)
ETH	Ethernet port	Connected to the router for data communication
GRID.CT	Current detection	Used for detecting the current on the grid-connection side
PROD.CT	Current detection	Used for detecting the current of the third-party inverter
DI/DRM	DI port	Used for digital input signal wiring
RS485	RS485 communication port	Supports 2 inputs of RS485
DO	DO port	Used for heat pump control

Indicators

Indicator	LED color	LED status	Description
Run	Blue	Off	Not connected to external power supply
		Blinking	Working normally
COM	Blue	Off	No device is online
		Steady on	All devices are online
		Blinking	Some devices are online
WLAN	Blue	Off	Not connected to cloud service
		Steady on	Connected to cloud service
		Blinking	Data communication in progress

Cable Requirements

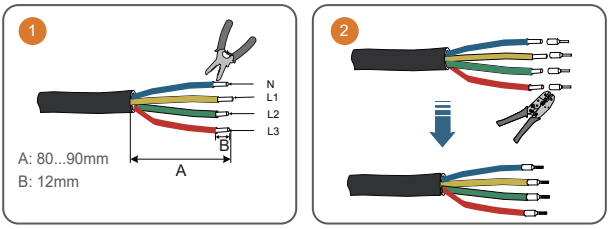
Cable type	Specifications	Description
RS485 communication cable	Recommended cross-sectional area: 0.75mm^2	· Communication distance ≤1000m · Outdoor-type anti-UV twisted-pair cable with a shielding layer
RJ45 Ethernet cable	Network cable of Cat5e or higher	Communication distance ≤100m
DI signal cable	Recommended cross-sectional area: 0.75mm^2	Communication distance ≤10m
DO signal cable	Recommended cross-sectional area: 0.75–1.5mm^2	Communication distance ≤10m
AC power supply cable	Recommended cross-sectional area: 2.5mm^2	Outdoor-type copper-core cable

Button

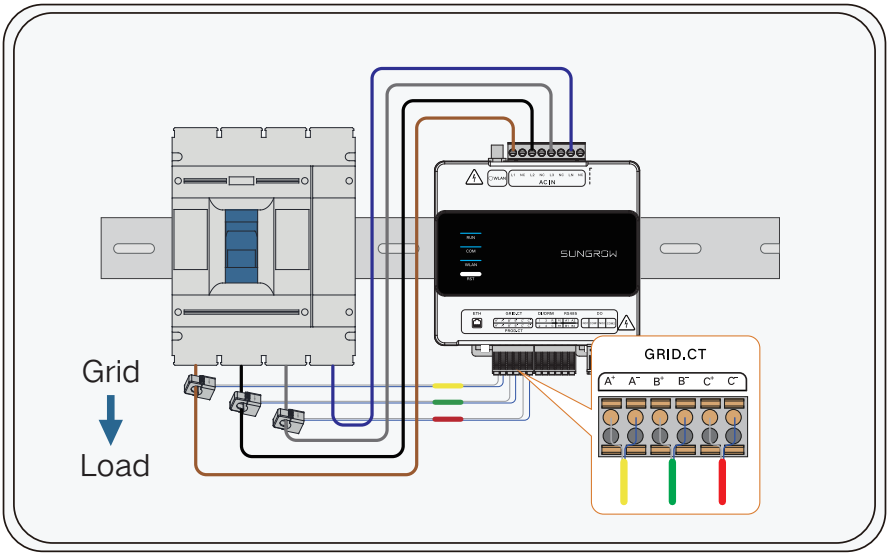
RST	Description
Short press 3 times	Turn on the AP hotspot

Press and hold for 3-10s	Restart the iHomeManager
Press and hold for over 30s	Reset to factory settings

