

# Inverter Quick Installation Guide

This installation guide is applicable to R6-5-10K-S2-X, R6-6K-S2-X-IE, R6-5K~10K-S3, R6-6K-S3-IE grid-tied inverter

Note: R6-5-10K-S2-X series inverter has 2 MPPT, R6-5K-10K-S3 series inverter has 3MPPT, the installation and electrical connection methods are the same for both series. Due to the space limit of this Quick Installation Guide, the schematics of R6-5-10K-S2-X is omitted.

## 1. Installation ways and gaps

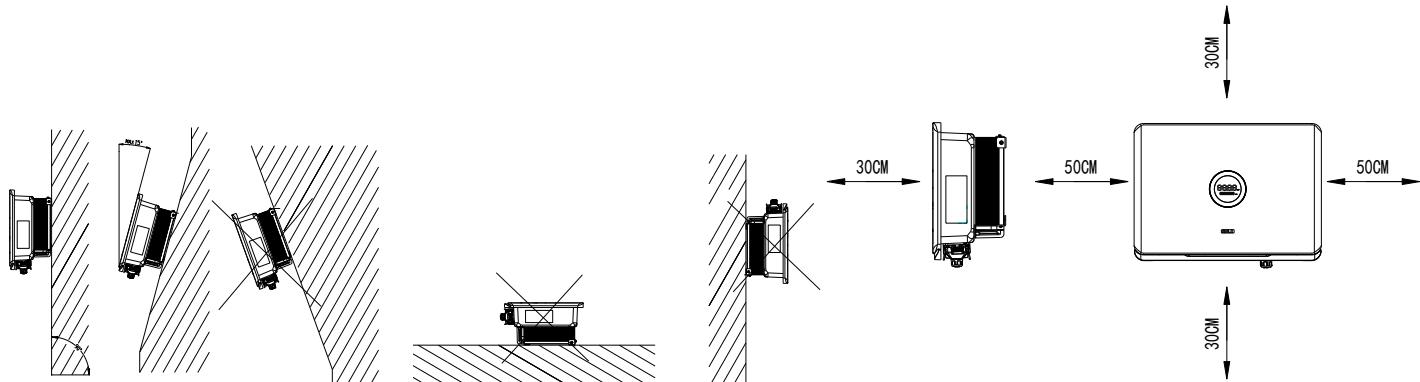


Fig. 1.1 Installation methods

Fig. 1.2 Installation clearance

## 2. Hanging panel size and drill hole

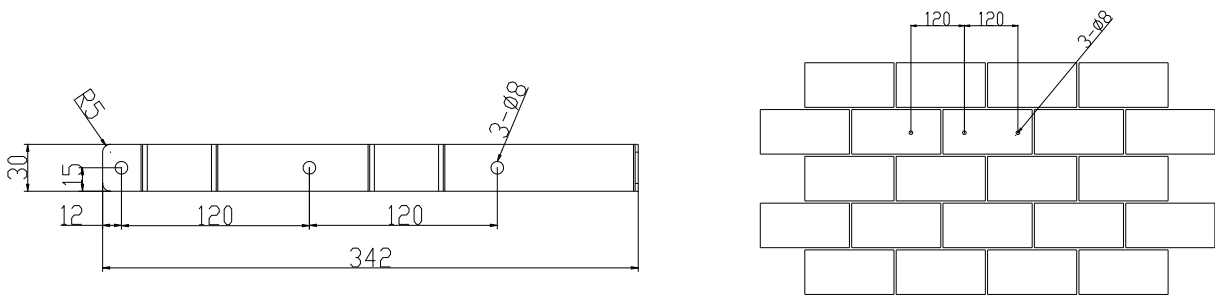


Fig. 2.1 hanging panel size

Fig. 2.2 Drill holes' dimensions

## 3. Inverter installation

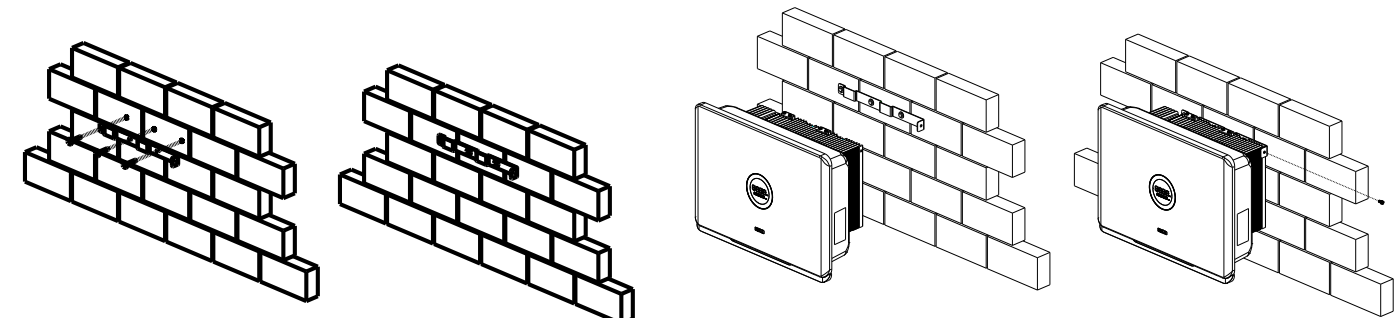


Fig. 3.1 Mount the rear panel

Fig. 3.2 Mount inverter

## 4. AC side electrical connection

| Conductor cross-sectional area of cables(mm²) |                   | External cable diameter (mm) | Conductor material |
|---|-------------------|------------------------------|--------------------|
| Scope   | Recommended value |                              |                    |
| 6.0-16.0                                      | 10.0              | 14-20                        | Copper             |

Table 4.1 AC side electrical connection

| Conductor cross-sectional area (mm²) | Maximum cable length (m)                             |                          |                            |
|--------------------------------------|--|--------------------------|----------------------------|
|                                      | R6-5/6K-S3/R6-5/6K-S2-X<br>R6-6K-S3-IE/R6-6K-S2-X-IE | R6-7/8K-S3/ R6-7/8K-S2-X | R6-9/10K-S3/ R6-9/10K-S2-X |
| 8                                    | 15   | 11                       | 9                          |
| 10                                   | 18   | 14                       | 11                         |

