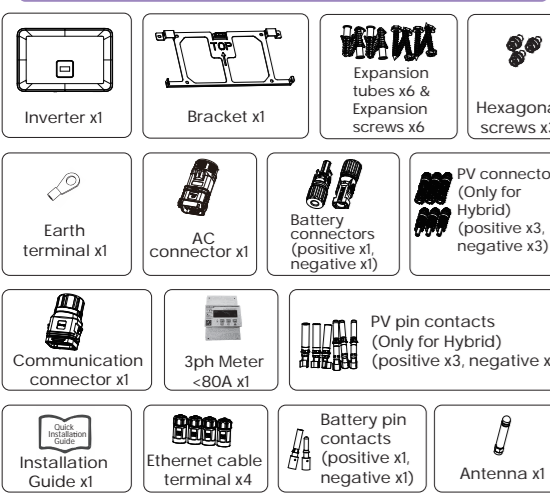


Quick Installation Guide

Note: Storage inverter and AC couple inverter share a quick installation system. The AC couple inverter does not have a PV-side interface or accessories. For PV wiring and related steps in this quick installation, please disregard them during the installation of the AC couple inverter.

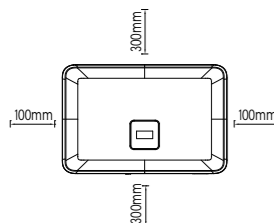
5-15kW Three Phase Storage Inverter

1. Packing List



2. Mounting Steps

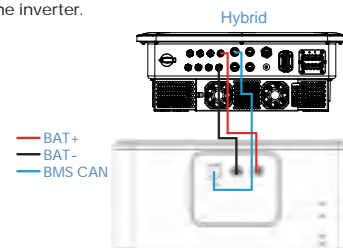
Step 1: Please make sure the inverter will be installed with a proper distance as shown below.



6. BAT Connection

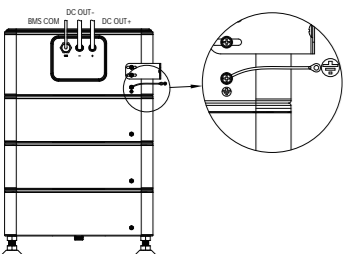
Step 1: Prepare BAT wire. We recommend to use the original Bat-Inverter power cable and communication cable from the battery's accessory bag. If require a longer cable, please contact our sales representative to purchase.

Step 2: Connect the power line and communication line between the BMS and the inverter.



NOTE: When the standard cable harness of the battery is connected to the BMS port of the inverter, the waterproof connector on the battery side may not be compatible and needs to be replaced with the RJ45 waterproof connector from the inverter accessory kit. In this case, the original connector should be moved down and replaced with the one provided with the inverter. If the RJ45 connector on the inverter side is consistent with the one in the accessory kit, no replacement is required.

Step 3: Connect the grounding cable to ensure that all batteries are grounded. Wiring shall be connected in the sequence as shown in below.



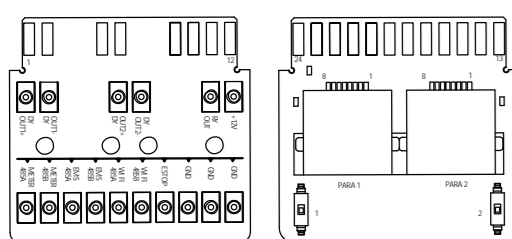
The connection between BMS and inverter should be less than 10m.

NOTE: The number of battery packs cannot be less than 2 pcs. (for ECS/EQ series battery)

13. COM Connection

Introduction to COM port: The COM port mainly includes EMS485, Meter485, WiFi485, Estop port, two relay output ports, two parallel ports and a toggle switch, +12V and corresponding relay output signals.

The ripple control function is described below.



EMS 485: Supports Modbus485 communication, which can be used to read and control inverters. The specific protocol is provided by the manufacturer.

Meter 485: Similar to the Meter485 interface, this interface is designed to be redundant.