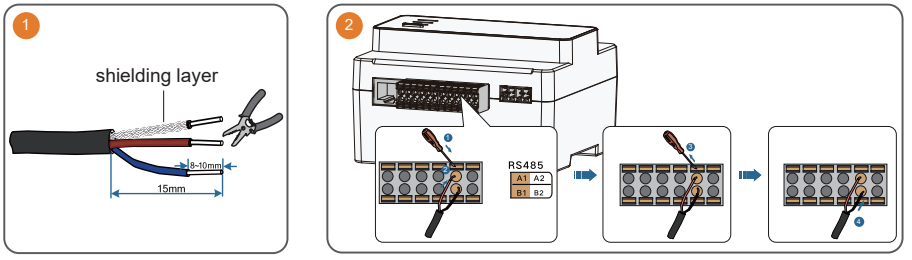
6.2 AC and GRID.CT connection



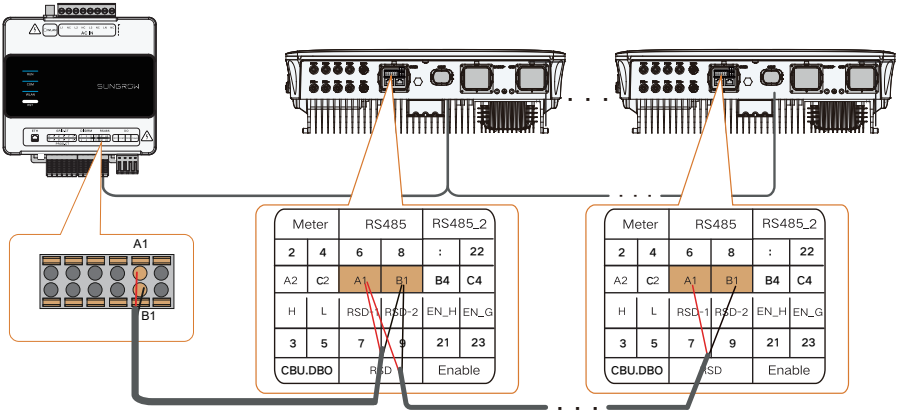
The colors of the cable wires in the figure are for reference only. Please select cables and cable wires properly according to the relevant local standards.



