SUNGROW SG10KTL-MT PV Grid-Connected Inverter Installation Guide

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1. 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.
2. 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.
3. 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.

4. 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.
5. The cable must be intact and well insulated. Operation personnel must wear proper personal protective equipment (PPE) all the time.
6. Any violation could result in personal death or injury or device damage, and will void the warranty.

Contents

Safety

The inverter has been designed and tested strictly according to international safety regulations. Read all safety instructions carefully prior to any work and observe them at all times when working on or with the inverter. Incorrect operation or work may cause:

- injury or death to the operator or a third party; or
- damage to the inverter and property safety of the operator or a third party.

Please follow the safety instructions related to the PV strings and the utility grid.

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.

NOTICE Lethal voltages and danger to life due to electric shock!

- 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.

The warning label on the inverter body are as follows.

 Disconnect the inverter from all the external power sources before service!
 Do not touch live parts until 10 minutes after disconnection from the power sources.
 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.

DANGER

Danger to life from electric shocks due to live voltage

- 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. Danger to life from electric shock due to damaged inverter
- Only operate the inverter when it is technically faultless and in a safe state.
- Operating a damaged inverter can lead to hazardous situations that can result in death or serious injuries due to electric shock.

WARNING

Risk of inverter damage or personal injury

- Do not pull out the PV connectors and AC connector when the inverter is running. Disconnect the AC circuit breaker and set the DC load-break switch of the inverter to OFF. Wait 10 minutes for the internal capacitors to discharge. Verify that there is no voltage or current before pulling any connector.

WARNING All the warning labels and nameplate on the inverter body:

- must be clearly visible; and
- must not be removed, covered or pasted.

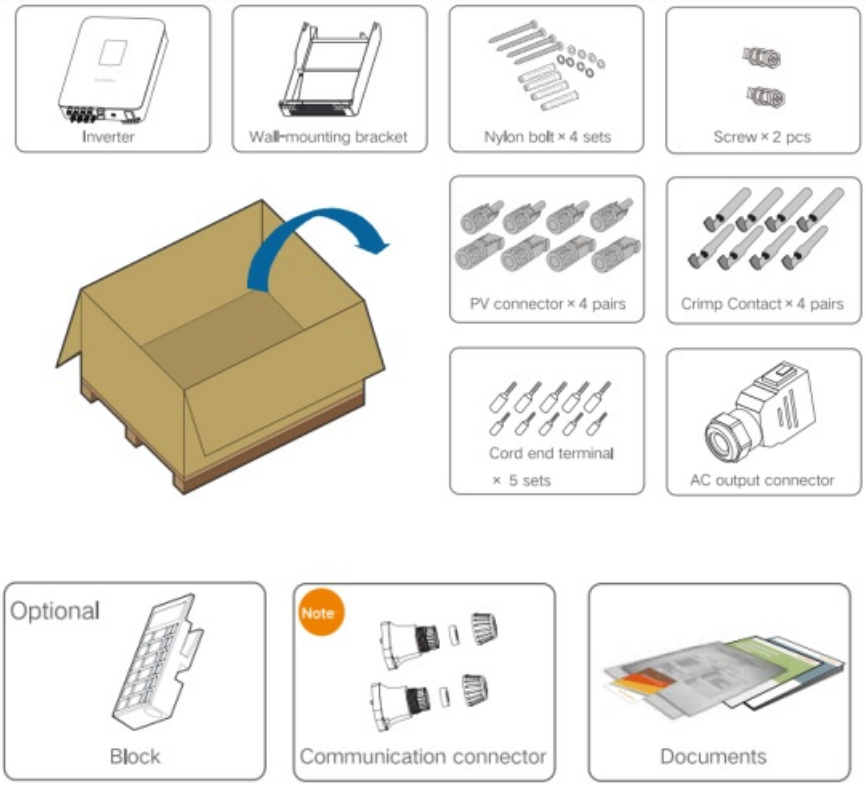
CAUTION Risk of burns due to hot components!

