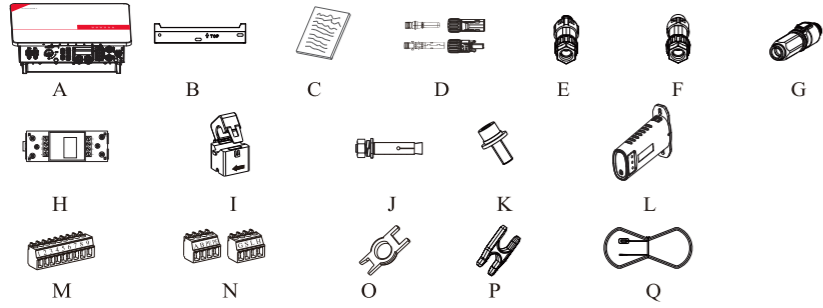


# PrimeVOLT

## QUICK INSTALLATION GUIDE

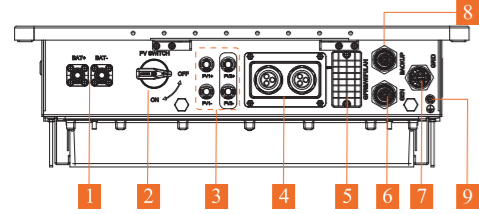
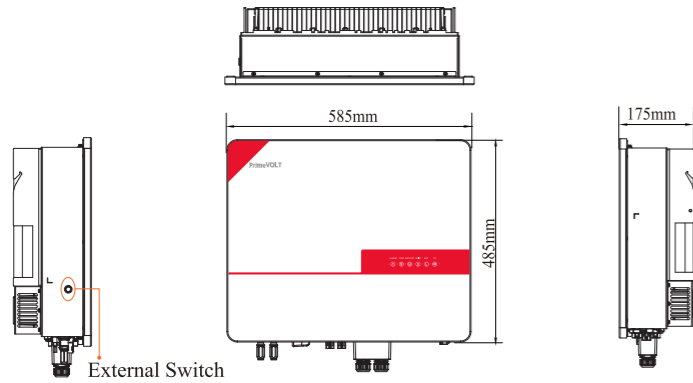
Single-phase ESS Inverter 3.6K/3.68K/4.6K/5K/6K

### 1 PACKING CONTENTS



A Inverter	J M12 Expansion screws
B Mounting bracket	K M6 Security screw
C File package	L WIFI module (Optional)
D PV terminal connector group (PV+/PV-)	M 9-Pin terminal
E BACKUP/GEN connector	N 4-Pin terminal
F GRID connector	O Removal tool for PV connector
G Battery connector	P Removal tool for GRID/BACKUP/GEN connector
H Meter (Optional)	Q Battery temperature sensor (Optional)
I CT	