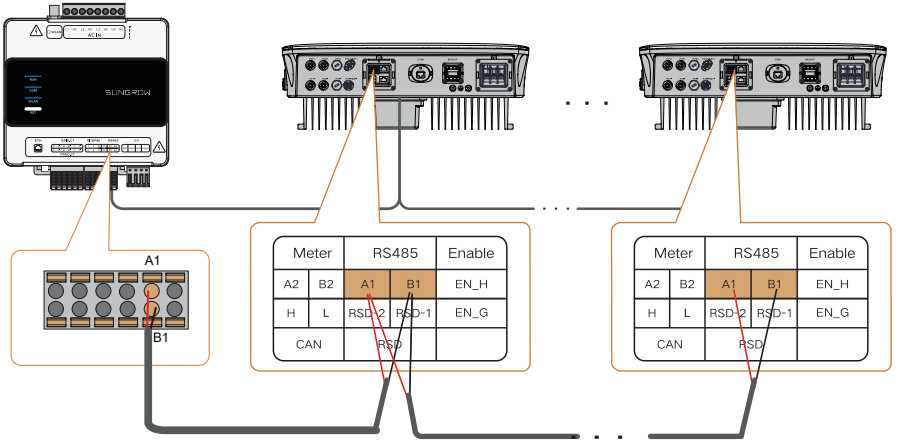
6.3 Connection to SUNGROW Inverters



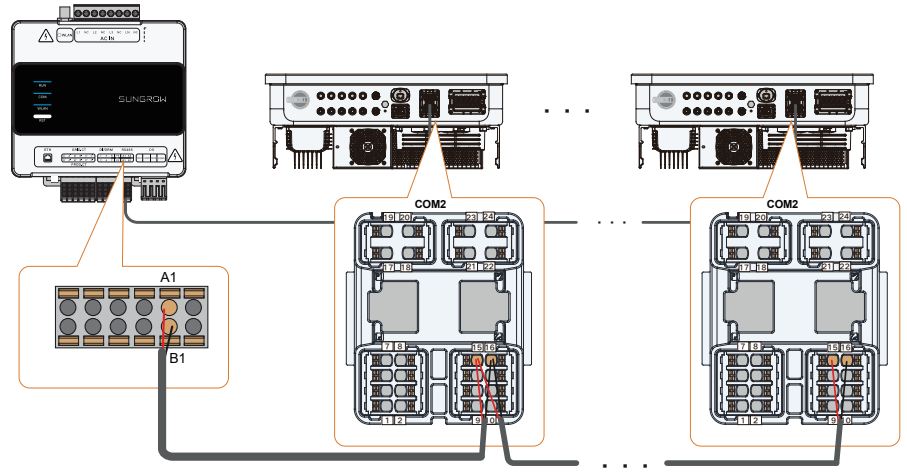
SH5.0/6.0RS



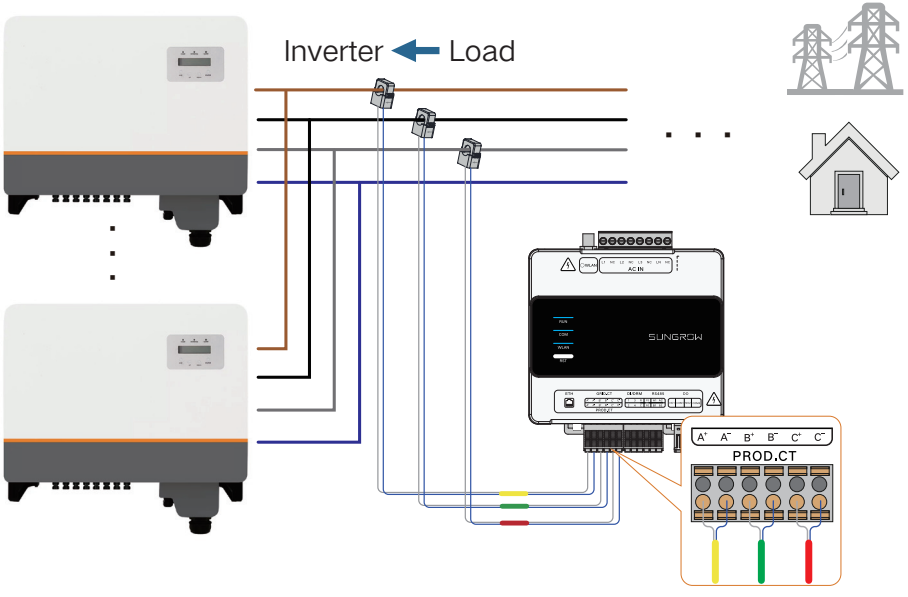
SH8.0/10RS



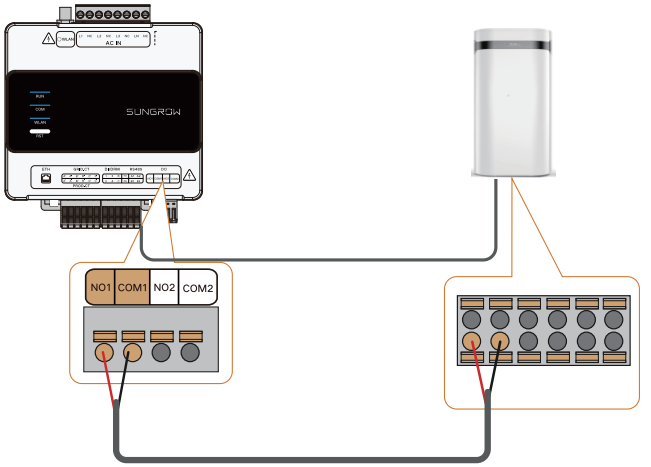
SH5-25T



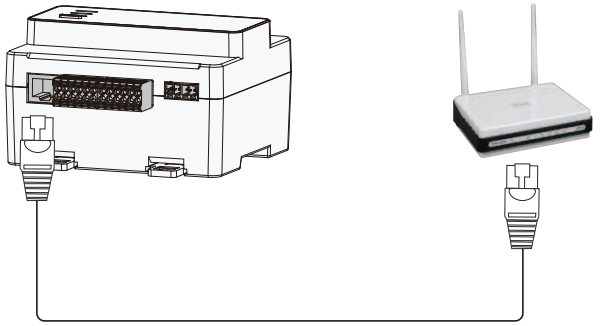
6.4 (Optional) PROD.CT Connection



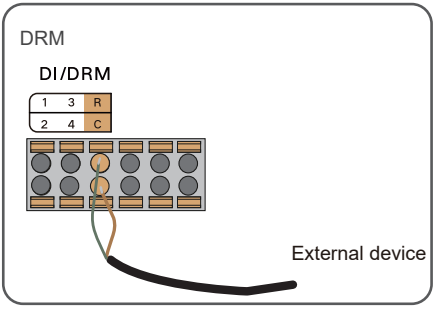
6.5 Connection to Heat Pump

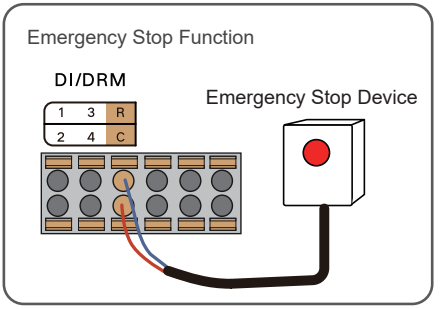


6.6 (Optional) Connection to Router

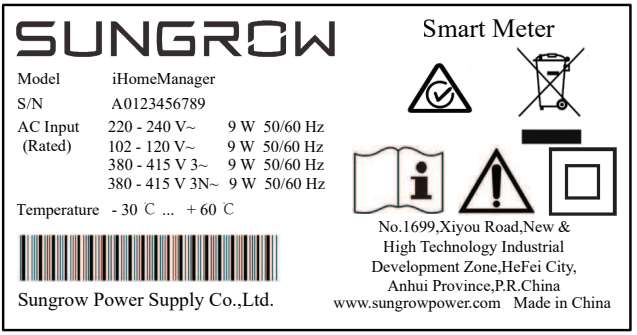


6.7 DI connection





7. Nameplate

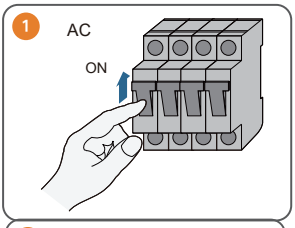


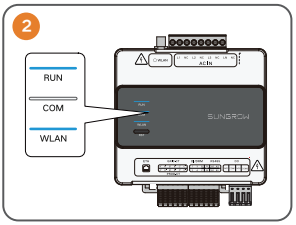
Parameter	Description
