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THREE-PHASE HYBRID INVERTER

H8000H-EU/H10000H-EU/H12000H-EU

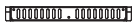
Quick Installation Guide

1. Packing List

Upon receiving the hybrid inverter, please check if any of the components as shown below are missing or broken.

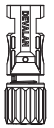
* The images shown here are for reference. The actual product and quantity are based on delivery.

Inverter x1



Wall Mount Bracket x1

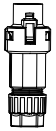
Black PV positive Connector x2



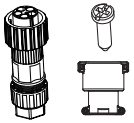
Black PV negative Connector x2

Blue positive battery Connector x1

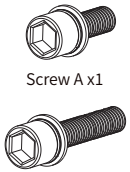
Blue negative battery Connector x1



AC Load Connector x1



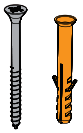
GRID Connector x1
Phillips Screw x4
Protective Cover x1



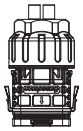
Screw A x1

Screws B x2

PV Disassembly Tool x1



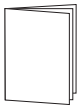
Expansion screw x3



COM x1

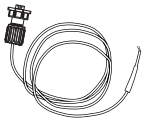
WIFI Module x1

Cord End Terminal x18



User Manual x1
Quick Installation Guide x1

RJ45 Waterproof Plug x1



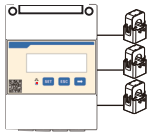
Meter Communication Cable x1

Standalone mode

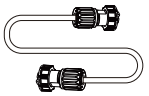
Smart Meter x1

If you choose standalone mode, the accessory shown on the left will be added.
If you choose multiple parallel mode, the accessories shown on the right will be added.

Multiple parallel mode

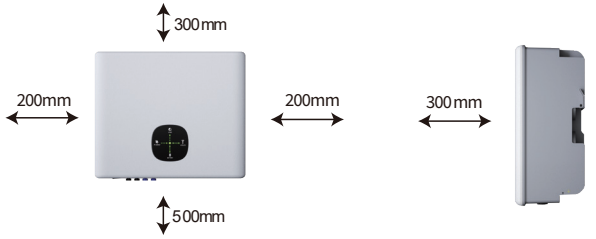


Smart Meter with CT x1

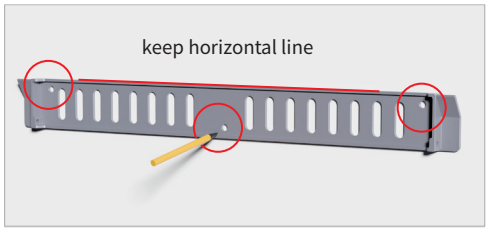


Parallel Communication Cable x1

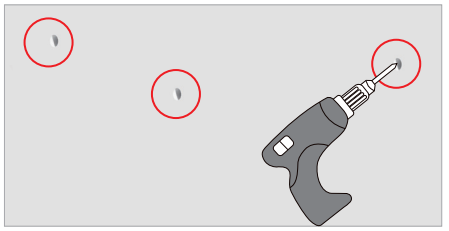
2. Mounting



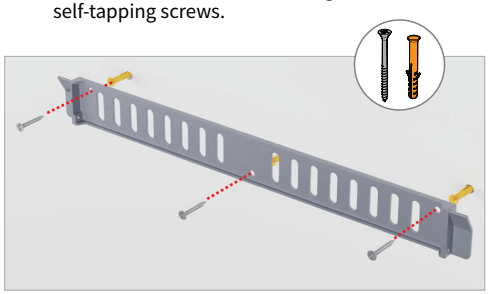
1 Place the wall mount horizontally on the installation wall and use a marker to mark the drilling points.



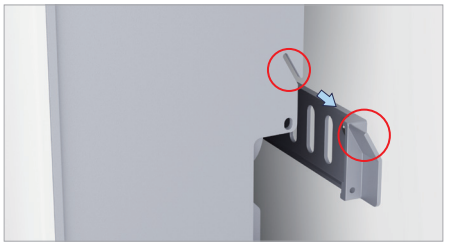
2 Use a percussion drill with an 8mm bit to drill holes at the marked points, to a depth of 60mm.



