

Quick Installation Guide

Models:

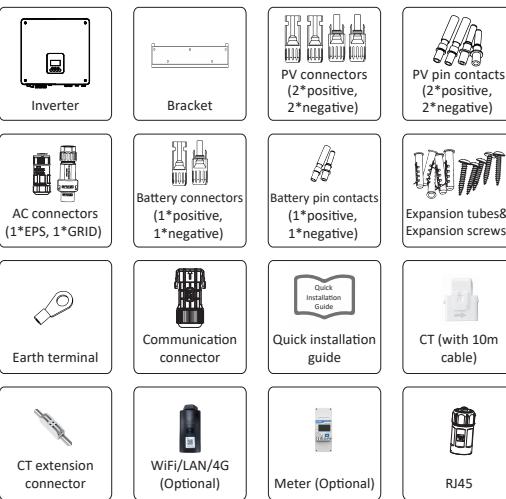
H1-3.0-E-G2 H1-5.0-E-G2 H1-5.0-E1-G2

H1-3.7-E-G2 H1-6.0-E-G2

H1-4.6-E-G2 H1-4.6-E1-G2

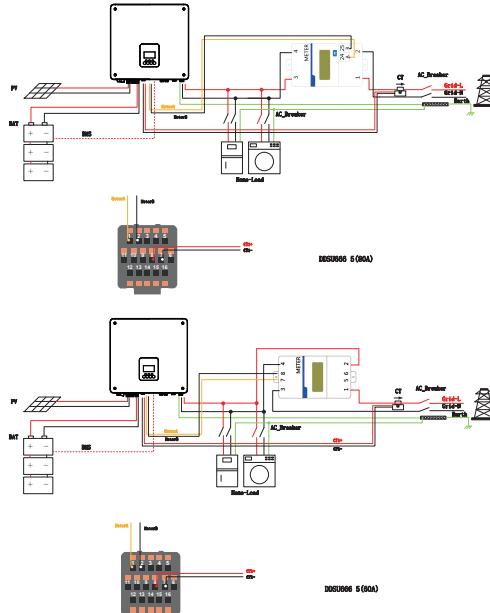
3-6kW Storage System Inverter

1. Packing List



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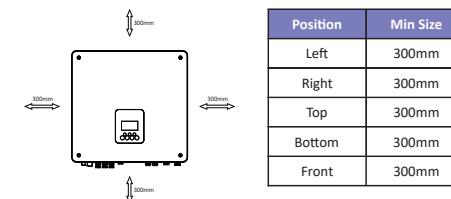
4. Typical Wiring Diagram



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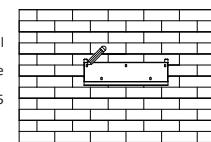
2. Inverter Installation

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

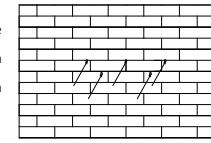


Step 1: Fix the bracket on the wall

Choose the place you want to install the inverter. Place the bracket on the wall and mark the position of the 5 holes from bracket.

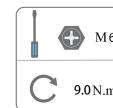
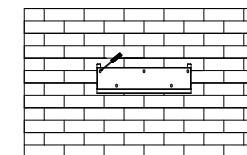


Drill holes with electric drill, make sure the holes are at least 50mm deep, and then tighten the expansion tubes.



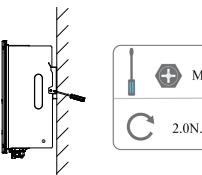
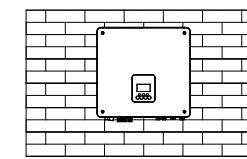
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Insert the expansion tubes into the holes and tighten them. Install the bracket with the expansion screws.



Step 2: Match the inverter with wall bracket

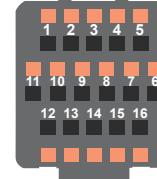
Hang the inverter over the bracket, slightly lower the inverter, and make sure the 2 grooves on the back are fixed with the 2 mounting bars from bracket properly.



3. Serial Port Connections

Meter and RS485 should be connected to inverter by the connector illustrated in the figure below. All ports in connector should connect to the corresponding ports on inverter.

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Port	1	2	3	4	5	6	7	8
CT/ Meter/ 485	Meter 485A	Meter 485B	EMS 485B	EMS 485A	CT2+	CT2-	CT1-	CT1+
PIN Port	9	10	11	12	13	14	15	16
CT/ Meter/ 485	/	K1	K2	K3	K4	/	DI	COM

Note:

1. CT1: For Hybrid, CT2: Grid tied inverter (if have). Red corresponds to CT+, black corresponds to CT-.
2. Compatible Meter type: DDSU666 (CHINT), SDM230 (EASTRON). Communication A and B are marked on the side of the meter.
3. For other pin definitions, please refer to the user manual.

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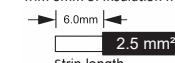
5. Wiring Steps

Note:

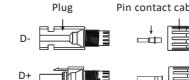
Please use the connectors provided in the accessory kit for wiring.

