



Quick Guide

Three Phase All In One System: 5~15kW

MEI2-HT5H-AIO(AIO1)

MEI2-HT6H-AIO(AIO1)

MEI2-HT8H-AIO(AIO1)

MEI2-HT10H-AIO(AIO1)

MEI2-HT12H-AIO(AIO1)

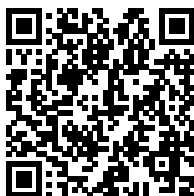
MEI2-HT15H-AIO(AIO1)

MEI2-HT10H-AIO2

Please scan the QR code below to view the user manual



Please scan the following QR code to download the APP



Before installing the Three Phase Hybrid Inverter, please read through the user manual in order to learn the product information and safety precautions. The Company does not provide warranty services for any damage caused by not follow the manual instructions during in storing, handling, installing and using the equipment. We may update this document irregularly due to product version upgrading or other reasons. This document is used for use guidance, and all statements, information and suggestions contained herein do not constitute any guarantee, either expressly or in an implied manner, unless otherwise specified.

STATEMENT

Follow local laws and regulations when installing, operating, or maintaining the equipment. The safety instructions in this manual are only supplements to local laws and regulations. The Company will not be liable for any consequence caused by the violation of general safety requirements or design, production, and usage safety standards.

PERSONNEL REQUIREMENTS

- Personnel who plan to install or maintain the equipment must receive thorough training, understand all necessary safety precautions, and be able to correctly perform all operations.
- Only qualified professionals are allowed to install, operate, and maintain the equipment.

The following types of safety instructions and general information appear in this document as described below:

	Danger!	Indicates a hazard with a high level of risk which, if not avoided, will result in death or serious injury.
	Warning!	Indicates a hazard with a medium level of risk which, if not avoided, could result in death or serious injury.
	Caution	Indicates a hazard with a low level of risk which, if not avoided, could result in minor or moderate injury.
	Notice	Indicates actions of which, if not avoided, could result in material damage.

VERSION:

V1.0 - 2026.08.05
First edition release

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1 Important Safety Instructions



Danger!

• Danger to life due to high voltages in the inverter! All work must be carried out by qualified electrician. The appliance is not to be used by children or persons with reduced physical sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction.

• The accessories which are shipped with the inverter are only recommended, otherwise may result in a risk of fire, electric shock, or injury to person.

• Do not disassemble any parts of inverter which are not mentioned in installation guide. It contains no user-serviceable parts. See Warranty for instructions on obtaining service. Attempting to service the inverter yourself may result in a risk of electric shock or fire and will void your warranty.

• Do not operate the inverter when the device is running.

• Ensure input DC voltage $\leq$ Max. DC voltage. Over voltage may cause permanent damage to inverter or other losses, which will not be included in warranty!

• Make sure that existing wiring is in good condition and that wire is not undersized.



Warning!

• Risk of electric shock!

• Authorized service personnel must disconnect both AC and DC power from inverter before attempting any maintenance or cleaning or working on any circuits connected to inverter.

• PV modules shall have an IEC 61730 Class A or Class II rating.

• Authorized service personnel must use insulated tools when installing or working with this equipment.

• Danger of burn injuries due to hot enclosure parts!

• Never touch either the positive or negative pole of PV connecting device.

• CAUTION-RISK of electric shock from energy stored in capacitor, never operate on the inverter couplers, the MAINS cables, Battery cables, PV cables or the PV generator when power is applied. After switching off the PV, battery and Mains, always wait for 5 minutes to let the intermediate circuit capacitors discharge before unplug DC, battery plug and MAINS couplers.



Caution

Measure the voltage between terminals DC+ and DC- with a multi-meter (impedance at least 1Mohm) to ensure that the device is discharged before beginning work (35VDC) inside the device.

PE Connection and Leakage Current



Warning!

• High leakage current!

• Earth connection essential before connecting supply. Incorrect grounding can cause physical injury, death or equipment malfunction and increase electromagnetic.

• Make sure that grounding conductor is adequately sized as required by safety regulations.



Notice

• The inverter has an integrated Type-B Residual Current Monitoring Unit (RCMU). if an external RCD is required by local regulations, check which type of RCD is required for relevant electric codes. It is recommended to use a Type-A RCD with the value of 300 mA.

• All the product labels and nameplate on the inverter shall be maintained clearly visible.

Network Security



Warning!

Install the gateway. Please do not configure this product in an untrusted network environment.

Equipment Installation

Powerinfi Series is designed for outdoor installation (IP66). Make sure the installation site meets the following conditions:

- Not in direct sunlight.
- Not in areas where highly flammable materials are stored.
- Not in potential explosive areas.
- Not in the cool air directly.
- Not near the television antenna or antenna cable.
- Not higher than altitude of about 2000m above sea level.
- Not in environment of precipitation or humidity.
- Under good ventilation condition.
- The ambient temperature in the range of -20 °C to +60 °C.
- The equipment should be installed in areas away from liquids and must not be installed below water pipes, air outlets, or other locations prone to condensation; it must not be installed below air conditioning vents, ventilation outlets, or cable entry windows in machine rooms, which are prone to water leakage, to prevent liquids from entering the equipment and causing malfunctions or short circuits. The wall hanging the inverter should meet conditions below
- The surface should be strong and flat.
- Keep away from flammable, explosive materials to avoid fire disaster.
- The installation place should be away from humid or corrosive substance.



Notice

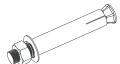
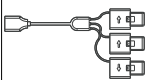
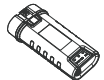
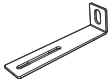
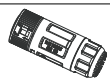
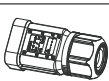
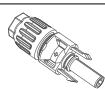
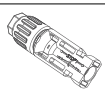
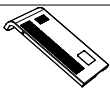
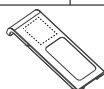
Battery Safety Instructions



Notice

For transportation, installation, commissioning, operation, maintenance, or disposal of the batteries, please refer to the battery user manual.

2 Packing List

					
Inverter*1	(M 8 x80)*2	CT*1	OT Terminal*2	WiFi*1	CT/METER*1
					
COM*1	L Bracket*2	M5*18 Bracket Screws*2	M5X12 Grounding Screw*2	Quick Installation Manual*1	Certificate of Quality*1
					
Backup*1	Grid*1	PV Positive Terminal* 2 or 3	PV Negative Terminal* 2 or 3		
		*Subject to the actual product.			
(Right) Trim Panel*1			(Left) Trim Panel*1		

NOTICE: Accessories are subject to the actual item; the images above are for reference only.

3 Structural Installation

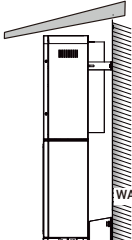
3.1 Installation Requirements

Installation environment requirement

IP66

-20°C~50°C

0%~100%RH



WALL

Notice

When installed outdoors, build a sun/rain shelter to protect the battery system from direct sunlight and rain.

Wall thickness:
 Wall-mounted installation: >150mm
 Floor-mounted installation: >100mm

load-bearing wall:
 It can withstand four times the weight of the device.

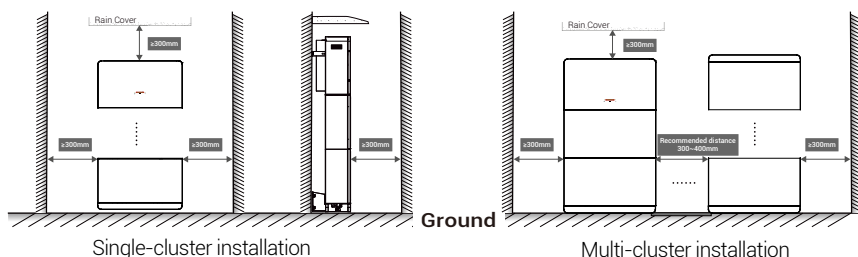






 No direct sunlight ✓	 No exposure to rainwater ✓	 No snow accumulation ✓
 Direct sunlight ✗	 Rainwater exposure ✗	 Snow accumulation ✗

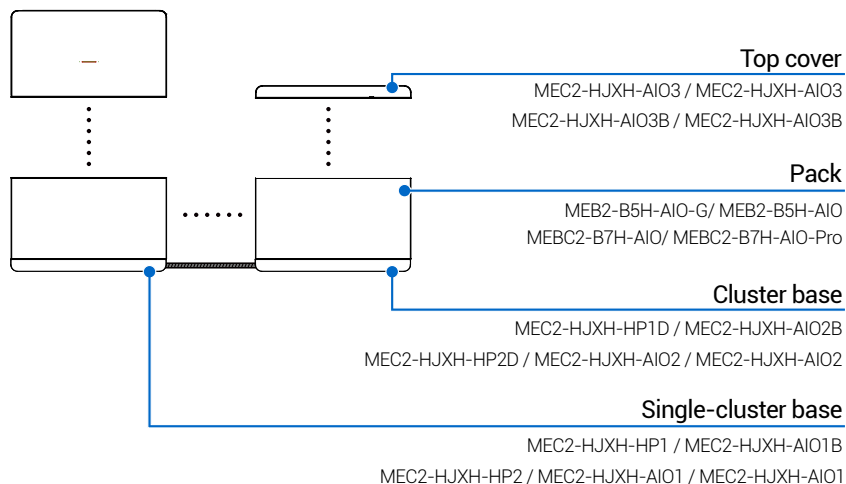
Installation distance requirements



3.2 Installation the energy storage system

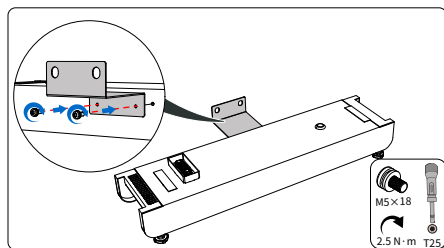
 **Notice** The Inverter can be used with different battery systems. A battery system includes the battery pack, base, top cover. When configured for 100 Ah or 314 Ah battery systems, the battery pack must be paired with the corresponding base and top cover.