- 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. Risk of inverter damage due to electrostatic discharge (ESD). By touching the electronic components, you may damage the inverter. For inverter handling, be sure to:

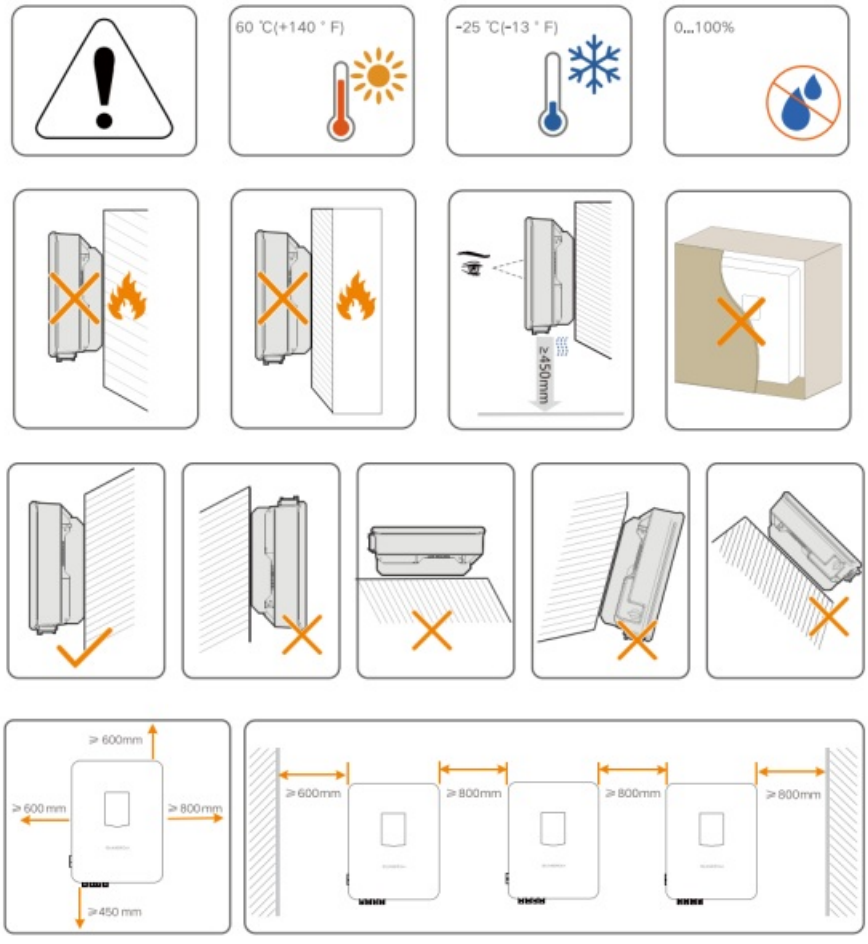
- avoid any unnecessary touching; and
- wear a grounding wristband before touching any connectors.

Scope of Delivery

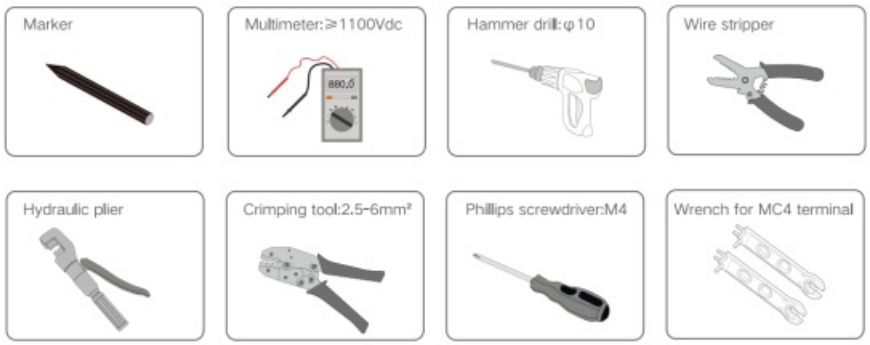


One set of communication connector is optional.

