

PrimeVOLT

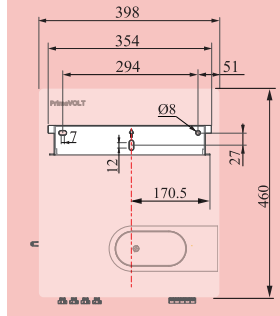
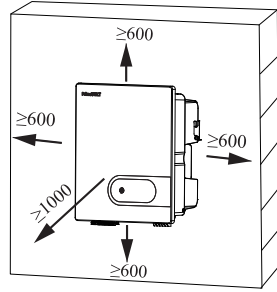
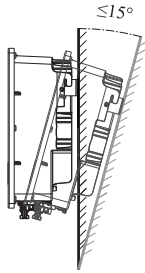
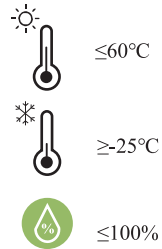
QUICK INSTALLATION GUIDE

Three-phase Grid-tied PV String Inverter 5K-25K

1 PACKING CONTENTS

A	B	C	D	A Inverter	F Expansion screws groups
E	F	G	H	B Bracket	G M6 Security screw
I	J			C AC shield(4× M4 security screws)	H 6-Pin terminal
				D PV connectors	I Remove tool for PV connector
				E File package	J RS485 cover

2 INSTALLATION LOCATION



3 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.

1 Set bracket horizontally. Mark the holes position on the wall.

2 Drill the holes.

Ø: 10mm; Depth: 60mm

3 Install the expansion tubes.

Expansion screw group (M6; 3 suites)

4 Install bracket.

M6 Expansion screws; 2.5N·m

5 Install the inverter.

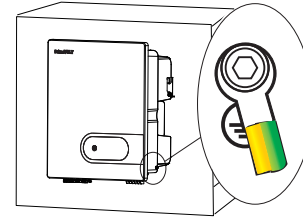
6 Tighten the screws at both sides.

2 x M6 screw; 2.5N·m

4 GROUNDING



- According to regulations, the secondary protection grounding can't replace the PE terminal connection of the AC cable. Ensure that both are grounded reliably.
- Ensure that inverter and all cables to be installed are completely powered off during whole installation and connection. Otherwise, fatal injury can occur due to the high voltage.

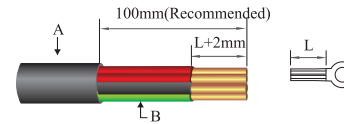


Items	Remark
Screw	M6 X 12mm; 3N·m
OT Terminal	OT6-6 (5K-15K) ; OT16-6 (17K-25K)
Yellow green lines	$S_{\text{Yellow green lines}} \geq S_{\text{PE line of AC cable}}$ S is the cross-sectional area.
Ensure that the grounding resistance is less than 10Ω.	

5 AC CONNECTION

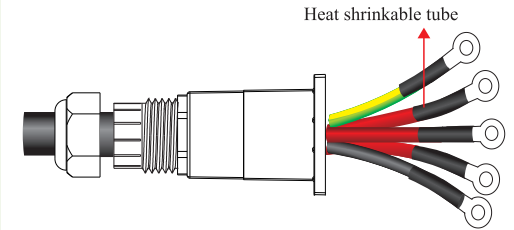


- Before connecting the AC terminal, ensure that both the AC terminal and the DC terminal are powered OFF and the DC switch is OFF. Otherwise there is a risk of high voltage shock.

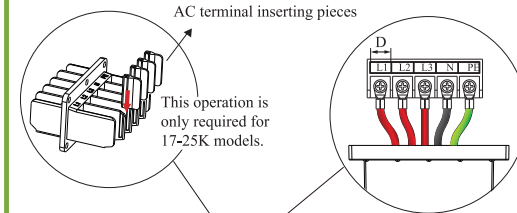


It is recommended to use outdoor dedicated cables with multiple copper cores.

No.	Name	Model	5K-15K	17K-20K	22K-25K
A	Wire outer diameter (mm)		11-18	24-32	24-32
B	Cross-sectional area (mm ²)	Range	4-6	6-16	10-16
		Recommended	6	10	16



1 Wires making.



3 Lock the AC cable to the corresponding AC terminals.

Screw	Torque	D
5K-15K M4	1.2N·m	10mm
17K-25K M5	2N·m	12.5mm

Note: ① is for WiFi/GPRS communication (For WiFi Connection, refer to Stick Logger Quick Guide).
② is for RS485 communication.

2 Wires threading and pressing.

4

Nut	Torque
5K-15K M25	5.5N·m
17K-25K M40	12N·m

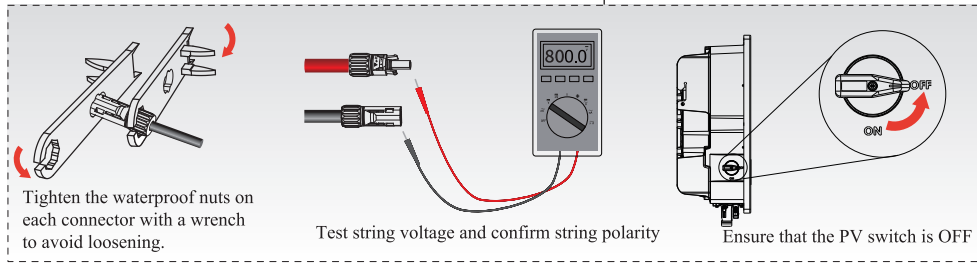
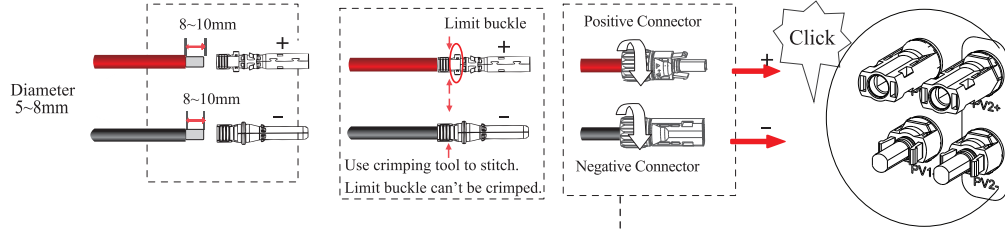
① 4 x M4 screws; 1.2N·m

