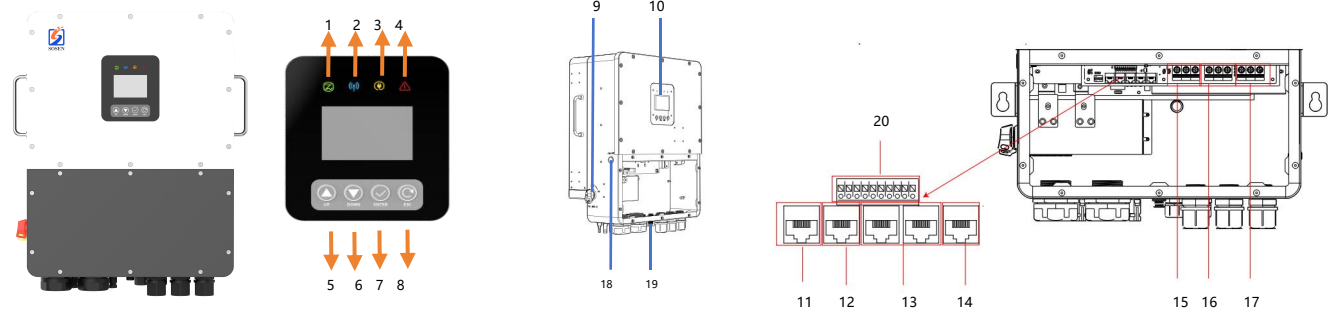


1.Overview



Name	NO.	Description	NO.	Description	NO.	Description
Indicator LED	1	Green: Steady ON for running status; Flash is Standby.	9	PV Switch	17	EPS input
	2	Blue: Steady ON, Communication with BMS normal.	10	LCD Screen	18	Power on/off
	3	Yellow: Steady ON, The inverter is in EPS mode.	11	DRY/Debug	19	WiFi port
	4	Red: Fault alarm.	12	BMS: CAN/485	20	Function port
	5	UP: Go to previous selection	13	Parallel port	21	
	6	DOWN: Go to next selection	14	DRM port	22	
	7	ENTER: Confirm the selection	15	Grid input	23	
	8	ESC: Exit setting mode	16	Generator input		

WARNING

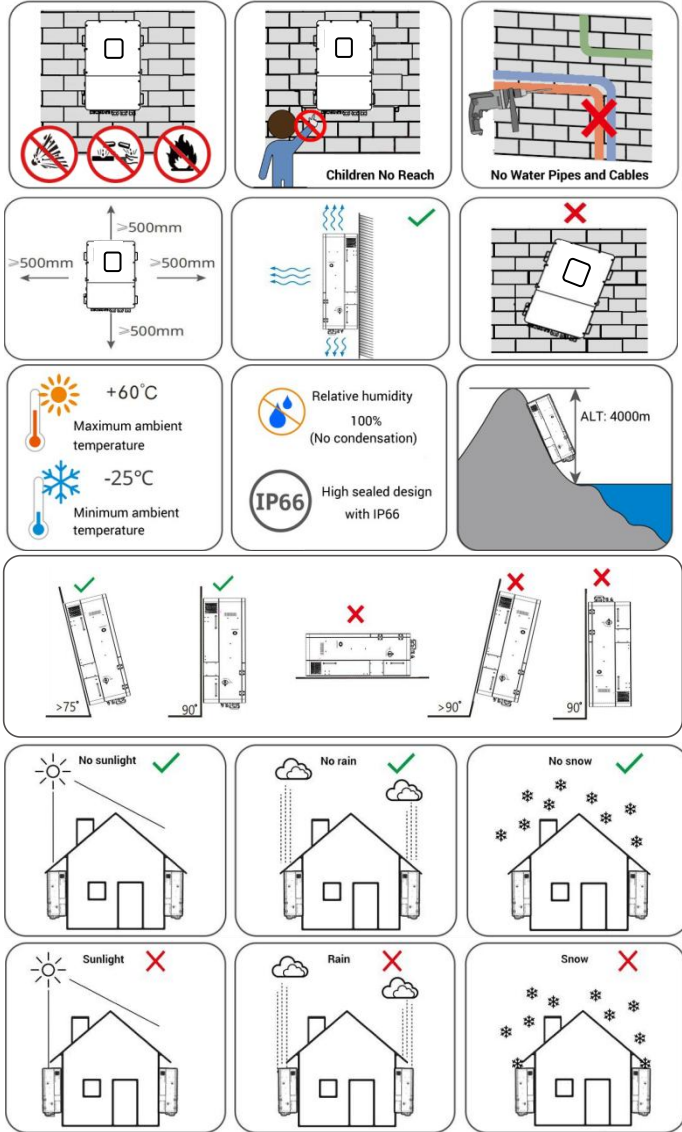
1.This file will be updated from time to time due to product upgrades or other reasons. Unless otherwise agreed, this document is intended as a guide only. All information and suggestions do not constitute an express or implied warranty. The final interpretation of the content is at SOSEN.