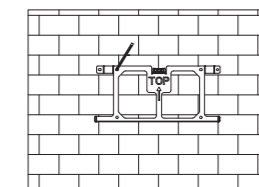
Wifi 485: For internal testing.

Estop port: When short circuiting ESTOP and GND, the inverter will stop working.

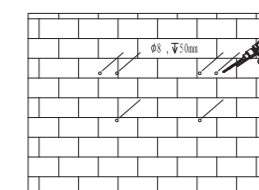
DY OUT: The inverter has two DY OUT interfaces, with two internal contacts of relays that can drive loads of 230VAC/1A/50VDC/0.5A, and can be used for powering on and starting heat pumps.

PARA port RJ45: Used for parallel communication, it is necessary to set the DIP switch to the ON state during parallel operation. +12V and RY-Out are used to control external relay switches and cannot be used for other functions.

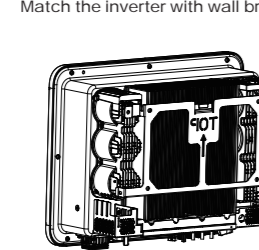
Step 2: Select the installation location, place the bracket on the wall, and mark the hole positions.



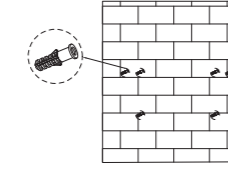
Step 3: Drill the 6 holes with a $\phi 8$ drill bit. Depth at least 50mm. Hammer the expansion tubes.



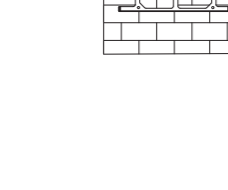
Step 5: Match the inverter with wall bracket.



Step 4: Installing the Bracket. Screw the expansion bolts.



Step 6: Lock the screws on the side (Left and right). Make sure the inverter is firmly attached.



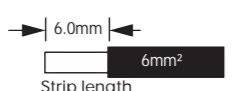
1

2

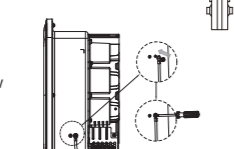
7. Grounding Connection

Grounding Wiring

Step 1: Prepare ground wire.



Step 2: To insert Earth terminal. Press the wire and terminal tightly with a wire clamp.



Step 3: screw the ground screw with screwdriver as shown below.



8. Firmware Update

Preparation: Please ensure the inverter is powered on with steady PV/BAT and AC power. Please prepare a PC and an U-Disk. Please note the U-Disk shall be less than 32GB and its formats is fat16 or fat 32. Please DO NOT apply USB3.0 U-Disk on USB port, the inverter USB port only support for USB2.0 U-disk.

Step1: Please contact our service support to get the update files, and extract it into your U-Disk as follow: update/master/H3_G2_Smart_Master_Vx.xx.bin, update/slave/H3_G2_Smart_Slave_Vx.xx.bin, update/manager/H3_G2_Smart_Manager_Vx.xx.bin

NOTE: Vx.xx is version number.

Step 2: Unscrew the waterproof lid and insert U-disk into the "USB" port at the bottom of the inverter.

Step 3: The LCD will show the selection menu. Then press up and down to select the one that you want to upgrade and press "OK" to confirm to upgrade.

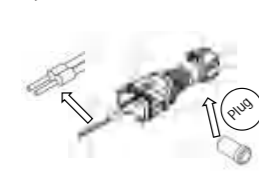
Step 4: After the upgrade is finished, pull out the U-disk. Screw the waterproof lid.

5

24PIN Wiring

Installation Procedure

Step 1: Remove the plug inside the plug and thread the terminal according to the sequence shown in the illustration.



Step 3: And use a screwdriver to crimp the wire, screwing torque 1.2 +/- 0.1N.m.



Step 5: Install the plug into the main body and plug the holes without wires with a plug.



Step 2: Insert the wires into the corresponding terminals.



