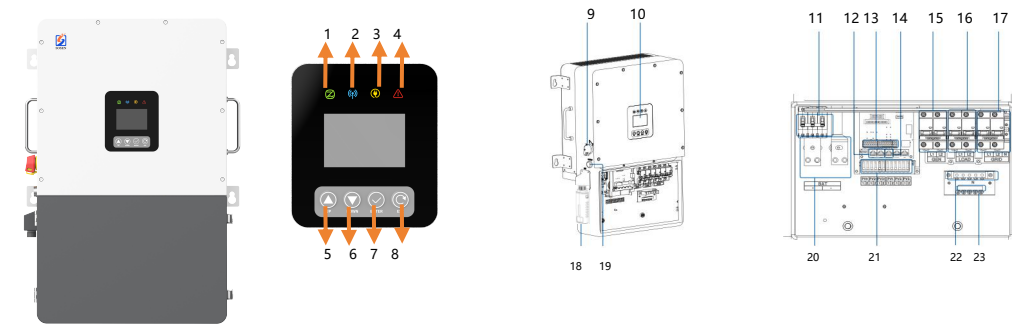


1. Overview



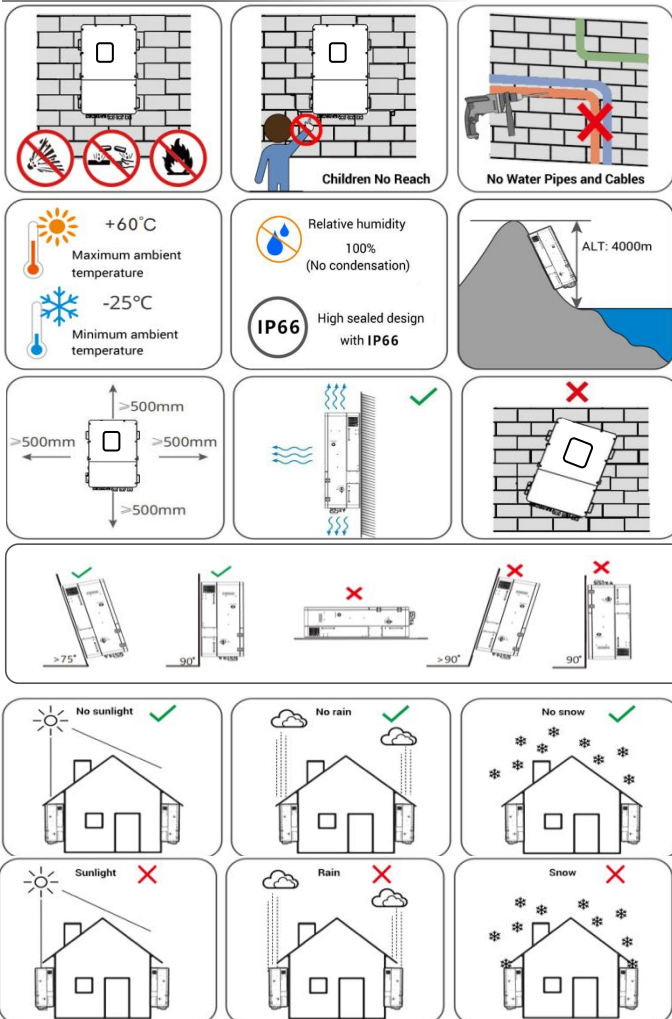
Name	NO.	Description	NO.	Description	NO.	Description
Indicator LED	1	Green : ON, The inverter is running ; Flash is Standby.	9	PV DC disconnect	17	Grid Breaker
	2	Blue : ON, Communication with BMS normal.	10	LCD Screen	18	Wifi
	3	Yellow : ON, The inverter is in EPS mode.	11	BAT Breaker	19	ON/OFF Button
	4	Red : The inverter is in fault mode.	12	Parallel RJ45 ports	20	Battery terminals
	5	UP:To go to previous selection	13	Input pinouts for sensors & accessories	21	3*PV Inputs
	6	DOWN:To go to next selection	14	BMS RJ45 ports (RS485/CAN)	22	Neutral busbar
	7	ENTER:To confirm the selection	15	Generator Breaker	23	Ground busbar
	8	ESC:To exit setting mode	16	Load Breaker		

WARNING

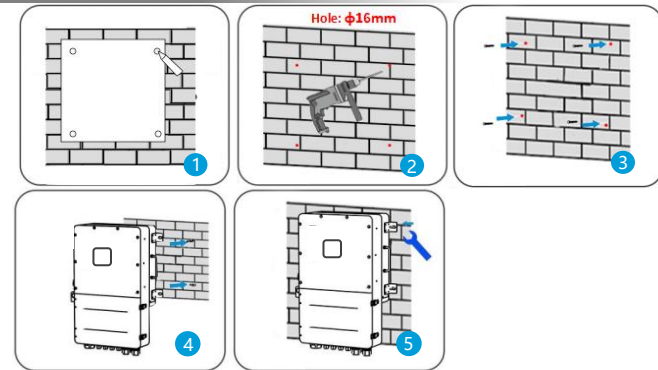
1.This file will be updated from time to time due to product upgrades or other reasons. Unless otherwise agreed, this document is intended as a guide only. All information and suggestions do not constitute an express or implied warranty. The final interpretation of the content is at company.
2. This document is for quick guidance installation only. For details, please refer to the User Manual.