2. This document is for quick guidance installation only. For details, please refer to the User Manual.

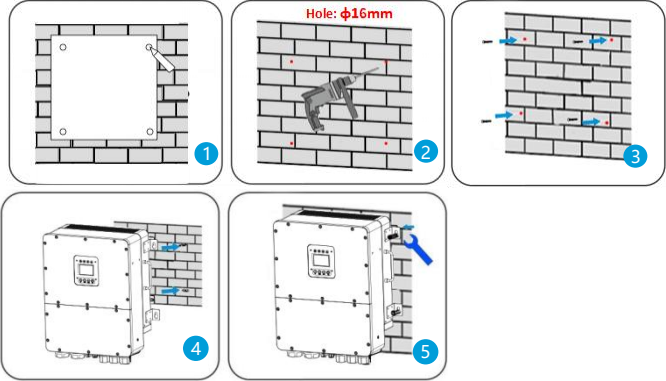
3. Any damage caused by failure to follow the content is not covered by the warranty.

2.Installation

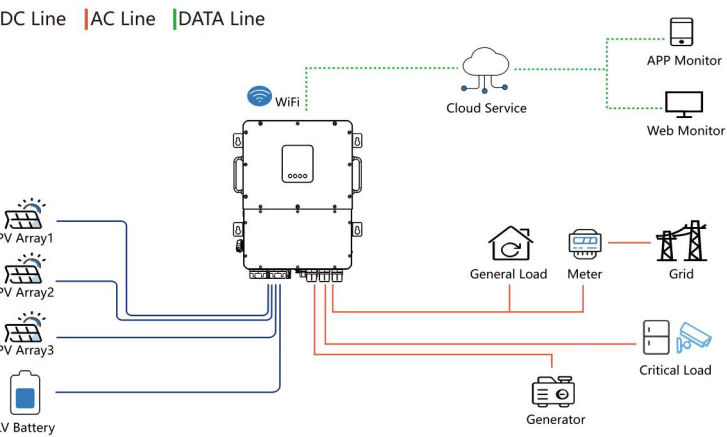
2.1 Installation Requirements



2.2 Installation Steps



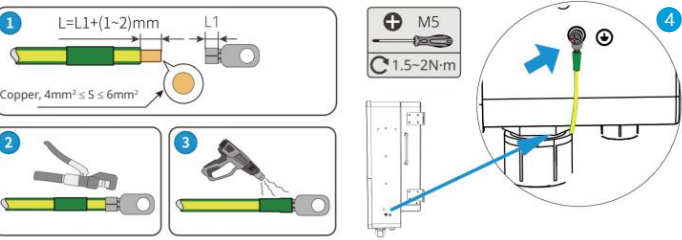
2.3 System View



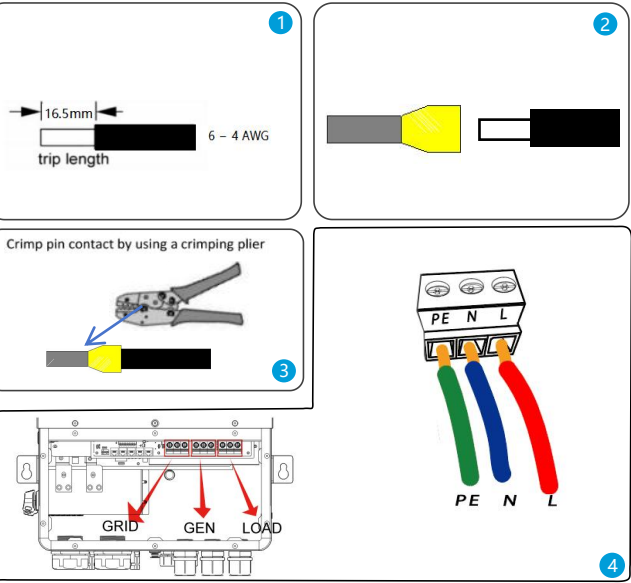
3.Connecting cables

NO.	Cable name	Type	Recommend module	WARNING
1	Grounding cable	Single multi-core yellow-green copper cable	Cable diameter≥ 6AWG	1.Lithium battery has its own power line and communication line. so use them. 2.Hybrid inverter include the basic communication line. So use them directly. 3.Please make sure all the switches OFF before connection. For your safety. Please do not operation when power on.
2	AC output cable	Two or three different color multi-core copper cables	Cable diameter≥6-4 AWG	
3	PV input cable	Photovoltaic dedicated cable (such as PV1-F)	12AWG-10AWG	
4	Battery cable	Red and back multi-core copper	Cable diameter≥ 2/0 – 4/0 AWG	
5	Communication cable	CAT5E	/	