3 Insert the expansion tubes into the drilled holes and secure the wall mount using the standard self-tapping screws.



4 Two people are required to hang the inverter on the wall mount.



5 Use the standard anti-theft screws to secure both sides of the wall mount.

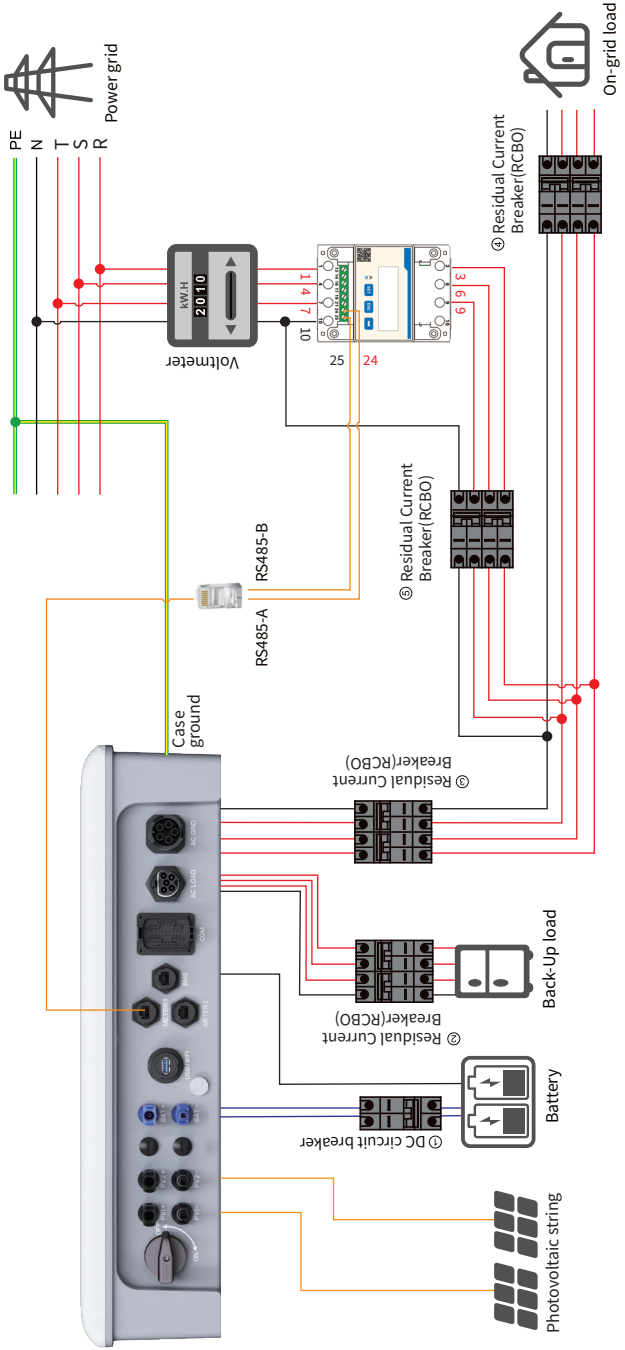
Note: After screwing the left and right screws into the holes, tighten the screws successively!

Energy Storage Inverter Wiring System

Select a circuit breaker according to the following specifications:

Inverter	①	②	③	④	⑤
The 12K inverter	60A/650V DC circuit breaker	32A/400V AC circuit breaker	32A/400V AC circuit breaker	Depending on load	

1. For batteries with a built-in circuit breaker, the external DC circuit breaker can be omitted.
2. Only for lithium batteries with BMS communication.
3. The direction of the CT (Current Transformer) cannot be reversed, and the current flow direction must point to the inverter.