PV Wiring

- Choose 2.5 mm² wire to connect the PV module.
- 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:

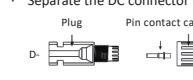
- Use the specified wrench tool.
- When separating the DC+ connector, push the tool down from the top.
- When separating the DC- connector, push the tool down from the bottom.
- Separate the connectors by hand.

Battery Wiring

- Turn off the DC switch.
- Choose 6.0 mm² wire to connect the battery.
- Trim 6mm of insulation from the wire end.



- Separate the DC connector (battery) as below.



- Insert striped cable into pin contact and ensure all conductor strands are captured in the pin contact.

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- 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.
- 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.

AC Wiring

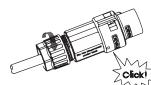
Cable dimensions

Table1: With EPS Function (Internal)

Model (kW)	3.0	3.7	4.6	5.0	6.0
Cable (GRID)	8.0-10.0 mm ²				
Cable (EPS)	4.0mm ²	4.0mm ²	6.0mm ²	6.0mm ²	6.0mm ²
Micro-Breaker	50A	50A	63A	63A	63A

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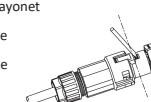
- Push the threaded sleeve into the socket, tighten up the cap on the terminal.



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

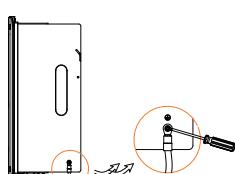


- Remove the ON-GRID connector: Press the bayonet out of the slot with a small screwdriver or the unlock tool and pull it out, or unscrew the threaded sleeve, then pull it out.

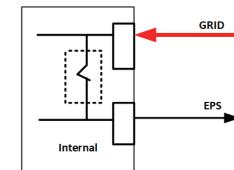


Grounding Wiring

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



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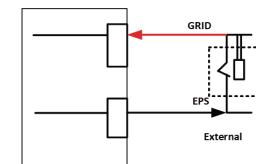


The Bypass Relay is connected in the On-Grid Connection state, and disconnected in the Off-Grid Connection state.

Note: Cable dimensions refer to Table1.

Table2: Without EPS Function (External)

Model (kW)	3.0	3.7	4.6	5.0	6.0
Cable (GRID)	4.0mm ²	4.0mm ²	6.0mm ²	6.0mm ²	6.0mm ²
Cable (EPS)	4.0mm ²	4.0mm ²	6.0mm ²	6.0mm ²	6.0mm ²
Micro-Breaker	25A	25A	32A	32A	40A



Selecting the "Normally open" relays or ATS.

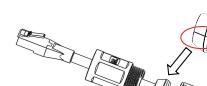
The Bypass Relay is connected in the On-Grid Connection state, and disconnected in the Off-Grid Connection state.

Note: Cable dimensions refer to Table2.

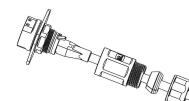
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BMS Connection

- 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.



- Insert the network cable plug into the matched RJ45 panel mount connector.
- Tighten the connector mainbody by an open-ended wrench into the RJ45 panel mount connector with a torque 1.2 ± 0.2 N·m.

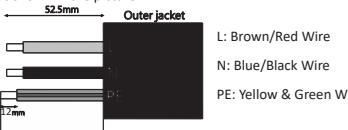


- Insert the sealing plug into the main body of RJ45 cable end connector.
- Tighten the connector's nut by an open-ended wrench with a torque 1.2 ± 0.2 N·m.



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.



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

A. EPS Wiring

- Run the cable into the sleeve assembly.



- Install the cable into the plug terminal and lock the screw, torque is $(0.8 + / - 0.1$ N·m).



- Insert the plastic core into the main body.



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



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6. Inverter Start-Up

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

- Ensure the inverter fixed well on the wall.
- Make sure all wirings are completed.
- Make sure the meter is connected well.
- Make sure the battery is connected well.
- Make sure the external EPS contactor is connected well (if needed).
- Turn on the PV/DC switch, AC breaker, EPS breaker and battery breaker.
- If the main page shows "off mode", please long press "enter" 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 the 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.

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



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



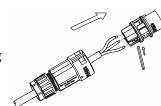
B. GRID Wiring

- Separate the GRID plug into three parts as below.

- Hold the middle part of the female insert, rotate the back shell to loosen it, and detach it from female insert.
- Remove the cable nut (with rubber insert) from the back shell.



- Slide the cable nut and then the back shell onto the cable. Install the cable into the plug terminal and lock the screw, torque is $(2.0 + / - 0.2$ N·m).



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7. Inverter Switch Off

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

- Enter the settings page, select START / STOP and set it to stop.
- Turn off the PV/DC switch, AC breaker, EPS breaker and battery breaker.
- Wait 5 min before you open the upper lid (if in need of repair).

Note:

The ethernet port under inverter is only for local monitoring use (Via register), LAN connection need to purchase an separate product Smart LAN. The inverter installation is complete. For battery installation, please refer to battery quick installation guide.

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V1.0.4



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