

Inverter Quick Installation Guide

This installation guide is applicable to R6-5-10K-S2-X, R6-5K~10K-S3 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

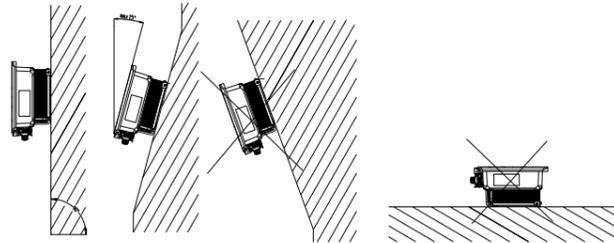


Fig. 1.1 Installation methods

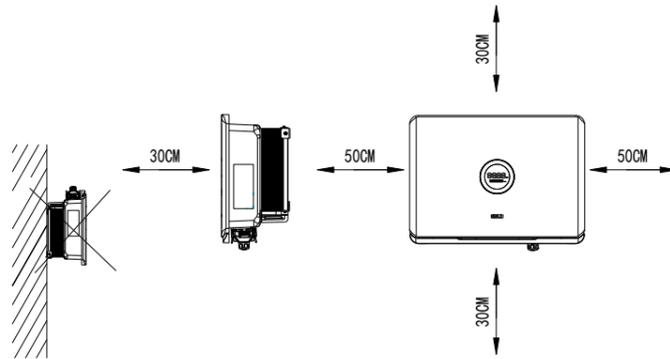


Fig. 1.2 Installation clearance

2. Hanging panel size and drill hole

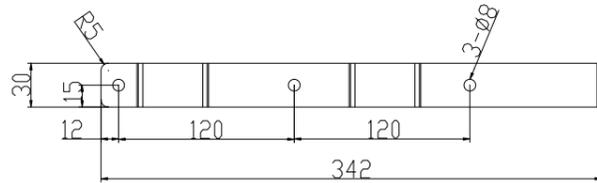


Fig. 2.1 R6-5-10K-S2-X, R6-5-10K-S3 hanging panel size

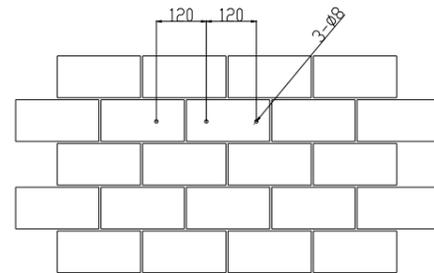


Fig. 2.2 Drill holes' dimensions of R6-5-10K-S2-X, R6-5-10K-S3

3. Inverter installation

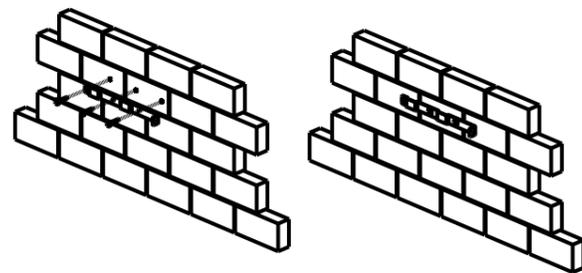


Fig. 3.1 Mount the rear panel

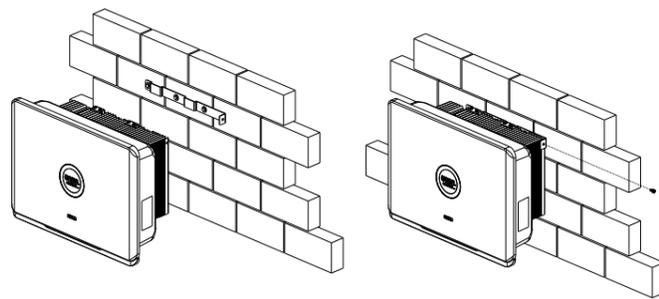


Fig. 3.2 Mount inverter

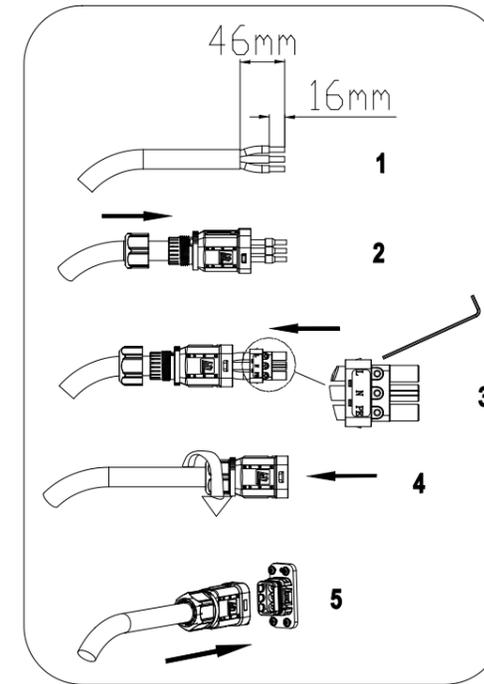
4. AC side electrical connection

Conductor cross-sectional area of cables(mm ²)		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 sectional area (mm ²)	cross-	Maximum cable length (m)		
		R6-5/6K-S3/ R6-5/6K-S2-X	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