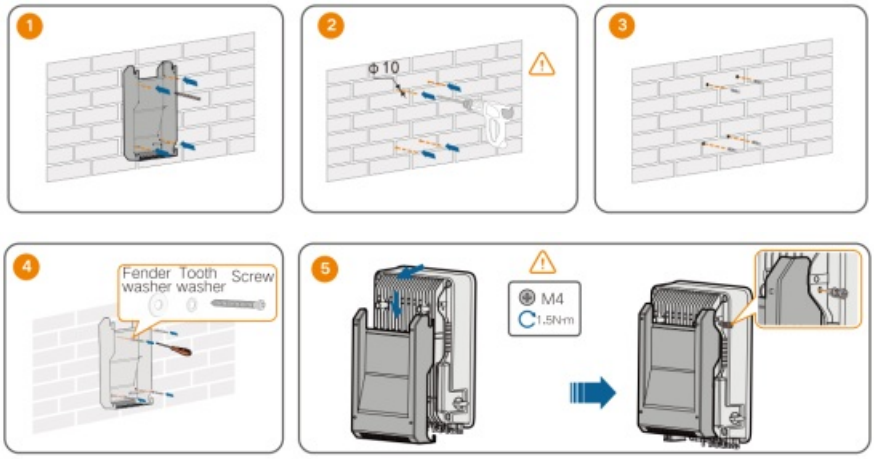
Mounting location



Installation Tools

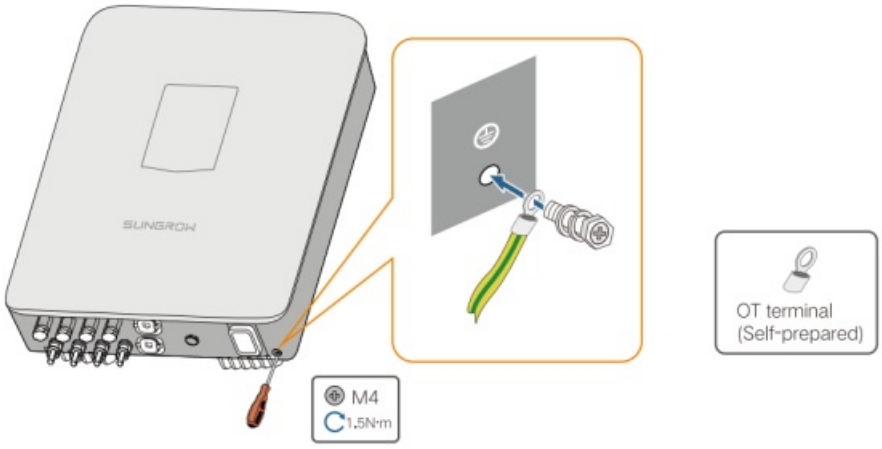


Mounting



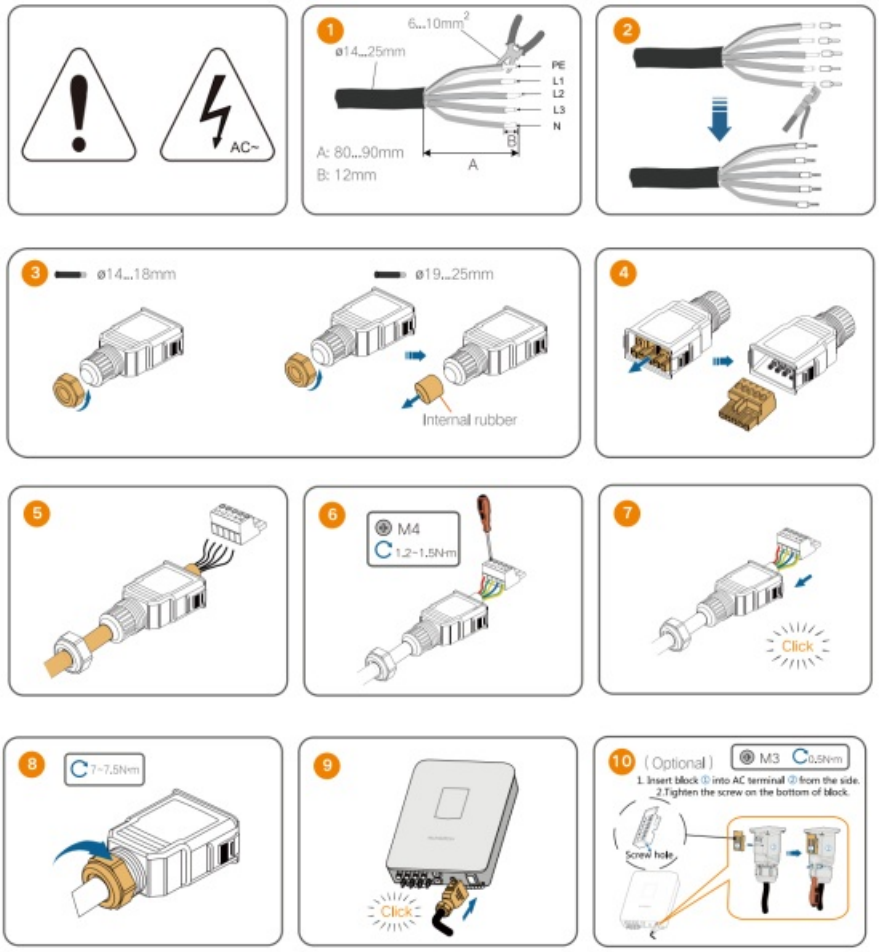
USe appropriate mounting hardware for wall type.

