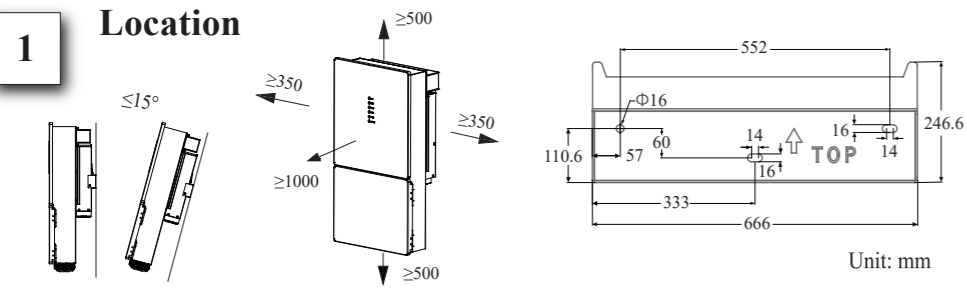


QUICK INSTALLATION GUIDE

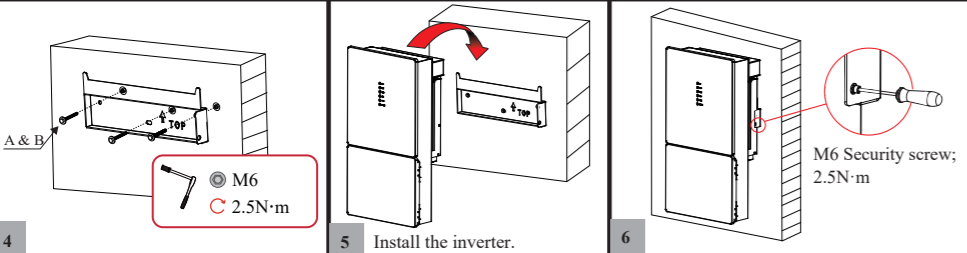
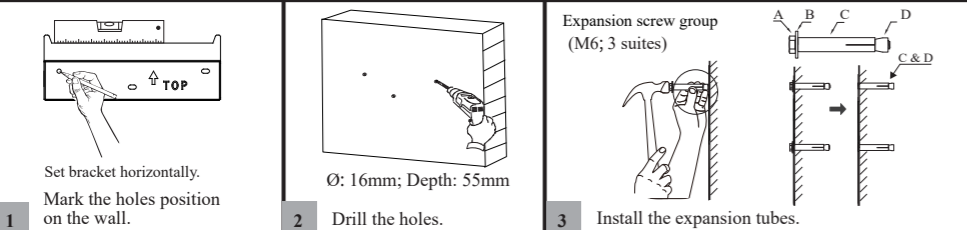
ESS INVERTER 5/6/8/10K US



2 Installation

Inverter is installed on the wall or support by means of mounting bracket. The following steps are illustrated with only wall-mounted 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.



