Quick Installation Guide

PV Grid-Connected Inverter

SG110CX-P2

- Contents may be periodically updated or revised due to product development. The information in this guide is subject to change without notice. In no case shall this guide substitute for the user manual or related notes on the device.
- Make sure to read over, fully understand and strictly follow the detailed instructions of the user manual and other related regulations. Visit http://www.sungrowpower.com/, choose "PV Inverters" and search for the device model on the"Products" tab page to view or obtain the user manual.
- All operations can be performed only by qualified personnel, that must be trained in the installation and commissioning of the electrical system, as well as the dealing with hazards, have knowledge of the manual and of the local regulations and directives.
- Before installation, check that the package contents are intact and complete against the packing list. Contact SUNGROW or the distributor in case of any damaged or missing components.
- The cable must be intact and well insulated. Operation personnel must wear proper personal protective equipment (PPE) all the time.
- Any violation could result in personal death or injury or device damage, and will void the warranty.

Safety

Please follow the safety instructions related to the PV strings and the utility grid. Otherwise, SUNGROW shall not be held liable for any damage caused.

⚠ DANGER

Lethal voltage!
- PV strings will produce electrical power when exposed to sunlight and can cause a lethal voltage and an electric shock.
- Only qualified personnel can perform the wiring of the PV panels.
- All electrical connections must be in accordance with local and national standards.
- Only with the permission of the utility grid, the inverter can be connected to the utility grid.
- Do not open the enclosure at any time. Unauthorized opening will void guarantee and warranty claims and in most cases terminate the operating license.
- When the enclosure lid is removed, live components can be touched which can result in death or serious injury due to electric shock.

⚠ WARNING

All the warning labels and nameplate on the inverter body must be clearly visible and not be removed, covered or pasted.

⚠ CAUTION

Risk of burns due to hot components!

Do not touch any hot parts (such as heat sinks) during operation. Only the DC switch can safely be touched at any time.

⚠ NOTICE

Only qualified personnel can perform the country setting.

Unauthorized alteration of the country setting may cause a breach of the type-certificate marking.

Security Declaration

- To learn more about the product network security vulnerability response process and vulnerability disclosure, please scan the QR code below or visit the following website:
https://en.sungrowpower.com/security-vulnerability-management

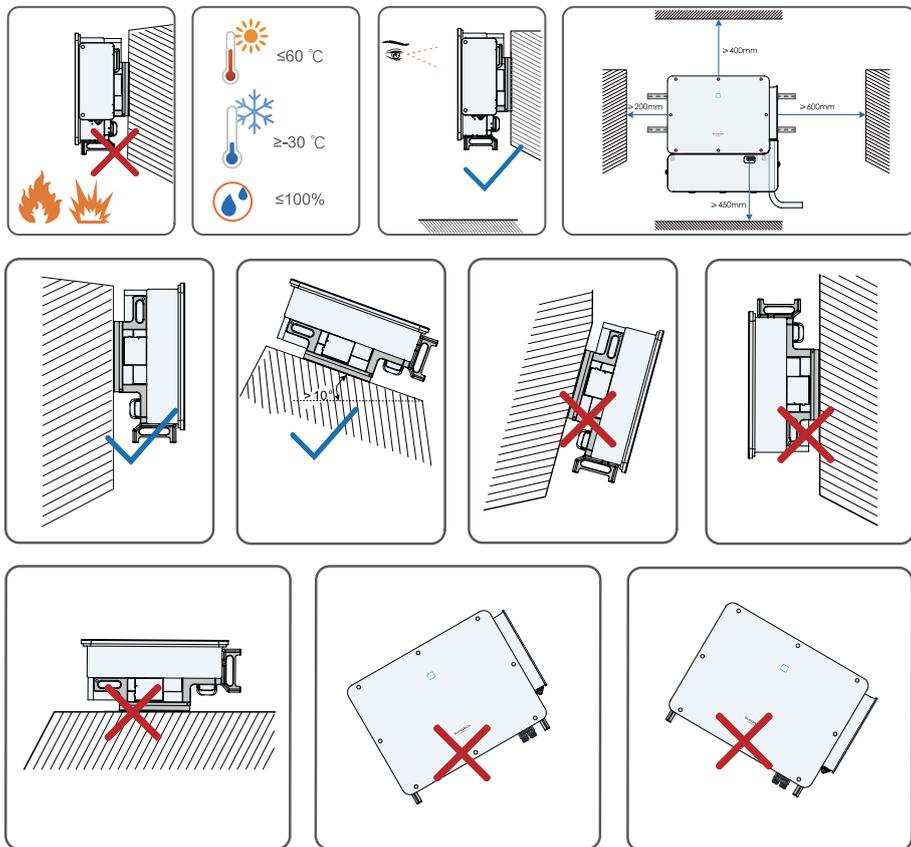The warning label on the inverter body are as follows.

