

Disclaimer

- Please read the user's manual carefully before performing all operations; this installation guide does not supersede the use of the product's user's manual;
- Product information is subject to change without notice. This manual is frequently updated, please contact your salesperson for the latest version.
- After unpacking, please check the product for damages and missing parts.
- Do not open the battery to repair or disassemble. Only Felicitysolar is allowed to carry out any such repairs. Only qualified personnel can install this device with battery.
- In case of fire, use only dry powder fire extinguisher. Liquid extinguishers should not be used.
- Before using the inverter, please read the instructions and warning signs of the battery and corresponding sections in the instruction manual. Improper reassembly may result in electric shock or fire.
- To reduce risk of electric shock, disconnect all wires before attempting any maintenance or cleaning. Turning off the unit will not reduce this risk.
- Never charge a frozen battery.
- Never cause AC output and DC input short circuited. Do not connect to the mains when DC input short circuits.

Installation Video&User Manual

The manual and installation video can be accessed by scanning the QR code on the right.



Packing List

Inverter×1	User Manual×1	Warranty Card×1	Quick Installation Guide×1
WiFi Module×1	CT×3	Meter(optional)×1	ring 1 Magnetic Ring for AC Cables ×2
ring 2 Magnetic Ring for BMS and Meter Communication Cables×2	ring 3 Magnetic Ring for CT Cables×3	M6 Combination Screw×2	Solar Photovoltaic Connector×1
OT Terminals×2	Battery Connector×2	Expansion Screw×4	Wall Mounting Bracket×1
Parallel Cable×2	PV Connector×4	RJ45 Terminal×4	

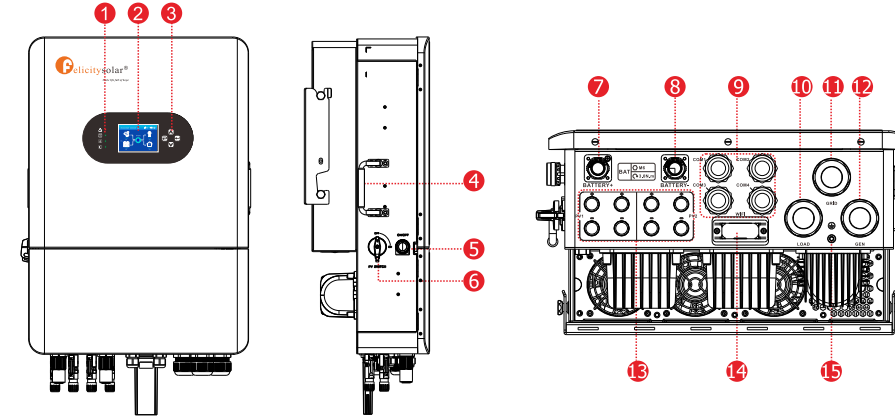
*ring 1:32x50x20mmx2
ring 2:20x32x15mmx2
ring 3:19x31x30mmx3

No.	Name	Description	Quantity
1	Inverter	Inverter	1
2	User manual	User manual	1
3	Warranty card	Warranty card	1
4	Quick installation guide	Quick installation guide	1
5	WiFi module	For installing the WFI module	1
6	CT	Meter and anti backflow(ratio: 100A/50mA)	3
7	Meter(optional)	Meter and anti backflow	1
8	Ring 1	Magnetic ring 1 for AC cables	2
9	Ring 2	Magnetic ring 2 for BMS and Meter communication cables	2
10	Ring 3	Magnetic ring 3 for CT cables	3
11	Screws	M6 Combination screw	2
12	Solar photovoltaic connector special spanner	Used for installing and disassembling photovoltaic systems	1
13	OT terminals	For external ground connection	2
14	Battery connector	Connection ports for batteries and inverter Bat Port	2
15	Expansion screw	Used for securing the product's wall mount	4
16	Wall mounting bracket	Used to fix the inverter to the wall	1
17	Parallel cable	Used for parallel wiring	2
18	PV connector	PV Port Connectors	4 pairs
19	RJ45 Terminal	Used for creating custom communication cables	4

