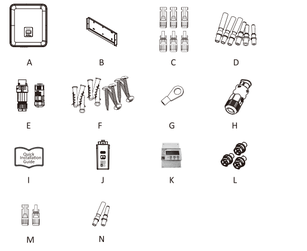
Quick Installation Guide

5-12KW Three Phase Storage Inverter

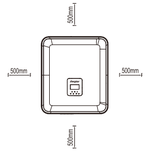
1. Packing List



Object	Quantity	Description	Object	Quantity	Description
A	1	Inverter	H	1	Communication connector
B	2	Brackets	I	1	Quick installation guide
C	6	PV connectors (Only for HT) (3*positive, 3*negative)	J	1	WiFi/GPRS/LAN (Optional)
D	6	PV pin contacts (Only for HT) (3*positive, 3*negative)	K	1	3-phase Meter
E	2	AC connectors	L	3	Hexagonal screws
F	6	Expansion tubes & Expansion screws	M	2	Battery connectors (1*positive, 1*negative)
G	1	Earth terminal	N	2	Battery pin contacts (1*positive, 1*negative)

2. Installation Steps

Please make sure the inverter will be installed with proper spacing distance around the inverter as shown below.

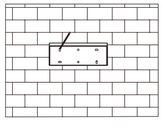


Position	Min Distance
Left	500mm
Right	500mm
Top	500mm
Bottom	500mm

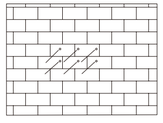
Step1: Fix the bracket on the wall

Choose the place you want to install the inverter.

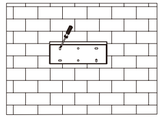
Place the bracket on the wall and mark the position of the 6 holes in the bracket. Please ensure that you check to see the bracket is level.



Drill holes with electric drill, make sure the holes are at least 50mm deep and 8mm wide, and then tighten the expansion tubes.

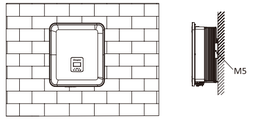


Insert the expansion tubes into the holes and tighten them. Install the bracket with the expansion screws.



Step2: Match the inverter with wall bracket

Mount the inverter to the bracket. Secure the inverter with the M5 screw and washer.



3. Serial Port Connections

Communication wiring interfaces between the inverter and the Meter/485/DRM/Ethernet/BMS/Parallel 1/Parallel 2 are as follows.

Rj45 connectors should be inserted into the corresponding ports in the inverteras indicated.

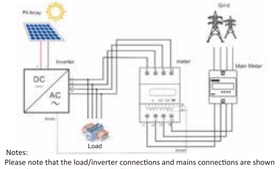
NOTE: Hybrid Inverter Connector: Pin 3 = B and Pin 4 = A on DTSU666 (CHINT) Meter Connection: Pin 3 = A and Pin 4 = B.

PIN Port	1	2	3	4	5	6	7	8
Meter/ 485	485A	485B	Meter 485B	Meter 485A	/	/	BY_CON	+12V

Communication ports for meters

Notes:

1. compatible meter type: DTSU666 (CHINT).
2. for further pin definitions, refer to the user manual.
3. communication A and B are marked on the side of the meter;
4. when adding an RS485 cable it is recommended to use Ferroules for the cabling with a size of 0.14mm²



Notes:

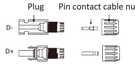
Please note that the load/inverter connections and mains connections are shown in the figure. Port 10 is specifically for neutral connections.

4. Wiring Steps

PV Wiring (For Hybrid version Only)

- Turn off the DC switch.
- Choose 12 AWG wire to connect the PV module strings to the inverter.
- Trim 6mm of insulation from the wire end.

- Separate the DC connector (PV) as below.



- Insert striped cable into pin contact and ensure all conductor strands are captured in the pin contact.
- Crimp pin contact by using a crimping plier. Put the pin contact with striped cable into the corresponding crimping pliers and crimp the contact.

- Insert pin contact through the cable nut to assemble into back of the male or female plug. When you feel or hear a "click" the pin contact assembly is seated correctly.

- Unlock the DC connector:
  - Use the specified wrench tool. (The tool is optional)

- When separating the DC+ connector, push the tool down from the top.
- When separating the DC- connector, push the tool down from the bottom.
- Separate the connectors by hand.

Battery Wiring

- Turn off the DC switch.
- Choose 8 AWG wire to connect the battery.
- Trim 6mm of insulation from the wire end.

- Use the crimping pliers and crimp the contact. pin contact with stripped wire into the corresponding crimp pin contact using crimping pliers.

- Assembly is seated correctly. male or female connector. If you feel or hear a "click", put the pin contact through the cable nut to mount it on the back.

- Unlock the DC connector:
  - Use the specified key tool.
  - When disconnecting the DC+ plug, press the tool down from above
  - When disconnecting the DC connector, press the tool down from below
  - Disconnect the plugs by hand.