3.2.1 Compatible parts and models

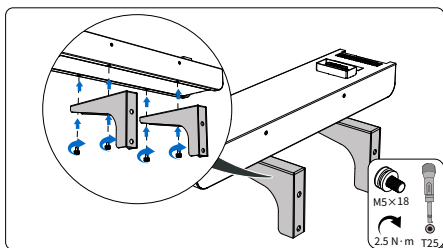


3.2.2 Base installation

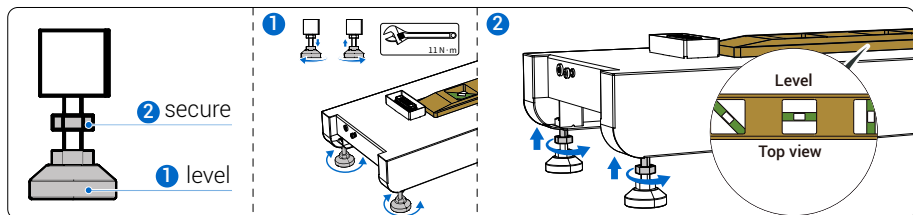
01 Base bracket installation (Floor-Mounted Installation).



01 Base bracket installation (Wall-Mounted Installation).

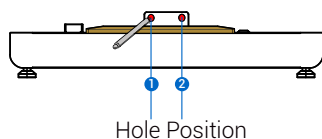


02 Adjust the leveling feet (Floor-Mounted Installation).

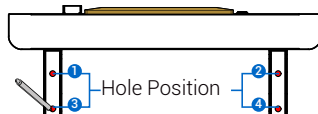


03 Marking hole positions.

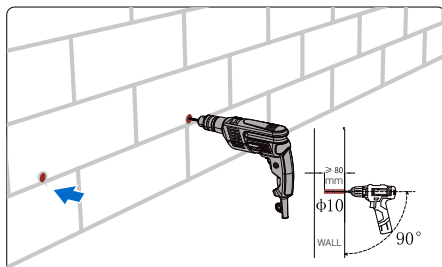
(Floor-Mounted Installation)



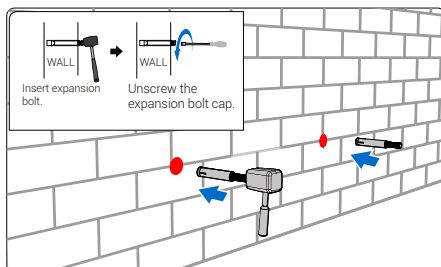
(Wall-Mounted Installation)



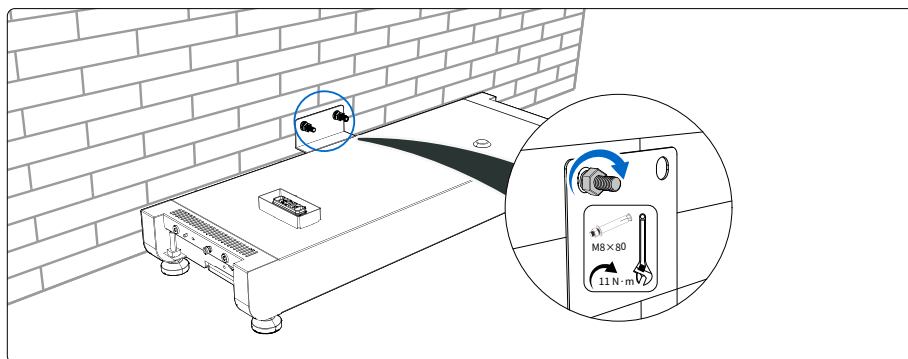
04 Base bracket drilling.



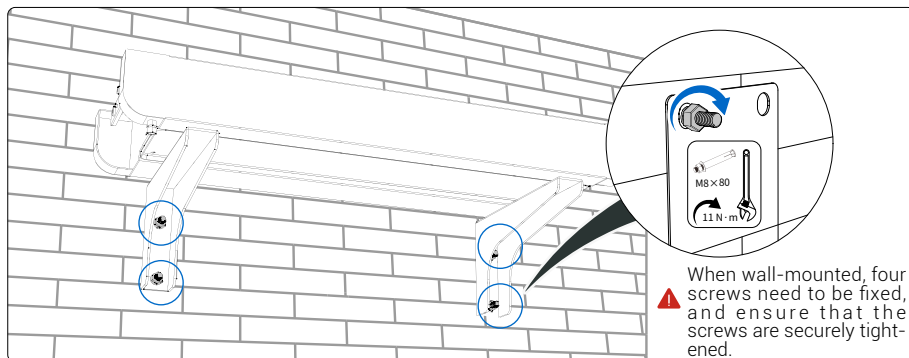
05 Install expansion screws.



06 Fixing screws, mounting the base (Floor Mounting).



07 Fixing screws, mounting the base (Wall-Mounted).



3.2.3 PACK installation

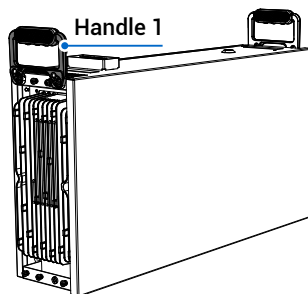
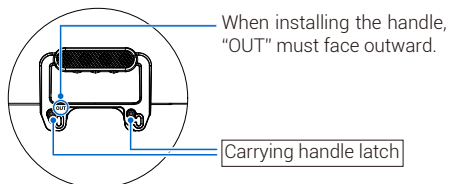
Carrying handle instructions

Handle 1:



Notice

1. The handle is inside the base packaging box.
2. Ensure the handle is fully secured before use.

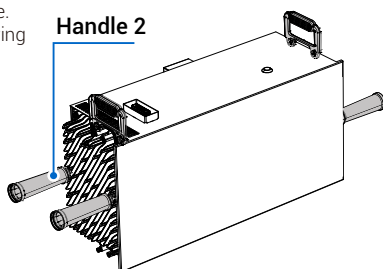
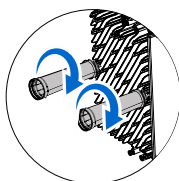


Handle 2:



Notice

1. This handle is an optional accessory.
2. Ensure the handle is fully tightened before use.
3. This handle is only compatible with the following battery models: MEBC2-B7H-AIO / MEBC2-B7H-AIO-Pro

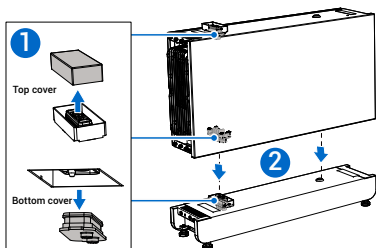


01 Stacked battery pack.

1

Top cover

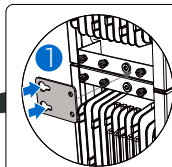
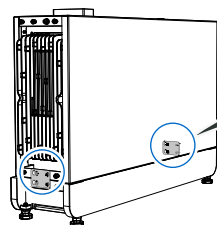
Bottom cover



Notice

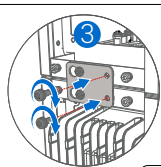
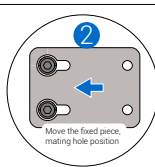
- Remove the terminal protective cover before installation.
- When installing the battery pack, ensure the terminals are properly mated; do not press down forcefully to avoid damaging the terminals.
- If the number of stacked battery packs exceeds three, a ladder must be used during transportation.
- During installation, use the handle provided in the accessories for transportation, and ensure the handle is properly engaged before moving.

02 Fixed battery pack

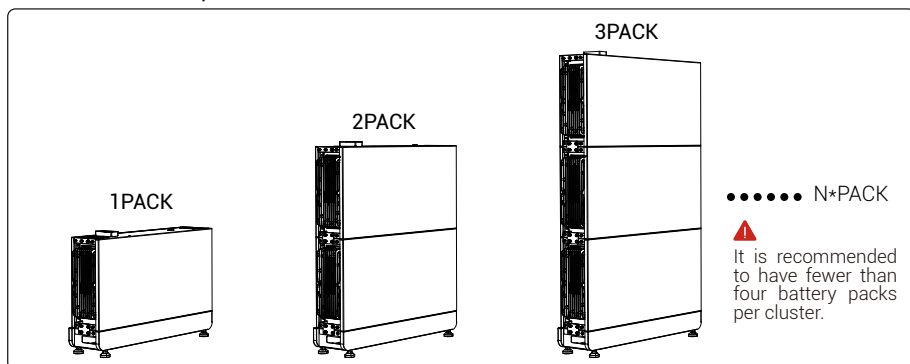


Notice

The battery pack must be securely fixed before installing the next one.