Explanation of the Symbols

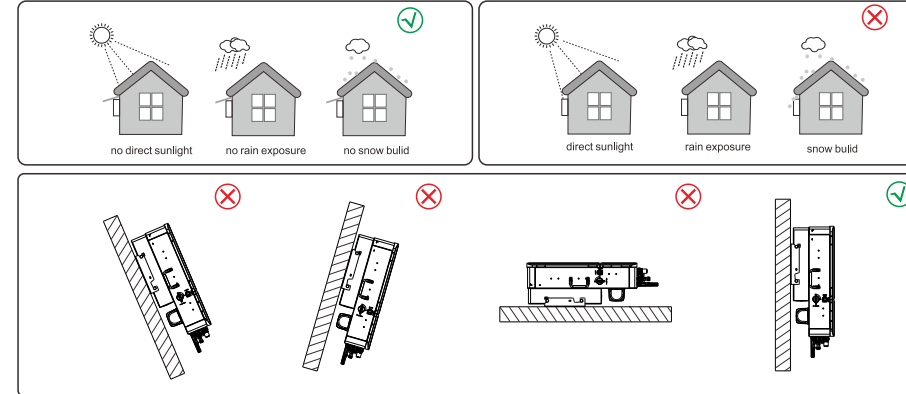
Danger: Serious physical injury or even death may occur if not follow the relative requirements	Instruction manual: Read the instruction manual before starting installation and operation.
Warning: Physical injury or damage to the devices may occur if not follow the relative requirements	EU WEEE mark: Product should not be disposed as household waste.
Hot surface: Sides of the device may become hot. Do not touch!	NOTE Note:The procedures taken for ensuring proper operation.
Electrostatic sensitive: Damage may occur if not follow the relative requirements	CE mark: The inverter complies with the CE directive.
Directive on the restriction of the use of certain hazardous components in electrical and electronic equipment	Earth terminal: The inverter must be reliably grounded.
Caution: Ensure that DC and AC side circuit breakers have been disconnected and wait at least 5 minutes before wiring and checking.	

Product Overview



- | | | |
|------------------------|---------------------------|------------------------|
| 1. Inverter Indicators | 6. PV Switch | 11. GRID Interface |
| 2. LCD Display | 7. Battery Input Positive | 12. GEN Interface |
| 3. Function Buttons | 8. Battery Input Negative | 13. PV Input Interface |
| 4. Handle | 9. COMM Interface | 14. WIFI Interface |
| 5. Power on/off | 10. LOAD Interface | 15. Grounding Point |

