

Quick Installation Guide

AC Charger

AC007UK-01 / AC007UK-01 L1



- The contents of the document will be periodically updated or revised due to the product development. It is probably that there are changes of document in the subsequent edition. Under no circumstances can this document replace the user manual and the safety instructions on the product.
- Please read the user manual and relevant standards and specifications carefully before performing any operation. You can get the information by logging in Sungrow support platform via <http://support.sungrowpower.com/> or scanning the QR code on the side of the product or on the back cover of the quick installation instruction.
- All operations shall only be performed by professional personnel. Professional personnel must be trained specially, read this instruction thoroughly, master the safety instructions related to operation and be familiar with the local standards and safety regulations of electrical system.
- Before installing the equipment, check whether the goods are complete and consistent with the order, and whether there is obvious damage according to the packing List. Contact the shipping company or SUNGROW directly in case of any damage or incompleteness.
- Cables used for the charger must be intact and well insulated. Use insulation tools and wear personal protective equipment.
- Violation of any of the above requirements may cause casualties or equipment damage.

Safety Statement

Failure to comply with the requirements of this document and the user manual may cause casualties or equipment damage, and Sungrow shall not assume any liability.

DANGER

High voltages are present during operation and could cause electrical shock, resulting in death, serious personal injury, or property damage.
Non-professional personnel shall not disassemble the components.

CAUTION

Keep the charger away from flammable and explosive substances. Store it in a dry, clean, and well-ventilated place, free from harmful gases. Do not store it near the corrosive objects.

NOTICE

- During transport, the charger shall be securely packed and marked in the loading direction in a wooden box, and the charger shall not be stored upside down.
- During transport, tighten the equipment to avoid violent shaking and bumps that damage the package.
- After the arrival of goods, check for transport damage and, if any, contact the shipping company or us.
- Check if the devices inside the package are the same as that of the delivery list.

The symbols on the charger 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.
 Read the user manual before maintenance!	 Do not dispose of the inverter together with household waste.
 Danger to life due to high voltages! Only qualified personnel can open and maintain the inverter.	 UKCA mark of conformity.
 RoHS labeling. The product complies with the requirements of the applicable EU directives.	

EU Declaration of Conformity

within the scope of the EU directives:



- Low Voltage Directive 2014/35/EU (LVD)
- Electromagnetic compatibility Directive 2014/30/EU (EMC)
- Radio Equipment Directive 2014/53/EU (RED)
- The restriction of the use of certain hazardous substances (RoHS) in electrical and electronic equipment Directive 2011/65/EU and Commission Delegated Directive (EU)2015/863

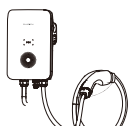
SUNGROW confirms here with that the products described in this document are in compliance with the fundamental requirements and other relevant provisions of the above-mentioned directives. The entire EU Declaration of Conformity can be found at support.sungrowpower.com.

Radio data

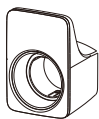
Radio Technology	WIFI	RFID
Radio spectrum	802.11b/g/n 2412~2472MHz	13.56MHz
Maximum transmission power	19.5 dBm	20 dBμA/m

*Technical parameters listed above apply to EU countries only.

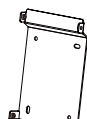
Scope of delivery



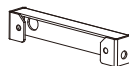
Charger×1



Socket-out×1



Backplate ×1



Upper hanging plate×1



Lower hanging plate×2



Mounting pole×1
(optional)



Combination screw×4
(for wall-mounted installation)



Expansion screw×7



Combination screw×11
(for pole-mounted installation)



Wire end ferrule×1~2



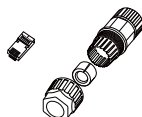
L-shaped wrench×1



Countersunk screw×6



or



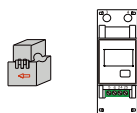
RJ45 screw connector×1



RFID-Card×2

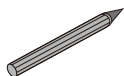


Documents



DDSU666 Smart Energy Meter×1
(optional)

