

# QUICK INSTALLATION GUIDE

Single-phase Grid-tied PV String Inverter

CPS SCA2/3/3.6KTL-PS1/EU

CPS SCA4.6/5/6KTL-PSM1/EU

Version: 0.0

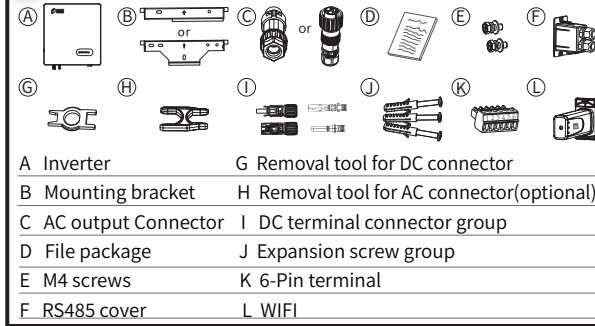
Date: 14/08/2024

SHANGHAI CHINT POWER SYSTEMS CO.,LTD

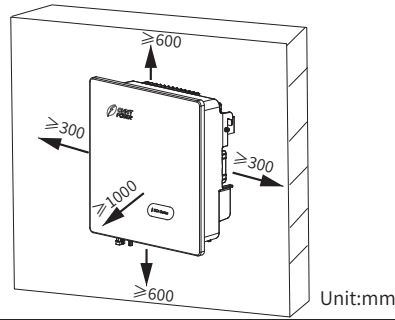
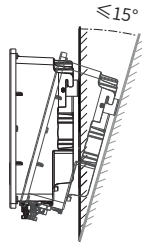
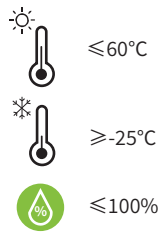
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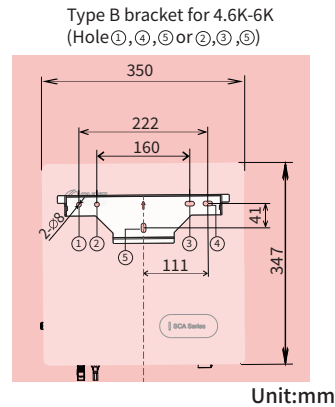
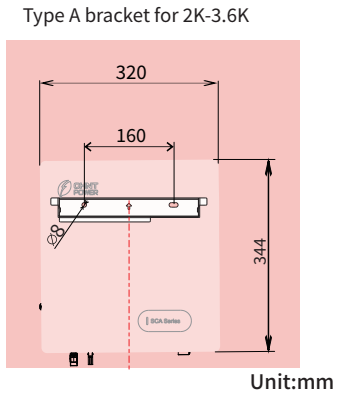
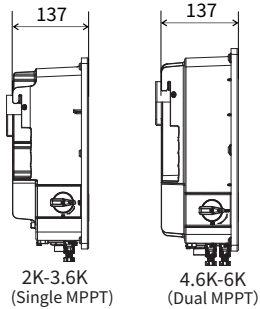
## 1 PACKAGE CONTENTS



## 2 INSTALLATION LOCATION



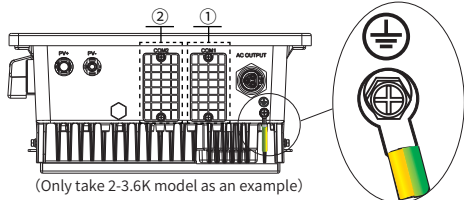
## 3 DIMENSIONS



## 5 GROUNDING



- According to regulations, the secondary protection grounding can't replace the PE terminal connection of the AC cable. Ensure that both are well grounded.
- Ensure that inverter and all cables to be installed are completely powered off during whole installation and connection. Otherwise, high voltage may result in fatal injury.



Items	Remark
Screw	M4 X 12mm; 1.2 N·m
OT Terminal	OT6-4
Green-yellow wire	S(Green-yellow wire) ≥ S(PE line of AC cable) S is the cross-sectional area.