2. Installation

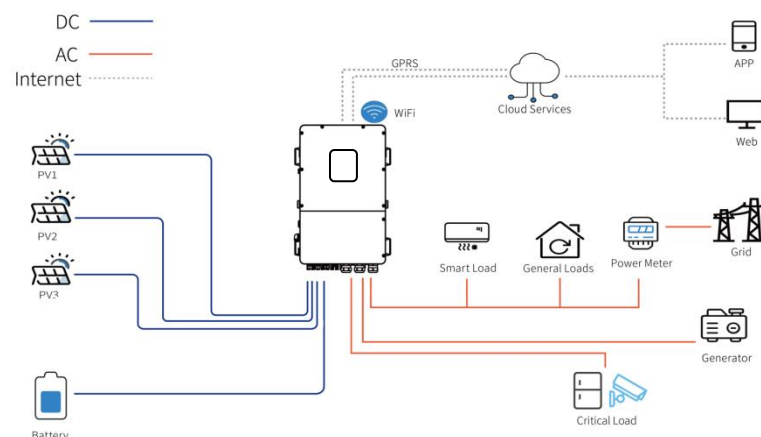
2.1 Installation Requirements



2.2 Installation Steps



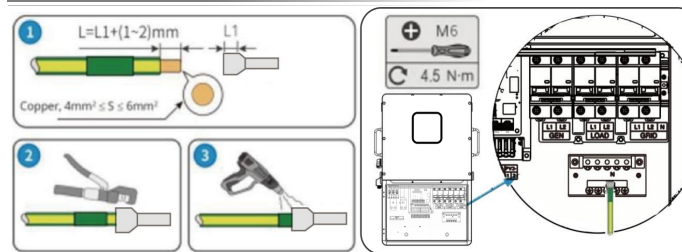
2.3 System View



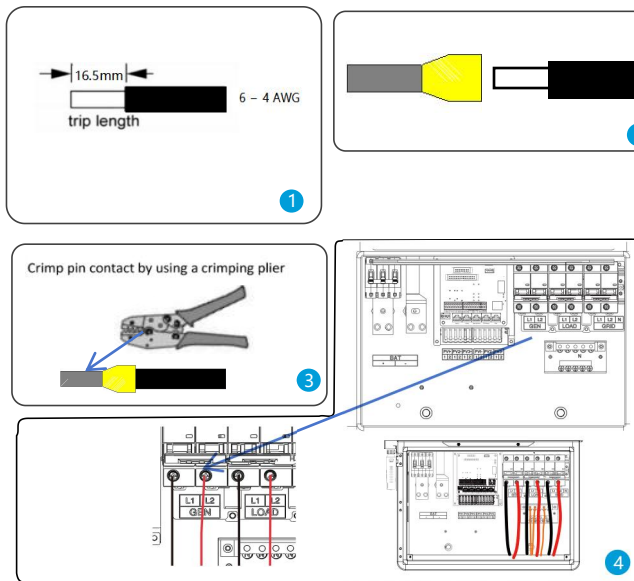
3. Connecting cables

NO.	Cable name	Type	Recommend module	WARNING
1	Grounding cable	Single multi-core yellow-green copper cable	Cable diameter ≥ 10AWG	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 ≥ 2/0 AWG	
3	PV input cable	Photovoltaic dedicated cable (such as PV1-F)	12AWG-10AWG	
4	Battery cable	Red and black multi-core copper	Cable diameter ≥ 2/0 - 4/0 AWG	
5	Communication cable	CAT5E	/	