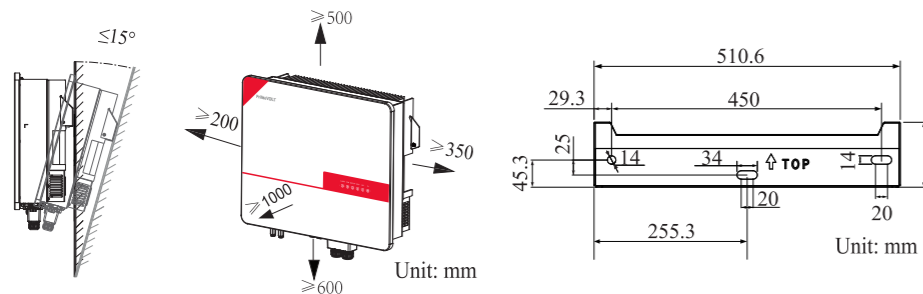
### 2 DIMENSIONS



The Bottom View of the Inverter

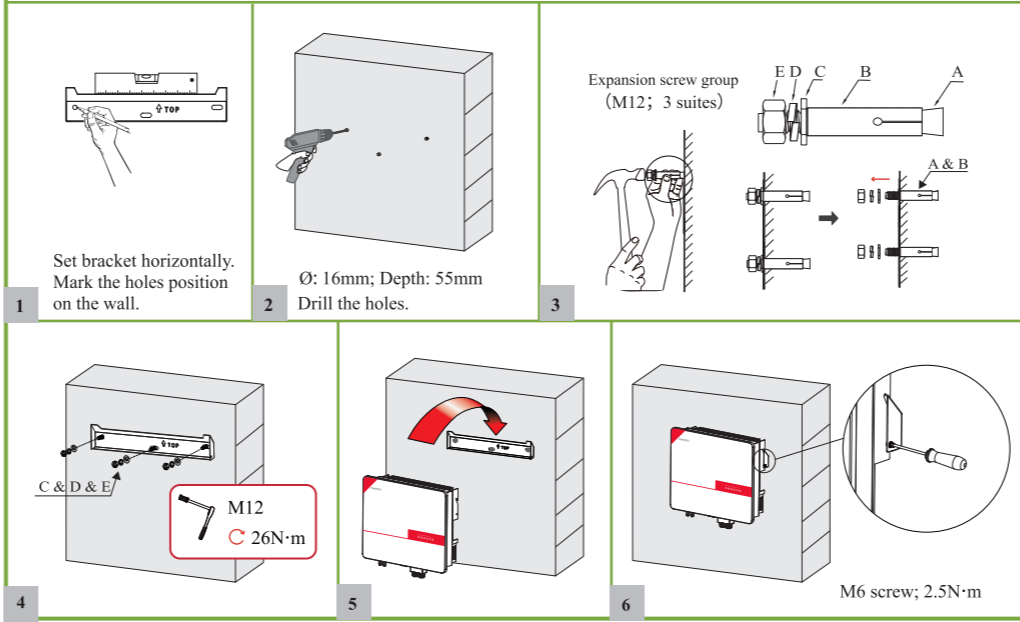
- Battery Input Terminals
- PV Switch
- PV Input Terminals
- Communication Ports (USB, PARAL, RS485, DRM, CT/METER, BMS, NTC/RMO/DRY)
- GPRS/WIFI/LAN Port
- GEN Output Terminal
- GRID Output Terminal
- BACKUP Output Terminal
- Ground Point

### 3 LOCATION



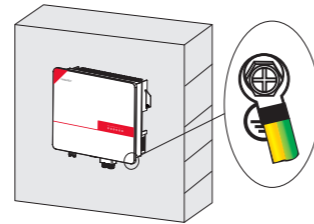
### 4 INSTALLATION

- The walls must be fireproof and non-flammable materials, otherwise there is a fire risk.
- Before drilling holes, check whether there are electric power pipes or other pipes buried in the walls to avoid risks.



### 5 GROUNDING

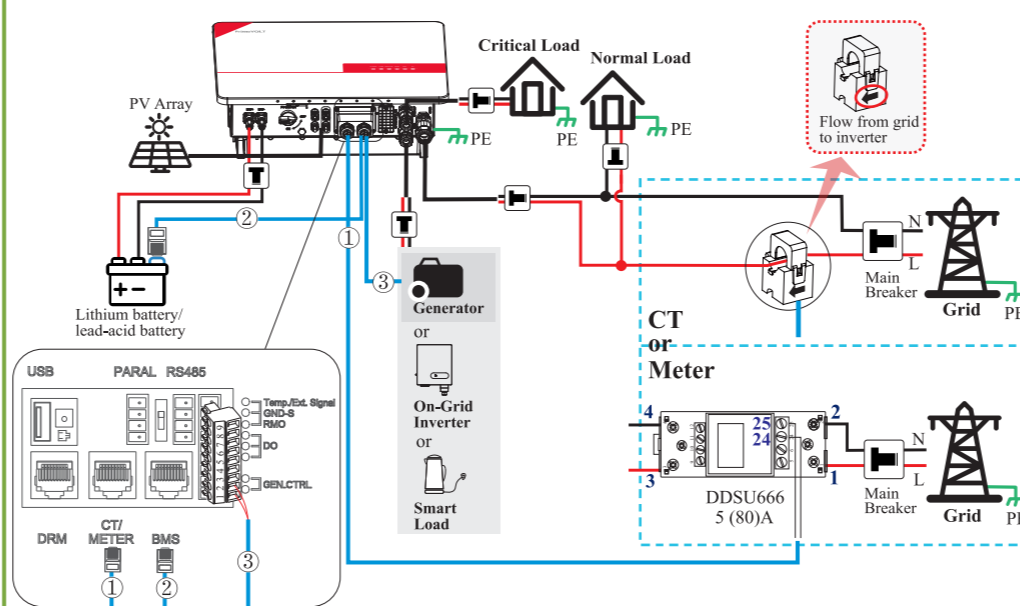
- Ensure that the inverter and all cables to be installed have been completely powered off during the whole process of installation and connection. Otherwise, fatal injury could be caused by the high voltage.