Installation Environment



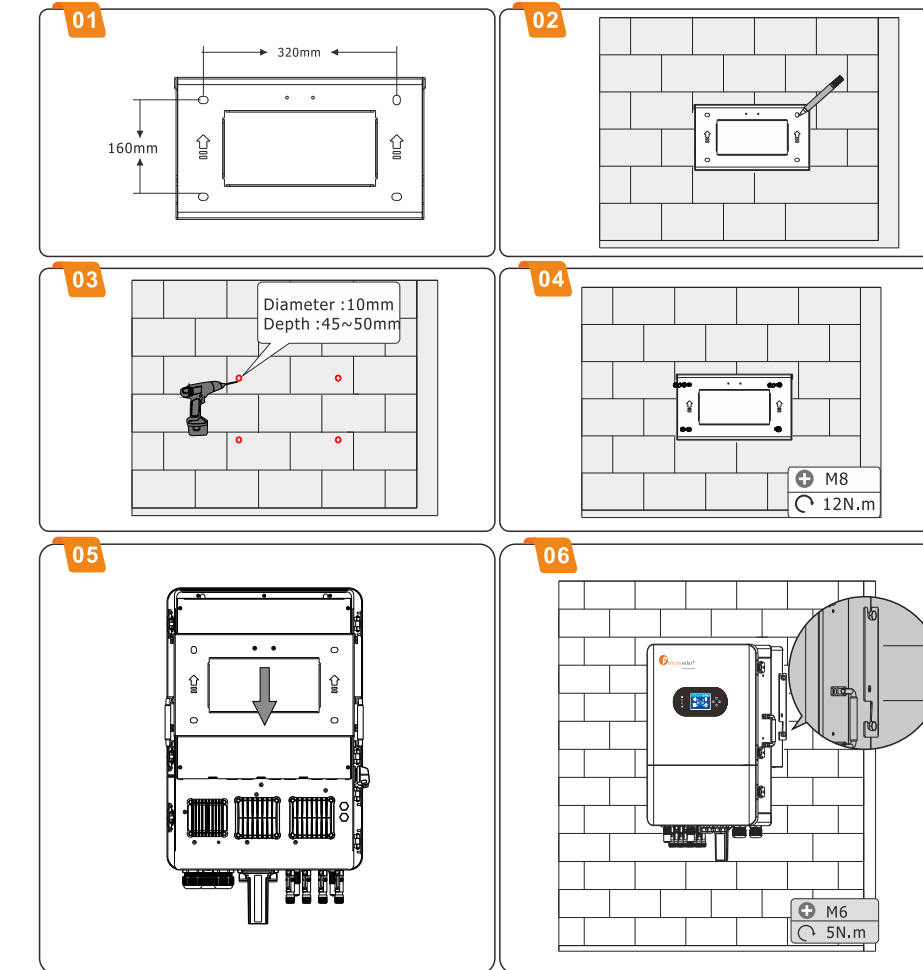
LCD Display Icons

Function Key	Icon	Description
ESC		To exit setting mode
UP		To go to previous setting page/Add
DOWN		To go to next setting page/Subtract
ENTER		To confirm the settings

LED Indicator	Icon	Description
Fault		Malfunction or warning
DC/AC		Inverter operating normal
GRID		Grid connection normal
BATTERY		Battery connection normal

Installation Procedure

The inverter is suitable for mounting on concrete or other non-combustible surface only.

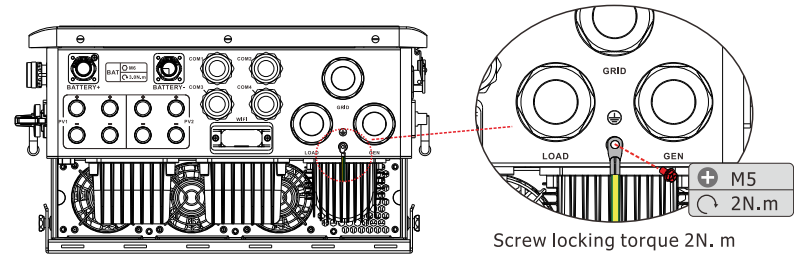


Quick Installation Guide

Hybrid inverter

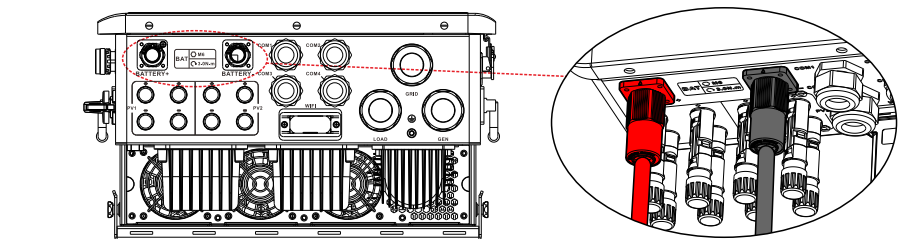
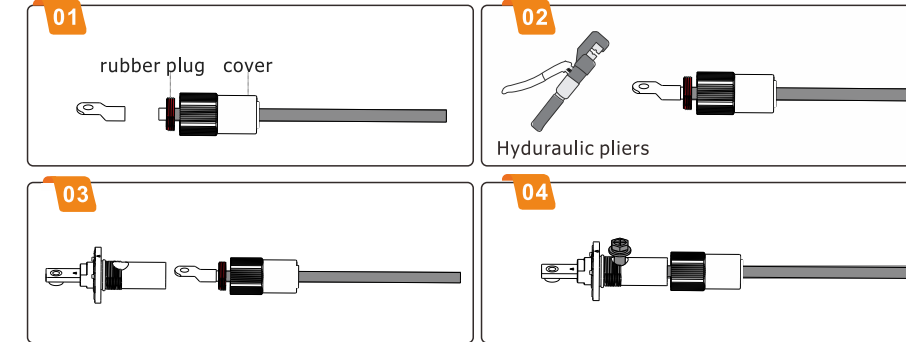