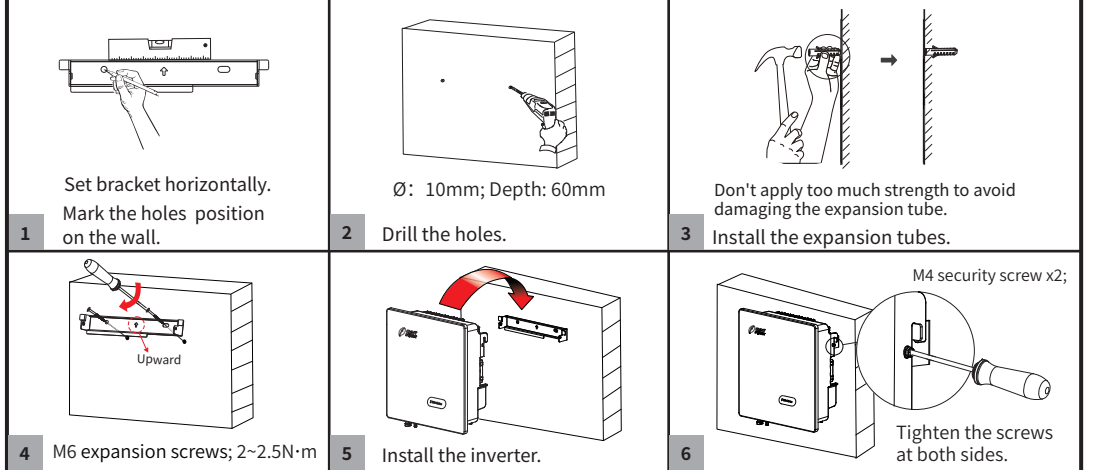
Note: ① is for WiFi/4G communication  
② is for RS485 communication (For RS485 cable connection, refer to user manual.)

## 4 INSTALLATION



- The walls must be fireproof and non-flammable materials, otherwise there is a fire risk.
- Before drilling holes, check whether there are electric power pipes or other pipes buried in the walls to avoid risks.

Note: The following steps are only illustrated by the type A bracket.



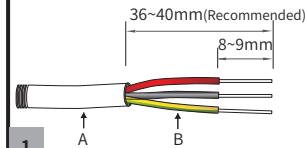
## 6 AC CONNECTION



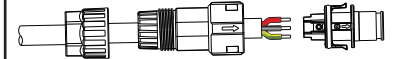
- Before connecting the AC terminal, ensure that both the AC terminal and the DC terminal are powered off and the DC SWITCH is OFF. Otherwise there is a risk of high voltage shock.

Note: There are two types of AC output connectors, specific please in kind prevail!  
Whether you use **type A** or **B**, tighten the waterproof nut to avoid loosening.

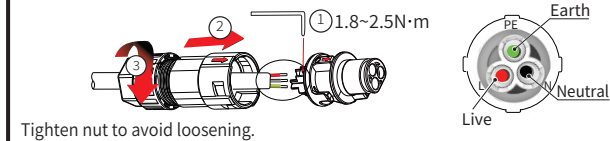
It is recommended to use outdoor dedicated cables with multiple copper cores.



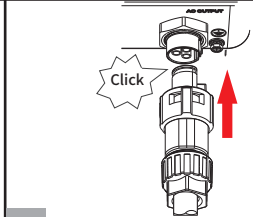
A Diameter (mm)	10-14
B Cross-section (mm <sup>2</sup> )	≤4 (Range) 4 (Recommended)



The wiring process of **type A**, are shown as below.

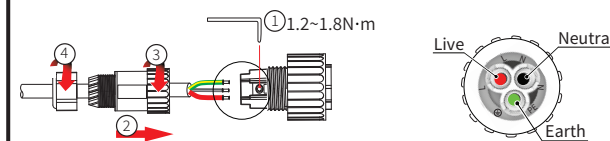


3-A Tighten three screws and ensure each screw cap does not exceed the surface.

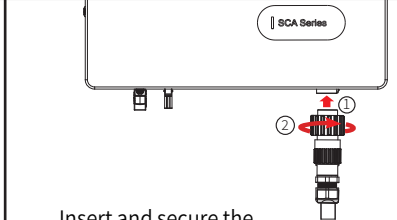


4-A Insert the AC output connector.

The wiring process of **type B**, are shown as below.



3-B Tighten three screws and ensure each screw cap does not exceed the surface.



4-B Insert and secure the AC output connector.

## 7 PV CONNECTION



1. Photovoltaic arrays exposed to sunlight will generate dangerous voltages!
2. Before connecting the DC terminal, ensure that both the AC terminal and the DC terminal are powered off and the DC SWITCH is OFF. Otherwise there is a risk of high voltage shock.

Use crimping tool to stitch.  
Red-circled area can't be crimped.