⚠	Disconnect the inverter from all the external power sources before service!	⚠	There is a danger from a hot surface that may exceed 60°C.
⚡	Danger to life due to high voltages! Only qualified personnel can open and service the inverter.	📖	Check the user manual before service!
⚡	Do not touch live parts until 5 minutes after disconnection from the power sources.	🗑	Do not dispose of the inverter together with household waste.
UKCA	UKCA mark of conformity.	CE	CE mark of conformity. EU/EEA Importer.
RCM	RCM mark of conformity.	⏚	Additional grounding point.
✖	The inverter does not have a transformer.	C	CMim mark of conformity.
TÜV Rheinland CERTIFIED	TÜV mark of conformity.	RoHS	RoHS labeling The product complies with the requirements of the applicable EU directives.

1× 1× 4× 2× 4×

M4×10 M10

2× 24× 1× 1× 1× 2× 1× 1×

M6×65 M6×20
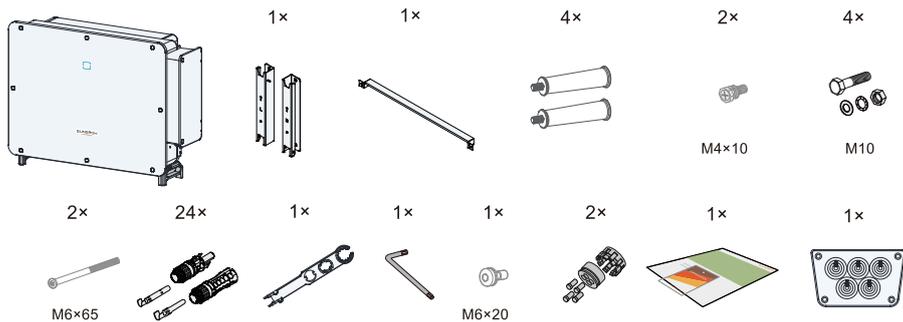
The images shown here are for reference. The actual product and quantity are based on delivery.
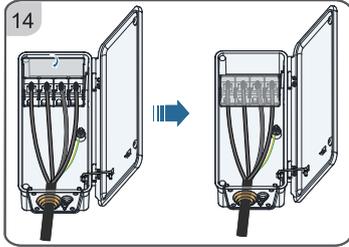
Mounting location

≤60 ℃

≥-30 ℃

≤100%

≥400mm

≥200mm

≥600mm

≥450mm

≥10°

Dimenson

Mounting

It is necessary to fix the left and right sides of the inverter with screws. Otherwise, the inverter may be unstable.