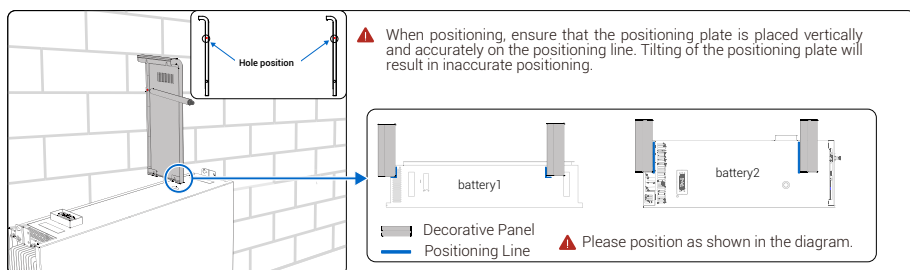


03 Installation complete

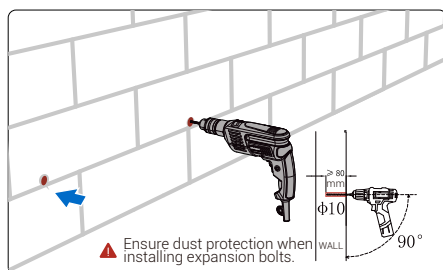


3.2.4 Inverter Installation

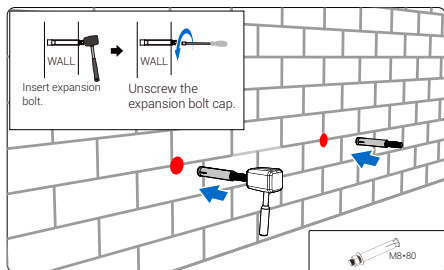
01 Mark the holes.



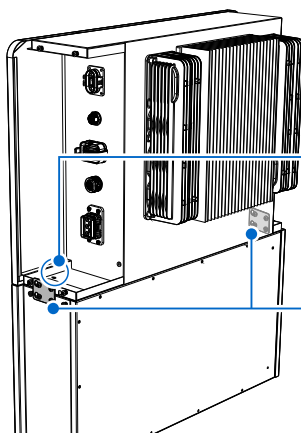
02 Drill the holes.



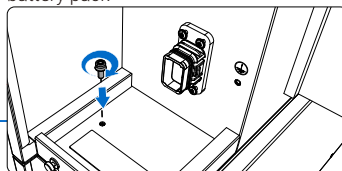
03 Install expansion screws.



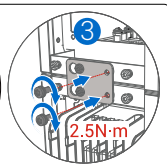
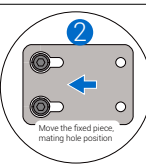
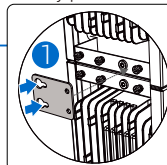
04 Fix the inverter and battery pack.



Steps 1: Install the fixing screw between the inverter and the battery pack



Steps 2: Install the fixing clips between the inverter and the battery pack.

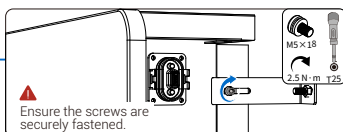
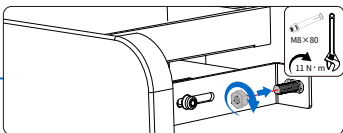
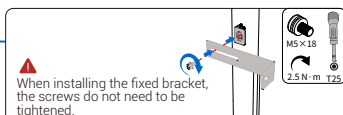
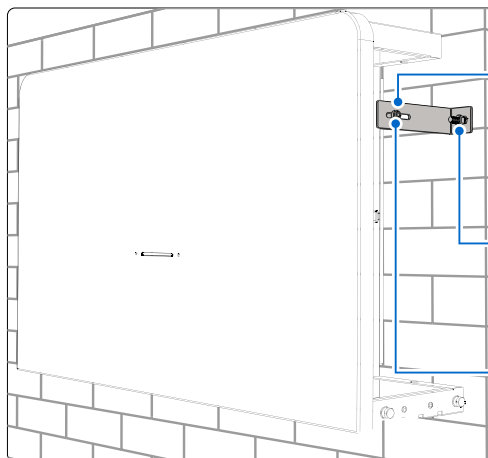


Notice

- Before placing the inverter, remove the terminal protection covers on the inverter and PACK.
- Before fixing the wall and the inverter, the inverter and the battery pack must be fixed first.
- Only one screw needs to be installed for fixing. Fixing clips need to be installed on both sides, and ensure all screws are securely installed before proceeding to the next step.



05 Install the wall bracket.



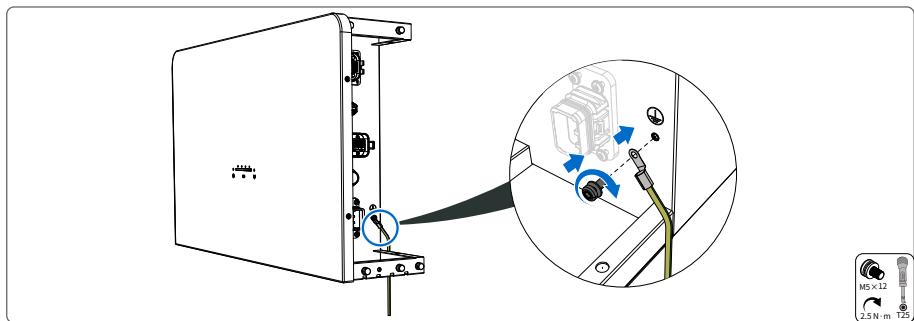
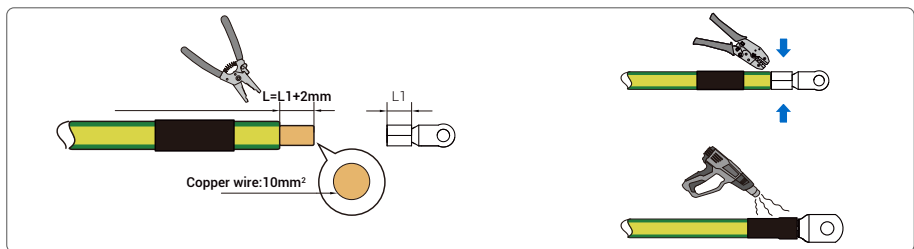
4 Electrical Installation

Electrical installation should be carried out in the following order. Reverse the procedure during disassembly.



Port	Wire Diameter	Port	Wire Diameter
PE	10mm ²	PV	6mm ²
CT/METER	Standard network cable	COM	4.5mm≤OD≤6.5mm
GRID	10mm ²	BACKUP	4-6mm ²

4.1 Install protective grounding wire



4.2 Install CT/METER Communication Terminal

RJ45 Patch Cord T-568A

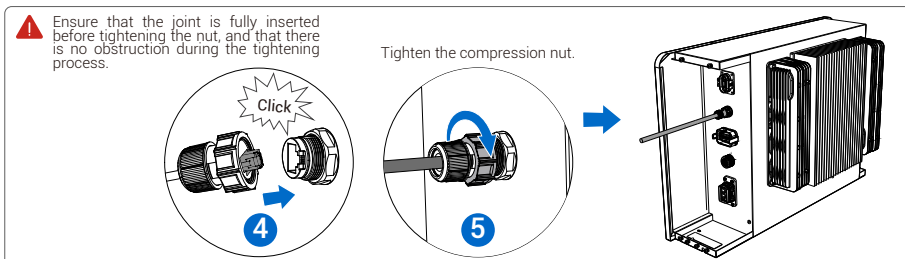
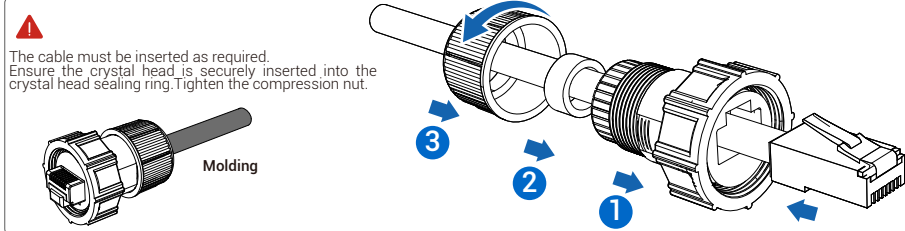
1. White & Green (RS485A Meter)
2. Green (RS485B Meter)
3. White & Orange (CT2+)
4. Blue (CT3-)
5. White & Blue (CT3+)
6. Orange (CT2-)
7. White & Brown (CT1+)
8. Brown (CT1-)

