


R3-75K/75KL

Quick Installation

1.Unpack And Check


 **Notice**

In any case, this guidance is not intended to replace the user manual or safety instructions of the product.

Make sure that you have read completely and understand fully, and carefully follow the user's manual and relevant specifications before any operation. Otherwise, it will result in casualties and equipment damage.

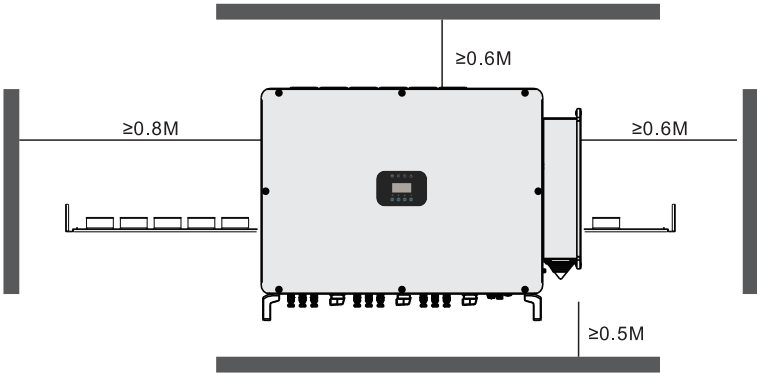
- 1) Unpack and take out inverter and accessories.
- 2) Please check if model of received inverter is correct and items listed in packing list are all included.
- 3) Please contact your local distributor if the inverter is found damaged or accessories found not comply with packing list, don't try to install it.

2.Inverter Fixation

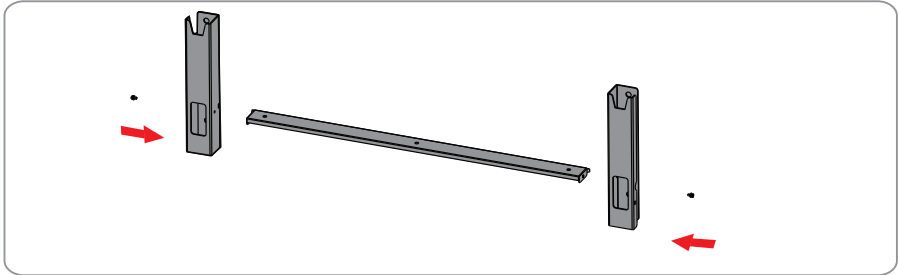
 **Notice**

The ground surface on which the inverter is to be placed should be covered with a sponge pad, foam cushion or the like to prevent the inverter bottom from scratches.

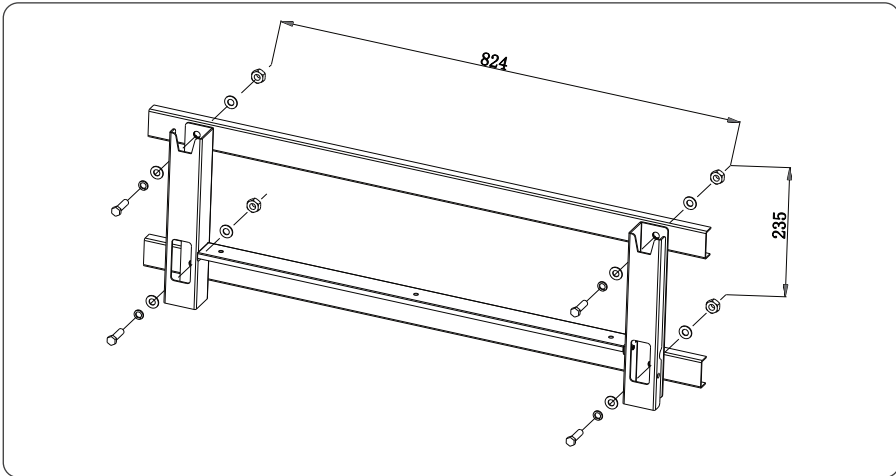
- 1) Please refer to inverter user manual to select proper position to install the inverter. Keep enough space for heat-dissipation when there are a few inverters to be installed.



- 2) Pay attention to human and inverter safety when moving the inverters.
 - 3) Inverter must be placed vertically, not allowed to flat, tilt or inverted.
 - 4) Follow the steps below to fix the inverter.
- Fix the rack on the metal holder. (standard: M10*35mm, nut and flat pad)
- 1. Assemble the mounting-bracket by using the connecting bar.