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

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

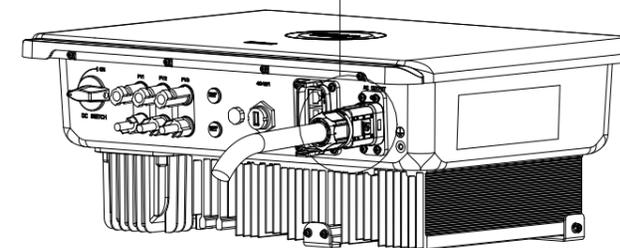
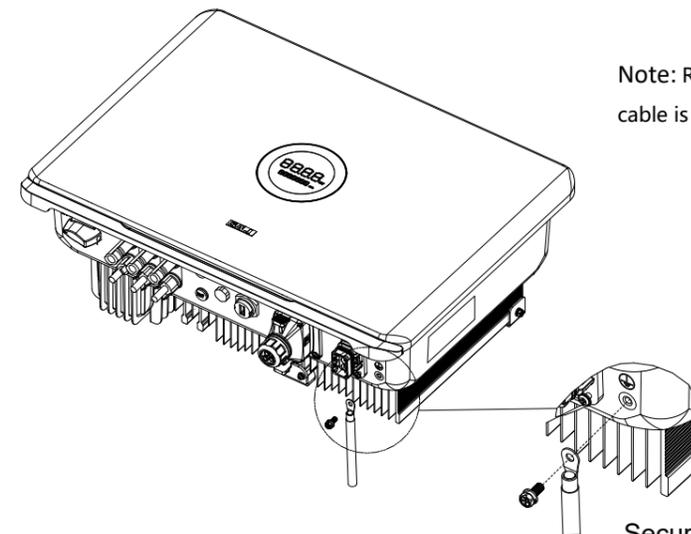


Fig. 4.1 AC cable connection

5. Additional Grounding Protection

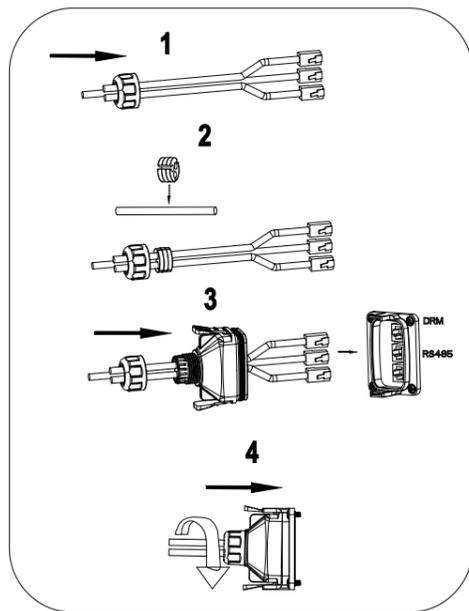
Note: Recommended conductor cross-sectional area of additional grounding cable is 6-16mm².



Secure the grounding cable by a screw.

Fig. 5.1 Inverter ground protection

6. Communication connection



1. Insert the cable through the sealing nut of cable gland
2. Install the rubber seal onto cables
3. Insert the RJ45 cables into the corresponding ports
4. Secure the cable gland by rotating sealing nut and plug the cable gland to communication port of inverter