Positive connector  
Negative connector

1 Note:  
DC cable should be dedicated PV cable (suggest using 4~6mm<sup>2</sup> PV1-F cable).

2 Tighten the waterproof nuts on each connector with a tool to avoid loosening.

3 Test string voltage and confirm string polarity.

4 Ensure that the DC switch is OFF.

5 Insert the positive/negative connectors into the PV+/PV- ports until a "click" sound is heard.

## 8 RS485 CONNECTION

RS485 communication mode with multiple inverters:

- 1 Unscrew and remove the cover plate.

- 2 Connect the differential A and B signal wires of the RS485 cable from the data logger to Pin1 and Pin2 of the 6-Pin terminal respectively. If there is more than one inverter, connect Pin3 and Pin4 to Pin1 and Pin2 of another inverter.
- 3 Insert the 6-Pin terminal into the RS485 communication port.
- 4 Install the RS485 cover. Note: For power limit cable connection, please refer to inverter user manual.

## 9 STARTUP / SHUTDOWN PROCEDURE

### Inspection

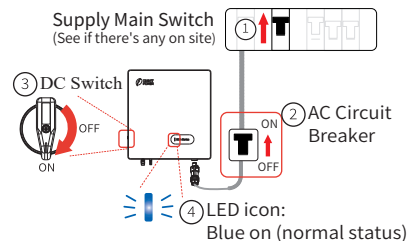
#### No. Items

- 1 The inverter is firmly installed.
- 2 There is enough heat dissipation space, no external objects or parts left on the inverter.
- 3 It is convenient for operation and maintenance.
- 4 The wiring of the system is correct and firm.
- 5 Check whether the DC and AC connections are correct with a multimeter and ensure there is no short circuit, break, or wrong connection.
- 6 Check whether the waterproof nuts of each part are tightened.
- 7 The vacant port has been sealed.
- 8 All safety labels and warning labels on the inverter are complete and without occlusion or alteration.

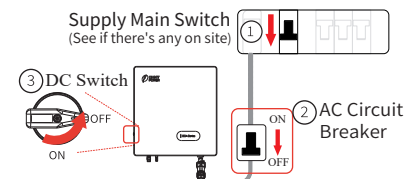


After the inverter is powered off, the remaining electricity and heat may still cause electrical shock and body burns. If need to disconnect the inverter cables, please wait at least 10 minutes before touching these parts of inverter.

### Startup Procedure



### Shutdown Procedure



## 10 BLUETOOTH CONNECTION SETTING



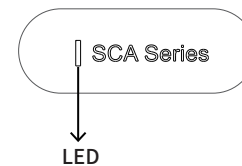
### NOTICE

After the inverter is installed and powered on, please use the Matricloud APP to connect to the mobile phone Bluetooth to calibrate the time.

1. Scan the QR code to download "Matricloud" APP.  
Note: Grant all access rights in all pop-up windows when installing the APP or setting your phone (Support Android 4.4 and IOS 11.0 system or higher version system).
  2. Install WiFi module into the COM1 port of the inverter.  
Note: If no obstacle, the maximum working linear distance of WiFi module is up to 15m. Penetration thickness: a 25cm bearing wall and two 12cm non-bearing walls.
  3. Power on the inverter. When solar array produces enough power, inverter POWER LED indicator will be lit, and the inverter will enter the self-check state in turn.
  4. Open Bluetooth function on your phone, then open the APP and operate as below.
    - 4-1. Click "Device Access" button in the bottom left corner (Fig. 1).
    - 4-2. Click "Bluetooth Connect" button (Fig. 2).
    - 4-3. Click device name "XXXXXXXX" (last 8 digits of SN on the WIFI module label) (Fig. 3).
    - 4-4. Click "More" and enter password "1111" to set "Basic Settings" such as regulation code, system time etc. Click "Settings" and enter password "1111" to read or change register parameters if necessary. If fault occurs, click red text in main interface to view fault information. Clear it and then restart (Fig. 4).
- Note: Register parameters must be modified acc. to communication protocol under guidance of engineer.



## 11 DISPLAY



LED status	Explanation
Red/Green/Blue light up in turn	1. Inverter firmware updating 2. Initial status of power-on
Blue blinks slowly (1s/time)	Standby
Blue on	Normal status
Green on	Power limited status
Red blinks slowly (1s/time)	Output side fault
Red blinks fast (0.25s/time)	Input side fault
Red on	Inverter internal fault

As the technology is constantly updated and improved, the illustrations in this document are for reference only. Contents including illustrations in this document are subject to change without notice.