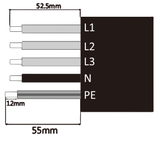
QUICK INSTALLATION GUIDE

Grid Wiring

Cable dimensions

Model (kW)	5.0	6.0	8.0	10.0	12.0
Cable (ON-GRID)	4.0-6.0mm²	4.0-6.0mm²	4.0-6.0mm²	4.0-6.0mm²	4.0-6.0mm²
Cable (EPS)	4mm²	4mm²	4mm²	4mm²	4mm²
Micro-Breaker	32A	32A	32A	32A	32A

- Trim all the wires to 52.5mm and the PE wire to 55mm.
- Use the crimping pliers to trim 12mm of insulation from all wire ends as shown in the picture.



L1/L2/L3: Brown/Red/Green or Yellow Wire

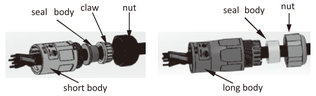
N: Blue/Black Wire

PE: Yellow & Green Wire

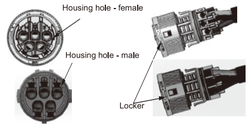
Note: Please refer to local cable type and color for actual installation.

A. EPS Wiring

- Set the parts on the cable.



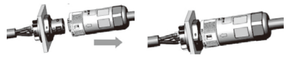
- Crimp wires, screw twisting torque 0.8+/-0.1N-m.



- Push Housing into Body.

- Put the sealing body and yarn trapper into the main body, screw the lock nut into the main body, and the torque is (2.5 + / - 0.5N-m).

- Insert the male end into the female end. For the rotation direction of the lock, please refer to the LOCK mark on the assembly.

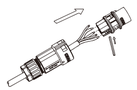


- Remove the EPS connector: Press the bayonet with a small screwdriver or the unlock tool. Rotate the sleeve referring to the UNLOCK mark on the assembly, then pull it out.

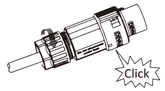
B. GRID Wiring

- Separate the ON-GRID plug into three parts as below.
  1. Hold the middle part of the female insert, rotate the back shell to loosen it, and detach it from female inset.
  2. Remove the cable nut (with rubber insert) from the back shell.

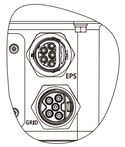
- Slide the cable nut and then the back shell onto the cable.



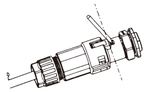
- Push the threaded sleeve into the socket, tighten up the cap on the terminal.



- Push the threaded sleeve into connection terminal until both are locked tightly on the inverter.



- Remove the GRID connector: Press the bayonet out of the slot with a small screwdriver or use the unlock tool and pull it out, or unscrew the threaded sleeve, then pull it out.



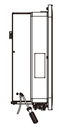
Grounding Wiring

Trim 6mm of insulation from the wire end.

Insert striped cable into earth terminal and ensure all conductor strands are captured in the earth terminal.

Crimp earth terminal by using a crimping plier. Put the earth terminal with striped cable into the corresponding crimping pliers and crimp the contact.

- Use the crimping pliers to press the ground cable into the ground terminal, screw the ground screw with screwdriver as shown below.



Radio ripple control (German market)

1. connect the wiring from the DRM to the radio ripple control unit or switch.
2. set up safety regulations according to German safety regulations
3. Activate DRM 04. When switches 1, 2, 3 and 4 are open, the power is 100 %.

Setting	SWITCH 1	SWITCH 2	SWITCH 3	SWITCH 4
DRM 1	close	open	open	open
DRM 2	open	close	open	open
DRM 3	open	open	close	open
DRM 4	open	open	open	close
Value	1000	0100	0010	0001
Power Output (%)	100%	60%	30%	0%

5. Inverter Start-Up

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

1. Ensure the inverter is fixed securely.
2. Make sure all wiring is completed as per the instructions.
3. Ensure the meter is connected.
4. Ensure the battery cable is connected.
5. Make sure the external EPS contactor is connected correctly (if needed).
6. Make sure the BMS buttons and battery switch are off.
7. Turn on using the following startup sequence PV/DC switch (for Hybrid version only), AC breaker, EPS breaker and battery breaker.
8. Enter the settings page, default password is '0000', select START / STOP and set it to start (long press "enter" to quickly go to the START / STOP page).

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 screen on the inverter or by using the APP.

6. Inverter Switch Off

Please refer to the following steps to switch off the inverter.

1. Enter the settings page, select START / STOP and set it to stop.
2. Turn off using the following shutdown sequence, PV/DC switch (for Hybrid version only), AC breaker, EPS breaker and battery breaker.
3. Wait 5 minutes before opening the upper lid (if in need of repair).

Note:

The Ethernet port, under inverter is only for local monitoring use (via registers), a LAN connection accessory is required to be purchased if Ethernet communications are required.

To view all relevent documentation such as Install Manuals and Remote Monitoring guides, scan the QR code below.

V1.0

10-203-00265-00