Model	Product model
S/N	Product serial number
AC Input	AC input requirements
Temperature	Operating temperature range
	Regulatory Compliance Mark
	Do not dispose of the device as household waste
	Please read through this quick installation guide
	Equipment protected throughout by reinforced insulation

8. Security Declaration

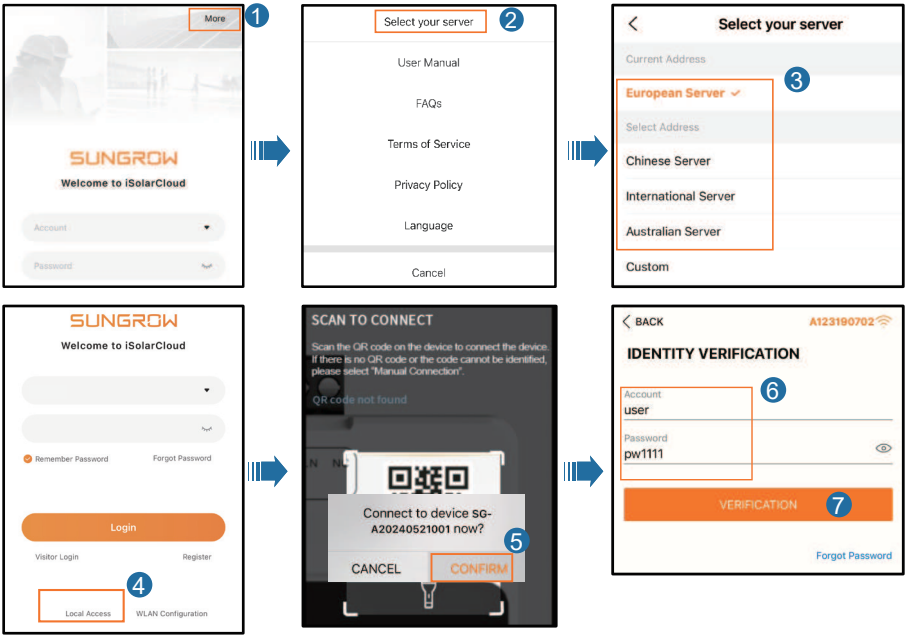
- The term of software update commitment for this product is 10 years.
- To learn more about the product network security vulnerability disclosure and handling process, you can scan the QR code below or visit https://en.sungrowpower.com/security-vulnerability-management