RJ45 Patch Cord T-568B

1. White & Orange (RS485A Meter)
2. Orange (RS485B Meter)
3. White & Green (CT2+)
4. Blue (CT3-)
5. White & Blue (CT3+)
6. Green (CT2-)
7. White & Brown (CT1+)
8. Brown (CT1-)

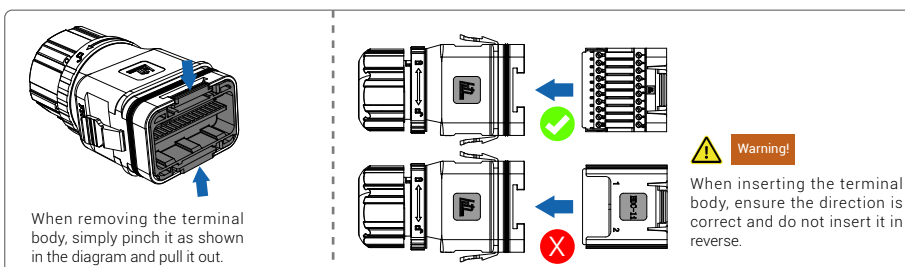
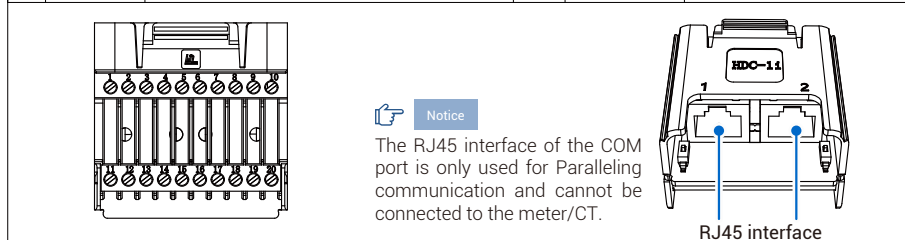
PIN	Description	PIN	Description
1	RS485A Meter	5	CT3+
2	RS485B Meter	6	CT2-
3	CT2+	7	CT1+
4	CT3-	8	CT1-

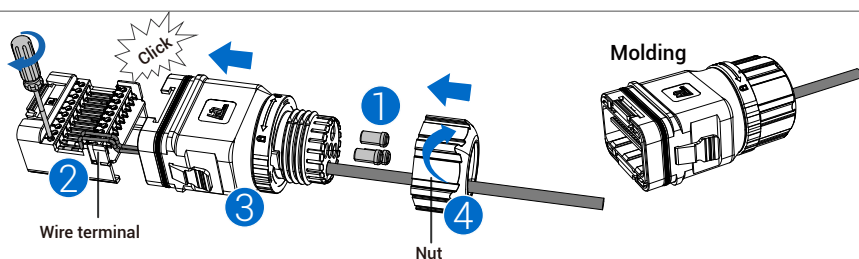
When crimping the wiring harness, the pin terminals must correspond pin-to-pin.



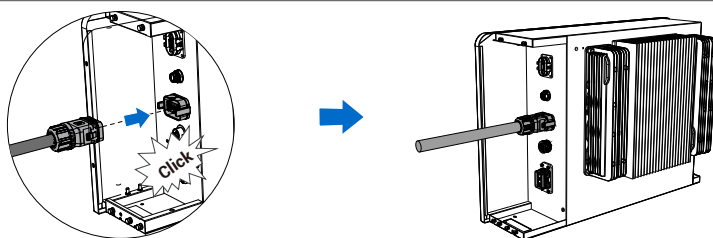
4.3 Install COM communication terminal

PIN	Definition	Interpretation	PIN	Definition	Interpretation
1	DRM1/5	DRED/RCR	2	DRM2/6	DRED/RCR
3	DRM3/7	DRED/RCR	4	DRM4/8	DRED/RCR
5	REF	DRED/RCR	6	COM/DRMO	COM/DRMO
7	5 V COM	5 V COM	8	GND	GND
9	DI3	ENWG14A/Digital input for emergency stop	10	DI4	DI from the ATS feedback
11	485A	Reserve 485A	12	485B	Reserve 485B
13	D03A	Heat pump A	14	D03B	Heat pump b
15	D04A	Diesel generator A	16	D04B	Diesel generator B
17	D05A	Reserve D05A	18	D05B	Reserve D05B

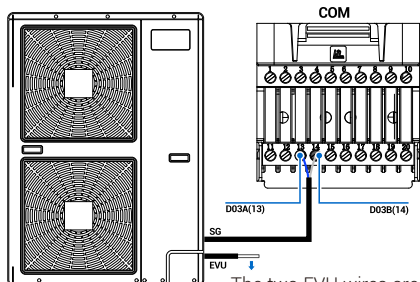




- Remove the plug inside the stopper and thread the wire through the terminal in the order shown in the diagram.
- Insert the wire into the corresponding terminal. (Note: The wire must be accurately inserted into the terminal according to the definition). Use a flat-head screwdriver to crimp the wire, tightening the screw with a torque of 1.2 ± 0.1 N·m.
- Arrange the core wires properly, ensuring no wire-crossing occurs in the rubber core area. Insert the rubber core into the main body until you hear a "click" sound.
- Install the stopper into the main body and use the plug to seal the unused wire holes. Screw the wire-locking nut onto the main body with a torque of 2.5 ± 0.1 N·m to complete the installation.



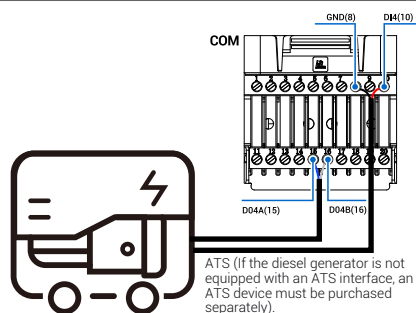
Connect the heat pump



Subject to the actual product received.

The two EVU wires are shorted together.

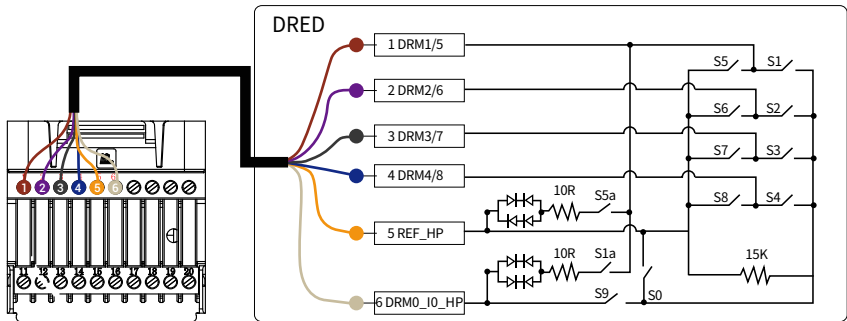
Connect to the diesel generator



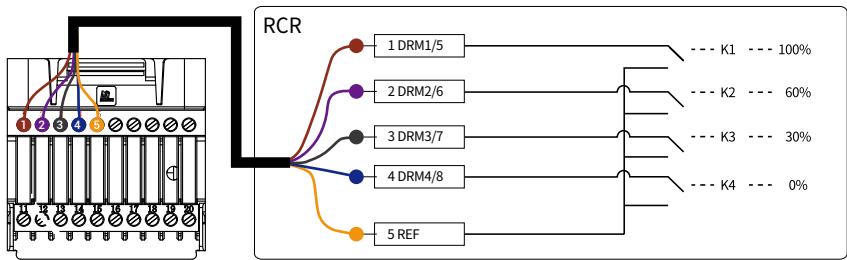
Subject to the actual product received.

ATS (If the diesel generator is not equipped with an ATS interface, an ATS device must be purchased separately).