Step 4: Arrange the core line, the rubber core are must not appear to ride the line. The rubber core is loaded into the main body and accompanied by a "click" sound.



Step 6: Lock wire nut screwed onto the body, torque 2.5 +/- 0.1N.m, then complete installation.



3

4

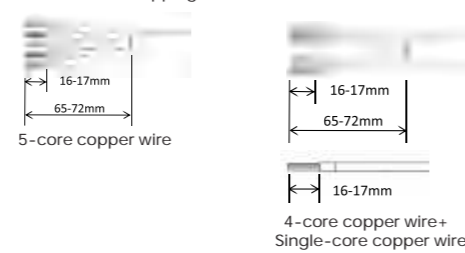
3. GRID Connection

Step 1: Prepare AC wire.

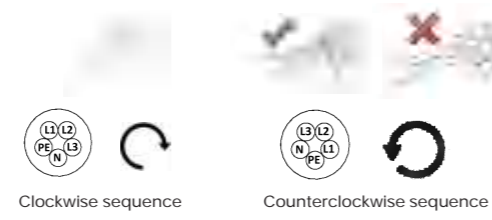
Cross-sectional area of wire is shown in the following table.

Model (kW)	5.0	6.0	8.0	10.0	12.0	15.0
Cable (GRID)	4.0mm²	6.0mm²	6.0mm²	6.0mm²	6.0mm²	6.0mm²
Cable (EPS)	4.0mm²	6.0mm²	6.0mm²	6.0mm²	6.0mm²	6.0mm²
Micro-Breaker	20A	25A	25A	32A	32A	32A

Step 2: Dimension of stripping line. Dimension of stripping line outside inverter



Step 3: Wiring Precautions



Step 4: Seal accessory option

A: $\phi 8$: The recommended outer diameter of the cable is 17.5-18.5mm.
B: $\phi 7$: The recommended outer diameter of the cable is 19-21mm.
C: $\phi 6$: When the four wire system is used, the special hole for the ground wire is recommended to be applicable to the outer diameter of the cable. (5-6mm)

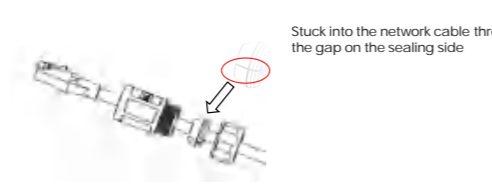
2

9. RJ45 Connection

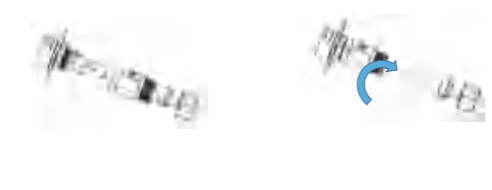
RJ45 Wiring

Installation Procedure of the RJ45 Connector

Step 1: Insert the network cable into the wire-locking nut, sealing plug and mainbody in turn. The sealing plug is stuck into the network cable through the gap on the sealing side.



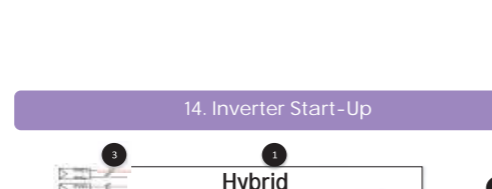
Step 2: Insert the network cable plug into the matched RJ45 panel mount connector.



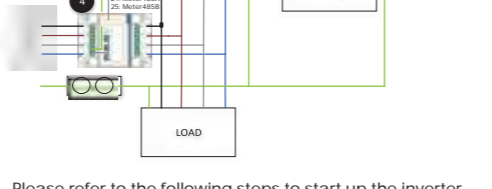
Step 3: Tighten the connector mainbody by an open-ended wrench with a torque 1.2 +/- 0.2N.m.



Step 4: Insert the sealing plug into the main body of RJ45 cable end connector.