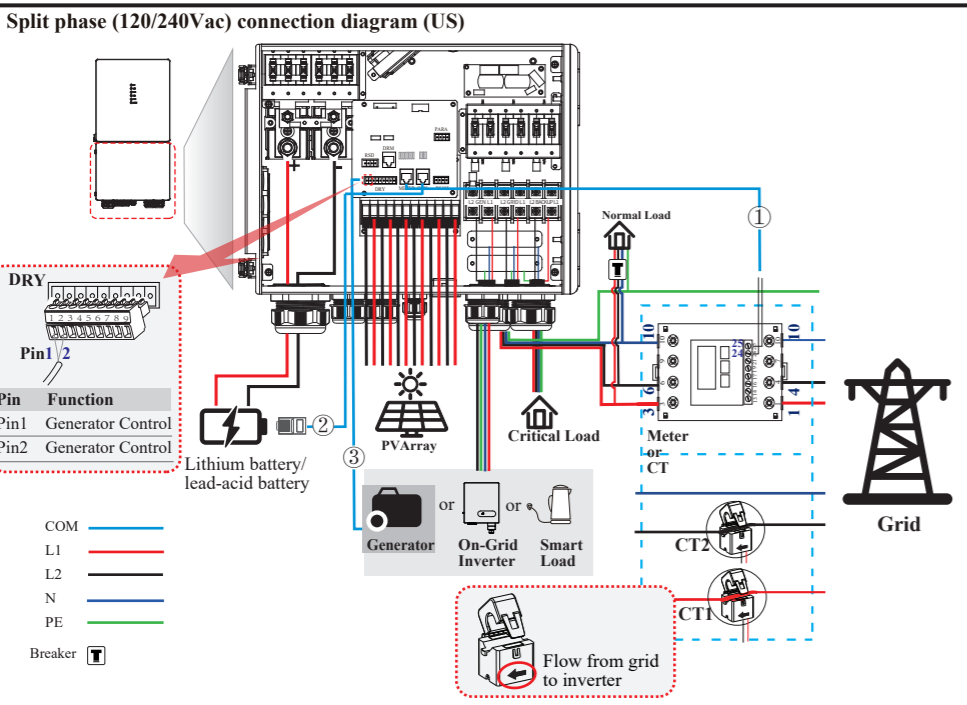
3 Grounding

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
Yellow green lines	4-2AWG
Screw	M6; 2.5N·m
OT Terminal	OT16-6.4

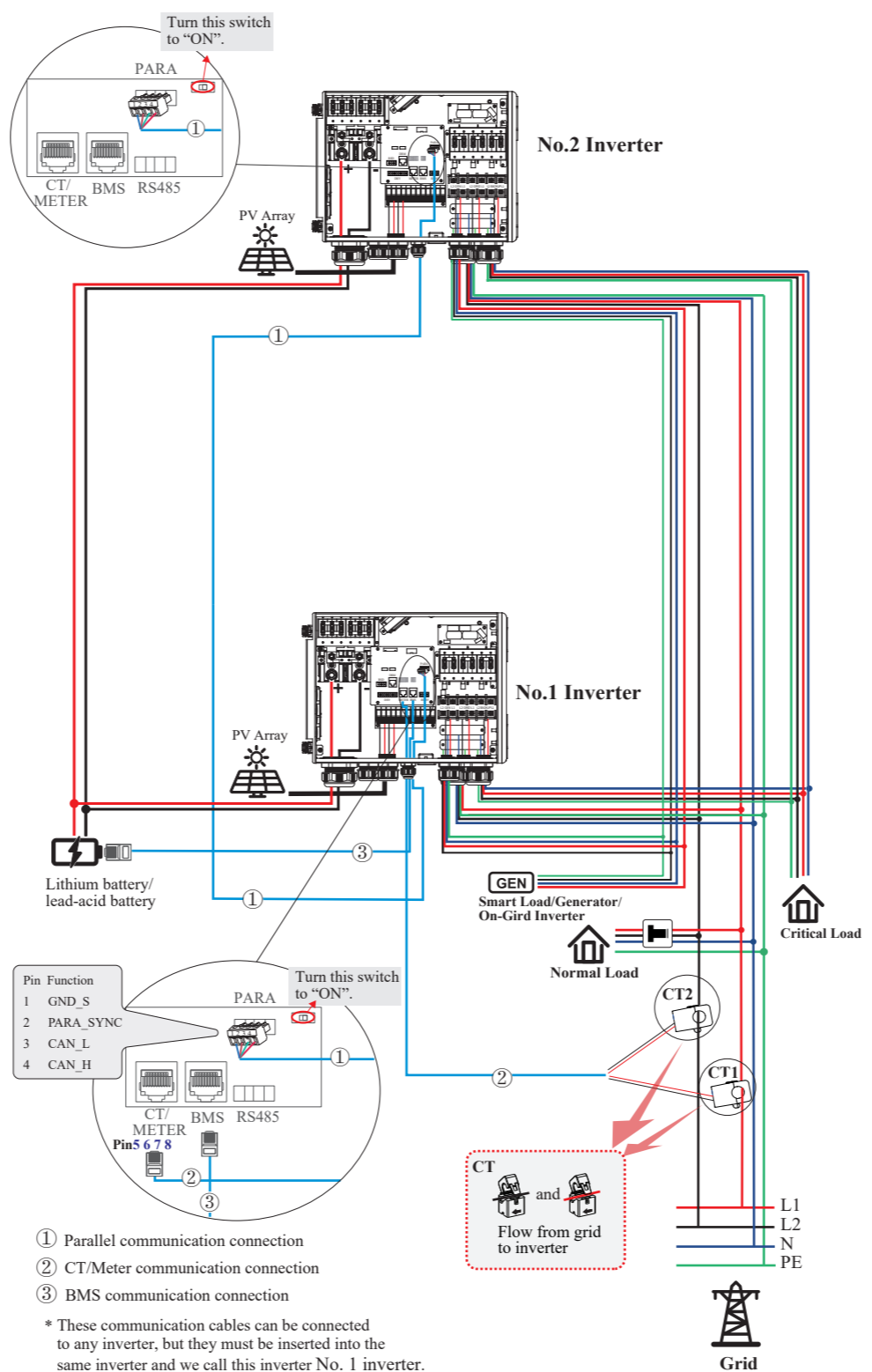
4 Wiring System

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.