- Align the AC cover with the 4 holes and tighten it firmly with 4 x M4 screws.
- Fasten the nut (waterproof cap).

6 PV CONNECTION



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



Note: DC cable should be dedicated PV cable (suggest using 4-6mm² PV1-F cable).

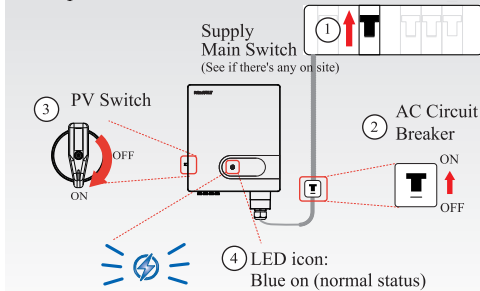
8 STARTUP / SHUTDOWN PROCEDURE

Inspection

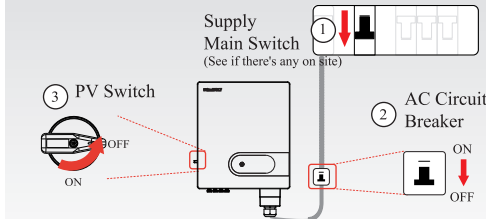
No.	Items
1	The inverter is firmly installed.
2	There is enough heat dissipation space, no external objects or parts left on the inverter.
3	It is convenient for operation and maintenance.
4	The wiring of the system is correct and firm.
5	Check whether the DC and AC connections are correct with a multimeter, and whether there is a 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 these parts of inverter.

Startup Procedure

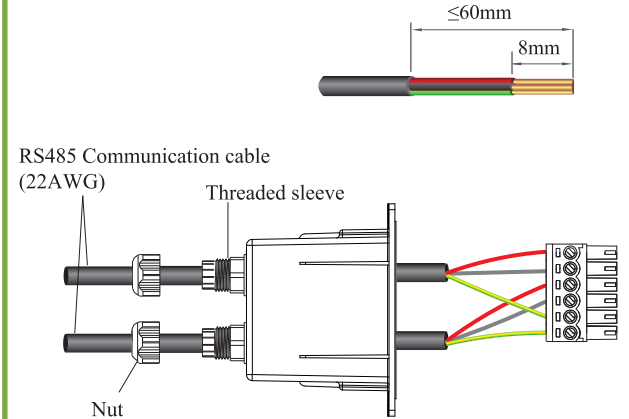
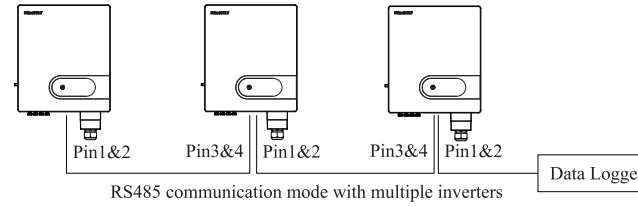


Shutdown Procedure



7 RS485 CONNECTION

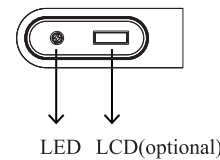
Note: Please set the Modbus address for RS485 communication after the following four steps. Refer to User Manual to get more details.



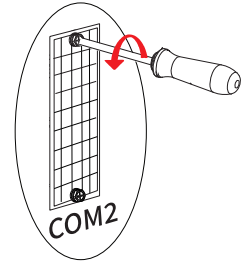
Connect the differential positive and negative signal wires of the first RS485 cable from the data logger to Pin1 and Pin2 of the 6-Pin terminal respectively. If there is more than one inverter, connect Pin3 and Pin4 to Pin1 and Pin2 of another inverter.

2 Wires making, threading and wiring.

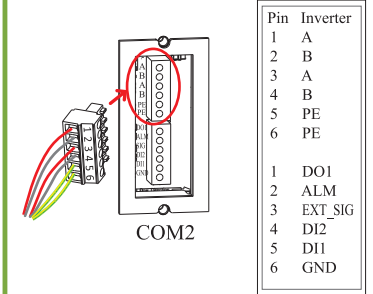
9 DISPLAY



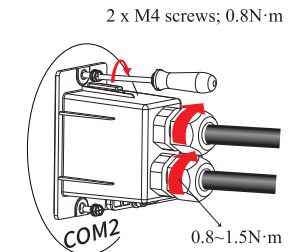
LED status	Explanation
Red/green/blue light up in turn	1. Inverter firmware updating 2. Initial status of power-on
Blue blinks slowly (1s/time)	Standby before normal status
Blue on	Normal status
Green on	Power limited status
Red blinks slowly (1s/time)	Output side fault
Red blinks fast (0.25s/time)	Input side fault
Red on	Inverter internal fault



1 Loosen the screws and remove the cover plate.



3 Insert the 6-Pin terminal into the RS485 communication port.



4 Install the RS485 cover.