Connect to DRED(Australia only)



Connect to RCR

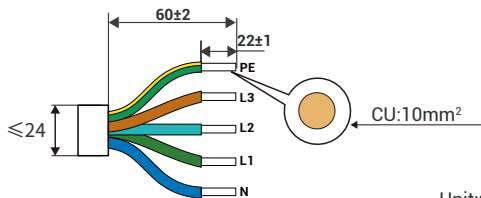
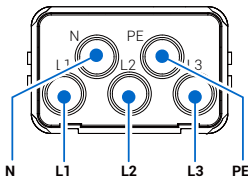


4.4 Install the grid port (GRID)

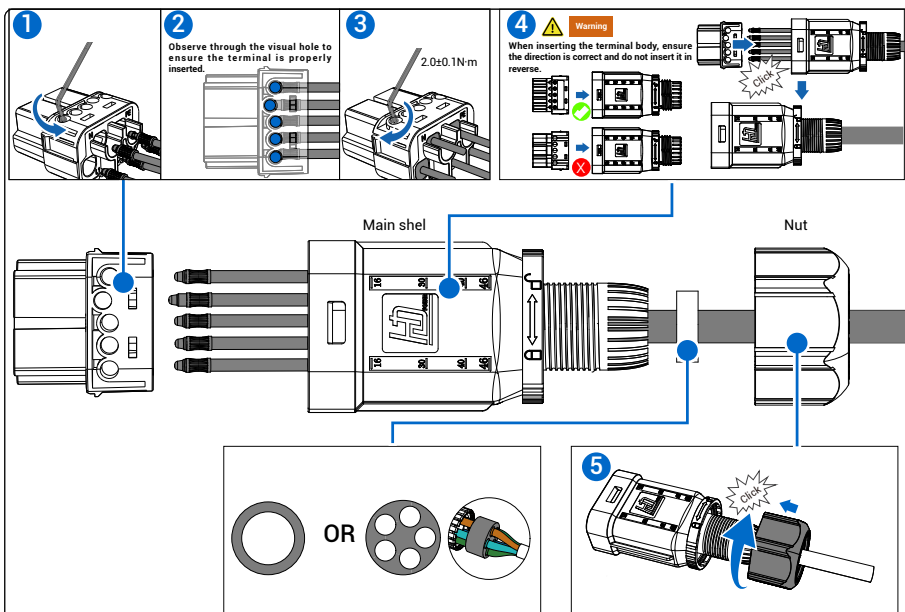


Notice

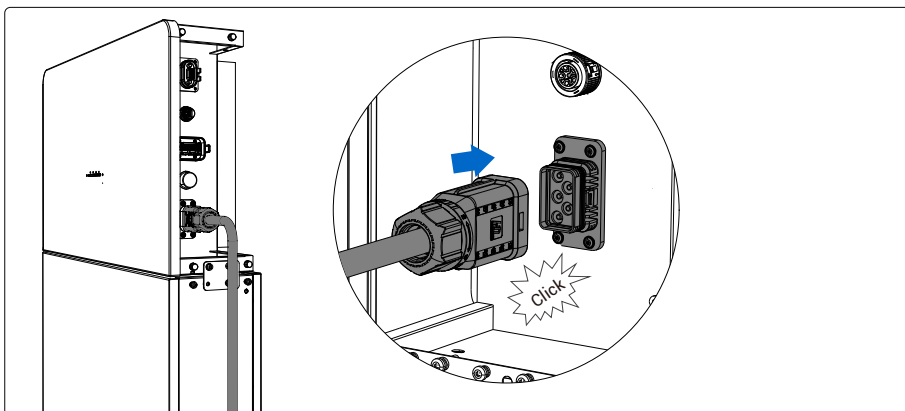
The connector is marked with corresponding symbols inside; the live wire must be connected to the "L1/L2/L3" terminal; the neutral wire must be connected to the "N" terminal; the ground wire must be connected to the "PE" terminal. Failure to comply with local standards, regulations, or the recommended values provided by the company, and using an oversized AC switch may result in the inability to safely disconnect in abnormal situations, leading to severe malfunctions.



Unit:mm



- After crimping the stripped wire with the insulated terminal, sequentially thread the locking nut, insert the main cable into the rubber core according to the wire sequence, ensuring the insulated terminal is flush with the surface of the rubber core, and tighten the screw with a torque of $2.0 \pm 0.1 \text{ N} \cdot \text{m}$.
- Note: Wiring must strictly follow the L, N, and PE labels on the plug.
- Insert the rubber core into the main body until you hear a "click" sound.
- Use an open-end wrench to tighten the nut, accompanied by "click, click" sounds.



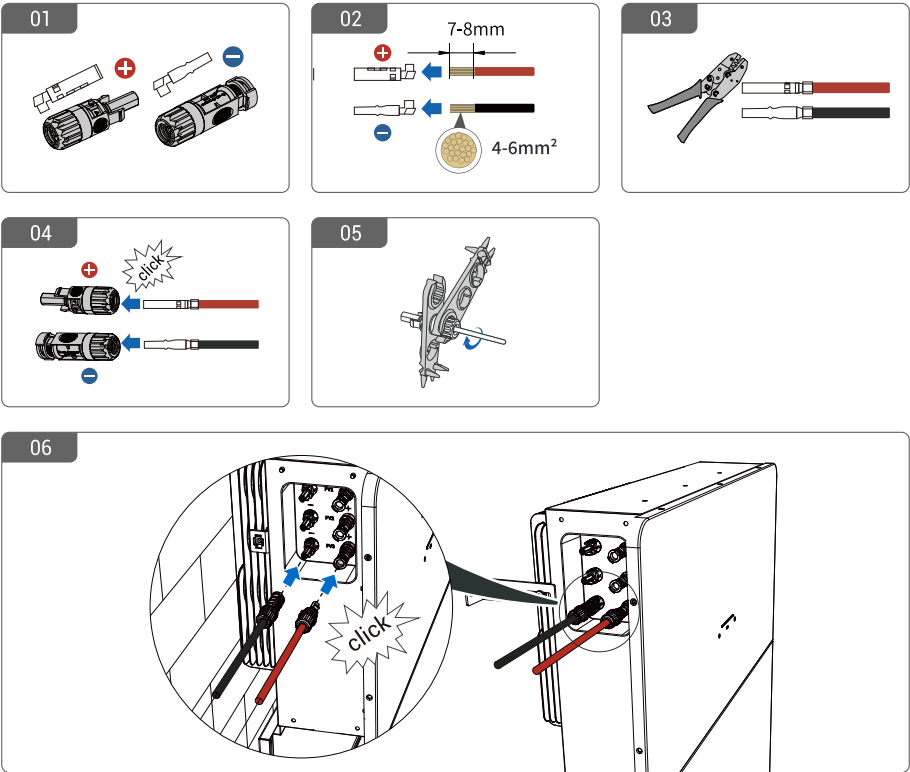
4.5 Install DC terminals (PV input)



Notice

The wiring harness is provided by the user.

After connecting the plug, perform a pull-back test to ensure the plug is properly installed and does not come off.



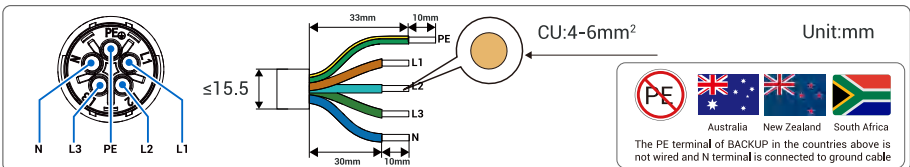
4.6 Install the off-grid port (BACKUP)

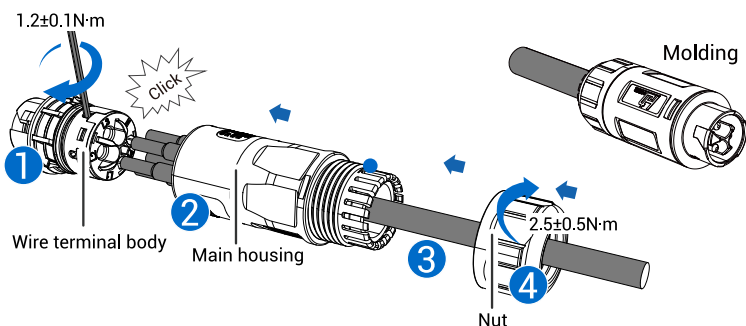


Notice

The connector is marked with corresponding symbols inside; the live wire must be connected to the "L" terminal; the neutral wire must be connected to the "N" terminal; the ground wire must be connected to the "PE" terminal. Failure to comply with local standards, regulations, or the recommended values provided by the company, and using an oversized AC switch may result in the inability to safely disconnect in abnormal situations, leading to severe malfunctions.

Interface Definition

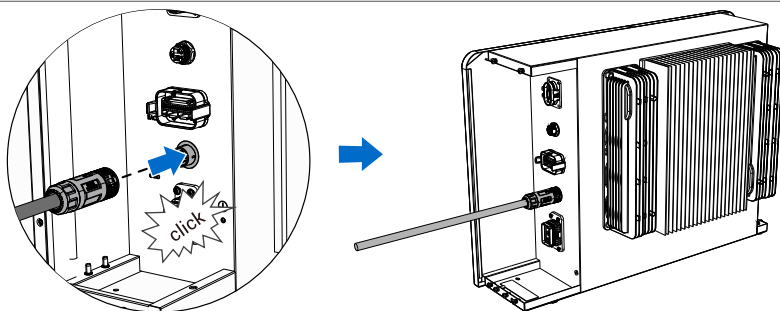




- Use a crimping tool to crimp the terminal, attach the parts to the cable, and insert them into the terminal holes according to the wire sequence. Use an inner hex screwdriver to crimp the wires, tightening the screws with a torque of 1.2±0.1N·m.

Note: Wiring must be done according to the L, N, and PE labels on the plug.

- Insert the rubber core into the main body until you hear a "click" sound.

