SUNGROW

Installation Guide on CX Rack-Rack for Horizontal Mounting

The CX rack-rack for horizontal mounting (referred to as "rack" hereinafter unless otherwise specified) is used for horizontal installation of PV grid-connected inverters researched and manufactured by Sungrow Power Supply Co., Ltd.

This manual mainly describes the mounting procedure of the rack. For detailed installation description of the inverter, visit the website at http://support.sungrowpower.com/ to obtain the corresponding manual.

1.1 Dimensions

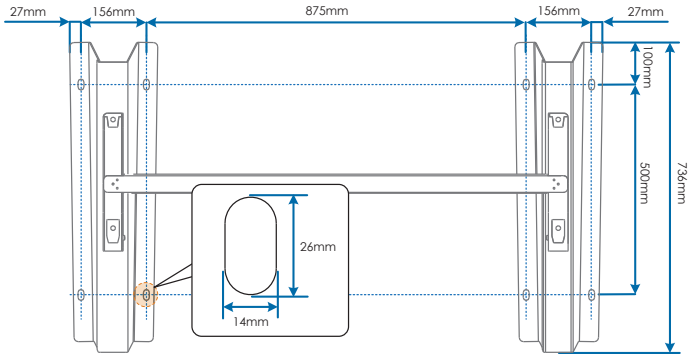


Fig. 1-1 Top view

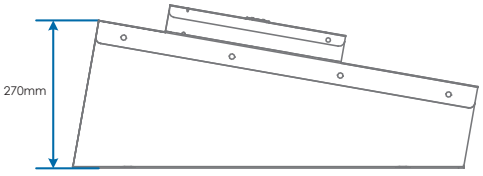
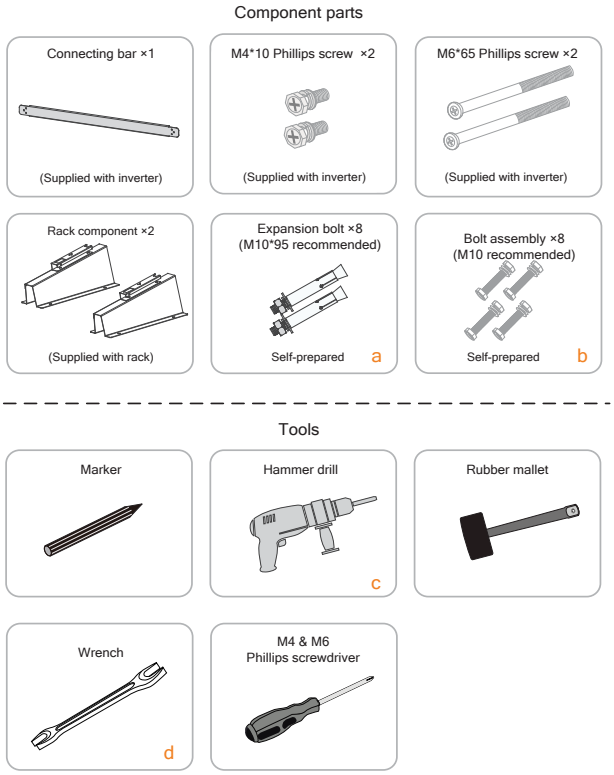


Fig. 1-2 Side view

1.2 Mounting

1.2.1 Preparation before Mounting



a. Use expansion bolt when the carrier is, for example, concrete ground, made of solid materials.

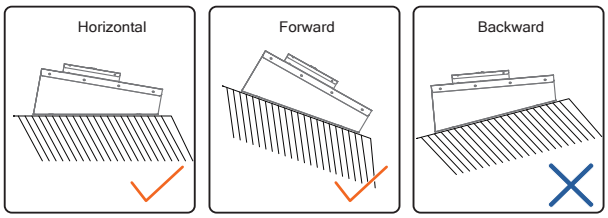
b. Use bolt assembly when the carrier is, for example, floating component and metal frame, made of hollow materials.

c. Select an appropriate drill bit according to the bolt specification. In case of M10 bolts, the drill bit must be of ϕ12.

d. Select an appropriate wrench according to the bolt specification. In case of M10 bolts, the opening of the wrench must be of 16mm.

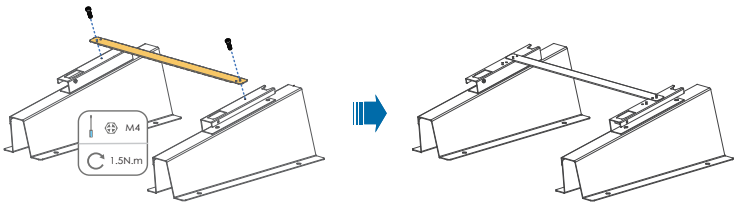
1.2.2 Mounting Site Requirements

- The mounting site should meet all requirements of the inverter. For details, refer to the chapter "Location Selection" in the inverter user manual.
- Mount the rack horizontally or forwardly. Backward mounting is prohibited.