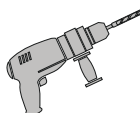
Tools



Marker



Wire stripper



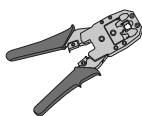
Hammer drill: $\Phi 6/\Phi 12$



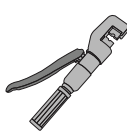
Phillips screwdriver:
M3,M4,M5



Heat gun



RJ45 crimping tool

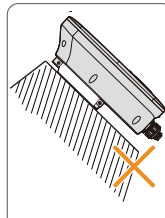
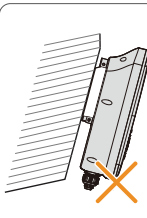
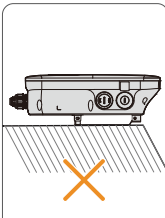
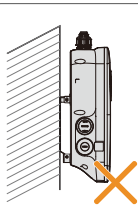
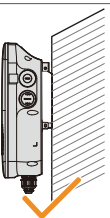
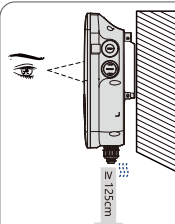


Hydraulic pliers: 2,5-6mm²

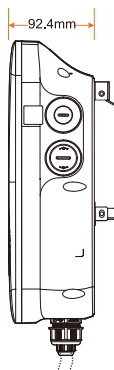
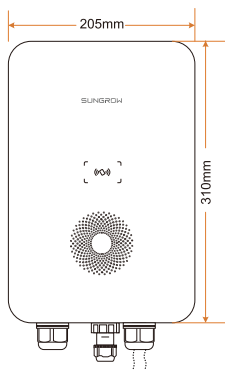


Adjustable spanner

Mounting place



Dimensions and weight



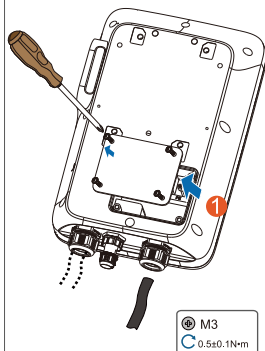
Cable connection

AC Cable connection

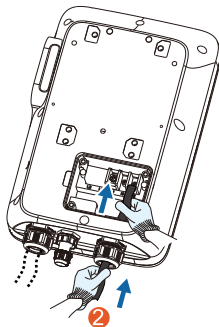
Note: cable shall be connected before the charger is installed. Cable cross section: 3×6 mm

2

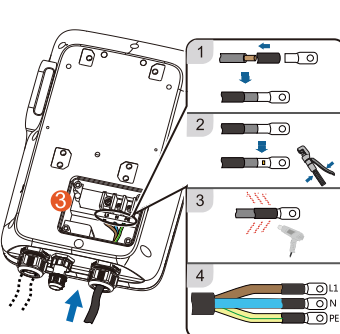
① Remove the back cover.



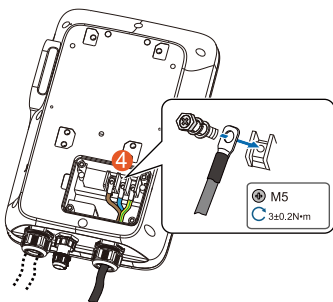
② Thread.



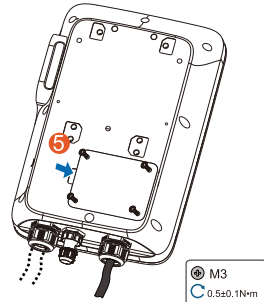
③ Crimp the terminal. (OT2.5-5)



④ Connect the cable.



⑤ Install the back cover.



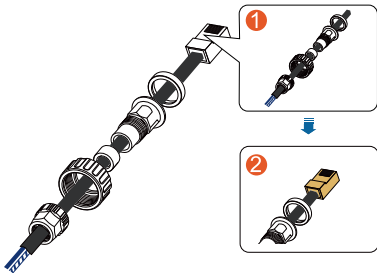
RS485 Communication Connection

Note: The RS485 communication cable (Ethernet cable) is not included in the scope of delivery and should be prepared separately according to actual needs.

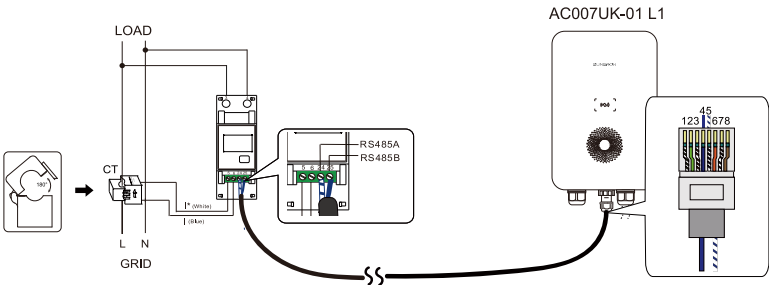
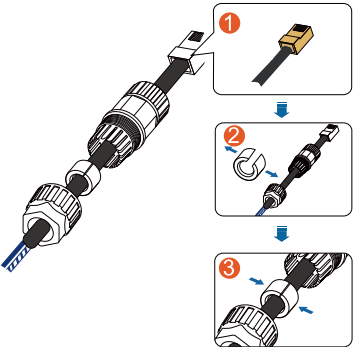
Note: Ensure that the blue wire and the blue-white wire is correctly crimped. The blue line (PIN4) connects to 485B, and the blue-white line (PIN5) connects to 485A.