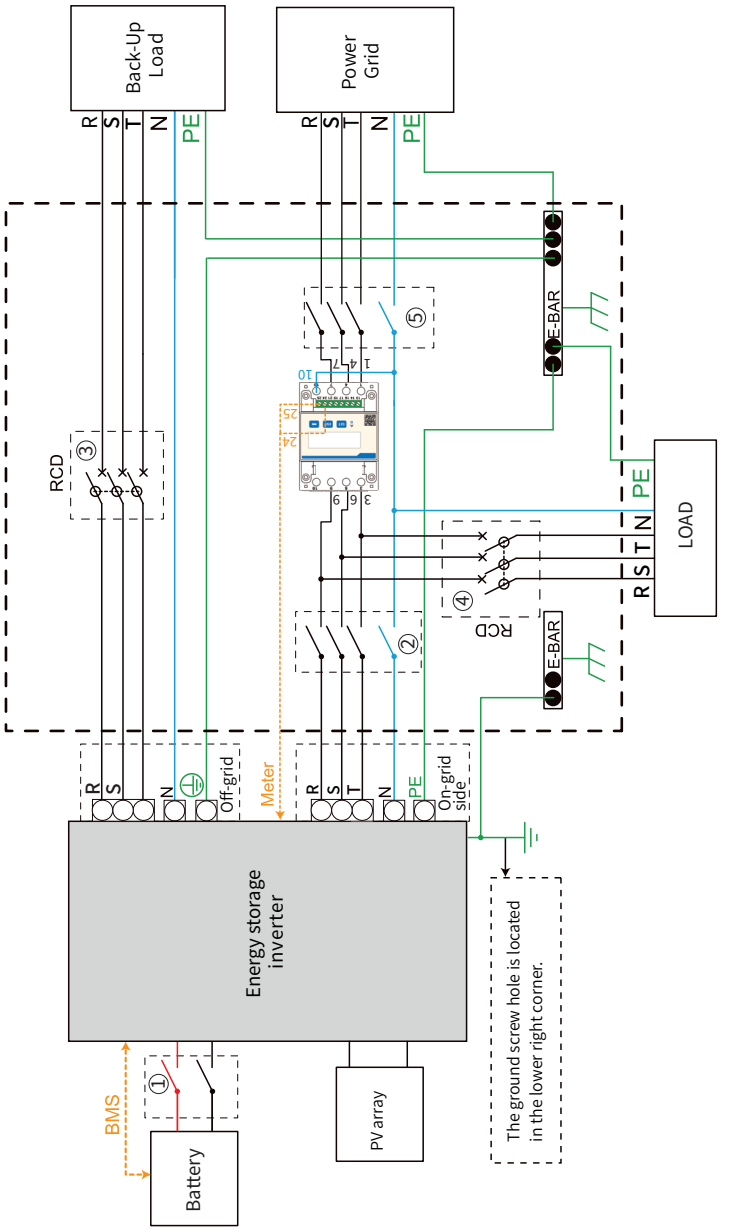


Note: This diagram shows the wiring structure of the energy storage inverter, not the electrical wiring standard.

System Wiring Diagram

Schematic representation of grid systems with no special requirements for electrical connections

Note: the off-grid ground wire and ground bar must be properly connected to work properly. Otherwise, the off-grid function may be abnormal when the grid fails.



Model	①	②	③	④	⑤
H8000H-EU	60A, ⩾650V DC breaker	32A/400V AC breaker	32A/400V, 3L/N/PE 30mA RCD (Type A)	30mA RCD (Type A), Depending on load	main breaker
H10000H-EU	60A, ⩾650V DC breaker	32A/400V AC breaker	32A/400V, 3L/N/PE 30mA RCD (Type A)	30mA RCD (Type A), Depending on load	main breaker
H12000H-EU	60A, ⩾650V DC breaker	32A/400V AC breaker	32A/400V, 3L/N/PE 30mA RCD (Type A)	30mA RCD (Type A), Depending on load	main breaker

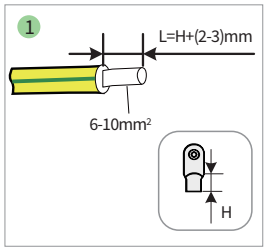
Note:

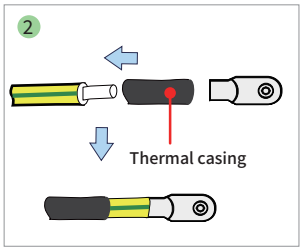
• If the battery has integrated a readily accessible internal DC breaker, then no additional ① DC breaker is required.

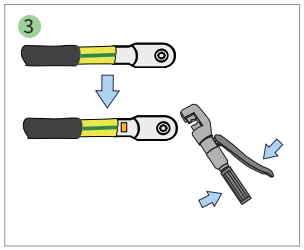
• The use of ③④ 30mA RCD is recommended but not mandatory, please comply with local regulations for the system installation.