Step 5: Tighten the connector's nut with a torque 1.2 +/- 0.2N.m.



Please refer to the following steps to start up the inverter.

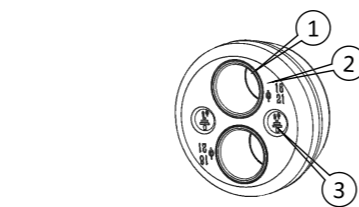
1. Ensure the inverter fixed well.
2. Make sure GRID and EPS wirings are completed.
3. Make sure the PV wirings is connected well.
4. Make sure the meter is connected well.
5. Make sure the battery is connected well.
6. Make sure the BMS buttons and battery switch are on.
7. Ensure accurate installation of the monitoring module to the inverter. (Refer to the installation of the monitoring module)
8. Turn on the PV/DC switch (for Hybrid version only), AC breaker, EPS breaker and battery breaker.
9. Check whether each voltage is normal and within the operating range of the inverter through the screen on the inverter.
10. If the main page shows "switch off", please long press " " bottom to quickly go to the START/STOP page and set it to start. (Enter the settings page, default password is "0000").

NOTE:

When starting inverter for the first time, the country code will be set by default to the local settings. Check if the country code is correct. Set the time on the inverter using the button or by using the APP.

3

10

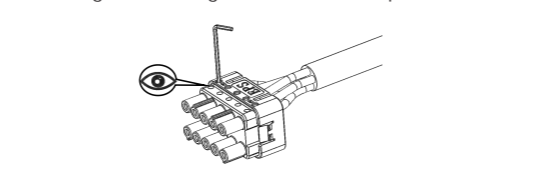


NOTE: If the outer diameter of the cable is greater than 18mm, remove part 1. When 4-core wire is used, $\phi 6$ holes are ground wire through holes. Remove part 3.

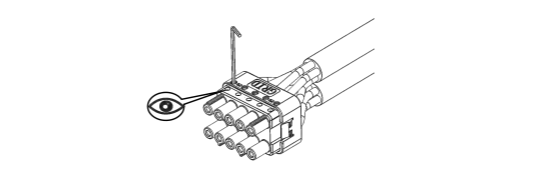
Installation steps for 5-core wire



First, insert the EPS end cable into the EPS end of the rubber core. After the cable is in place through the perspective hole, tighten the screw using an S2.5 hexagon wrench with a torque of 2.5 +/- 0.1N.m.



Insert the GRID end-core wire into the GRID end of the rubber core, observe the perspective hole cable in place, use S2.5 hex wrench to tighten the screws, torque 2.5 +/- 0.1N.m.



2

10. Meter Connection

The inverter supports the wiring of various types of electricity meters, including direct-connected meters, 3CT meters, and 6CT meters.

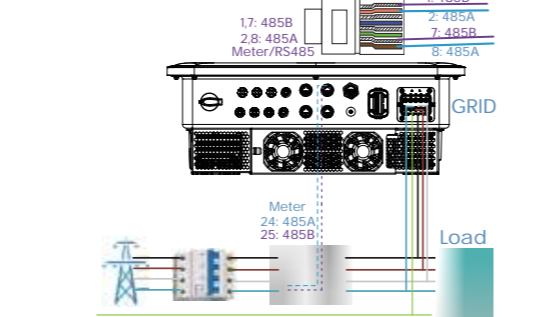
The definition of meter port pin is as follows:

Port	1	2	3	4	5	6	7	8
Meter	meter 485B	meter 485A	/	/	/	/	meter 485B	meter 485A

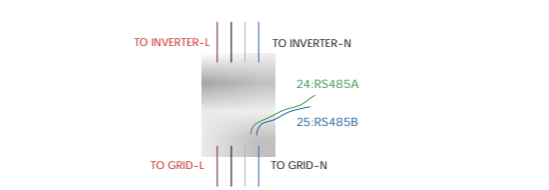
Pins 1 & 7 and pins 2 & 8 are internally linked, so only one needs to be connected. The dual-pin design ensures reliability in case of a faulty or broken wire.