Note: You will receive one of the following two RJ45 terminal components, please refer to the actual products received.

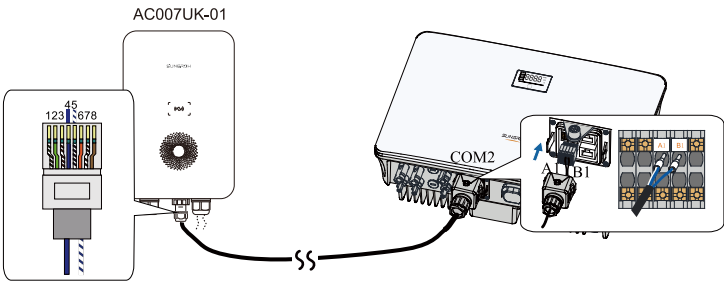
RJ45 terminal components (A)



RJ45 terminal components (B)



Connect to a Smart Energy Meter.

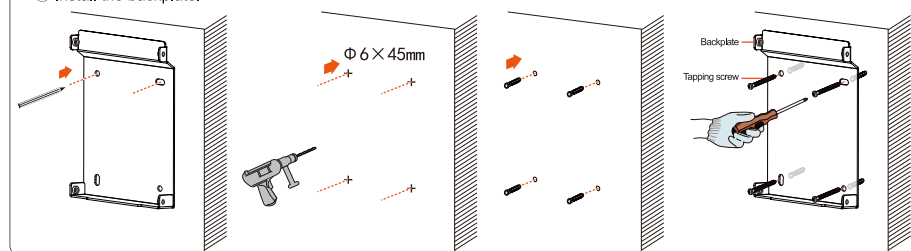


Connect to an inverter(SHRS).

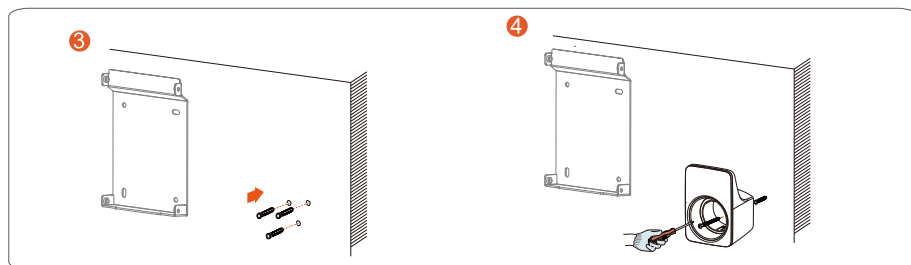
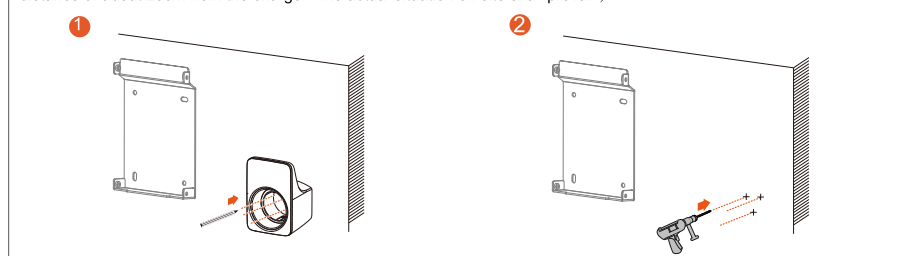
Wall-mounted charger installation

Before drilling, avoid the water and electricity wiring in the wall to prevent hazards. The drill size is $\Phi 6\text{mm}$ and the drilling depth is about 45mm. The bearing capacity of the installation carrier shall be at least 4.5 times that of the charger!