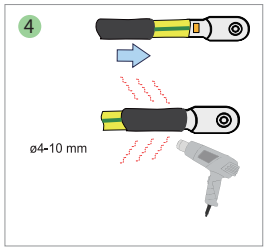
3. Electrical Connection

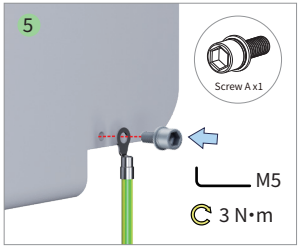
Step 1 Grounding Protection Wire



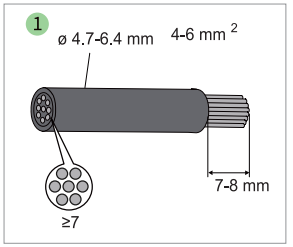


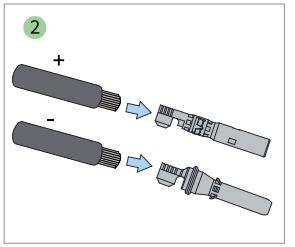


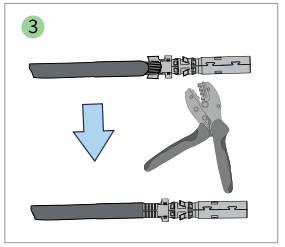


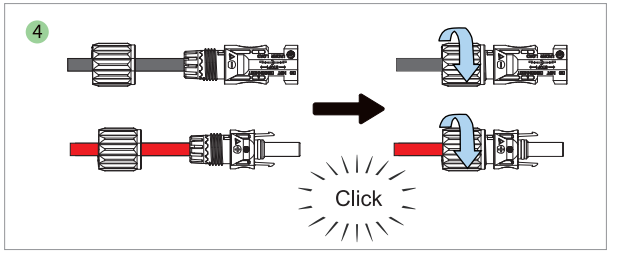


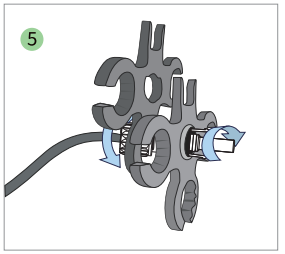
Step 2 PV

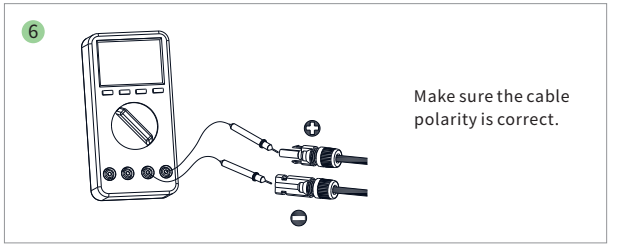




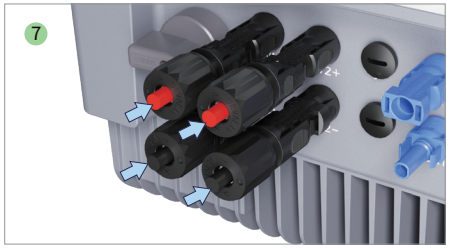




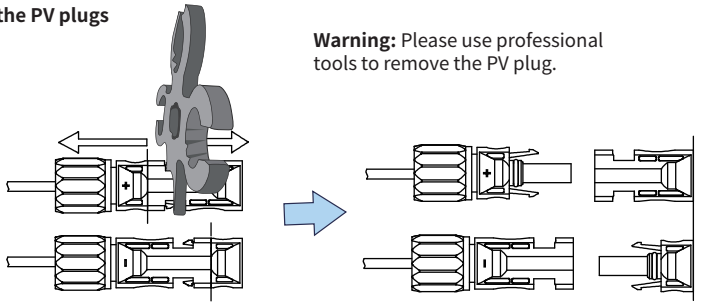




Make sure the cable polarity is correct.

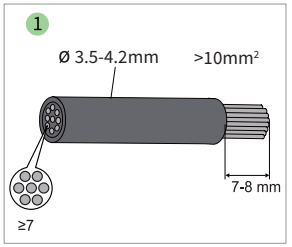


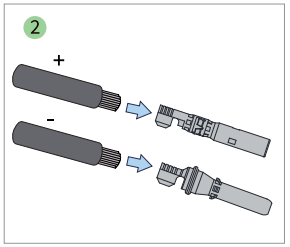
Remove the PV plugs

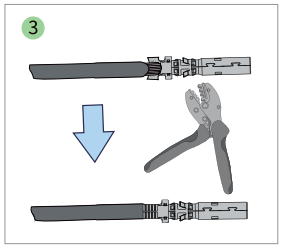


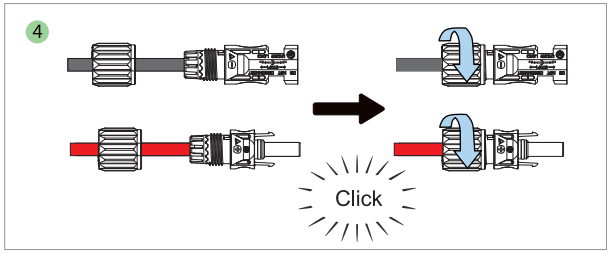
Warning: Please use professional tools to remove the PV plug.