Items	Remark
Screw	M4 X 12mm; 1.2 N·m
OT Terminal	OT6-4
Yellow green lines	$S_{\text{Yellow green lines}} \geq S_{\text{PE line of AC cable}}$ S is the cross-sectional area.

### 6 WIRING SYSTEM Non-parallel connection mode

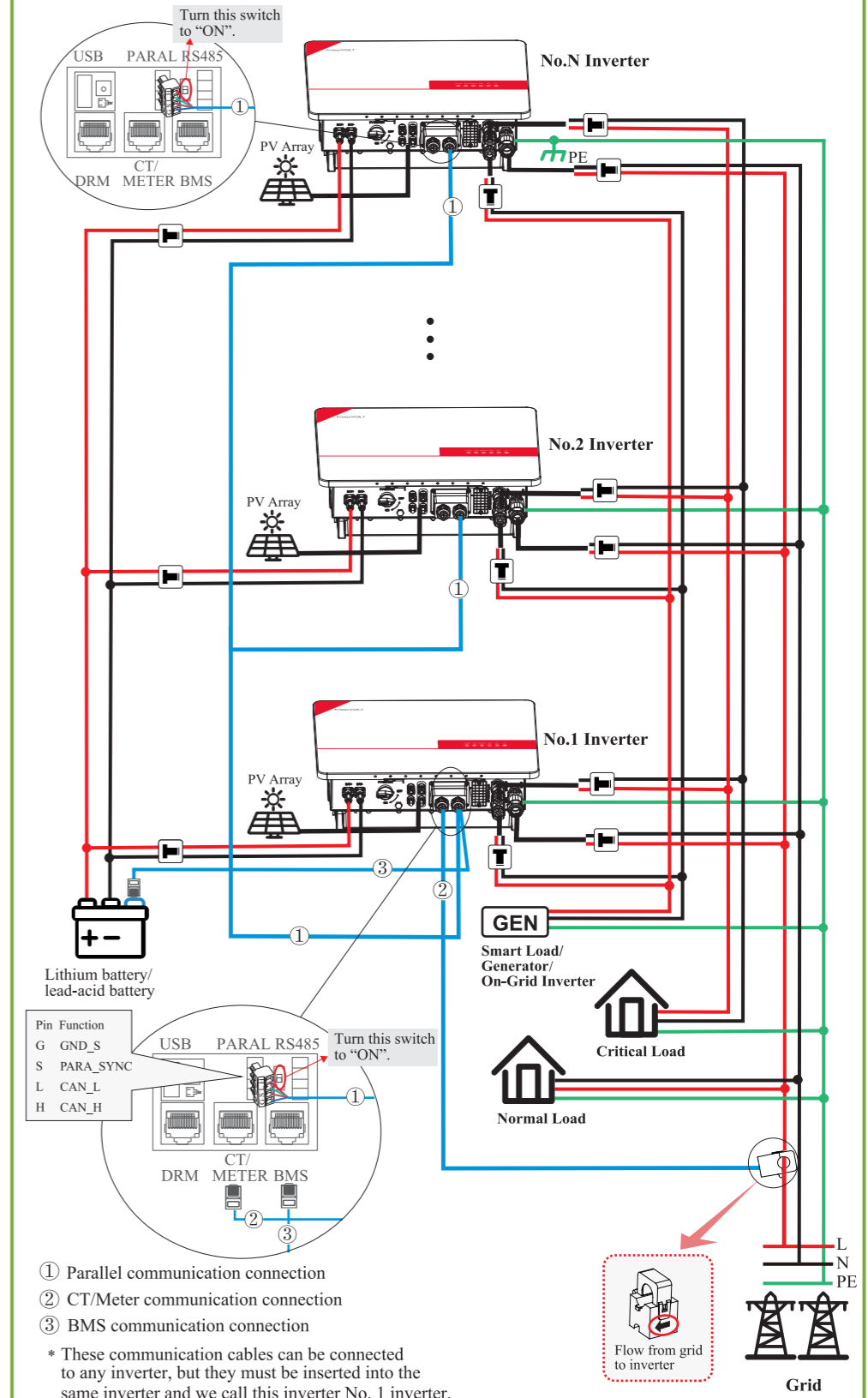
- Ensure that the inverter and all cables to be installed have been completely powered off during the whole process of installation and connection. Otherwise, fatal injury could be caused by the high voltage.