PE Connection

Panel 1: L = E + (2~3)mm, E
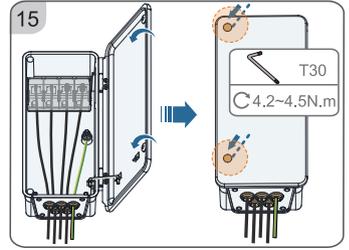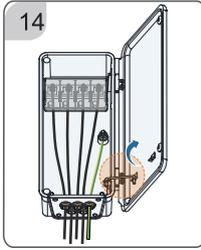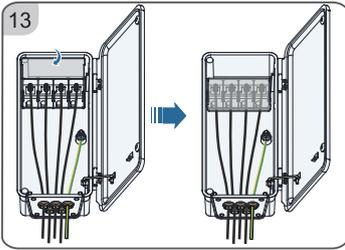
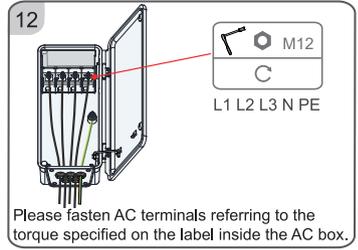Panel 2:

Panel 3:

Panel 4:

Panel 5: M8, 7~9N.m
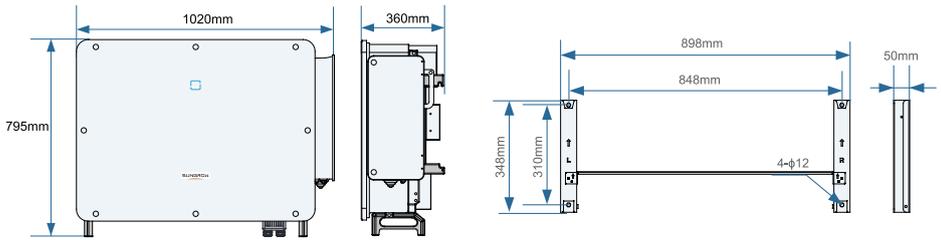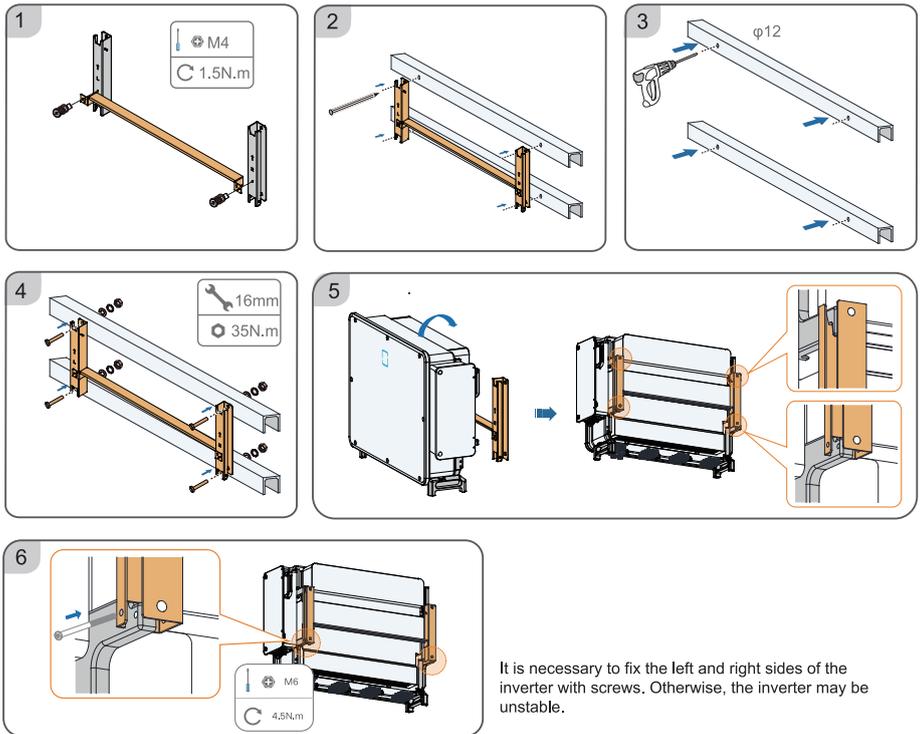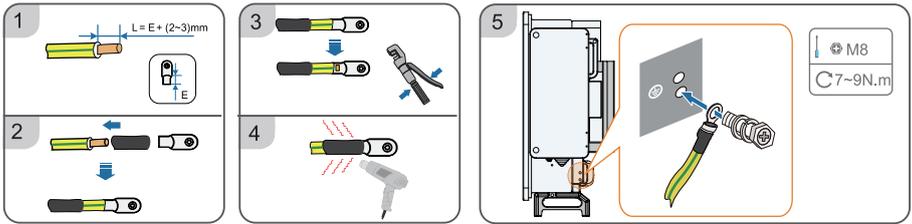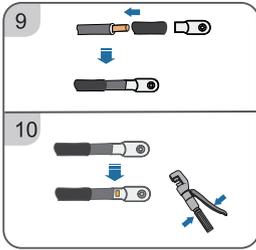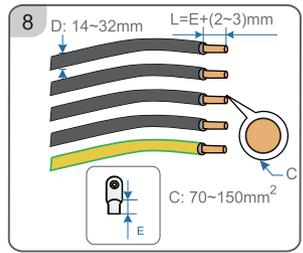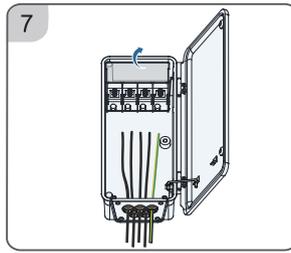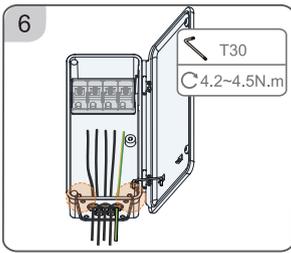
AC Connection (For a multi-core cable)