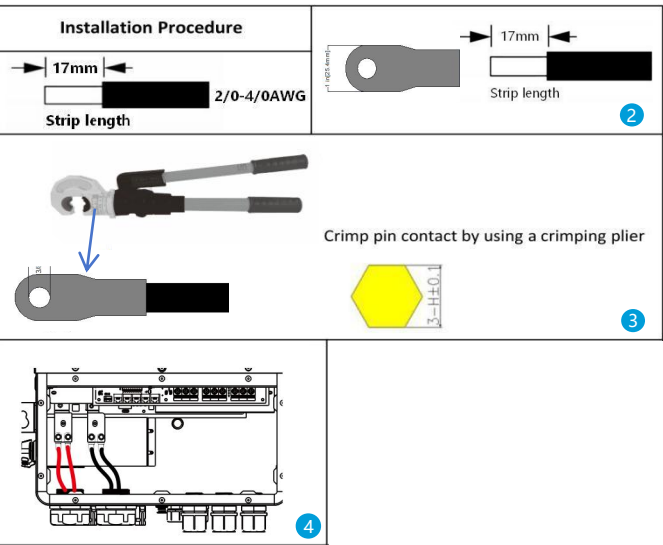
3.1 Grounding



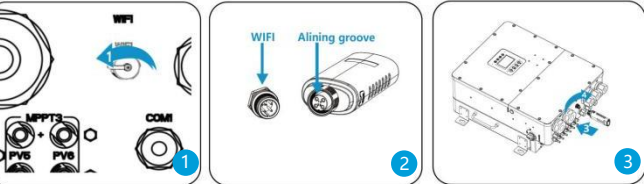
3.2 GRID, LOAD and GEN Wiring



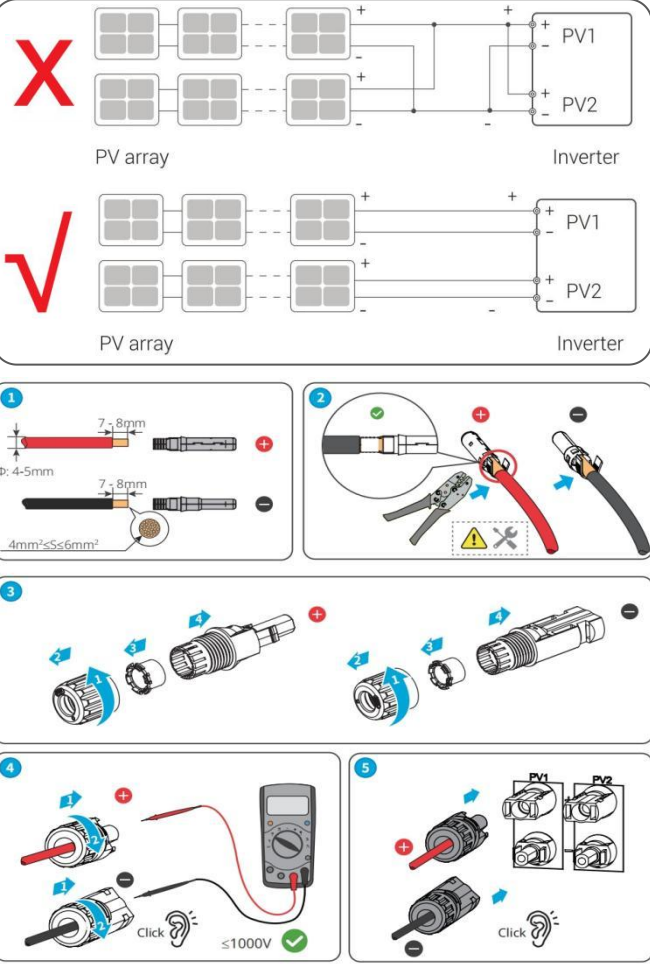
3.4,Battery Wiring



3.5 Communication Stick Installation(LSW-5 as reference)

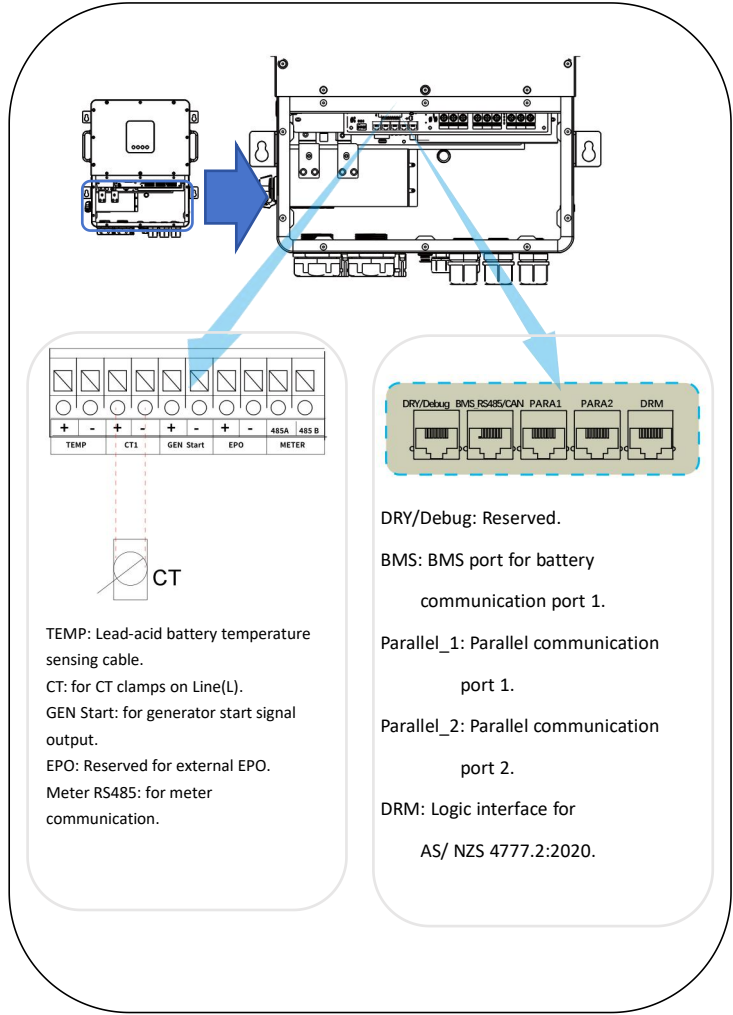


3.3 PV Wiring

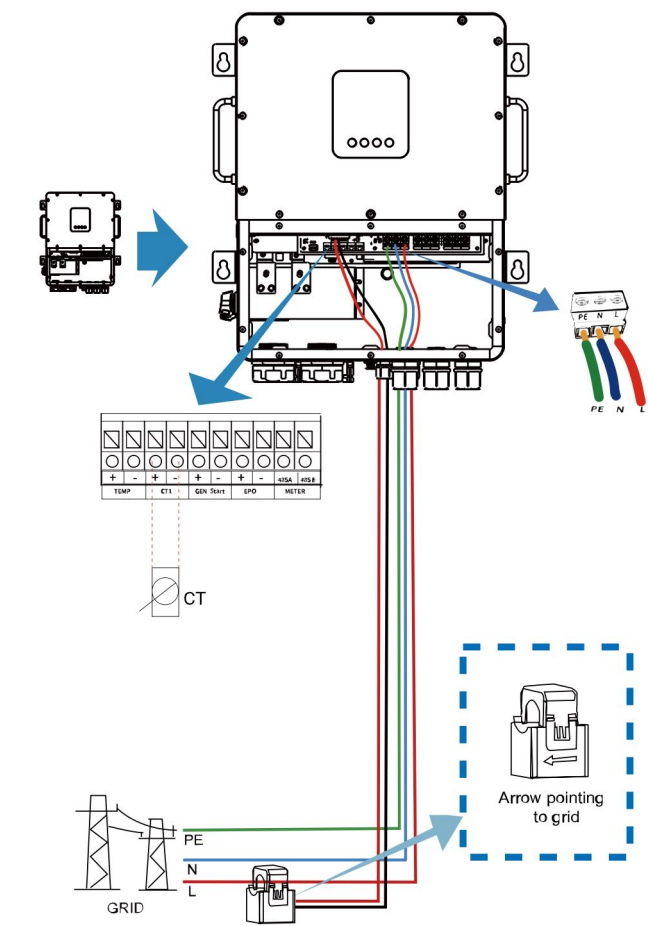


3.6. Communication

PIN	DRY/Debug	BMS_RS485/CAN	PARA1/2	DRM	
1	DRY_IN_B-	BMS_485A	PARA Display CANH1	DRM1/5	
2	DRY_IN_B+	BMS_485B	PARA Display CANL1	DRM2/6	
3	DRY_IN_A-	/	AC PARA CANH1	DRM3/7	
4	DRY_IN_A+	BMS_CANH	AC PARA CANL1	DRM4/8	
5	/	BMS_CANL	AC PARA CANH2	REFGEN	
6	/	/	AC PARA CANL2	COM/DRM0	
7	Debug_485_B	BMS_485B	Carrier Sync	+12V COM1	
8	Debug_485_A	BMS_485A	GND COM1	GND COM1	



Please look at the figure horizontally



*Note: When the load power reading in the App is not correct, reverse the CT.

3.8 Communication Stick Indication

LSW-5		
Lights	Implication	Status Description
	Communication with router	1.Light keeps on: Connection to the server succeeded. 2.Light off: Connection to the router failed. 3.Slow flash(On 1s/Off 1s): Connection to the router succeeded. 4.Fast flash(On 100ms/Off 100ms): Distributing network fast.
	Communication with inverter	1.Light keeps on: Logger connected to the inverter. 2.Light off: Connection to the inverter failed. 3.Slow flash(On 1s/Off 1s): Communicating with inverter.