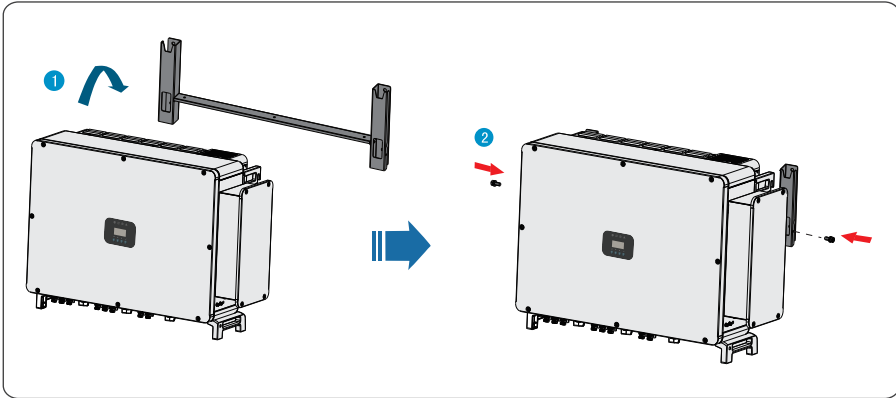



- 2. Drill holes on the metal support according to the hole size of the hanger. The drilling tool is Ø12 hammer drill, and the drilling position is as accurate as possible. The assembled pylon is fixed to the metal bracket by bolt combination.



Note: Due to the different installation methods of metal brackets, the inverter may shake in strong winds. In this case, you must strengthen it.


- 3. Gently hang the inverter from top to bottom on the rack, check both sides to ensure that they are fixed in the correct position, and then tighten the screws on the left and right ends (in the accessory bag).




 **NOTE**

Placing the inverter directly on a hard floor will cause damage to the housing or bottom terminals, and protective materials such as sponge pads or foam need to be laid under it.

3.Electric Connection

 **Danger**

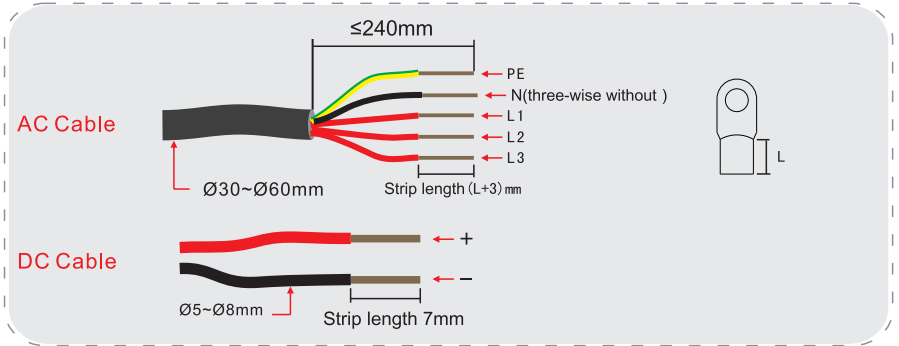
High voltage is present inside inverter it may do harm to human safety.
Before doing connection, make sure there are not power present in DC and AC cables.
Before finishing connections, DON'T switch on DC and AC breaker.

 **Warning**

+ and - of PV are not allow to be grounded, otherwise the inverter may be damaged
Recommended open circuit voltage of PV array.
Before finishing connections, DON'T switch on DC and AC breaker.

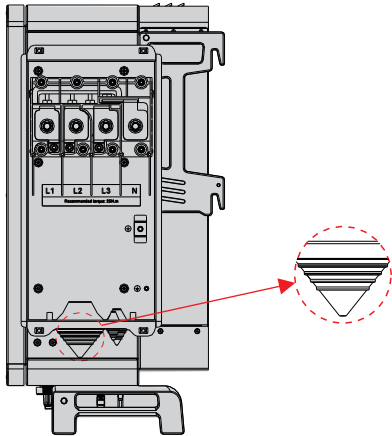
3.1 AC Cable

Terminal	Sectional area range of conductor	Recommendation(copper)
AC terminal	70-240mm²	70mm²
DC terminal	4-6mm²	4mm²
Ground protection terminal	10-16mm²	16mm²



3.2 AC Cable Connection

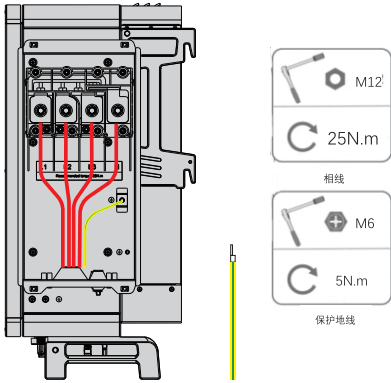
- Step1: Open the wiring compartment.
- Step2: Disconnect the AC-side circuit breaker and prevent it from in advertent reconnection.
- Step3: Cut the seal ring according to the outer diameter of the cable and pass the cable through the seal ring.