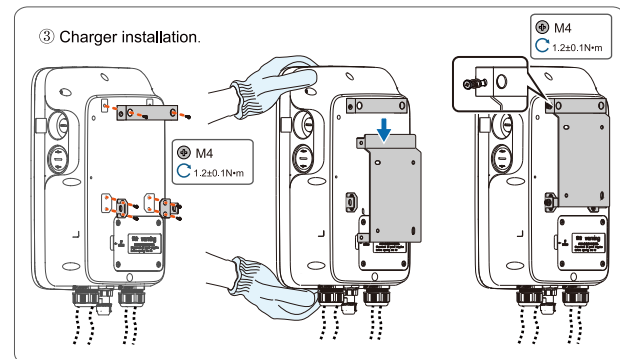
① Install the backplate.



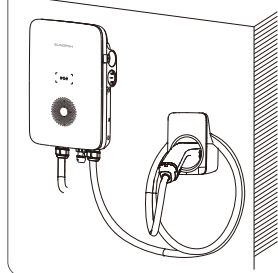
② Install the socket-out. (It is recommended that the socket-out be installed at the lower right side of the charger, with a linear distance of about 20cm from the charger. The actual situation on site shall prevail.)



③ Charger installation.



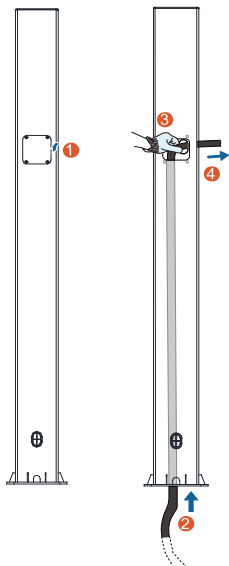
Wall-mounted installation effect diagram.



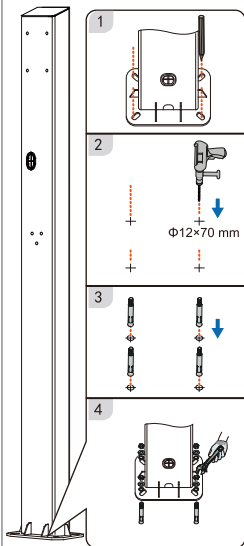
Pole-mounted charger installation (optional)

The drill size is $\Phi 12$ mm and the drilling depth is about 70 mm.

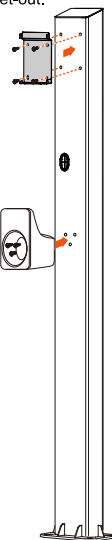
① AC line installation.



② Pole installation(after threading).

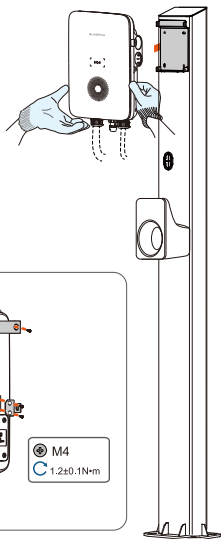


③ Install the backplate and the socket-out.



M4
C 1.2±0.1N·m

④ Install the upper hanging plate and lower hanging plate.



Pole installation effect diagram.



Inspection before commissioning

Item	Description	Judgment	
		Yes	No
Location	The charger is correctly mounted at a place that is convenient for operation and maintenance.	☐	☐
Charger	The charger is firmly and securely installed.	☐	☐
Cable	Cables are correctly and firmly connected, and are adequately protected from damage.	☐	☐
Current leakage protection	The AC input's current leakage protection switch is reasonable.	☐	☐
Clearance	The charger has sufficient cooling space and there is no other stuff or components are left on the top of the charger.	☐	☐

Commissioning

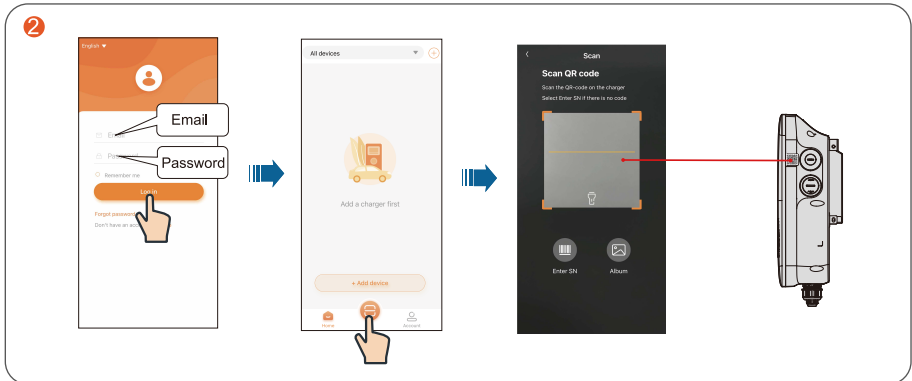
Step 1 Ensure that all requirements are met before commissioning.