	Logger running status	1.Light off: Running abnormally. 2.Slow flash(On 1s/Off 1s): Running normally. 3.Fast flash(On 100ms/Off 100ms): Restore factory settings.

LS4G-6-G		
Lights	Implication	Status Description
	Logger running status	1.Off/Steady on: Running abnormally 2.Slow flash(On 1s/Off 1s): Running normally
	Communication with inverter	1.Light keeps on: Logger connected to the inverter. 2.Light off: Connection to the inverter failed. 3.Slow flash(On 1s/Off 1s): Communicating with inverter.
	Communication with router	Green-4G mode; Blue-WiFi mode 1.Light keeps on: Connection to the server succeeded. 2.Slow flash(On 1s/Off 1s): Connection to router/base station succeeded. 3.Fast flash(On 500ms/Off 5s): Connection to router/base station failed.

3.7 App Installation and Web Monitor

Item	Web View	APP	
QR Code			
Website	https://home.solarmanpv.com/	iOS: Search "SOLARMAN Smart" in Apple Store	Android: Search "SOLARMAN Smart" in Google play

4.What is in the box?

No.	QTY	Description	No.	QTY	Description
A	1	Inverter	B	10	Tubular Terminals (16mm ²)
C	10	Tubular Terminals (0.5 mm ²)	D	4	Copper Terminals (50mm ²)
E	12	PV Connectors (Black) (6*positive, 6*negative)	F	12	PV Pin Contacts (Silver) (6*positive, 6*negative)
G	4	Expansion Screws M12x80	H	4	Mounting Screws M8x20
I	1	Parallel Communication Cable	J	1	CT (1000/1)