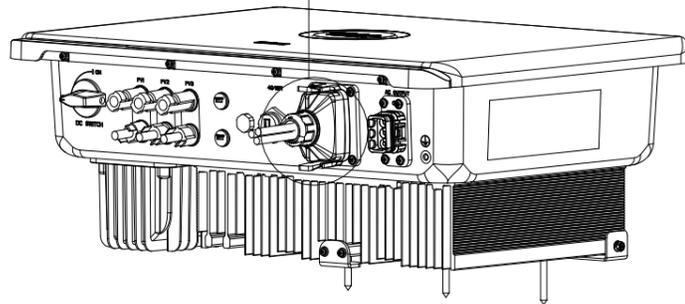


Fig. 6.1 Connecting the communication cable

7. Communication Module Installation and

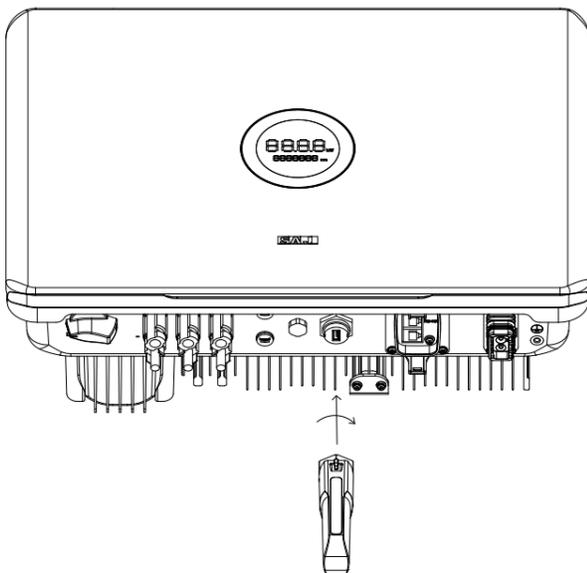


Fig. 7.1 Installation of communication modules

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(mm ²)		External cable diameter (mm)	Cable type
Scope	Recommended value		
4.0-6.0	5.26	6-9	Outdoor multi-core copper wire cable, complying with 600Vdc

Table 8.1 Recommended specifications of DC cables

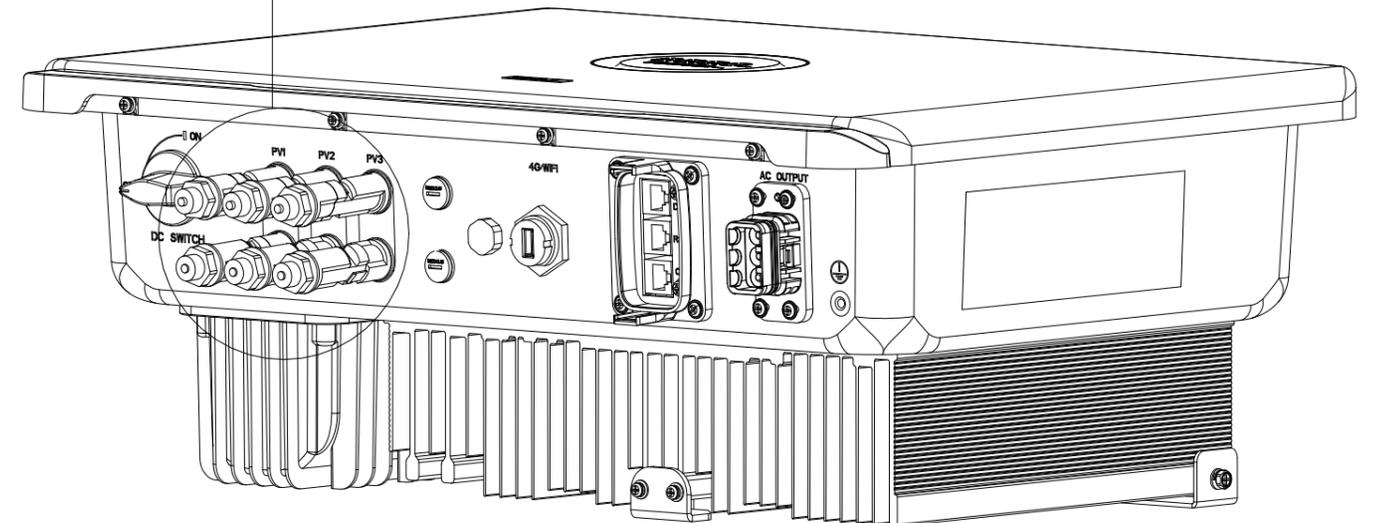
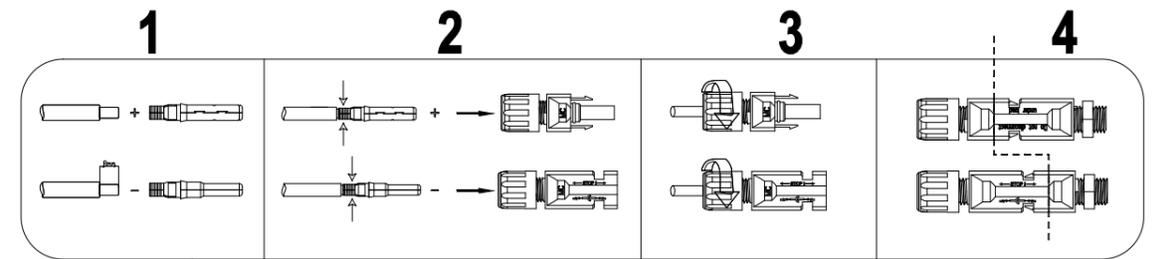


Fig. 8.1 Installation of PV cable

1. Strip 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