PE

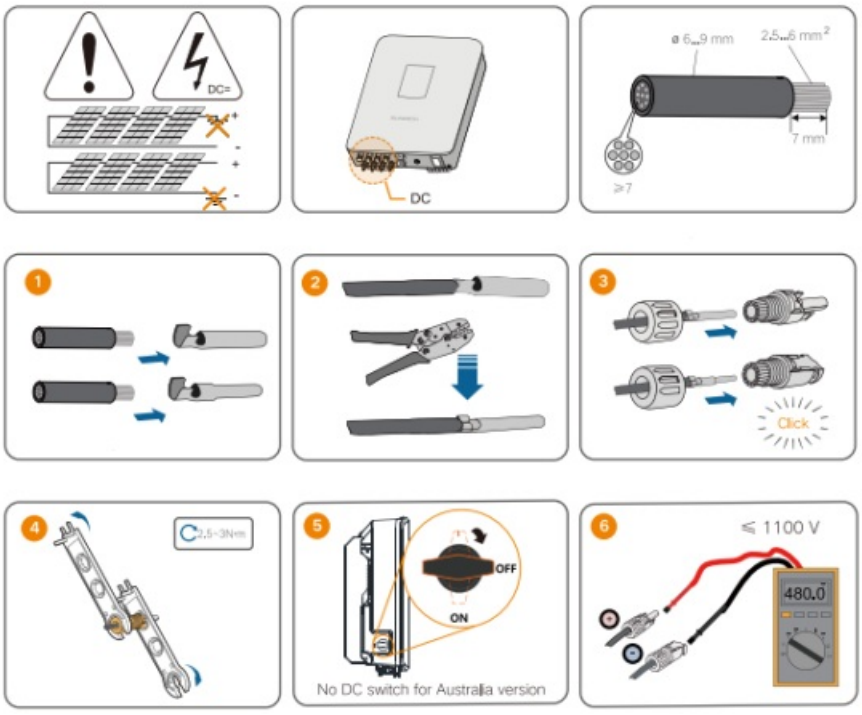


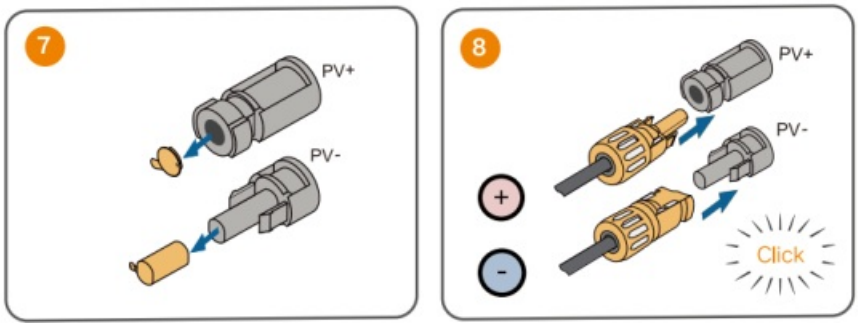
The cross sectional area of the cable shall be the sane with that of the AC cable.

AC


AC~
6...10mm²
ø14...25mm
PE
L1
L2
L3
N
A: 80...90mm
B: 12mm
A
B
ø14...18mm
ø19...25mm
Internal rubber
M4
1.2~1.5N·m
Click
7~7.5N·m
Click
(Optional)
M3
0.5N·m
1. Insert block ① into AC terminal ② from the side.
2.Tighten the screw on the bottom of block.
Screw hole

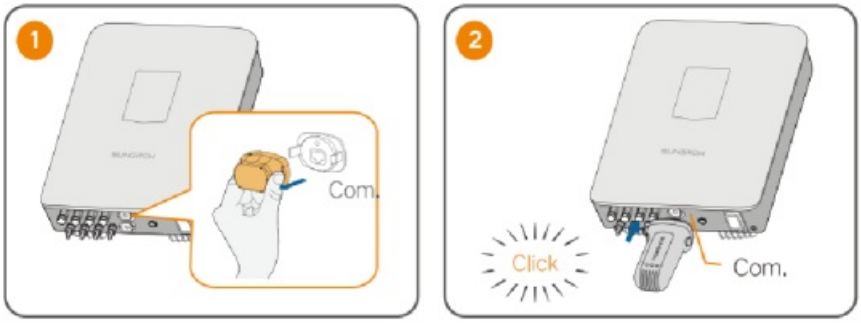
DC


DC~
DC
ø 6...9 mm
2.5...6 mm²
7 mm
≥7
Click
2.5~3N·m
OFF
ON
No DC switch for Australia version
≤ 1100 V
480.0