5 Wiring System

Split Phase parallel connection mode-Scheme A (N=2)



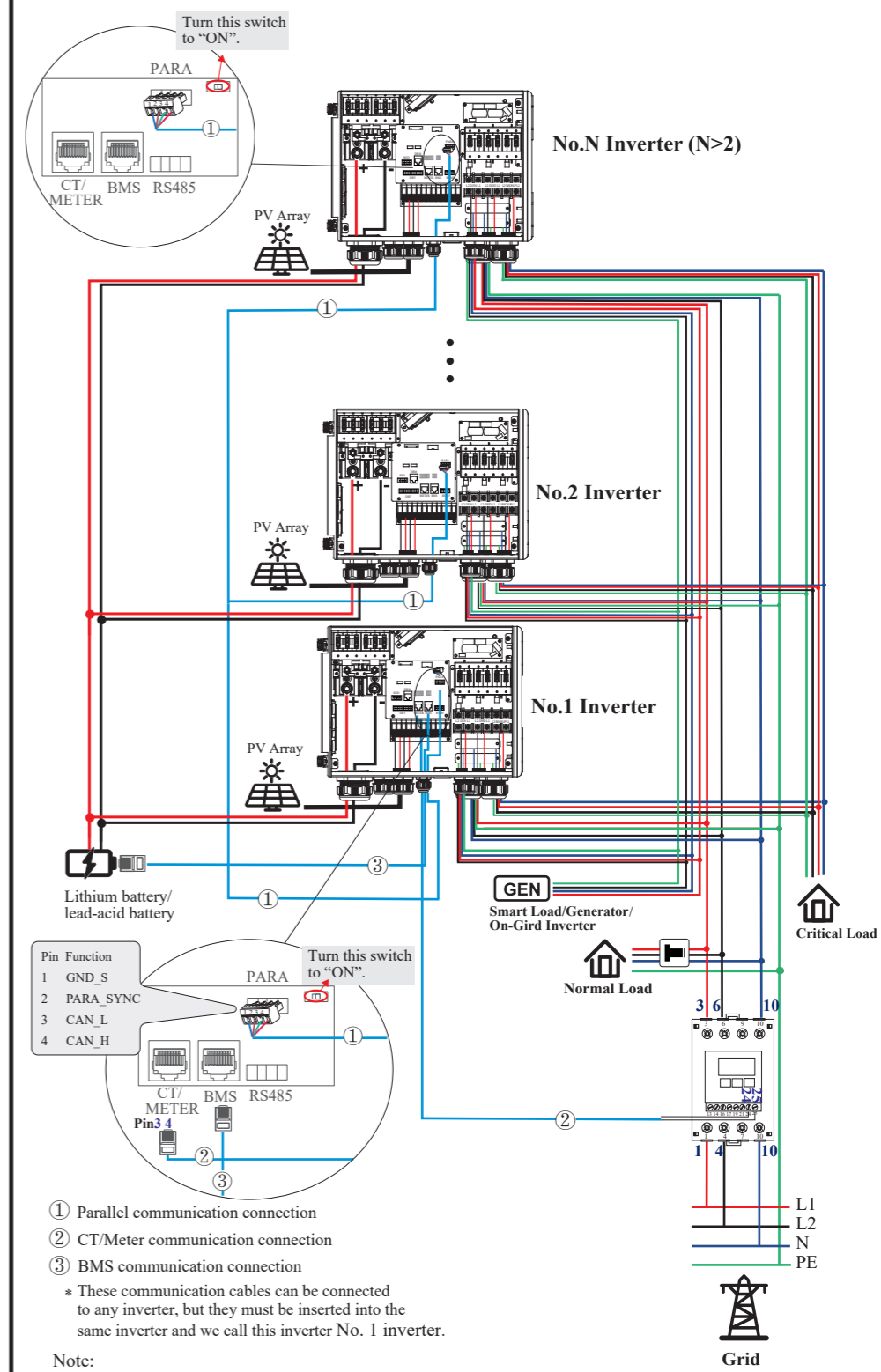
Note:

- PV related contents are N/A for AC Couple inverter.
- BMS communication connection is only for lithium battery.
- It is necessary to turn the matched resistance switch of No. 1 inverter and No. 2 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 > Other Setting](#) page to enable [Parallel mode](#) on APP.

DANGER 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.

