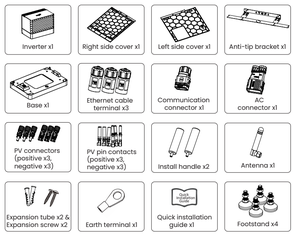
Quick Installation Guide

5~15kW Three Phase Storage Inverter

1. Packing List

Power Qube-H Package Box

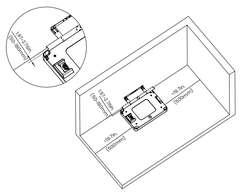


Battery Package Box



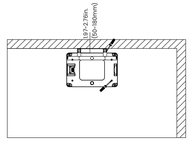
2. Installation Requirements

Installation clearance requirements from the wall

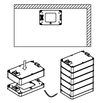


Installation steps

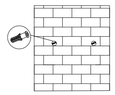
Step 1
Clamp the bracket above the battery base, adjust the distance from the wall, and use a screwdriver to level the feet.



Step 2
After removing the bracket from above the battery, stack the battery cells sequentially (**up to 9 cells maximum**).



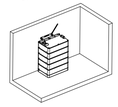
Step 5
Insert the expansion anchor into the hole.



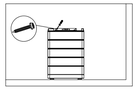
Step 8
After installing the wire harness in the right-side wiring area, secure it to the inner side with cable ties.



Step 3
Once again, secure the bracket onto the top battery cell, and mark the drilling positions on the installation wall.



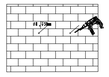
Step 6
Use a screwdriver to secure the bracket to the wall.



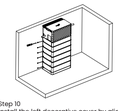
Step 9
Align the two buckles with the slots and insert them, then press the side panel flat from the top.



Step 4
Drill two 50mm deep holes with an impact drill (ø8mm drill bit).



Step 7
Install the handle accessory onto the inverter, stack and move it to the top, then secure by tightening the screws on both sides of the inverter and battery.

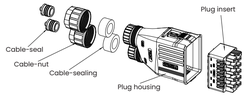


Step 10
Install the left decorative cover by aligning and inserting the clips, then press the side panel flat from the top.

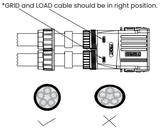


3. AC Cable Installation

Step 1
Disassemble parts below from package：



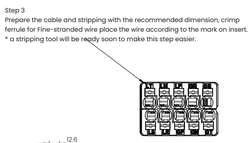
Step 2
Get 2 cables through plug nut, cable-sealing, plug-housing, choose right cable-sealing for cable with different diameter.
*GRID and LOAD cable should be in right position.



*Make sure that the cable cross-section is circular.

Sealing color	Black	Blue	Red
Cable diameter (Ø)	15.4<Ø<19	19<Ø<23.5	23.5<Ø<27.5

Step 3
Prepare the cable and stripping with the recommended dimension, crimp ferrule for Fine-stranded wire place the wire according to the mark on insert.
* a stripping tool will be ready soon to make this step easier.

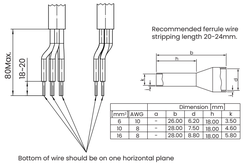




Cable wire type	Single-stranded	Multi-stranded (number of wires≥7)	Fine-stranded
With ferrule	No	No	Yes

Recommended conductor sizes for different Max. AC inputs:

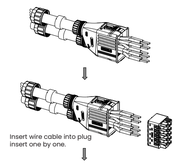
conductor cross-section	Max. bypass current/phase
6.0mm	32A a.c
10mm	40A a.c
10mm	50A a.c
16mm	63A a.c



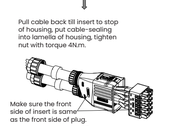
Recommended ferrule wire stripping length 20~24mm.

mm²	AWG	α	b	d	h	k
6	10	-	26.00	6.20	18.00	3.50
10	8	-	28.00	7.50	18.00	4.60
16	8	-	29.00	8.90	18.00	5.90

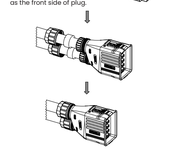
Bottom of wire should be on one horizontal plane



Insert wire cable into plug insert one by one.

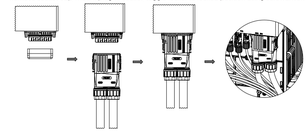


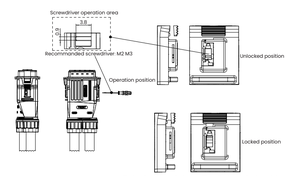
Pull cable back till insert to stop of housing, put cable-sealing into lamella of housing, tighten nut with torque 4N.m.



Make sure the front side of insert is same as the front side of plug.

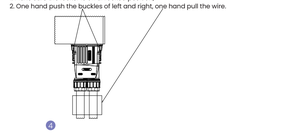
Step 4
Remove socket cap, mount plug to socket, toggle locker to locked position using screwdriver.