External Grounding Connection

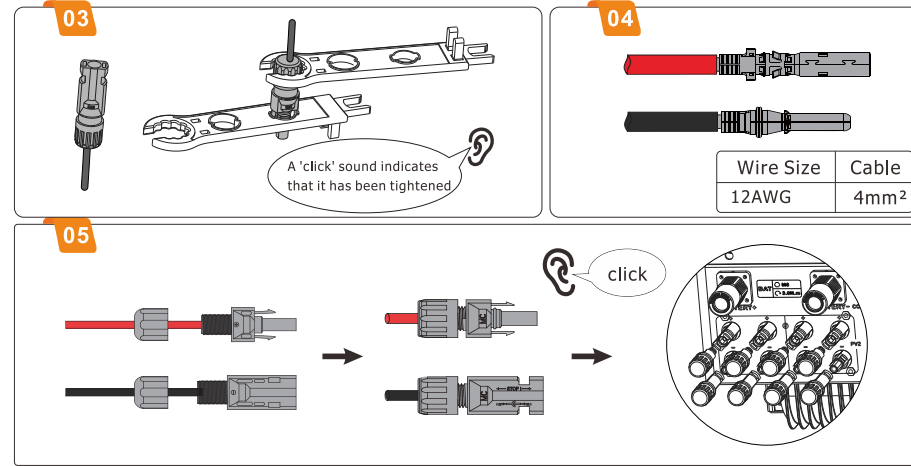
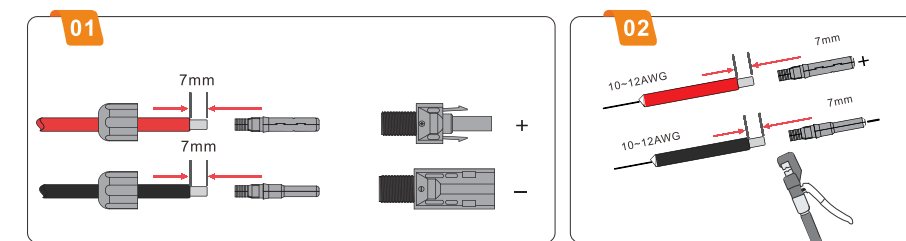


Battery Connection

Inverter Model	Wire Size	Strip length
IVGM25KHP3G3	4AWG	16mm ²



PV Connection



On-Grid & Back-Up Connection

! Make sure the inverter is totally isolated from any DC or AC power before connecting AC cable.