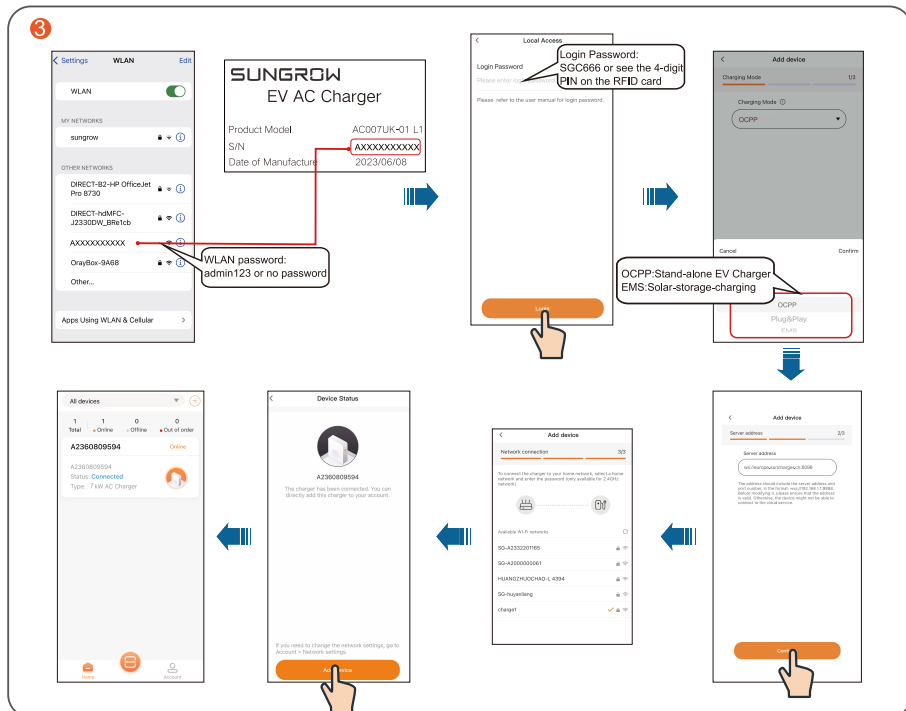
Step 2 Turn on the current leakage protection switch of the AC input.

Step 3 Power on the charger.

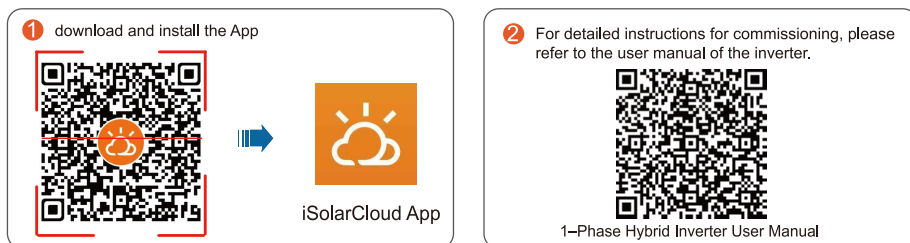
The blue LED blinks slowly which indicates the charger is in standby mode.

Step 4 If the charger works under OCPP mode, proceed with commissioning on the iEnergyCharge App.





Step 5 If the charger works under EMS mode, make sure it is connected to the inverter via the RS485 cable, and proceed with commissioning on the iSolarCloud App.



The status description of the LED indicators

Charger status	Indicator
Standby	Blue indicator flashes slowly, on for 1s and off for 4s; circulating
Charging	Blue indicator breathes, on for 1s and off for 1s; circulating
Charging stops	Blue indicator is steady on
Ready to charge	Blue indicator flashes quickly, on for 0.5s and off for 0.5s; circulating
Charging reservation	Blue indicator is on for 3s and red indicator is on for 3s
Power-on self-test	Blue indicator is on for 1s and red indicator is on for 1s
Charger software upgrading	Blue indicator flashes quickly
Swiping Card	Blue light is on for 5 times with an interval of 0.2s



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

SUNGROW

Sungrow Power Supply Co., Ltd.

www.sungrowpower.com