- CT/Meter communication connection
- BMS communication connection
- GEN DRY communication connection

- Note
- BMS connection is only for lithium battery.
  - Meter is optional.

### 7 WIRING SYSTEM Single phase parallel connection mode-Scheme A (N≤5)



- Parallel communication connection
- CT/Meter communication connection
- BMS communication connection

\* These communication cables can be connected to any inverter, but they must be inserted into the same inverter and we call this inverter No. 1 inverter.

#### Note

- BMS communication connection is only for lithium battery.
- It is necessary to turn the matched resistance switch of No. 1 inverter and No. N inverter to "ON" in parallel connection mode.
- With parallel connection mode, it is necessary to connect APP to one of inverters and then go to [Console > Hybrid Setting > Other > Parallel mode](#) page to enable [parallel mode](#) on APP.

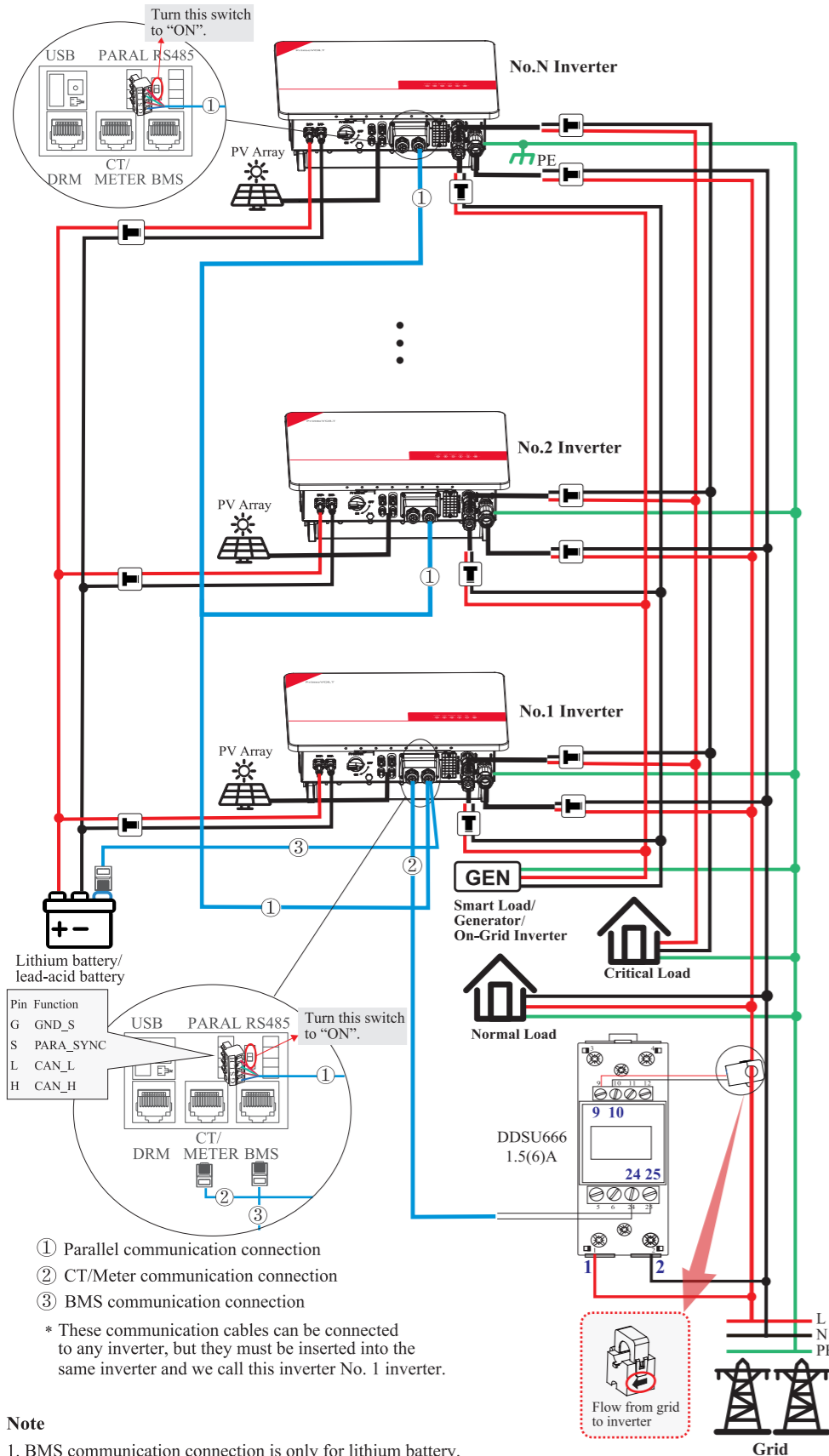


**DANGER**

Ensure that the inverter and all cables to be installed have been completely powered off during the whole process of installation and connection. Otherwise, high voltage may result in fatal injury.

## 8 WIRING SYSTEM

### Single phase parallel connection mode-Scheme B (N>5)



**DANGER**

Ensure that the inverter and all cables to be installed have been completely powered off during the whole process of installation and connection. Otherwise, high voltage may result in fatal injury.

## 9 GRID/BACKUP/GEN CONNECTION



Before connecting the GRID/BACKUP/GEN terminal, ensure that both the AC terminal and the DC terminal are powered OFF and the PV switch is OFF. Otherwise there is a risk of high voltage shock.