The types of direct-connected energy meters

Meter Connection Diagram



Step 1: Insert L1/L2/L3/N wires and RS485A/B cable into the meter. Please refer to the meter wiring diagram on side of meter itself.



Step 2: Connect RS485A to pin 2/8 of the inverter METER/RS485 port. Connect RS485B to pin 1/7 of the inverter METER/RS485 port. Please use twisted pair cable.

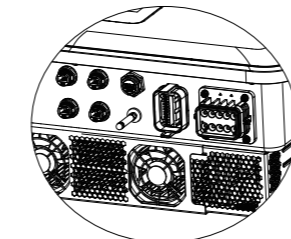
Port	1	2	3	4	5	6	7	8
Meter	meter 485B	meter 485A	/	/	/	/	meter 485B	meter 485A

15. WIFI Stick Installation

1. WIFI Stick Installation

Alarm: The collector can only be plugged into the inverter, not any other device.

Step 1: Please make sure the antenna is installed correctly.



Step 2: Power on the inverter (in accordance with the start-up procedure detailed in the inverter installation manual).

2. App Installation and WIFI Configuration

Scan the QR Code below to download and install the FoxCloud APP on your smartphone, refer to the "APP2.0 QUICK GUIDE" page for WIFI distribution network instructions.

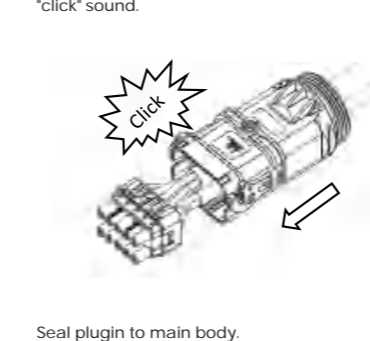


NOTE:

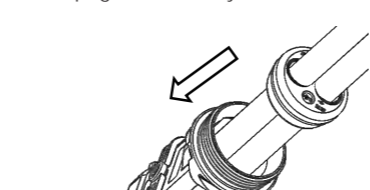
Contains app download path, configuration process, etc.

10

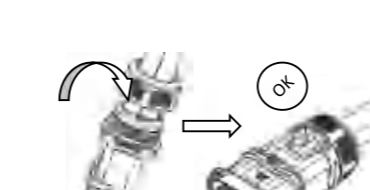
Insert the main body into the rubber core and hear the "click" sound.



Seal plug to main body.



Tighten the nut with an open-ended wrench. (torque 10.0 +/- 0.1N.m. Complete the installation.)

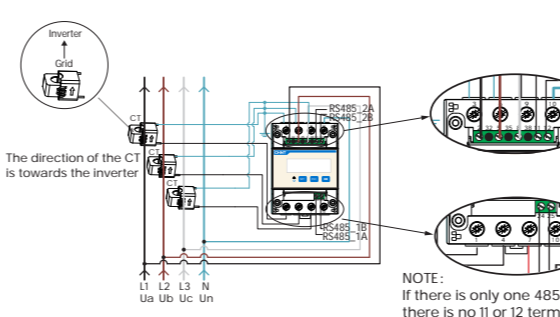
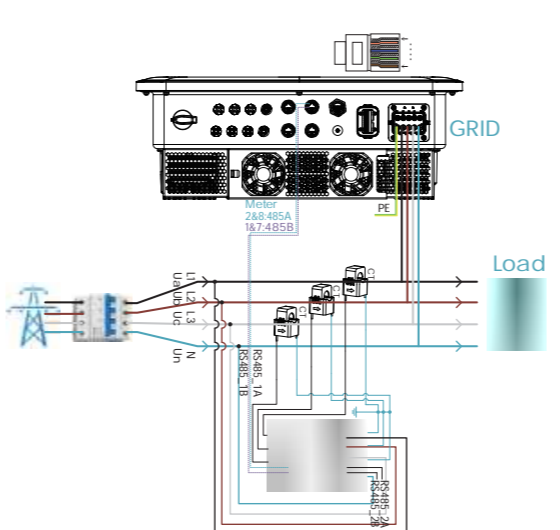


The types of 3CT energy meters

CT-Meter Type

NOTE: The electric meter is not included in the attachment and needs to be purchased separately.