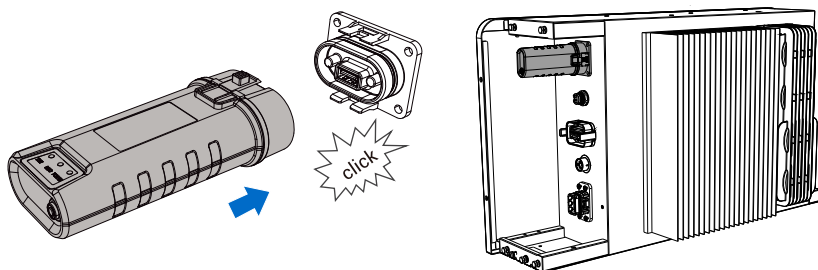


4.7 Install WiFi Module

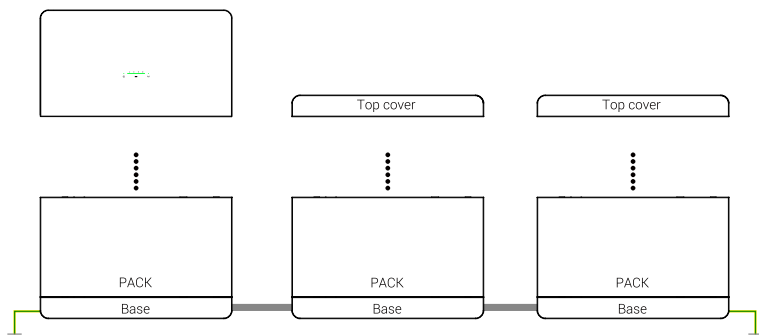


WiFi User Manual

- Ensure the WiFi dongle is fully aligned with the device slot and securely inserted (you should hear a "click" sound); otherwise, the WiFi dongle will not function properly.
- This section only demonstrates the installation of the WiFi dongle. For debugging and usage of the WiFi dongle, please refer to the WiFi dongle user manual. To obtain the WiFi dongle user manual, please scan the QR code on the right.

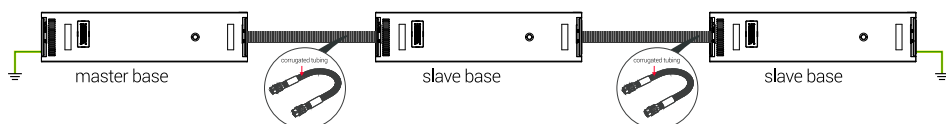


5 System Expansion



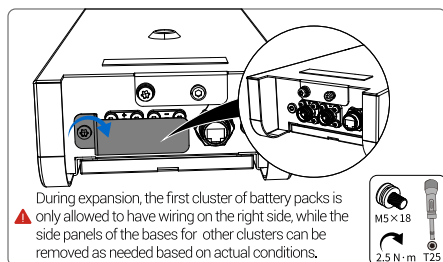
5.1 Base harness connection

Before installation, please choose the appropriate installation method based on the model of the base.

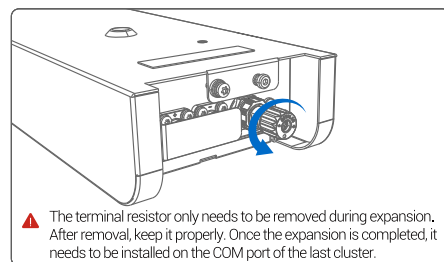


Base 1:(MEC2-HJXH-AI01 / MEC2-HJXH-AI02)

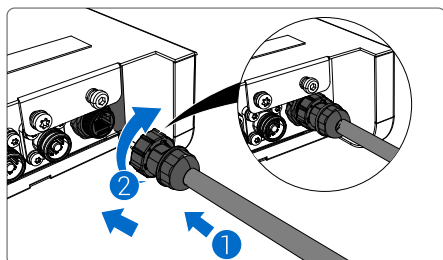
01 Remove the protective side panel.



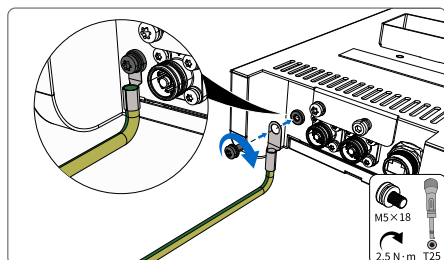
02 Remove the terminal resistor.



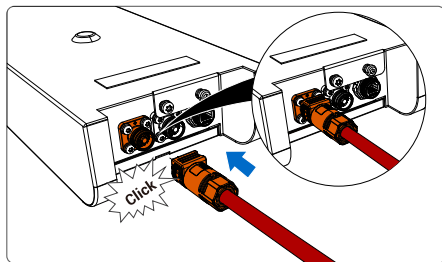
03 Connect the communication wiring harness.



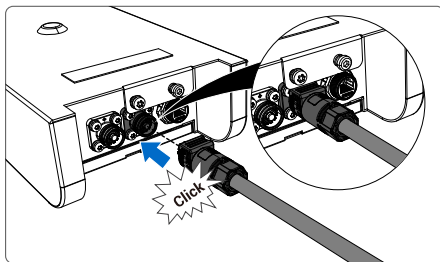
04 Connect the protective ground wire.



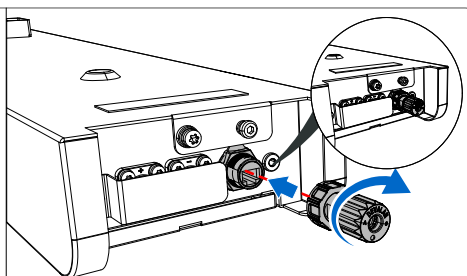
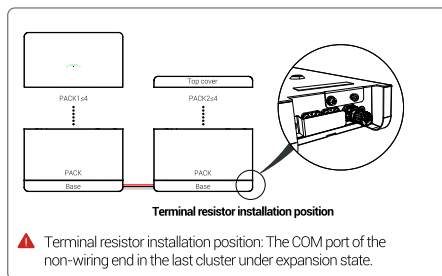
05 Connect the DC power supply harness (+).



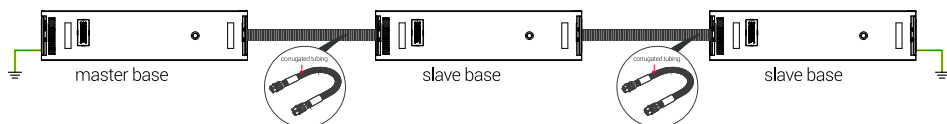
06 Connect the DC power supply harness (-).



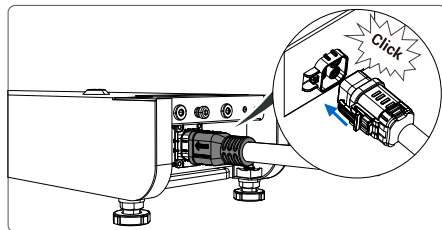
07 Install terminal resistor.



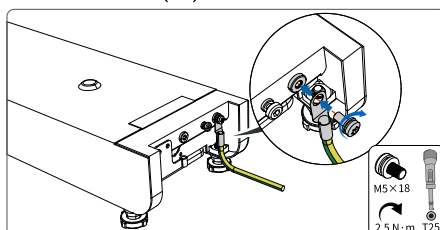
Base 2: (MEC2-HJXH-AIO1 / MEC2-HJXH-AIO2 / MEC2-HJXH-AIO1B / MEC2-HJXH-AIO2B)



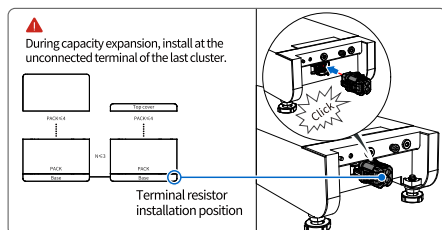
01 Install the wire harness terminals.



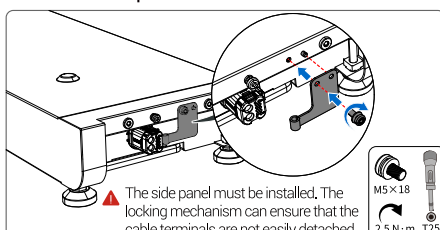
02 Connect the (PE) conductor.



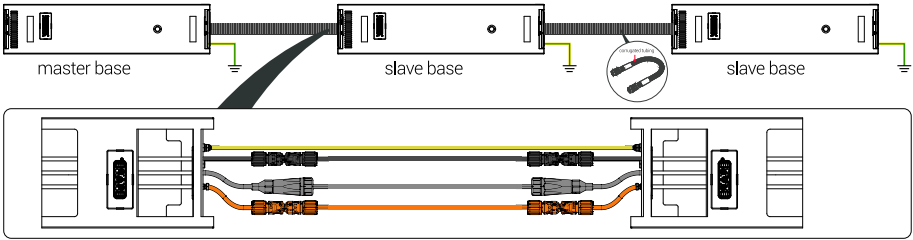
03 Install terminal resistor.