Table 4.2 AC side max cable length

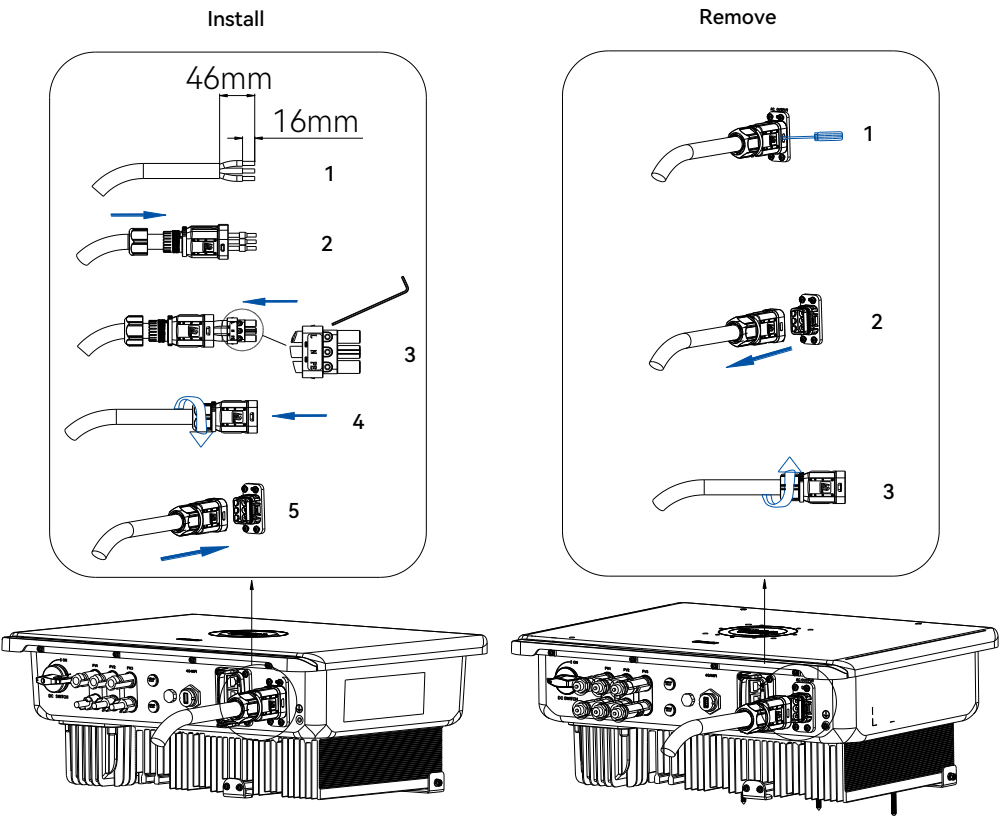


Fig. 4.1 AC cable connection

- Strip off 16mm of cable insulation skin
- Insert the cable into waterproof cable gland
- Insert the cables into the corresponding ports and fix it with screws
- Secure the cable gland by rotating sealing nut
- Plug the cable gland into the AC port of inverter

**Note:** Multi-core cable is recommended if cross-sectional area is less than 10mm², otherwise single-core cable is recommended. Copper core cable is recommended.

## 5. Additional Grounding Protection

Secure the grounding cable by a screw.