Insert L1/L2/L3/N wires, CT and RS485A/B cable into the meter. Please refer to the meter wiring diagram on side of meter itself. During CT use, the direction of the CT arrow faces the inverter.



NOTE: If there is only one 485 port, there is no 11 or 12 terminal.

Please scan the QR Code and follow the steps below to download our latest multi-language User Manual/Quick Installation Guide: Scan the QR Code --> Select your language --> Choose to download User Manual or Quick Installation Guide --> Download



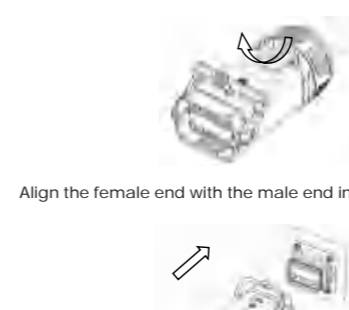
NOTE:

Contains app download path, configuration process, etc.

10

Inserted

Open the latch.



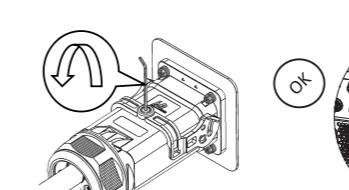
Align the female end with the male end in the anti-stay position.



After the male and female insert the card point into the tracks lot, press the lock.

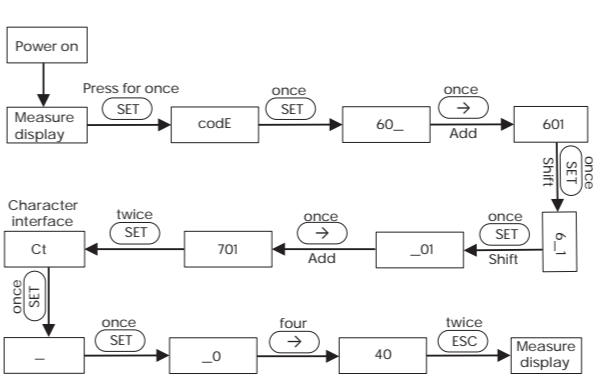


Tighten the screws with the S2.5 hexagon wrench with a torque of 2.5 +/- 0.1N.m. Installation completed.



The settings of the electric meter

The transformation ratio setting of a CT meter needs to be consistent with the transformation ratio of a CT meter. The transformation ratio setting method for a CT meter is as follows:

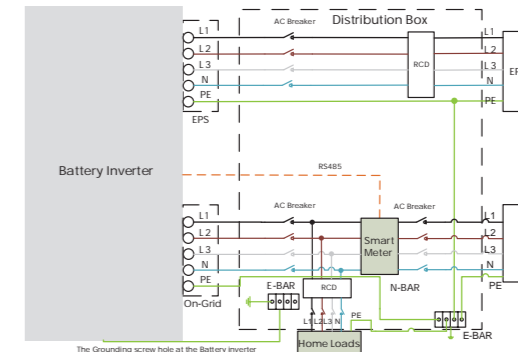


7

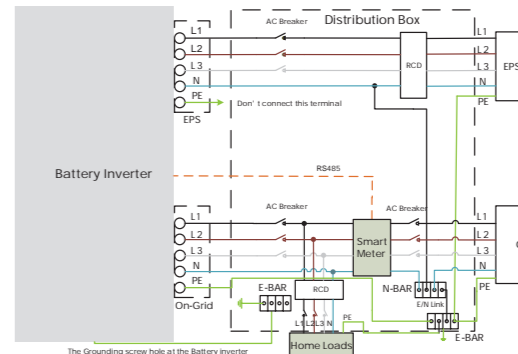
4. EPS Connection

EPS wiring diagram

For countries such as China, Germany, the Czech Republic, Italy, etc., please follow local wiring regulations. This diagram is an example for an application in which neutral is separated from the PE in the distribution box.