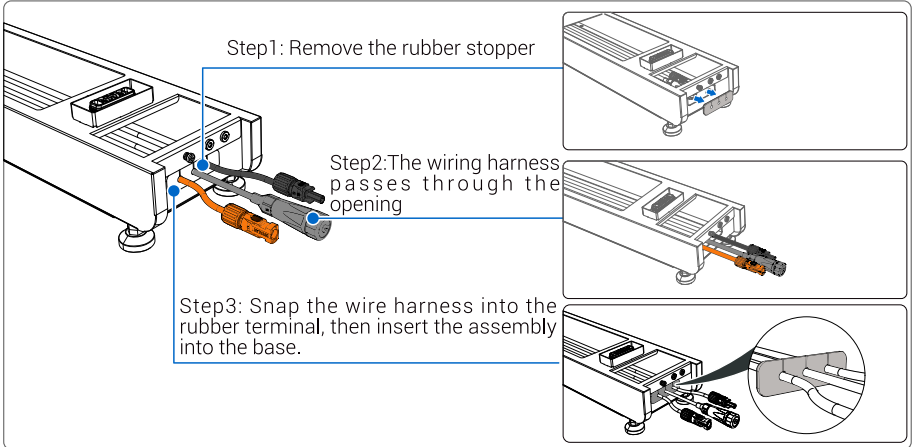
04 Fixed side panel.



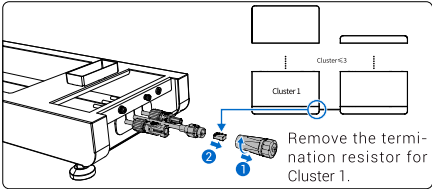
Base 3:(MEC2-HJXH-HP1 / MEC2-HJXH-HP1D / MEC2-HJXH-HP2 / MEC2-HJXH-HP2D)



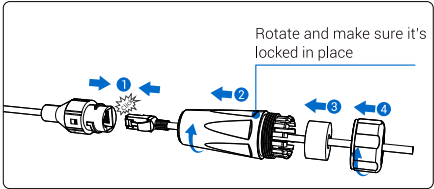
01 Wiring Harness Routing



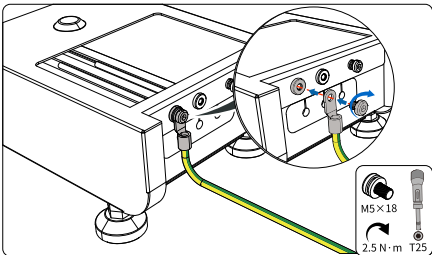
02 Remove the termination resistor.



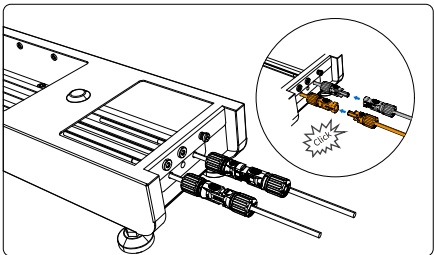
03 Install the communication wiring harness.



04 Install the PE wire.

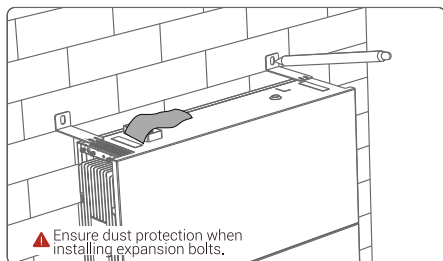


05 Install the positive and negative output wires.

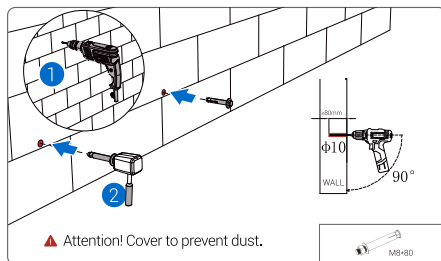


5.2 Install the top cover

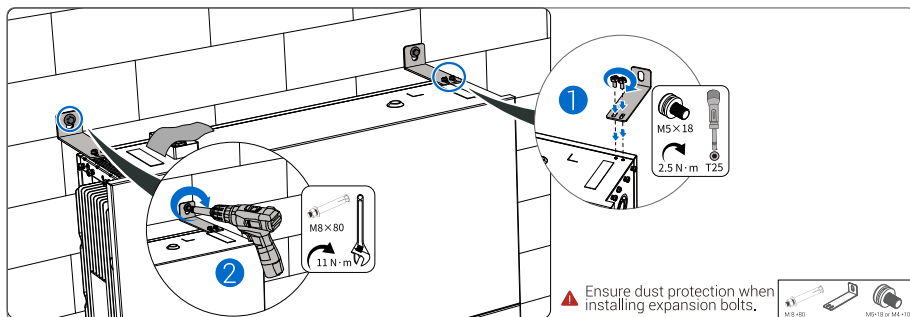
01 Position the expansion bolt.



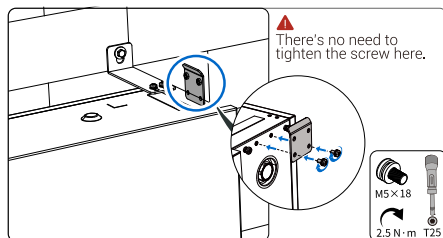
02 Install the expansion bolt.



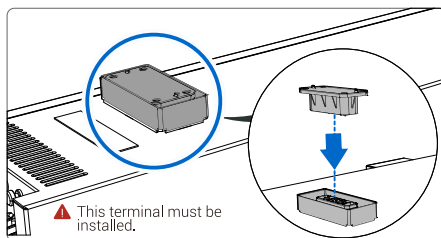
03 Fixed Wall Mounting Bracket.



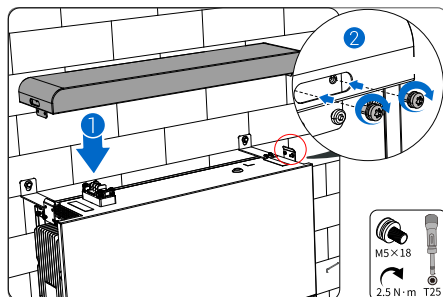
04 Side Mounting Bracket Installation.



05 Install the terminals.



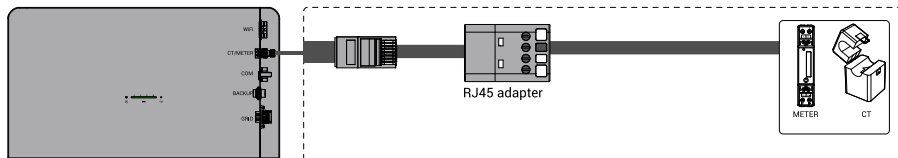
06 Installation of the Top Cover.



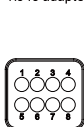
6 Install the Meter and CT

Connect the RJ45 adapter:

If CT/METER needs to connect to a meter or CT, an RJ45 adapter must be used for conversion. The conversion method for the RJ45 adapter is as follows:



RJ45 adapter PIN definition:



PIN	Description	PIN	Description
1	RS485A Meter	5	CT3+(For Grid)
2	RS485B Meter	6	CT2-(For Grid)
3	CT2+(For Grid)	7	CT1+(For Grid)
4	CT3-(For Grid)	8	CT1-(For Grid)

- CT is a standard accessory of the product. If an meter needs to be installed, the user must purchase it separately.
- The CT is subject to the actual product, and when connecting the CT, the arrow should point towards the grid side.
- There are multiple ways to connect the meter and CT. Users can connect them according to their actual situation. For specific connection methods, refer to the product user manual.

Installation Steps:

Step 1: The installer will prepare the Ethernet cable, and the length of the cable should be determined based on the site environment.

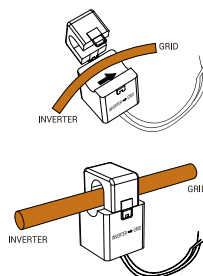
Step 2: Prepare the communication line, power cable, and tools for connecting the CT(only CT) or meter(with CT).

Step 3: Install the CT. Open the CT cover, place it on the main "L" cable of the grid, ensuring the arrow on the CT points towards the direction of the grid, and then close the cover. As shown in the figure .

*Step 4: Install the body of the meter. Choose an appropriate location to fix the DIN rail, and mount the meter onto the DIN rail.

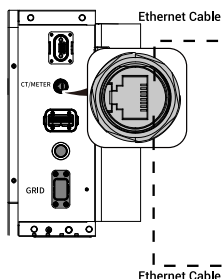
Note: Step 4 is only for installing the meter; skip this step when installing the CT.

CT access method



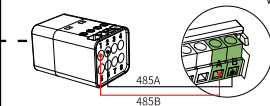
CT shall be subject to the actual product!