6 Wiring System

Split Phase parallel connection mode-Scheme B (N>2)



Note:

- PV related contents are N/A for AC Couple inverter.
- BMS communication connection is only for lithium battery.
- It is necessary to additionally purchase suitable CT and meter according to the specific requirements in parallel connection mode-Scheme B.
- 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 > Other Setting](#) page to enable [Parallel mode](#) on APP.

DANGER 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.

7 Removing Insulation Piece

8 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.

AC	Wire Size	OT Terminal
GEN	6-4AWG	OT16-6.4
GRID	4-2AWG	
BACKUP	4-2AWG	

1 Wires making.

According to labels on the terminal block, fit the wires' connectors in and tighten the terminal screws. Make sure the connection is complete.

9 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.

1 Wires threading.

10-8AWG 15mm (recommended)

It is recommend to use dedicated PV cable.

2 Check correct polarity of wire connection from PV modules and PV input connectors. Ensure that the PV switch is OFF.

3 Wires threading.

4 Connect positive pole (+) of connection wire to positive pole (+) of PV input connector. Connect negative pole (-) of connection wire to negative pole(-) of PV input connector. Close the switch and makesure the wires are tightly fixed.

10 Battery Connection

Before connecting the battery 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.

1 Wires making.

0AWG OT22-4 Heat shrinkable tube

2 Wires threading.

3 Wires connection.

M12 26N-m

Warning! Polarity reverse will damage the inverter!

11 Communication Cable(s) Connection (CT/Meter, BMS, DRY)

Meter

Inverter	Meter
Pin3 (RS485_A)	Pin24
Pin4 (RS485_B)	Pin25
CT	Pin 345678
Inverter	CT
Pin5 (CT2-)	Black
Pin6 (CT2+)	Red
Pin7 (CT1+)	Red
Pin8 (CT1-)	Black

BMS

Pin1:	RS485_A
Pin2:	RS485_B
Pin3:	/
Pin4:	CAN_H
Pin5:	CAN_L
Pin6:	/
Pin7:	/
Pin8:	/

DRY

Pin 1 2	PIN	Function
1	1	Generator Control
2	2	Generator Control

1 Make the RJ45/9-Pin terminal according to each Pin definition.

2 Route the communication cable(s) into the junction box. Insert RJ45/9-pin terminals into corresponding ports. Make sure the connection is complete.

*This product is not equipped with RJ45 terminals.

12 GPRS/WIFI/LAN Module Installation (Optional)

The appearance of modules may be slightly different. The figure shown here is only for illustration. For details, please refer to the corresponding Module Installation Guide in the packing.

1 Loosen two screws and move the cover.

2 Insert GPRS/WiFi/LAN module into the port, and ensure that it does not fall off.

3 Install/secure the module.

Proper strength to avoid damage to the module.
 2 x M4 screws: 0.8N·m
 0.2-0.3N·m

13 Insulation Piece Installation

Before installing insulation piece, please turn on all circuit breakers in junction box.

14 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 port has been sealed.
8	All safety labels and warning labels on the inverter are complete without occlusion or alteration.

After the inverter is powered off, the remaining electricity and heat may still cause electrical 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

- PV Switch OFF
- Battery ON
- Grid ON
- BACKUP ON
- Go to APP (Quick Setup)

Shutdown Procedure

- Go to APP (Quick Setup) or go to APP (Quick Setup)
- PV Switch OFF
- Grid ON
- Battery ON
- BACKUP ON

15 Quick Setup

A Preparation

- Download the APP.
 - Scan the QR code on the inverter to download the APP.
 - Download the APP from the App Store or Google Play.
 Note: the APP should access some permissions such as the device's location. You need to grant all access rights in all pop-up windows when installing the APP or setting your phone.
- Power on the inverter.

B Connecting the Inverter

- Open the Bluetooth on your own phone, then open the APP.
- Then follow the instructions below.

C Quick Setup

16 Display

LED	Status	Description	LED	Status	Description
PV	On	PV input is normal.	COM	On	Communication is ok.
	Blink	PV input is abnormal.		Off	Power supply is unavailable.
	Off	PV is unavailable.		On	BACKUP power is available.
BAT	On	Battery is charging.	BACKUP (EPS)	Blink	BACKUP output is abnormal.
	Blink	Battery is discharging. Battery is abnormal.		Off	BACKUP power is unavailable.
	Off	Battery is unavailable.		On	Fault has occurred and inverter shuts down.
GRID	On	GRID is available and normal.	ALARM	Blink	Alarms has occurred but inverter doesn't shut down.
	Blink	GRID is available and abnormal.		Off	No fault.
	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.