- Step 4: Pass the output cable through the sealing ring, and press the 5(or 4) core cable to the wiring terminal (delivered with the accessory bag) and the heat shrink sleeve for protection.



Step5:connect the 4cores to inverter output terminals L1,L2,L3,N, and PE (three-wise system do not have “N” wise) separately, Use straight screwdriver to tighten it. The AC output is three phase, mode of connection should be L1/L2/L3+PEor L1/L2/L3+PE. Finally, lock the lower cover.



Note: while connecting, the switch of AC side must be open, otherwise it will do harm to the human body; it should use professional crimping tool while crimping terminal, make sure the crimping is well, and ensure safety.

3.3 PV Input Connection

The electrical connection of the inverter must follow the steps listed below:

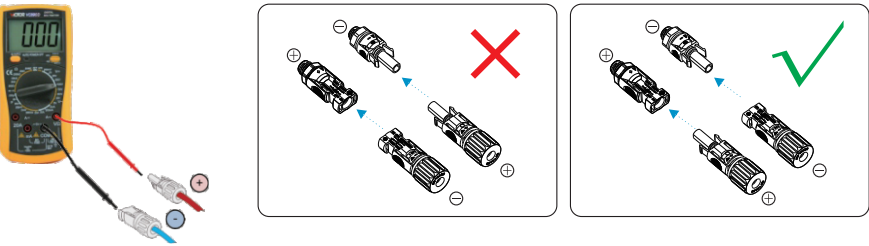
- 1. Switch the Grid Supply Main Switch (AC) OFF.
- 2. Switch the DC Isolator OFF.
- 3. Assemble PV input connector to the Inverter.

Check whether the polarity of the connecting cable of the photovoltaic string is correct, and ensure that the open circuit voltage under any condition does not exceed the upper limit of the inverter input value of 1100V.

Please don't connect PV array positive or negative pole to the ground, it could cause serious damages to the inverter.

Before connection, please make sure the polarity of the output voltage of PV array matches the "PV+" and "PV-" symbols.

Check the positive and negative polarity of the PV strings, and connect the PV connectors to the right terminals. Serious damages to the inverter and connector over temperature may occur.

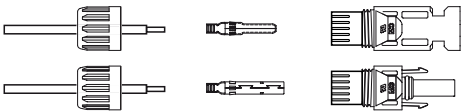


Please use approved DC cable for PV system.

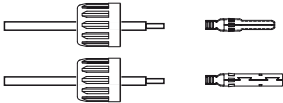
Cable type	Cross section	
	Range	Recommended value
Industry generic PV cable(model:PV1-F)	4.0-6.0 (12-10AWG)	4.0 (12AWG)

The steps to assemble the DC connectors are listed as follows:

- 1.Strip off the DC wire for about 7mm, Disassemble the connector cap nut.



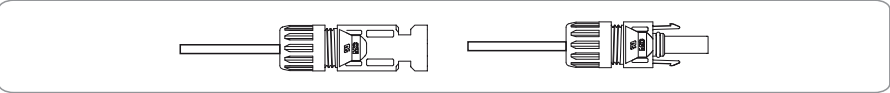
- 2.Insert the wire into the connector cap nutand contact pin.



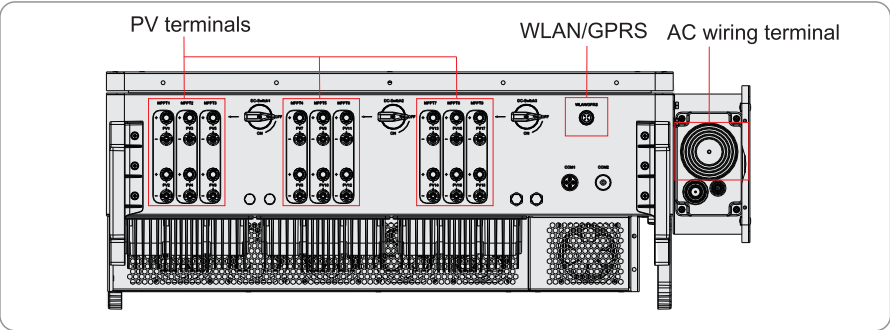
- 3.Crimp the contact pin to the wire using a proper wire crimper.



- 4.Insert the contact pin to the top part of the connector and screw up the cap nut to the top part of the connector.