CT/METER connection method

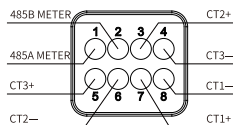
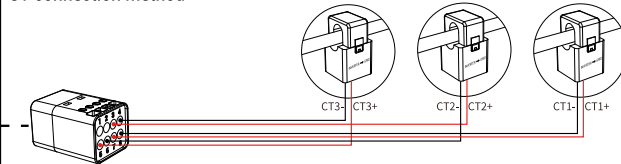


Subject to the actual product received

METER connection method

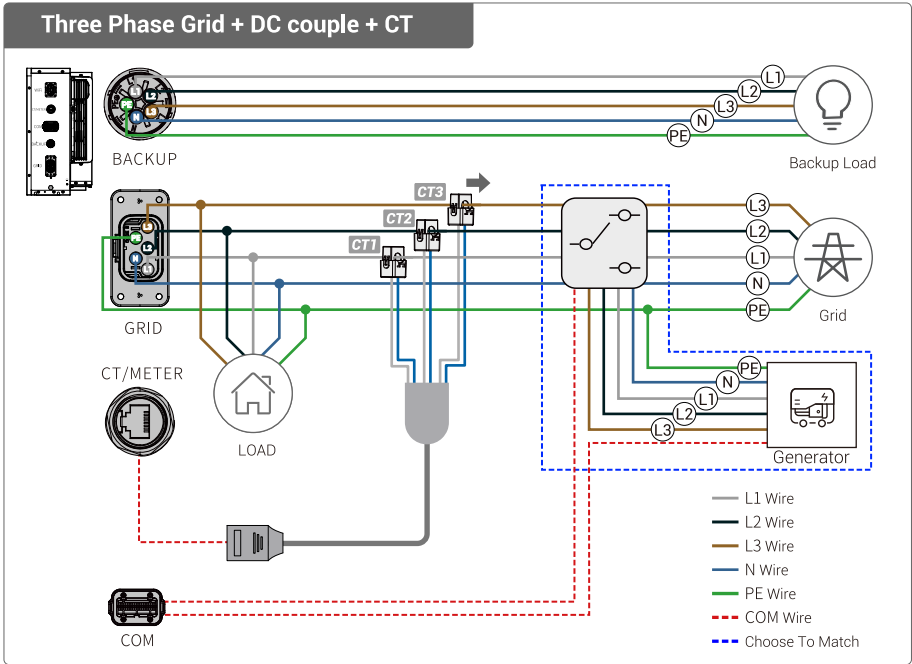


CT connection method



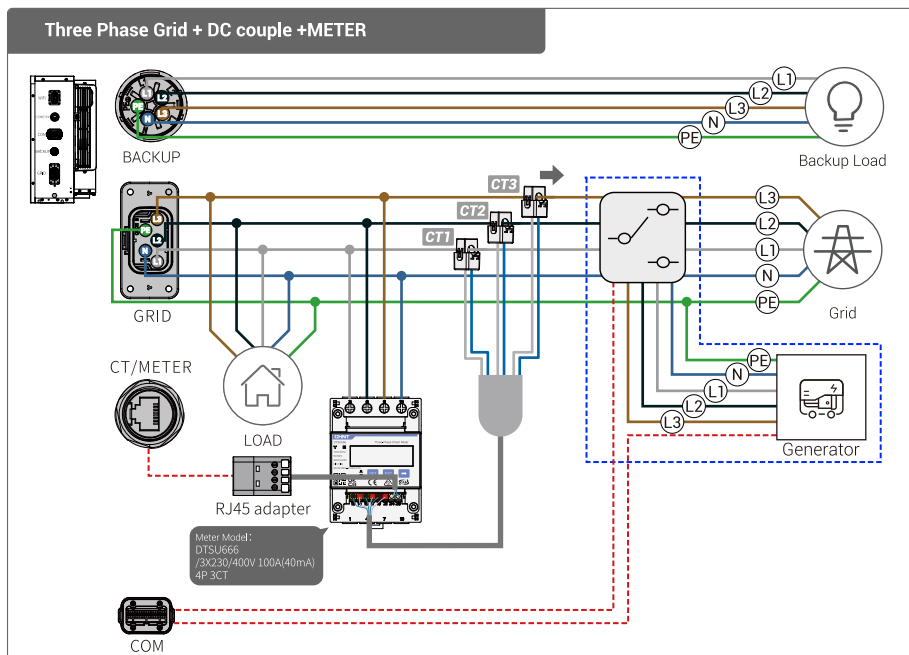
CT wiring diagram:

▲ It is recommended that the CT length be at least 10 m.

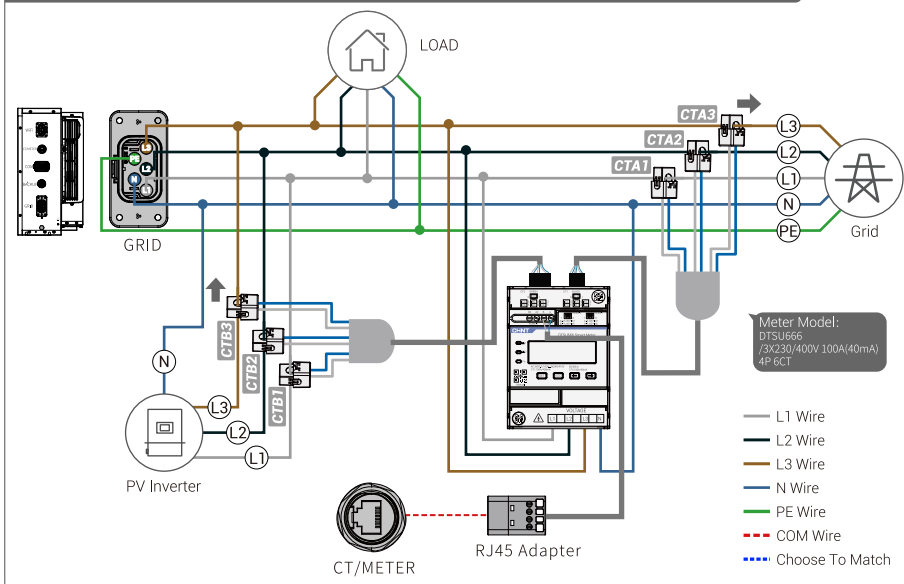


▲ For other wiring methods, please refer to the user manual.
For the wiring harness color, the actual product shall prevail.

METER wiring diagram:



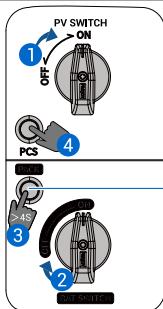
Three Phase Grid + AC Couple (Three Phase Solar Inverter) + Three Phase Meter (6 CT)



1. For other wiring methods, please refer to the user manual.
2. After completing the initial installation (including the dongle's network configured), it is recommended to perform a one-click self-test. For details, please refer to the app user manual.

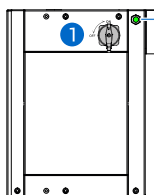
7 Power On/Off

Power On

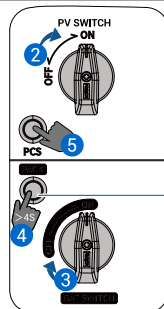


Press and hold for about 4 seconds or more.

I II(AU)

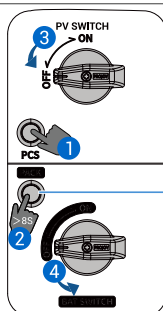


● Normal
● Fault



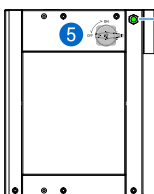
Press and hold for about 4 seconds or more.

Power Off

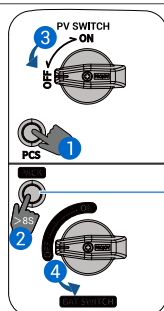


Press and hold for about 8 seconds or more.

I II(AU)



● Normal
● Fault



Press and hold for about 8 seconds or more.

8 Display Definition

Icon	Meaning	Display	Status	Description
	PCS Status		Green Light On	Inverter Working, Grid-Tied/Off-Grid Mode/Generator Mode Normal
			Green Light Blinking	Inverter in Detection Process/Online Upgrade Mode/Bypass Mode/Standby
			Red Light On	Red Light On: System Fault (Factors that Trigger Machine Stop, Red Light Display)
	Battery Status and Capacity		Light Off	No Battery Connection
			Light Blinks After Capacity	Charging and Current Battery SOC
			Light On After Capacity	Discharging and Remaining SOC
	Communication Connection and Data Transmission		Green Light On	Inverter Communication Module Normal, No Device Connected
			Green light flashing	Green light fast flashing: Communication (When the Bluetooth is connected to the inverter, the indicator light prioritizes indicating "Bluetooth connected: Green light slow flashing") Green light slow flashing: The LED will slow flash after Bluetooth connected

9 App Feature Overview



Please scan the following QR code for commissioning process



Scan the QR code to download the app for debugging

Warranty Registration Form

For Customer (Compulsory)

Name Country

Phone Number Email

Address

State Zip Code

Product Serial Number

Date of Commissioning

Installation Company Name

Installer Name Electrician License No.

For Installer

Module (If Any)

Module Brand

Module Size(W)

Number of String Number of Panel Per String

Battery (If Any)

Battery Type

Brand

Number of Battery Attached

Date of Delivery Signature

Please visit our warranty website: www.hiconics-global.com

For more detailed warranty terms, please visit Hiconics official
Website: www.hiconics-global.com

Hiconics Eco-energy Drive Technology Co., Ltd.

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Web: www.hiconics-global.com