For countries such as Australia, New Zealand, South Africa, etc., please follow local wiring regulations. According to Australian safety requirements, the N cables of the GRID side and EPS side must be connected together. Otherwise, the EPS function will not work.



11. Ethernet Connection

The definition of Ethernet port pin is as follows:

Port	1	2	3	4	5	6	7	8
Ethernet	TX+	TX-	RX+	/	/	/	RX-	/

Introduction to Ethernet port:

The network port is mainly used for communication, transmitting data from the inverter to the network for detecting the daily operation status of the inverter, and can control the inverter's wake-up through EMS.

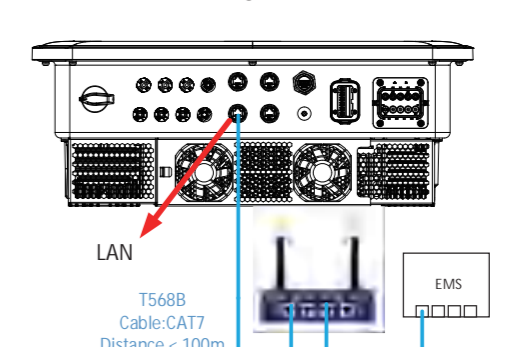
The device supports zero configuration network discovery through the mDNS (Multicast DNS) protocol. Users can directly access device services through standard format hostnames in the same LAN environment.

1. Service identification format: The device will broadcast the mDNS service in mDNS_ - SN > format (e.g. mDNS_12345678), and SN is the unique serial number of the device. (see fuselage nameplate label)

Protocol Type: TCP
Open port: 502 (default for Modbus TCP industrial communication protocol)

2. Precautions: Please make sure the device is on the same subnet as the client; Please close the firewall or release UDP 5353 (mDNS) and TCP 502 ports; Please refer to the SN number of the equipment for serial number.

Ethernet connection Diagram

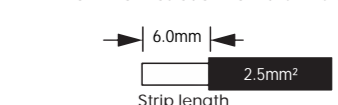


8

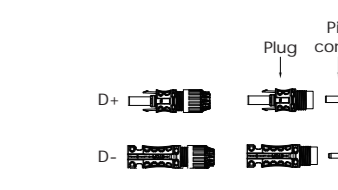
5. PV Connection

PV Wiring (For Hybrid Only)

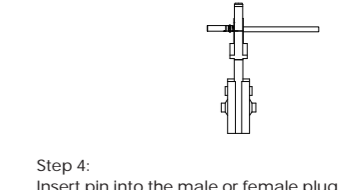
Step 1: Prepare PV wire. Choose 2.5mm² wire to connect the PV module. Trim 6mm of insulation from the wire end.



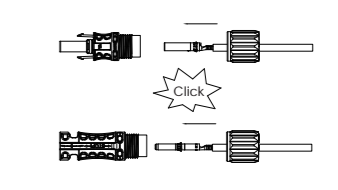
Step 2: Separate the PV connector as below.



Step 3: To insert terminal. Press the wire and terminal tightly with a wire clamp. Rivet terminal. Ensure the concentricity of metal parts and cable at same level/crimped metal parts and cable pull tension 230N.



Step 4: Insert pin into the male or female plug. Until hear a "click". Tighten the nut on the terminal.



4

12. DRM Connection

The definition of DRM port pin is as follows:

Port	1	2	3	4	5	6	7	8
DRM	REF GND/0	DRM/5	DRM/2	DRM/3	DRM/4	COM LOAD/0	GND	GND

Note: To achieve the DRMO function, pins 1 and 6 need to be short-circu