It is recommended to use outdoor dedicated cables with multiple copper cores.

A. Diameter 14 ~ 20/10~14/10~14mm  
B. Length 20 ~ 25mm  
C. Strip Length ~10mm  
S. Cross Section 8~14/4~6/4~6mm<sup>2</sup>

1

2

Tighten three screws and ensure each screw cap does not exceed the surface.

Earth  
Neutral  
Line

3

1  
2  
3  
Tighten nut to avoid loosening.

Click

4

## 10 PV CONNECTION



1. Photovoltaic arrays exposed to sunlight will generate dangerous voltages!  
2. Before connecting the PV terminal, ensure that both the AC terminal and the DC terminal are powered OFF and the PV switch is OFF. Otherwise there is a risk of high voltage shock.

Diameter 4-6mm

4mm

4mm

1

Note: PV cable should be dedicated PV cable (suggest using 4-6mm<sup>2</sup> PV1-F cable).

Limit buckle

Using crimping tool to stitch. Limit buckle can't be crimped.

2

Tighten the waterproof nuts on each connector with a wrench to avoid loosening.

360.0

3

Test string voltage and confirm string polarity.

ON  
OFF

4

Ensure that the PV switch is OFF.

Positive Connector  
Negative Connector

Click

5

Insert the positive and negative connectors into the PV+/PV- ports until a "click" sound is heard.

## 11 BATTERY CONNECTION

A. Diameter 10~12mm  
B. Cross Section 25mm<sup>2</sup>  
C. Strip Length ~10mm

1

2

Hydraulic Pressure Crimper

DC Breaker 150A

4

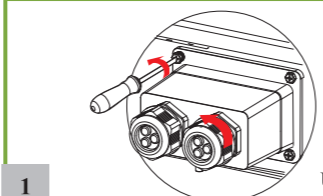
It is recommended that the battery cable be less than or equal to 3 m.  
This product is not equipped with DC breakers.