The description is given by using five-core cable as an example.

Panel 1: OFF

Panel 2:

Panel 3:

Panel 4: 60mm, >50mm, >40mm, >30mm

Panel 5: 50mm

Panel 6: T30, 4.2~4.5N.m

Panel 7:

Panel 8: L=E+(2~3)mm, D: 30~60mm, L1, L2, L3, N, PE, E, C, C: 70~150mm²

9

10

11

12

13

L1 L2 L3 N PE

M12

Please fasten AC terminals referring to the torque specified on the label inside the AC box.

14

15

16

T30

4.2~4.5N.m
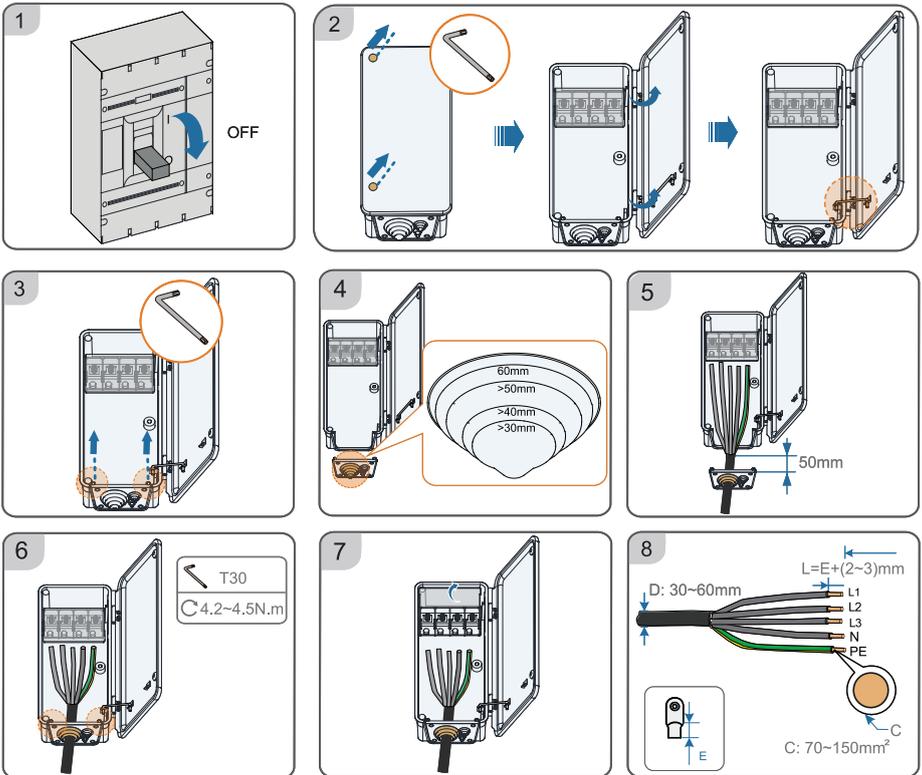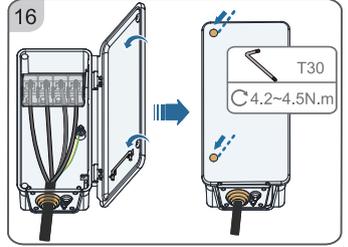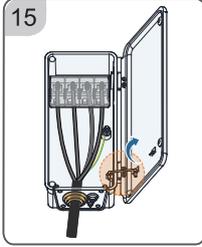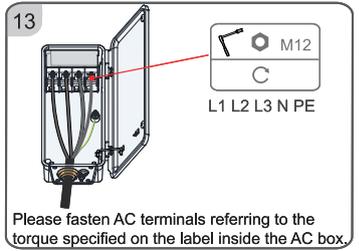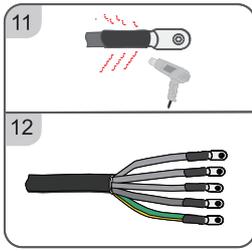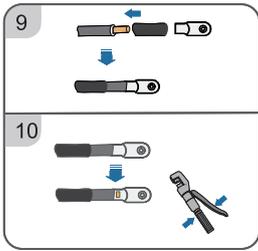
AC Connection (For a single-core cable)

1

OFF

2

3

4

>32mm
>24mm
>14mm

5

6

T30
$4.2~4.5N.m$

7

8 D: 14~32mm   L=E+(2~3)mm

C
C: 70~150mm^2
E

9

10

11

12

M12

L1 L2 L3 N PE

Please fasten AC terminals referring to the torque specified on the label inside the AC box.