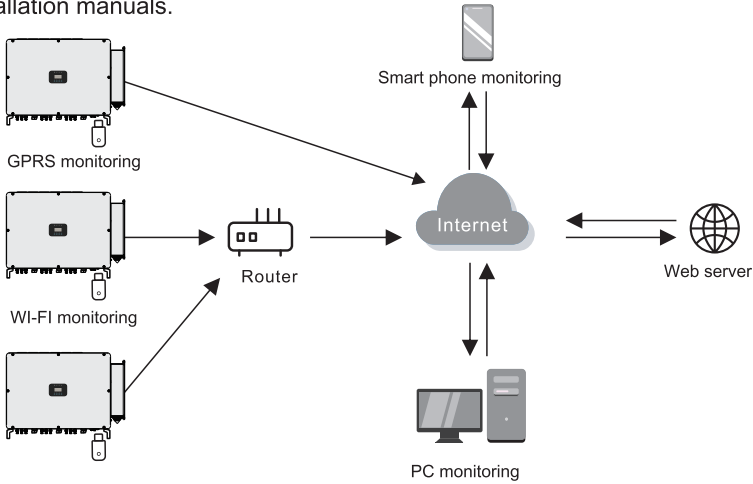


- 5.Then connect the DC connectors to the inverter. Small click will confirm connection.



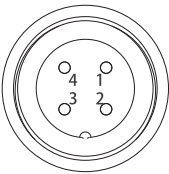
3.Inverter monitoring connection

The inverter can be monitored via Wi-Fi or GPRS. All communication devices are optional . For connection instructions, please refer to the Monitoring Device installation manuals.

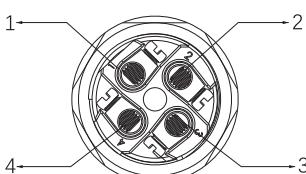


The inverter is equipped with standard COM1(RS485) and WLAN/GPRS communication ports, and the COM1(RS485) communication port is inverter wired monitoring, WLAN/GPRS communication port is for inverter wireless monitoring.

Pin	Description	Pin	Description	Pin	Description	Pin	Description
1	VCC	3	485A	1	485A positive electrode	3	485B positive electrode
2	GND	4	485B	2	485A negative pole	4	485B negative pole

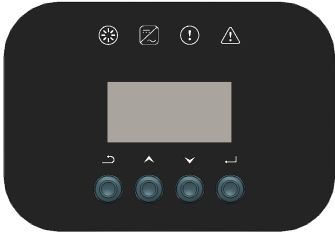


▲ Figure WLAN/GPRS connector



▲ Figure COM1(RS485) connector

4. Running Setting



Check all connections again before starting the inverter. To start the inverter, please switch on AC breaker first, then switch on the DC switch (If there) on inverter. If all connections are correct and PV configurations are correct, LCD will be on, "WAIT" LED will be on, inverter will be standby for Grid-tied connecting.

4.1 Working Mode Setting

Default working mode of inverter is independent. If the PV connections are not independent, mode settings required. On LCD, please press "ESC" to enter main menu interface, select "Setting", then press "ENTER" to confirm to enter password interface. Enter "00000" and press "ENTER" to confirm. Select " INPUT MODE ", press"ENTER" to confirm, move the cursor to choose the correct mode and press "ENTER " to confirm. After the setting, restart the inverter, the setting will be valid. (Note: before the setting, please switch off AC breaker, DC connected, inverter will give alarm, the setting should be carried out during this. "ESC" for quit, "UP", "DOWN" for moving cursor, "ENTER" for confirming).

4.2 Safety Standard Setting

Default working mode of inverter is independent. If the PV connections are not independent, mode settings required. On LCD, please press "ESC" to enter main menu interface, select "Setting", then press "ENTER" to confirm to enter password interface. Enter "00000" and press "ENTER" to confirm. Select " INPUT MODE ", press"ENTER" to confirm, move the cursor to choose the correct mode and press "ENTER " to confirm. After the setting, restart the inverter, the setting will be valid. (Note: before the setting, please switch off AC breaker, DC connected, inverter will give alarm, the setting should be carried out during this. "ESC" for quit, "UP", "DOWN" for moving cursor, "ENTER" for confirming).

4.3 Grid-tied Dc Voltage Setting

Grid-tied DC voltage can be set on the inverter when in error conditions (inverter factory default is 350Vdc), normally there is no to need. If needed, setting can be finished in the panel through the button, the steps are as follows: Press "ESC" key to enter the main menu interface, select the first option "settings", press "ENTER " to confirm, enter password "00000" and confirm, enter the setup menu, select the fourth option "operation parameters ", press " ENTER " to confirm, enter the menu and select first option" power voltage" according to the requirements, setting will be valid after restarting.

4.4 RS485 Address Setting

Rs485 address can be set when the inverter is grid- connected or giving alarm (default address is 1). It's no need to set it if there is single inverter in communication. To set it, please press "ESC" to enter the main menu, select "setting" and press "ENTER" to confirm, enter password"00000" and press "ENTER", select"485 address", press" ENTER" to confirm and enter desired address (max is 32), press “ENTER" to confirm. Setting will be valid after restarting.