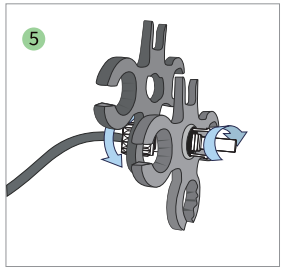
Step 3 Battery

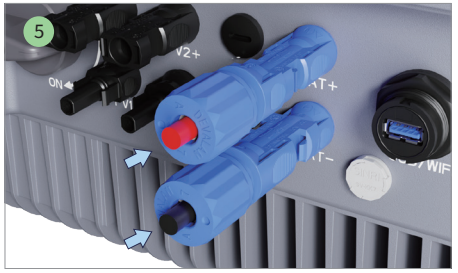




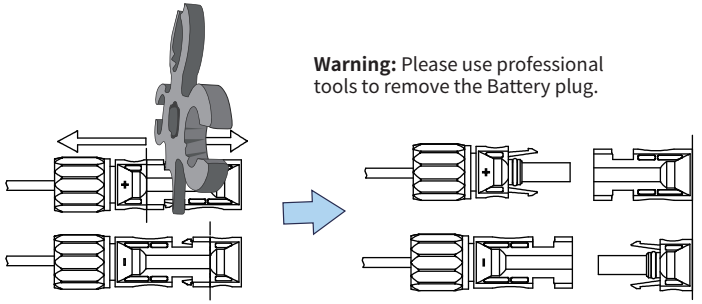






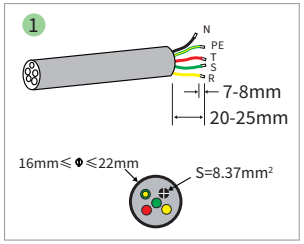


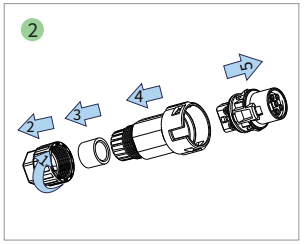
Remove the Battery plugs

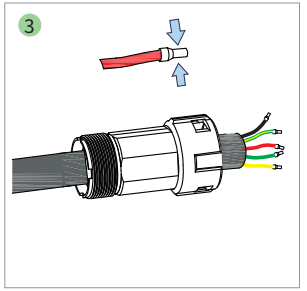


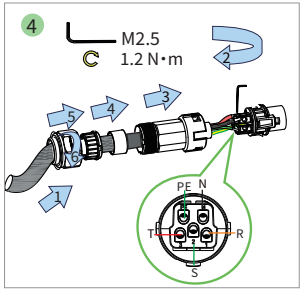
Warning: Please use professional tools to remove the Battery plug.

Step 4 AC LOAD



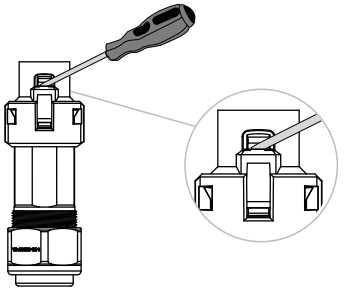






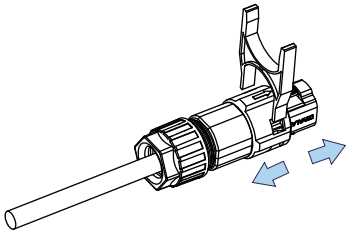
Remove the off-grid plug

1 To remove the AC load connector use a tool to hold down the foot buckle on the inverter off-grid port so that the square openings on the grid terminals are free from the inverter.