13

14

15

T30
$4.2~4.5N.m$

DC Connection

DC=

+

−

1   D: 4.7~6.4mm

8~10mm

4~6mm^2

2

3

4

Click

5

6

ON

OFF

7

880.0

≤ 1100 V

8

PV+

PV-

9

PV+

PV-

+

−

Click
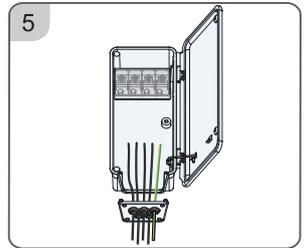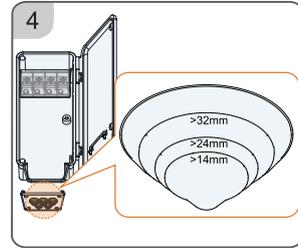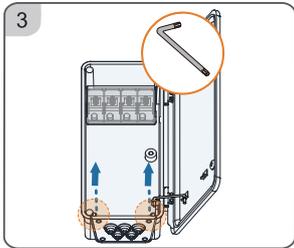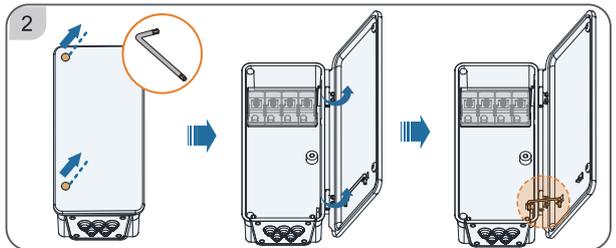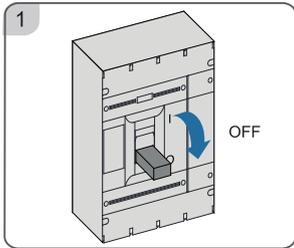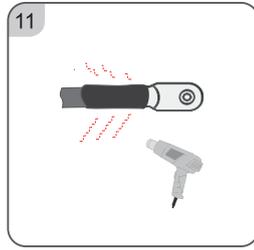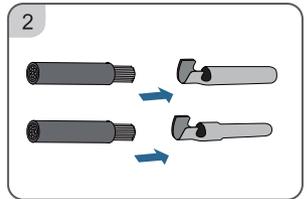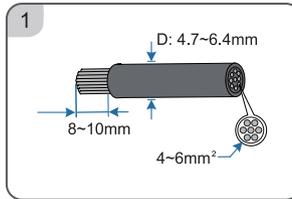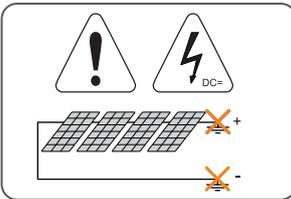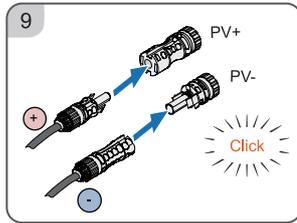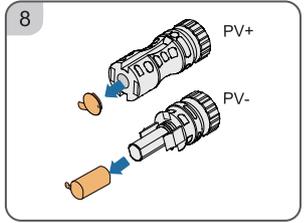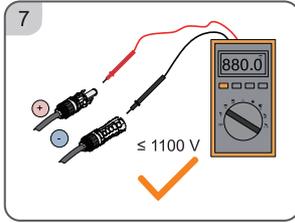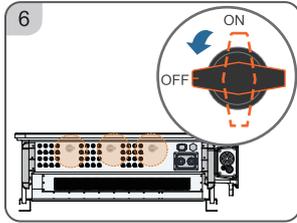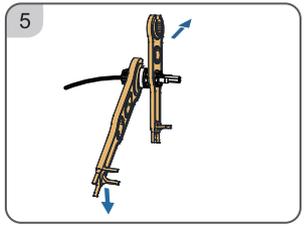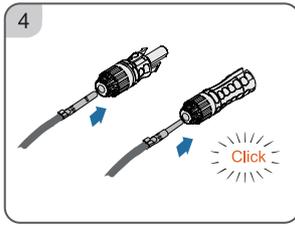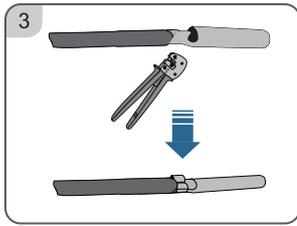
EyeM4 Connection(optional)
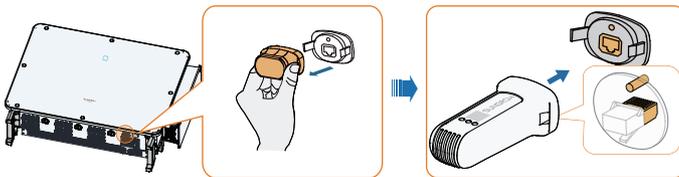
*The image shown here is for reference only. The actual product you receive may differ.