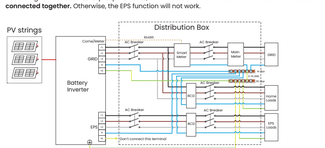
*locker should be on locked position after insert plug to socket.

Step 5
How to withdraw plug from socket:
1. Make sure the locker is on unlocked position;
2. One hand push the buckles of left and right, one hand pull the wire.



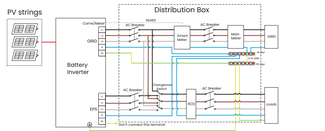
4. EPS Connection

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.



Note
Select an MCB with an appropriate rated current based on the actual requirements, including the overall wiring scheme, the number of loads, and the inverter's load-carrying capacity.
Selection of an External RCD device,suggest choosing a 30mA RCD (Comply with local regulation), but a RCD with a rating of 30mA may trip at a leakage as 15mA (according to IEC 61008).

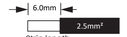
Whole Home Backup Wiring Diagram (Australia and New Zealand)



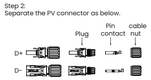
Note
1. AC breaker:Depends on loads；
2. RCD：30mA RCD (Comply with local regulation)；
3. Changeover switch：A 63A manual changeover switch is required for the whole home backup scenario. When switching to "EPS" using the changeover switch, household loads will be supplied by the PV installation and battery. When the inverter is faulty or undergoing maintenance, switch to "GRID" to ensure the loads can work normally.

5. PV Connection

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



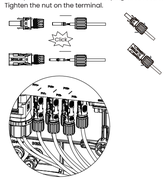
Step 2:
Separate the PV connector as below.



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 levelcrimped metal parts and cable pull tension 230N.

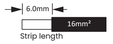


Step 4:
Insert pin into the male or female plug. Until hear a "click".
Tighten the nut on the terminal.



6. Grounding Connection

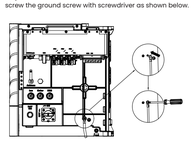
Grounding Wiring
Step 1:
Prepare ground wire.



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.



7. 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.

Step:
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_Power_Qube_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:
Upon inserting a USB flash drive, the fimware update page will automatically pop up. click on different icons to switch views; the option with a white background indicates selection



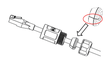
Step 4:
After the upgrade is finished, pull out the U-disk. screw the waterproof lid.

8. 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 into the RJ45 panel mount connector 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 by an open-ended wrench with a torque 1.2±0.2N·m.

9. 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:

PIN / 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.

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

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.

The types of 6CT energy meters

6CT meter enables dual-meter functionality

Step 1
A 6CT meter can be used to monitor the power output of an additional inverter or generation device.

Step 2:

NOTE
For the three-phase wiring of the Current Transformer (CT), it must be in phase with the corresponding voltage detection. Specifically, the CT corresponding to the L1 phase is IA, the CT corresponding to the L2 phase is IB, and the CT corresponding to the L3 phase is IC.

NOTE
The black power line is connected: the meter terminals L1, IA1 and IA2 should be clamped to the black wire.
The brown power line is connected: the meter terminals L2, [redacted] and [redacted] should be clamped to the brown wire.
The gray-white power line is connected: the meter terminals L3, [redacted] and [redacted] should be clamped to the gray-white wire.

NOTE
Need to enable meter2

10. Ethernet Connection

The definition of Ethernet port pin is as follows:

PIN / 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

11. DRM Connection

The definition of DRM port pin is as follows:

PIN / Port	1	2	3	4	5	6	7	8
DRM	DRM1/5	DRM2/6	DRM3/7	DRM4/8	REF GEN/0	COM LOAD/0	GND	GND

Note
To achieve the DRM0 function, pins 5 and 6 need to be short-circuited.

Note
The new version supports the 568B cable standard and is directly compatible with GSD devices, eliminating the need for an external converter.

DRM setting

Settings → Feature Parm → Ripple Control → Enable/Disable

DRM supports several demand response modes by configuring control signals as below.

Mode	Asserted by shorting pins		Requirement
DRM0	5	6	Operate the disconnecting device, under Australian safety regulations.
DRM1	1	6	Do not consume power.
DRM2	2	6	Do not consume at more than 50% of rated power.
DRM3	3	6	Do not consume at more than 75% of rated power and source reactive power if capable.
DRM4	4	6	Increase power consumption (subject to constraints from other active DRMs).
DRM5	1	5	Do not generate power.
DRM6	2	5	Do not generate at more than 50% of rated power.
DRM7	3	5	Do not generate at more than 75% of rated power and sink reactive power if capable.
DRM8	4	5	Increase power generation (subject to constraints from other active DRMs).

12. 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 inverter.
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 hat can drive loads of 230VAC1A/60VDC0.5A, 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.

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 2
Insert the wires into the corresponding terminals.

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

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

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

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

13. WiFi Stick Installation

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).

NOTE
Do not use an external Wi-Fi/4G collector while the built-in Wi-Fi is enabled.

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.

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

V1.0.0
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