1.2.3 Mounting Steps

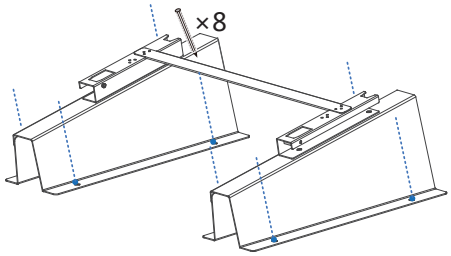
Step 1 Assemble the two rack components with the connecting bar and two M4*10 bolts supplied together with the inverter.



Step 2 Place the rack on the mounting site.

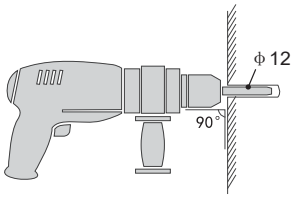
If onsite wind speed is always less than 15m/s, and the ground is a level surface, skip performing step 3 and step 4. If otherwise, perform the two steps.

Step 3 Mark positions for drilling holes with a marker.



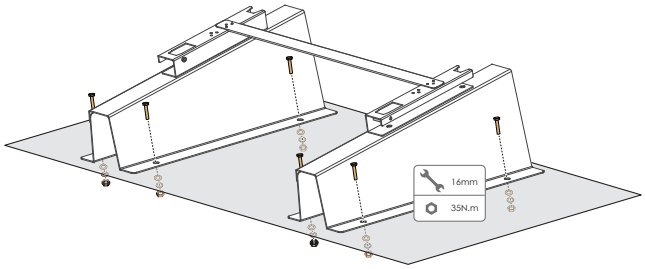
Step 4 Drill holes according to the marks and fix the rack.

Tools and torque provided in this step are based on M10 bolts, and the actual situation may differ.



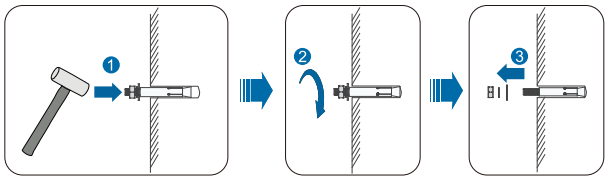
- Hollow carrier (such as floating component and metal frame)

1. Align the rack with holes on the ground, place the rack, insert the bolts, and fasten the nuts.

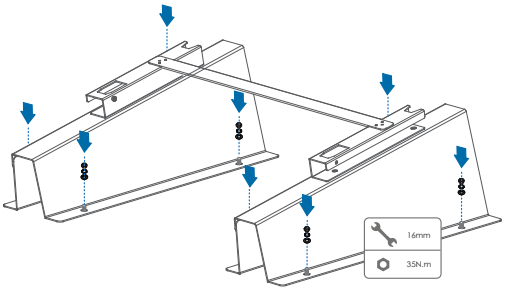


- Solid carrier (such as concrete ground)

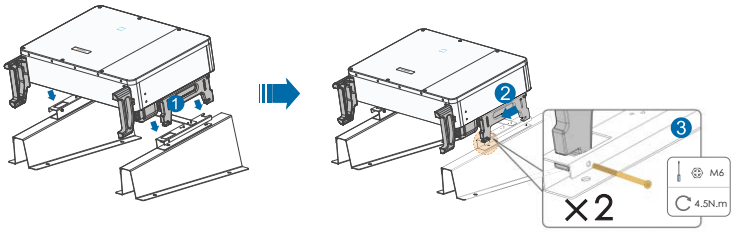
1. Insert the expansion bolts into the holes and secure them with the rubber mallet. Fasten the nut with a wrench to expand the bolt. Remove the nut, spring washer, and flat washer, and store them properly.



2. Align the rack with bolts anchored to the ground, place the rack, and fasten the expansion bolts.



Step 5 Uplift the inverter, and fix it onto the rack by anchoring two supplied M6*65 bolts on both sides.

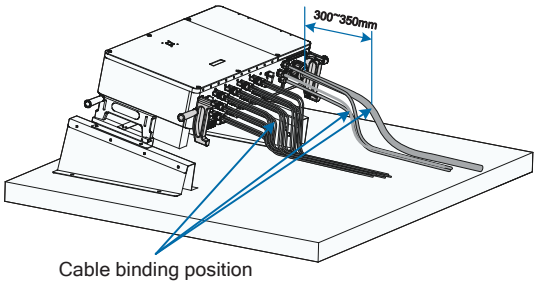


*The image here is for reference only, and the actual situation may differ.

Step 6 Perform wiring operation according to the chapter "Electrical Connection" in the user manual.

Fasten each waterproof connector with the torque prescribed in the user manual, and ensure it is secured and well-sealed.

Step 7 After finishing the wiring operation, bind the cables at positions 300~350mm away from the DC connectors, AC waterproof connectors, and communication waterproof connectors, to prevent impairment of protection degree caused by looseness of waterproof connectors due to dangling cables.



Cable binding position

* The image here is for reference only, and the actual situation may differ.

Step 8 Install a terminal baffle plate to ensure electrical safety if there is frequent rain and snow on site.

- The baffle plate is prepared by users.
- Apart from installing a baffle plate, there are other protective measures available.