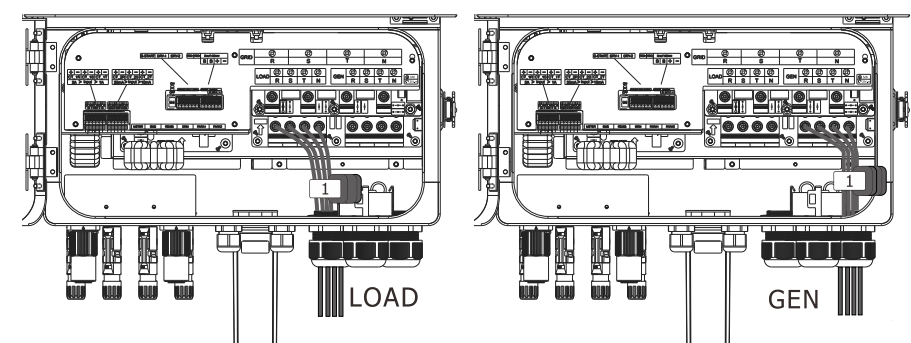
An external AC breaker is needed for on-grid connection to isolate from grid when necessary. Recommended AC circuit breaker parameters are 100A/400V.

Inverter Model	Wire Size	Strip length
IVGM25KHP3G3	4AWG	16mm ²

Schematic diagrams of the magnetic rings for LOAD and GEN

ring 1:32x50x20mm

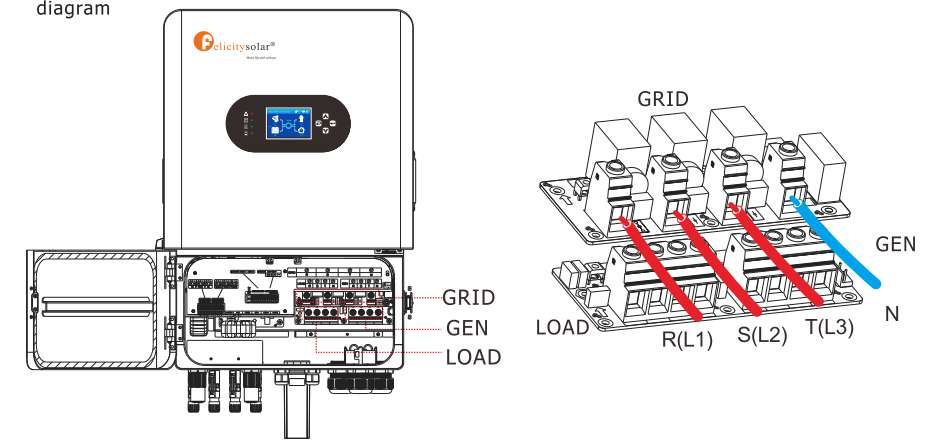
Wind the wire at the load port around the magnetic ring once, and then pass one end of the wire through the magnetic ring. The LOAD terminal and GEN terminal are connected to the inverter according to the silk-screen printing on the chassis.