K	1	Wi-Fi Module (LSW-5/LS4G-6-G)	L	1	L-type Hexagon Wrench
M	1	Positioning Board	N	1	Connector Unlock Tool
O	4	Product Documentation	P	1	Desiccant

5.Post-installation check

Step	Acceptance Criteria	Step	Acceptance Criteria
1	Hybrid inverter is installed correctly and firmly	2	All switches off
3	WiFi&BLE stick Installation is installed correctly and firmly.	4	The ground wire confirms the connection and is reliable.
5	Cable wiring is reasonable, meets the requirements, no broken skin, etc.	6	All wires are correct and securely connected.
7	Cable tie port trimming, no sharp corners, etc.	8	All exposed terminals are well protected, no vacant ports.
9	Pay attention to packing all the residual materials.		

6.ON/OFF Hybrid Inverter

	NOTICE
Before power on, please make sure all of the voltage and current are in the range of specification of hybrid inverter. Otherwise it will be damage to hybrid inverter.	
Follow are the steps of turn on actions:	
1.Press the Power on/off button to turn on the device, and keep the button pressed.	
2.Turn on PV switch.	
3.Turn on the switch between Grid and hybrid inverter.	
4.Turn on the switch between battery and hybrid inverter and wake up battery.	
5.If need to setup hybrid inverter. Please turn to user manual of hybrid inverter for detail description.	
6.The shutdown steps are opposite to the above order.	