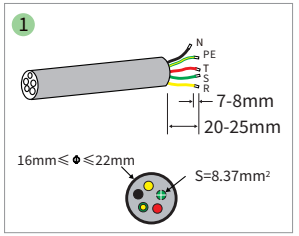


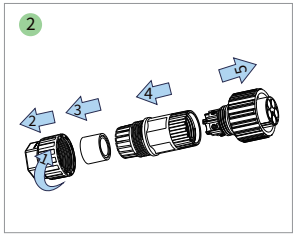
Warning: Disconnect power from grid and equipment, and remove grid terminals by professional installer.

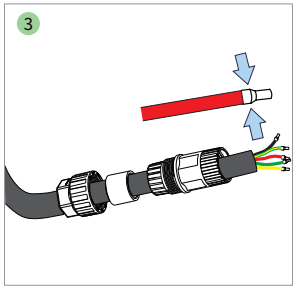
2 Insert the H type tool and pull it out from the socket.

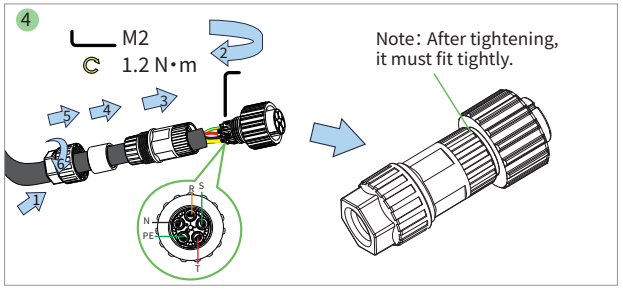


Step 5 AC GRID



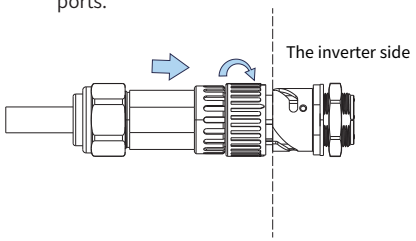




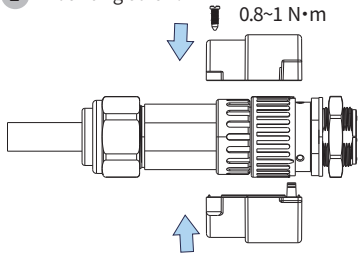


Note: After the grid connector is installed, a protective cover must be added.

1 Rotate and twist terminals to splice ports.

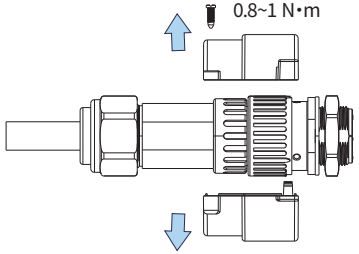


2 Mounting screw.

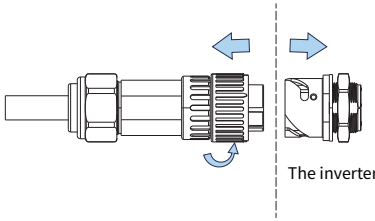


Remove operation

1 Remove screw.



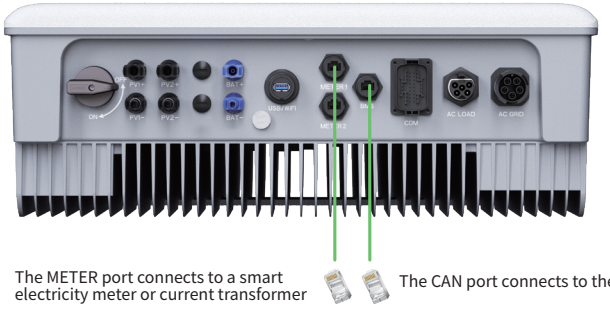
2 Rotate and twist the terminal to separate the terminal from the port.



Step 6. Smart Meter and BMS

Inverter BMS Port/Smart Meter function

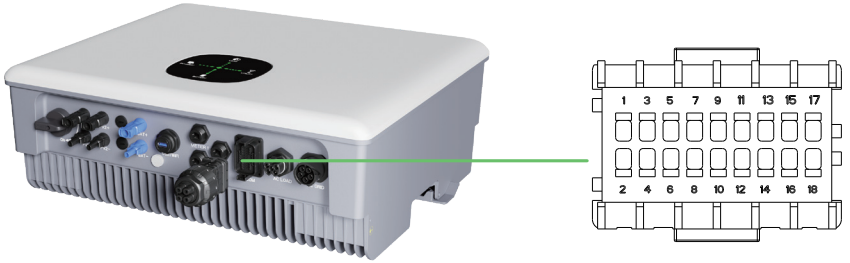
Pin	Color	CAN(BMS)	Meter1/2
1	Orange and white	WAKE_UP	Meter-485_B
2	Orange	GND	NC
3	Green and white	NC	485_B
4	Blue	CANH	NC
5	Blue and white	CANL	Meter-485_A
6	Green	NC	485_A
7	Brown and white	NC	NC
8	Brown	NC	NC