ring 1:32x50x20mm

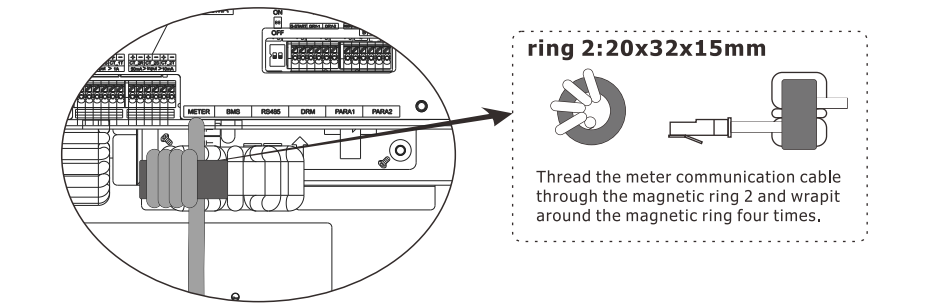
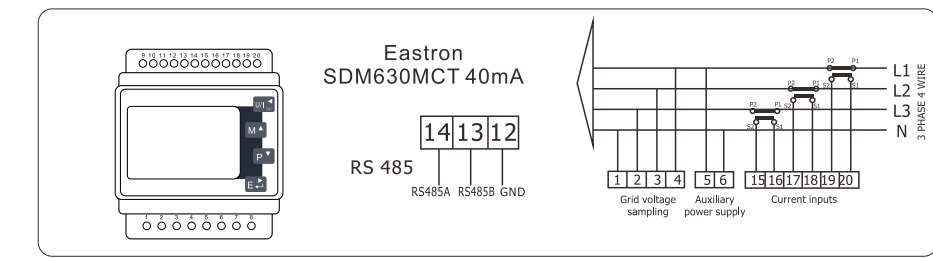
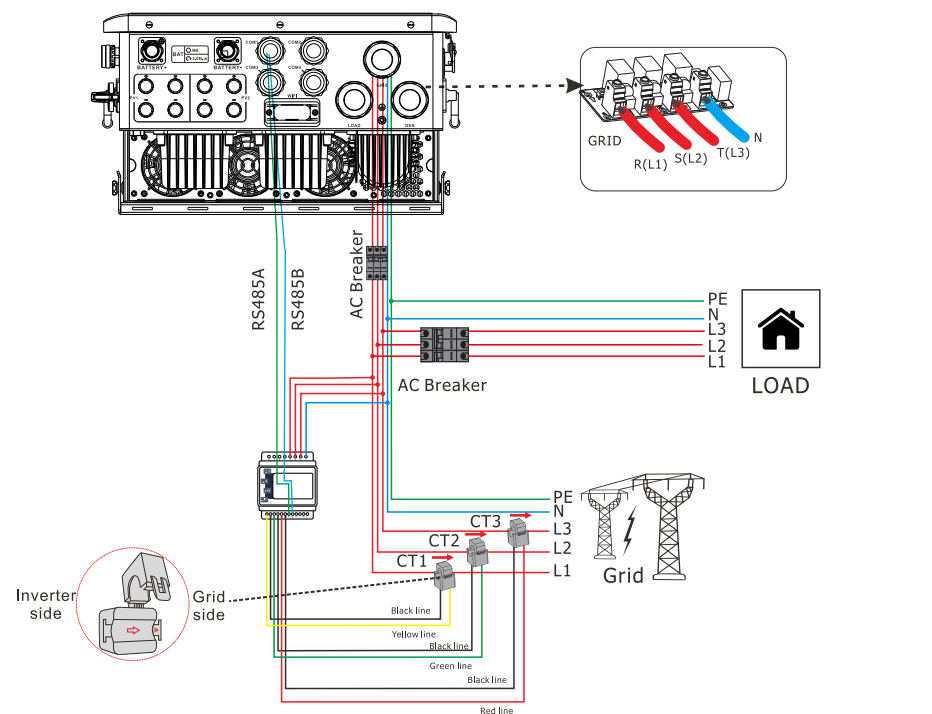
Wind the wire of the Gen port around the magnetic ring once, and then pass one end of the wire through the magnetic ring. The load terminals and GEN terminals are connected to the inverter according to the silk-screen printing on the chassis.

After the GRID and LOAD are connected, please connect the ground wire as shown in the schematic diagram