**Note:** Recommended conductor cross-sectional area of additional grounding cable is 6-16 mm².

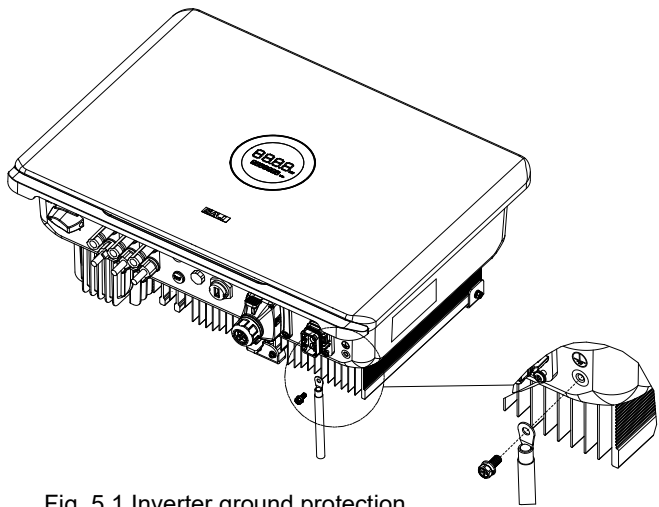


Fig. 5.1 Inverter ground protection

6. Communication connection

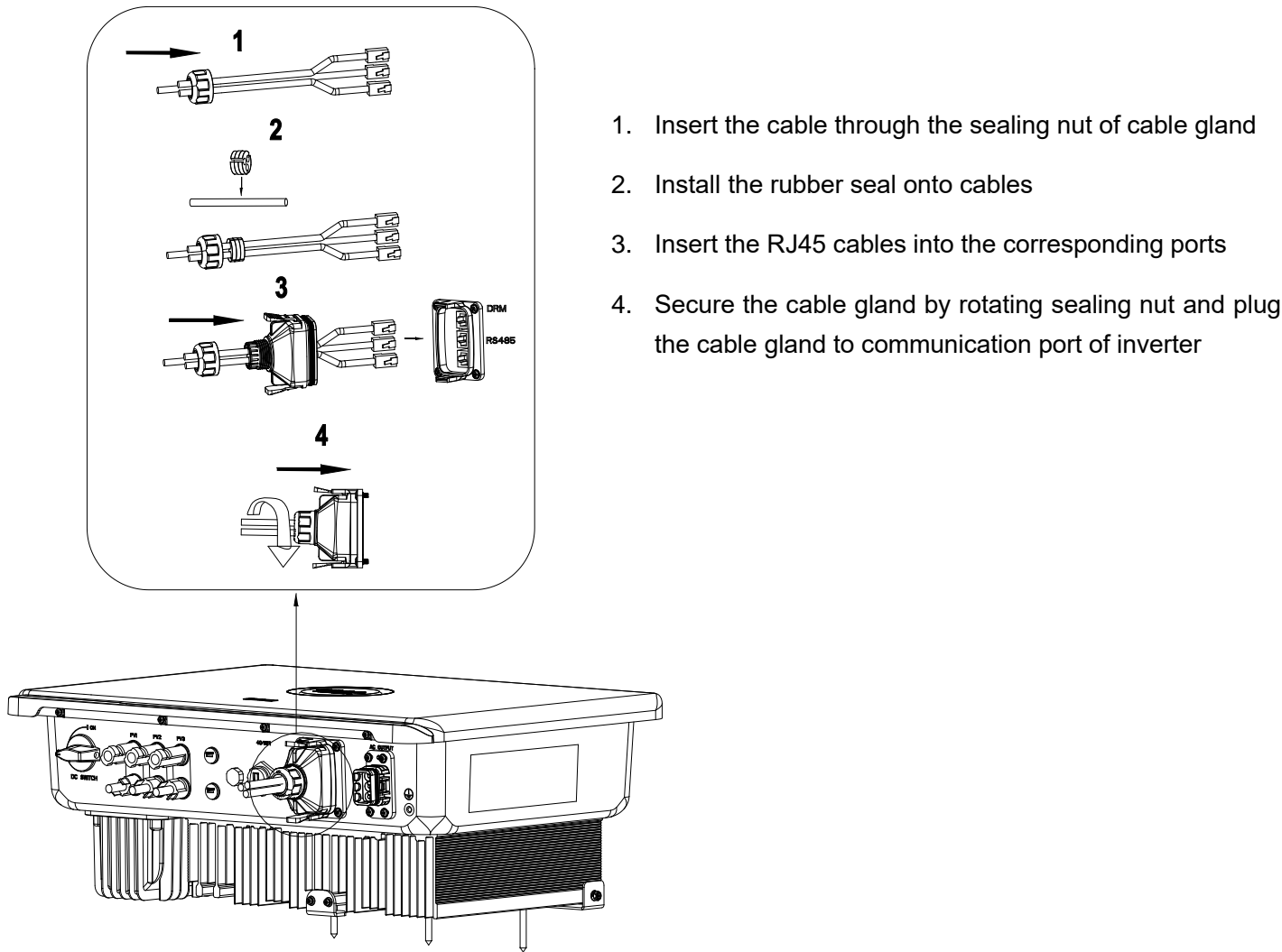