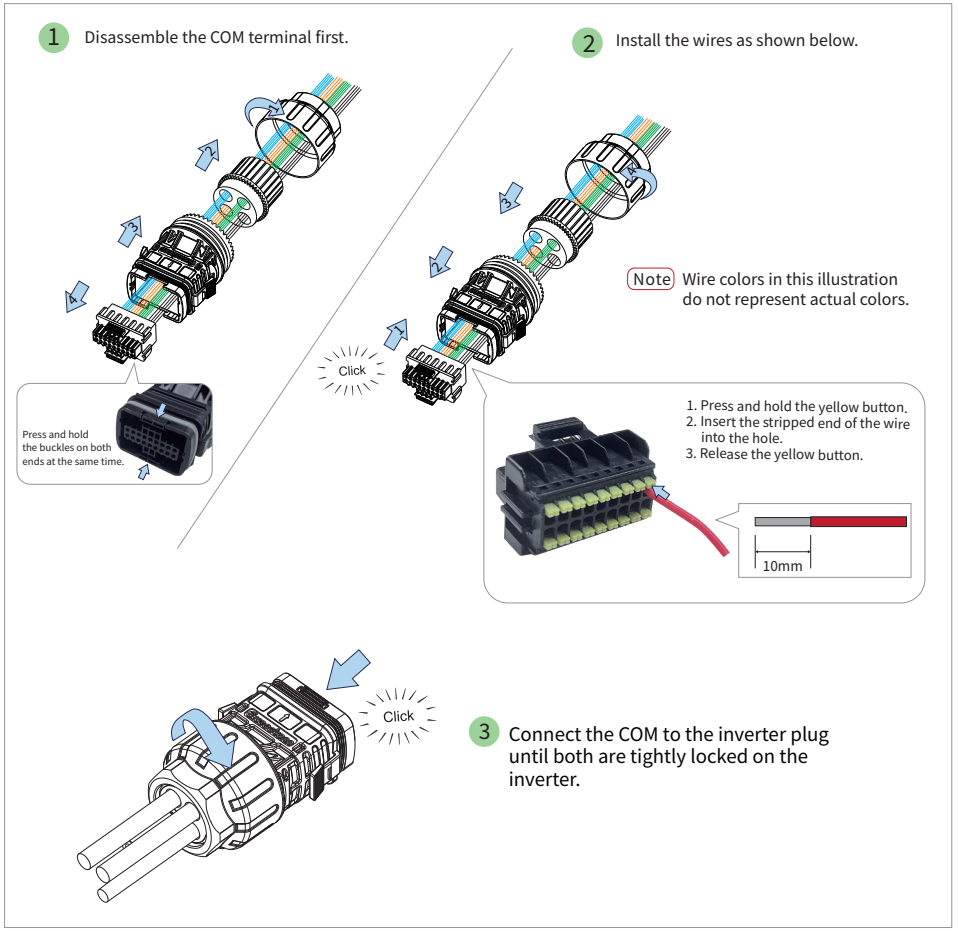
Step 7. WiFi Module Connection

The Wi-Fi communication function is only applied to WiFi Module.

Step 9. COM Connection Mode



1. DRM 1/5
2. 485_A
3. DRM 2/6
4. 485_B
5. DRM 3/7
6. COM/DRM 0
7. DRM4/8
8. REF
9. GND_S
10. EPO+
11. WET_RLY
12. EPO-
13.14. +12VS
15.16. DO-
17.18. DO+



4. Online Setting

SOLARMAN monitoring system provides you a clear overview of how your PV plant, Energy storage system works. SOLARMAN cloud platform satisfies all-round monitoring requirements such as grid-tie, off-grid and storage systems. Users can grasp all the data, including production, consumption, grid and battery status from a glimpse of energy flow chart.

After the inverter has completed the communication connection, visit https://www.solarmanpv.com/ or scan the QR code to download the APP to monitor your PV plant and energy storage system.

SOLARMAN Smart

SOLARMAN Business