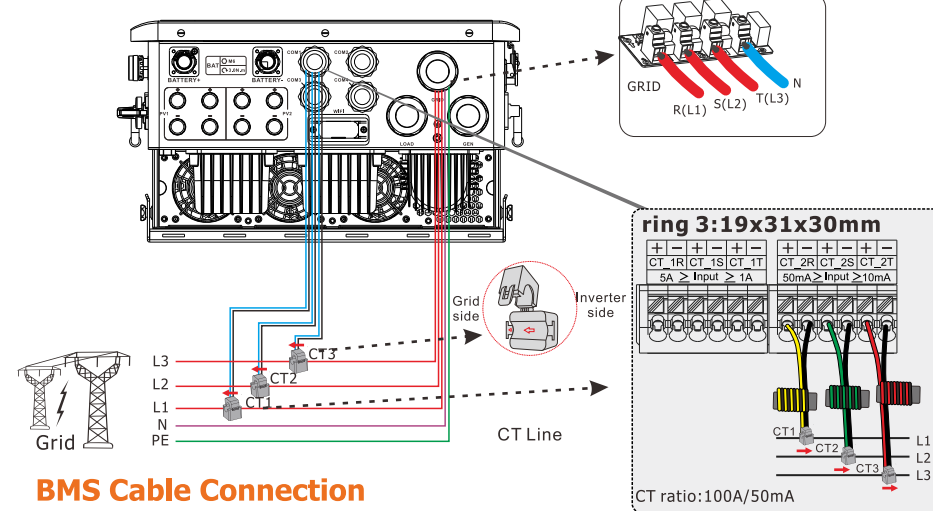


Smart Meter & CT Connection

NO.	P1	P2	P3	P4	P5	P6	P7	P8
Function	/	/	/	/	/	/	Meter_485B	Meter_485A

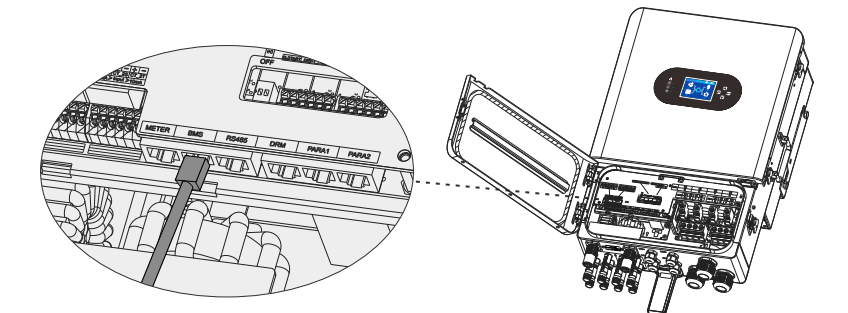


Or No Meter, Just three CTs



BMS Cable Connection

NO.	P1	P2	P3	P4	P5	P6	P7	P8
Function	/	/	/	BMS/CANH	BMS/CANL	GND	BMS/485A	BMS/485B

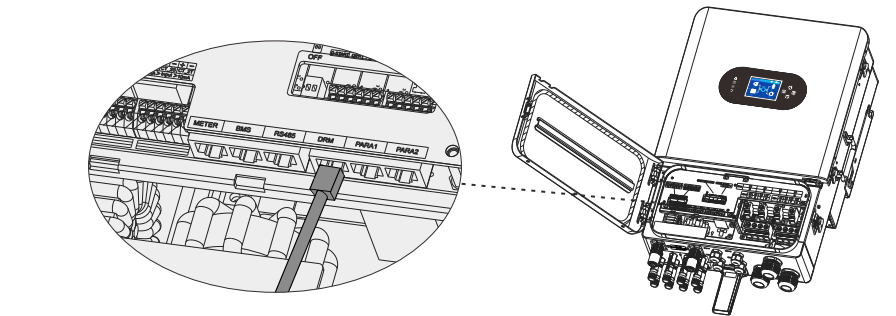


DRMS Connection

DRMS(Demand response enabling device) is used for Australia and New Zealand installation (also used as remote shutdown function in European countries), in compliance with Australia and New Zealand safety requirements(or European countries). Inverter integrates control logic and provides an interface for DRMS, The DRMS is not provided by inverter manufacturer, Detailed connection of DRMS & Remote Shutdown are shown below:

Step 1. Screw this plate off from the inverter.
Step 2. Plug out the RJ45 terminal and dismantle the resistor on it. Plug the resistor out, leave the RJ45 terminal for next step.

NO.	P1	P2	P3	P4	P5	P6	P7	P8
Function	DRM1/5	DRM2/6	DRM3/7	DRM4/8	REF	GND	/	



Installation Of Wifi Module

For detailed instructions on how to install WIFI Module, you can scan the QR code to the right to view the WiFi Module installation instructions.

Download The App

Method 1: Access <https://download.felcitysolar.com> using the mobile phone browser and download the latest installation package.
Method 2: Scan the following QR code and download the latest installation package.

