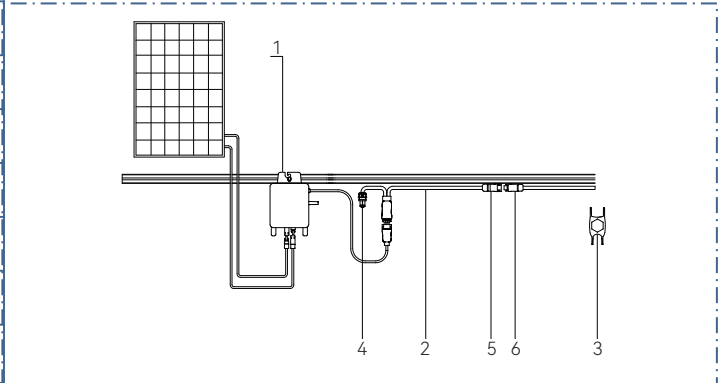


## SG400/450/500 Quick installation Guide

### 1. Accessories

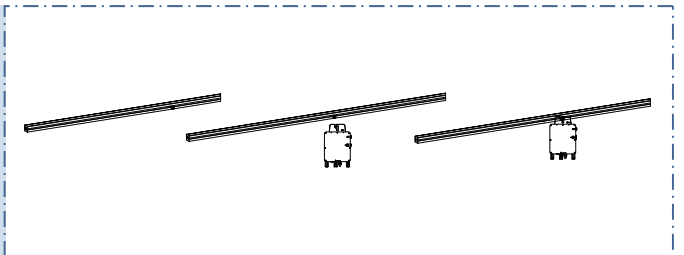
Item	Description
1	M8*25 screws(Prepared by Installation personnel)
2	AC Bus Cable, 12/10 AWG Cable
3	AC Connector Unlock Tool
4	AC Bus End protective Cap, IP67
5	AC Female Connector
6	AC Male Connector



### 2. Installation steps

#### Step 1: Fix Microinverter on the Rail

- A) Mark the approximate center of each panel on the frame.
- B) Fix the screw on the rail.
- C) Hang the microinverter on the screw (shown as picture below), and fasten the screw. The silver cover side of the Microinverter should be facing the panel.



Note:

1. Install the Microinverter and all DC connections under the PV module to avoid direct sunlight, rain exposure, snow, UV etc.
2. Keep a minimum of 2cm space around the microinverter to ensure ventilation and heat dissipation.
3. The installation torque for the M8 screws should be 9 N·m. Do not over tighten.

#### Step 2: Plan and lay the AC cables

- A) Select the appropriate AC bus according to the spacing of the microinverter to ensure a good match.
- B) Determine the number of microinverters per AC bus and prepare the corresponding buses.
- C) Prepare the AC end cable with the proper length, and insert one side of the cable into the cap. Connect the other side of the AC end cable to the distribution box.

a) Prepare a suitable length of AC cable and strip the end at the corresponding position as required. As shown in Figure 2.1.

b) Insert the cable slot into the cover and ensure that the L, N, and PE wires are in their correct positions, then tighten the screws. As shown in Figure 2.2.

c) Connect the male and female ends of the AC connector securely, then attach it to the distribution box. As shown in Figure 2.3.

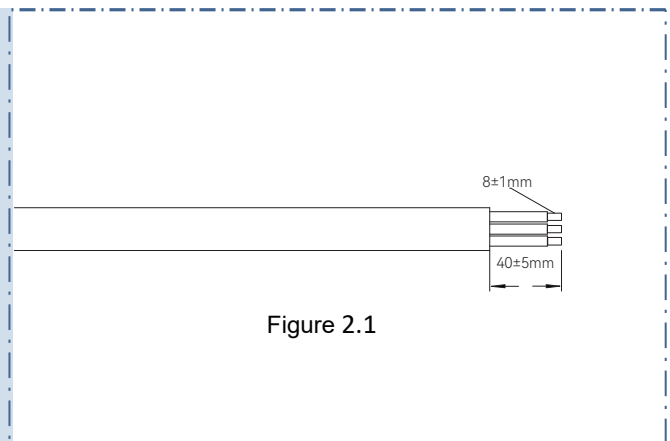


Figure 2.1

# SG400/450/500 Quick installation Guide

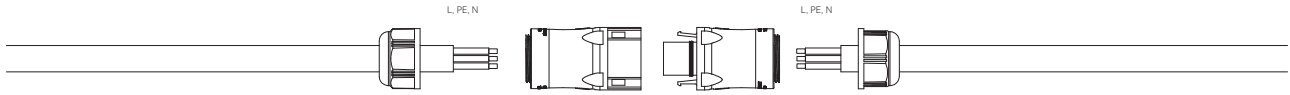


Figure 2.2

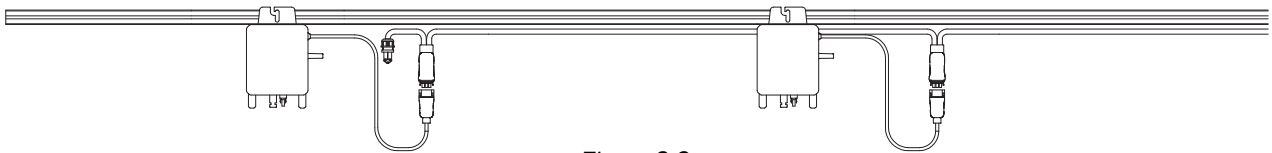


Figure 2.3

## Note:

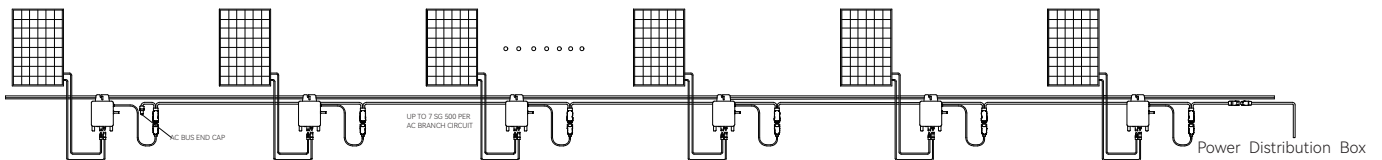
1. The plastic waterproof cover should be tightened to  $4.0 \pm 0.5 \text{ N} \cdot \text{m}$ , avoiding over tightening to prevent damage.
2. The tightening torque for the screw is  $0.4 \pm 0.1 \text{ N} \cdot \text{m}$ .
3. During disassembly and assembly, please avoid damaging waterproof seals on AC cable connectors.

## Step 3: Create an installation diagram

- A) Remove the peelable serial number label from each microinverter.
- B) Affix the serial number label to the corresponding location on the installation diagram.

## Step 4: Connect PV Modules

- A) Connect the PV modules' DC cables to the DC input side of the microinverter.
- B) Mount the PV modules above the microinverter.



\*Note: The cable used in the picture is 12 AWG, if you choose 10 AWG, it can be up to a maximum of 11 SG500 per AC branch.

## Step 5: Energize the System

- A) Turn on the AC breaker of the branch circuit.
- B) Turn on the main AC breaker of the house. Your system will start to generate power after about two-minute wait time.

## Step 6: Set Up the Monitoring System

- A) Set up the monitoring system according to the provided data collector and installation instructions.