Click

5

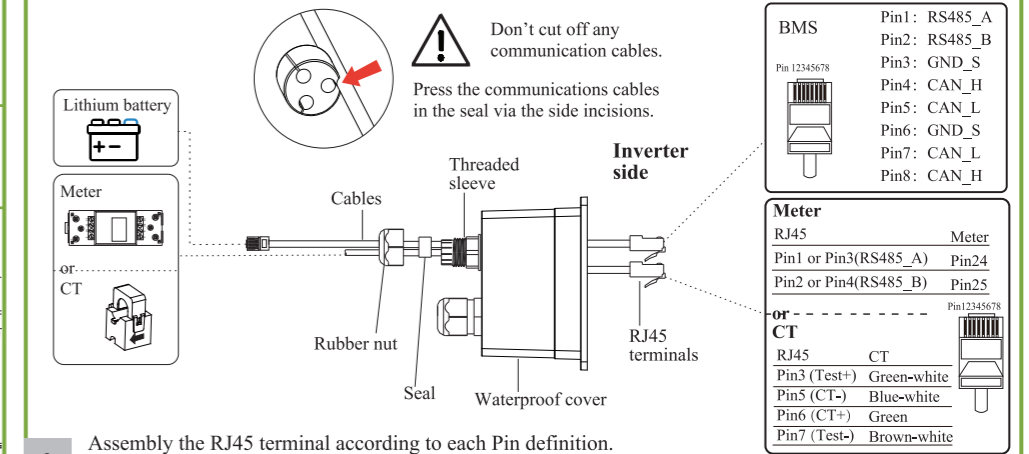
Warning!  
Reverse polarity will damage the inverter!

## 12 COMMUNICATION CABLE(S) CONNECTION (CT/Meter and BMS)

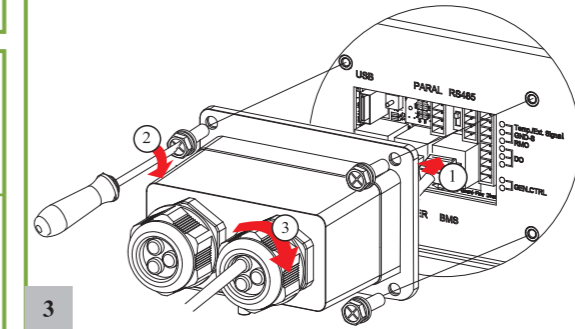


1

Unscrew the waterproof cover and loosen the rubber nut on waterproof cover.



2 Assembly the RJ45 terminal according to each Pin definition.  
Lead the communication cable(s) through the rubber nut, seal and waterproof cover in turn.



3

1 Insert RJ45 terminals into corresponding ports.  
2 Screw the waterproof cover back to inverter firmly with 4 x M4 screws(1.2N·m).  
3 Install the seal into the threaded sleeve, fasten the rubber nut.

## 13 STARTUP/SHUTDOWN PROCEDURE

### Inspection

- | No. | Items   |
|-----|---|
| 1   | The inverter is firmly installed.   |
| 2   | There is enough heat dissipation space, no external objects or parts left on the inverter.  |
| 3   | It is convenient for operation and maintenance.   |
| 4   | The wiring of the system is correct and firm.   |
| 5   | Check whether the DC and AC connections are correct with a multimeter, and make sure there is no short circuit, break, or wrong connection.                   |
| 6   | Check whether the waterproof nuts of each part are tightened.   |
| 7   | The vacant ports have been sealed. All gaps at the cable inlet and outlet holes have been plugged with fireproof/waterproof materials, such as fireproof mud. |
| 8   | All safety labels and warning labels on the inverter are complete and without occlusion or alteration.  |

After the inverter is powered off, the remaining electricity and heat may still cause electric shock and body burns. If need to disconnect the inverter cables, please wait at least 10 minutes before touching the inverter.

## 14 DISPLAY

LED	Status Description	LED	Status Description
On	PV input is normal.	On	BACKUP power is available.
Blink	PV input is abnormal.	Blink	BACKUP output is abnormal.
Off	PV is unavailable.	Off	BACKUP power is unavailable.
On	Battery is charging.	Blink	Data are communicating.
Off	Battery is discharging.	Off	No data transmission.
Blink	Battery is abnormal.	On	Fault has occurred and inverter shuts down.
Off	Battery is unavailable.	Blink	Alarm has occurred but inverter doesn't shut down.
On	GRID is available and normal.	Off	No fault.
Blink	GRID is abnormal.		
Off	GRID is unavailable.		

As the technology is constantly updated and improved, the illustrations in this document are for reference only. Contents including illustrations in this document are subject to change without notice.

For more installation instructions, please scan the QR code on the right.



Installation Manual



Installation Video (WiFi+Smart meter)