Fig. 6.1 Connecting the communication cable

7. Communication Module Installation and

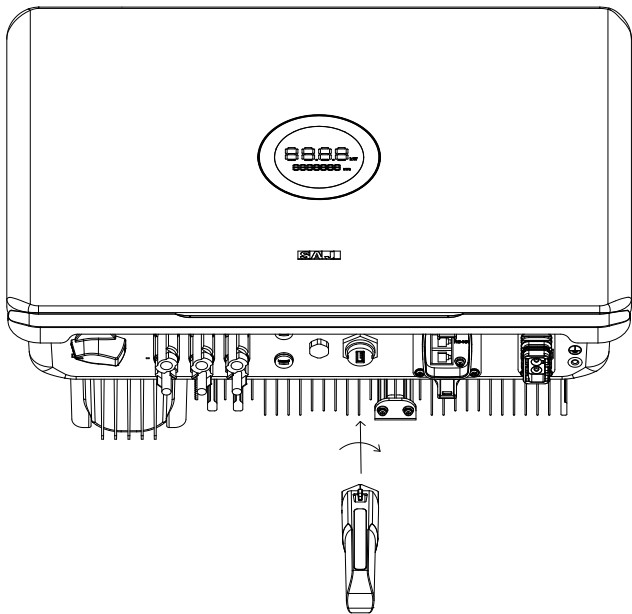


Fig. 7.1 Installation of communication modules

Plug in the communication module to 4G/Wi-Fi port and secure the module by rotating the nut.