RS485

RS485_1

RS485_2/3

A2/A3 — B2/B3   RJ45   RJ45   A1 A1 B1 B1

DI/ DO

DRM

RJ45

RSD STOP   LOCAL STOP   ALARM

DIN PGND   DI DI PGND PGND   COM NC NO
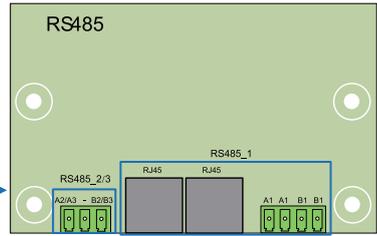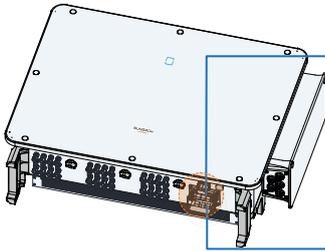
Terminal Block（RS485 / Dry Contact Connection)

1

2

a b c

4.5~6mm	6~12mm	12~18mm
c	a+b	b

3

7 mm

20 mm

0.1~1.5mm²

4

RS485

⊜ M2

↻ 0.2N.m

Dry Contact
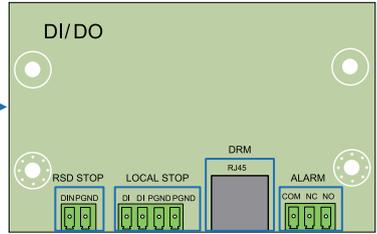
DI terminal (emergency stop dry contact)

DO terminal (fault output dry contact)

Method 1: for COM＆NO   Method 2: for COM＆NC

5

RS485

A1 A1 B1 B1 RS485_1

Dry Contact

DI terminal (emergency stop dry contact)

DI DI PGND PGND LOCAL STOP

DO terminal (fault output dry contact)

COM NC NO ALARM

COM NC NO ALARM

Method 1
normally open contact (COM＆NO)

Method 2
normally closed contact (COM＆NC)

RJ45 (RS485 / DRM Connection)

4.5~6mm	6~12mm	12~18mm
c	a+b	b

RJ45 plug

1——8

TIA/EIA 568A

1 2 3 4 5 6 7 8

TIA/EIA 568B

1 2 3 4 5 6 7 8

Pin 3 and Pin 6 are for communication on connection.

RS485

DRM

33mm

5~6N.m

Power on

1

ON

2

ON

OFF

3

LED Indicator: Blue Slow blink

4

iSolarClud App

5

SUNGROW
Welcome to iSolarCloud

Account

Password

Remember Password   Forgot Password

LOGIN

Visitor Login   Register

Local Access | WLAN Configuration

BACK

SCAN TO CONNECT

Scan the QR code on the device to connect the device. If there is no QR code or the code cannot be identified, please select "Manual connection".

QR code not found

MANUAL CONNECTION

6

BACK

IDENTITY VERIFICATION

hected

Account   "user"
user

Password

Remember Me   "pw1111"

VERIFICATION

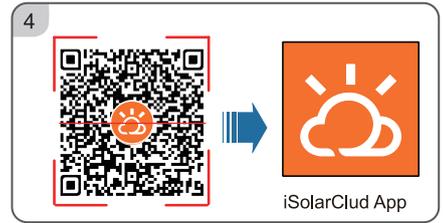Scan the QR code to access the iSolarCloud App User Manual and complete software commissioning by referring to the Device Commissioning section.

LED Indicator

LED color	State	Definition
	ON	The device is connected to the grid and operating normally.
	Fast blink (Period: 0.2s)	The Bluetooth communication is connected and there is data communication. No system fault occurs.
	Slow blink (Period: 2s)	The device is in standby or startup state (not feeding power into the grid).
	Slow blink once, fast blink three times	The inverter is performing PID recovery.
	ON	A fault occurs and the device cannot connect to the grid.
	Blink	The Bluetooth connection is established, data communication in process, and a system fault occurs.
	OFF	Both the AC and DC sides are powered down.

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 0 1 8 9 0 0 - 6