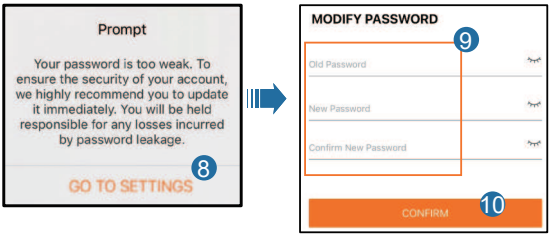
9. Commissioning





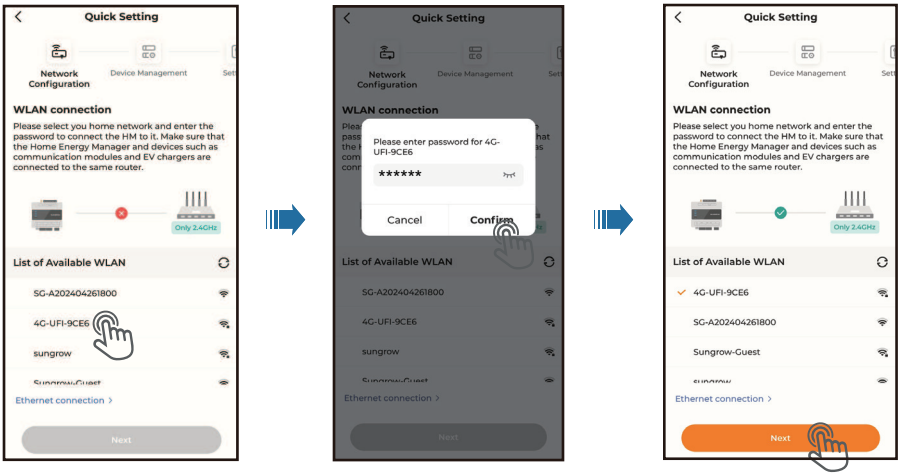
9.1 Local Access



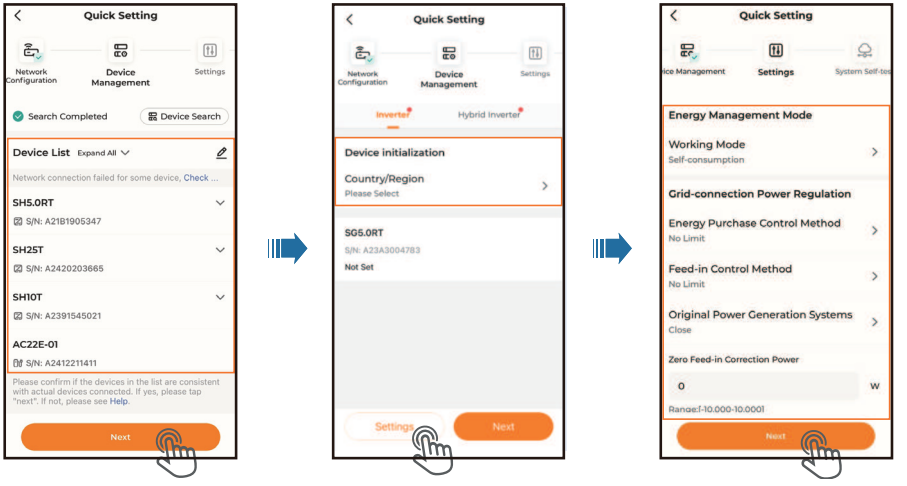


*It is recommended to go to the application store to update iSolarCloud App to the latest version.

9.2 Network Configuration

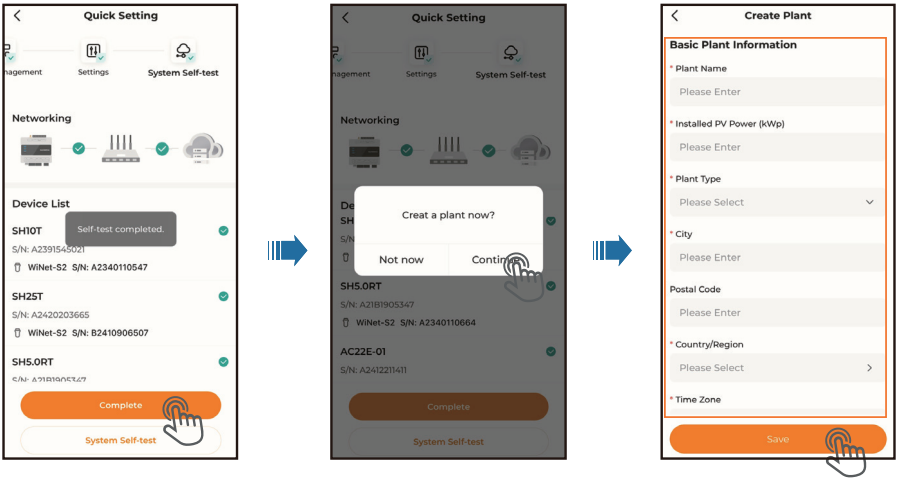


9.3 Device Management and Settings



For detailed parameter setting instructions, see “Parameter Settings” in the iHomeManager user manual. You can scan the QR code below for the manual.

9.4 System Check and Plant Creation



More information in the QR code or
at http://support.sungrowpower.com/

SUNGROW

Sungrow Power Supply Co., Ltd.

www.sungrowpower.com

M 0 H 0 1 2 9 2 0 0 - 6

QIEN M0H01292