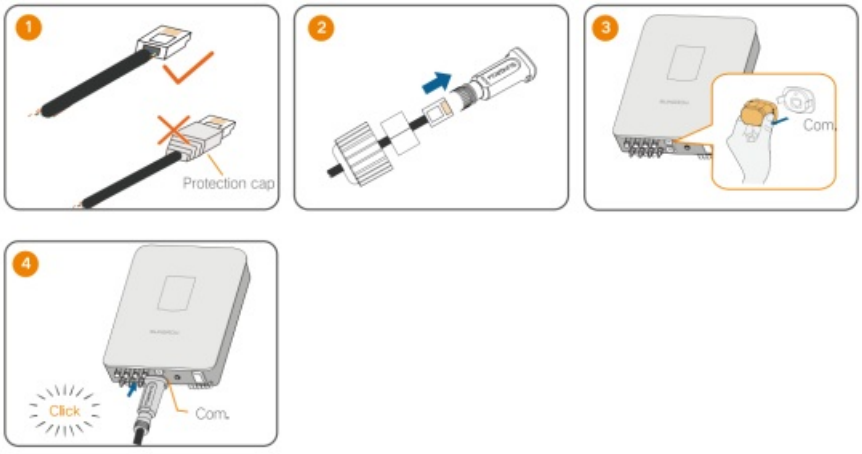


WLAN

Optional

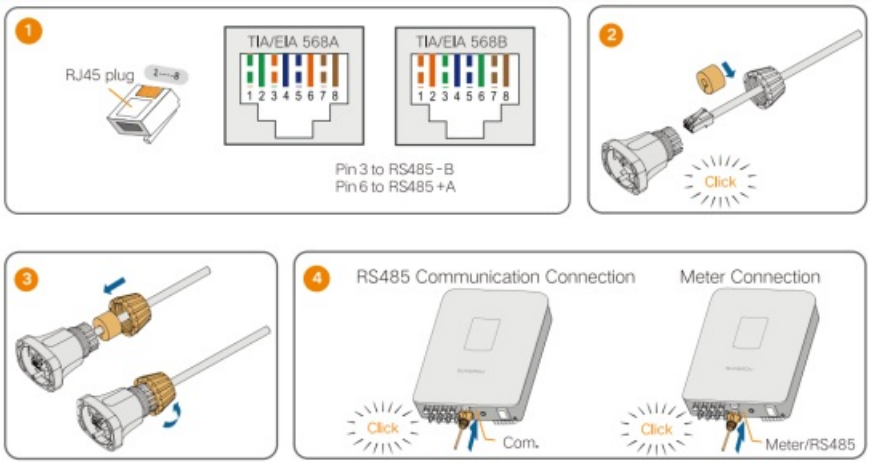


Ethernet E Net

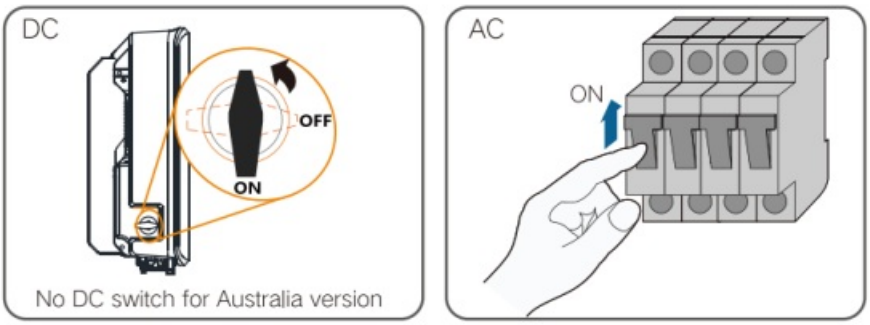


RS485 communication connection/RS485

Meter Connection



Power On



LED indicator panel

LED indicator	LED color	LED state	Definition
Bluetooth	Blue	ON	Bluetooth connected, without data exchange
		Flashing	Bluetooth connected, with data exchange
		OFF	No device connected via Bluetooth
Communication	Blue	Flashing	Communication cable/module connected, with data exchange
		OFF	Communication cable/module connected, without data exchange
Fault/PID	Red	ON	Fault occurs (feed-in operation interrupted)
		Flashing	Fault restored
	Green	ON	PID function enabled
		Flashing	PID function exception
	-	OFF	No alarms or faults,PID function disabled
Earth impedance abnormal ISO	Red	ON	Earthing short circuit (feed-in operation interrupted)
		OFF	No faults
Normal operation	Green	ON	Normal feed-in operation
		Flashing	Standby or startup state
		OFF	Powered off or fault occurs

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

Documents / Resources

	SUNGROW SG10KTL-MT PV Grid-Connected Inverter [pdf] Installation Guide SG10KTL-MT PV Grid-Connected Inverter, SG10KTL-MT, PV Grid-Connected Inverter