8. DC side connection

| Conductor cross-sectional area of cables(mm²) |                   | External cable diameter (mm) | Cable type  |
|---|-------------------|------------------------------|---|
| Scope   | Recommended value | 6-9                          | Outdoor multi-core copper wire cable, complying with 600Vdc |
| 4.0-6.0                                       | 5.26              |                              |   |

Table 8.1 Recommended specifications of DC cables

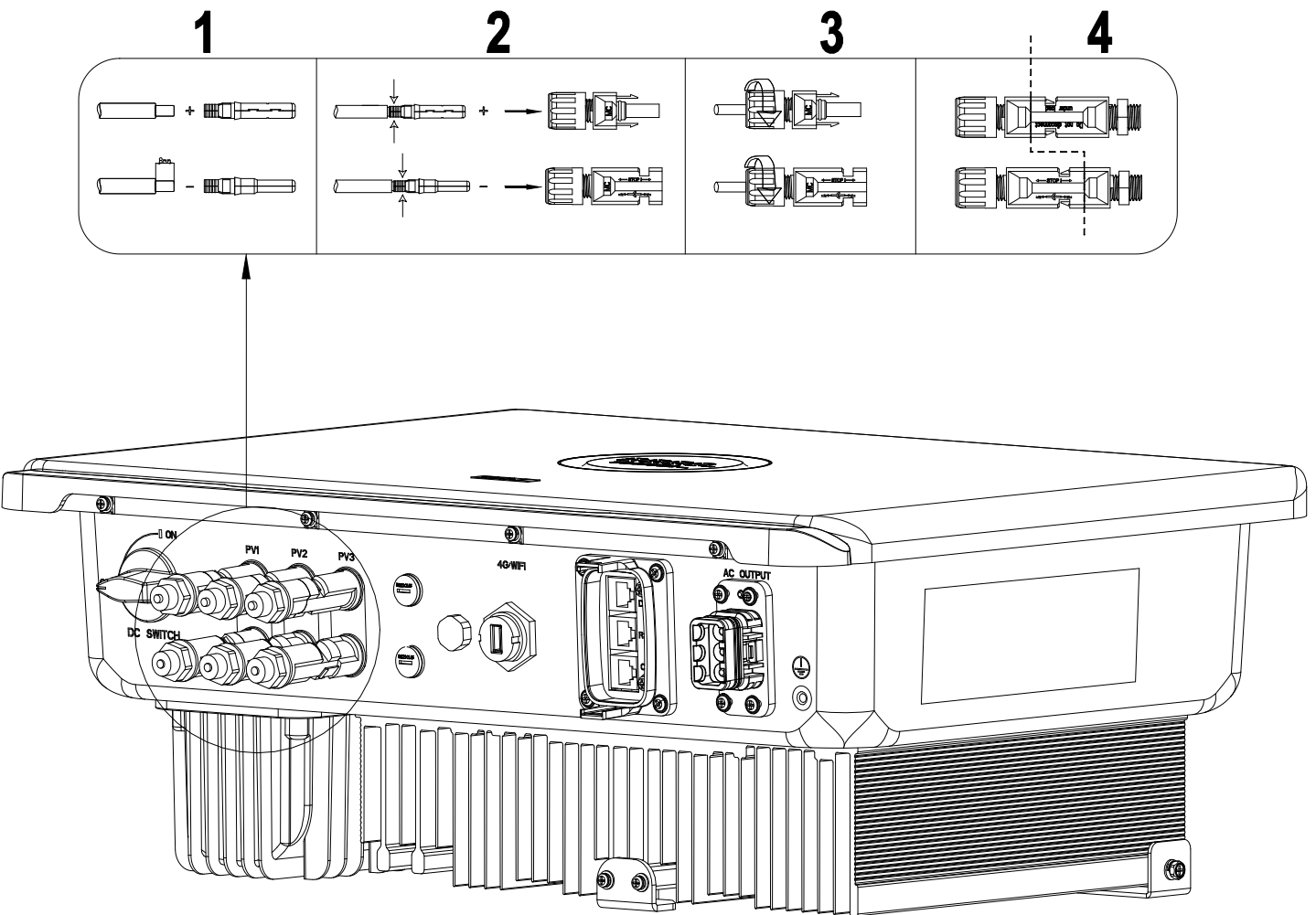


Fig. 8.1 Installation of PV cable

1. Stripe 8mm of cable insulation and insert the stripped cable into the DC connector
2. Cramp the cable and DC connector together and insert it into the housing
3. Secure the housing by rotating the screw
4. Insert the housing into the DC port of inverter