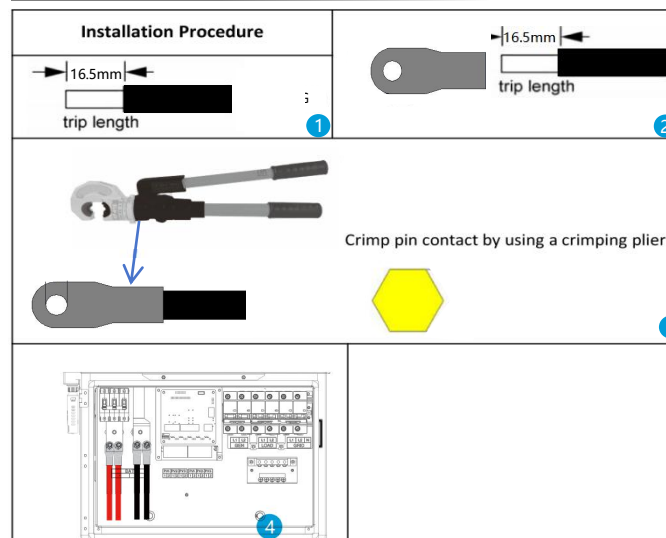
3.1 Grounding



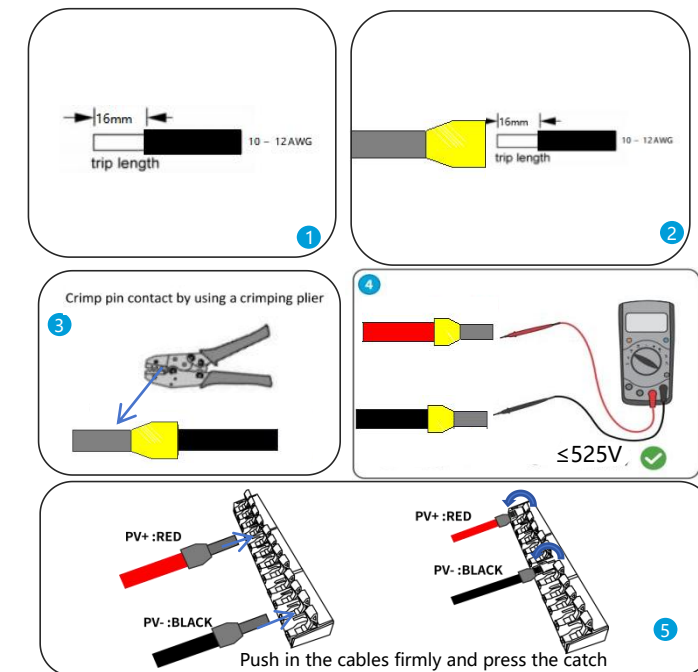
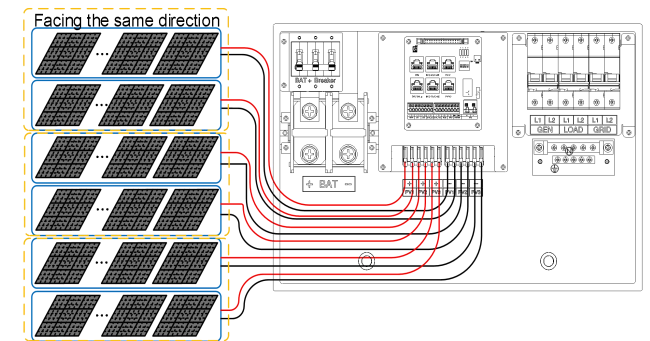
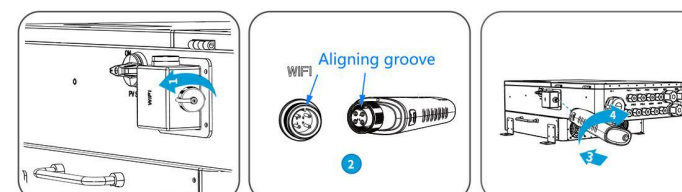
3.2 GRID, Load and GEN Wiring



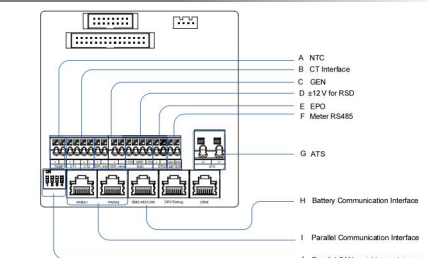
3.4 Battery Wiring



3.5 WiFi dongle Installation

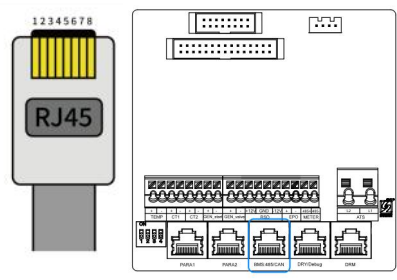
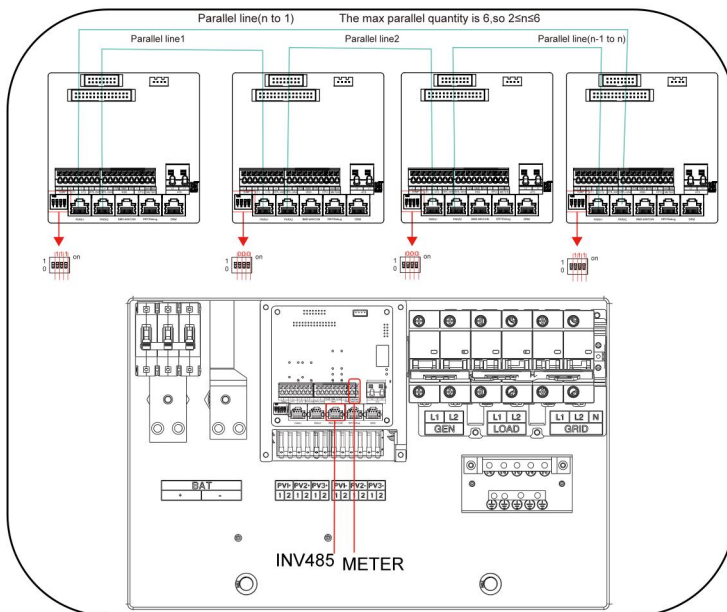


3.6 Communication

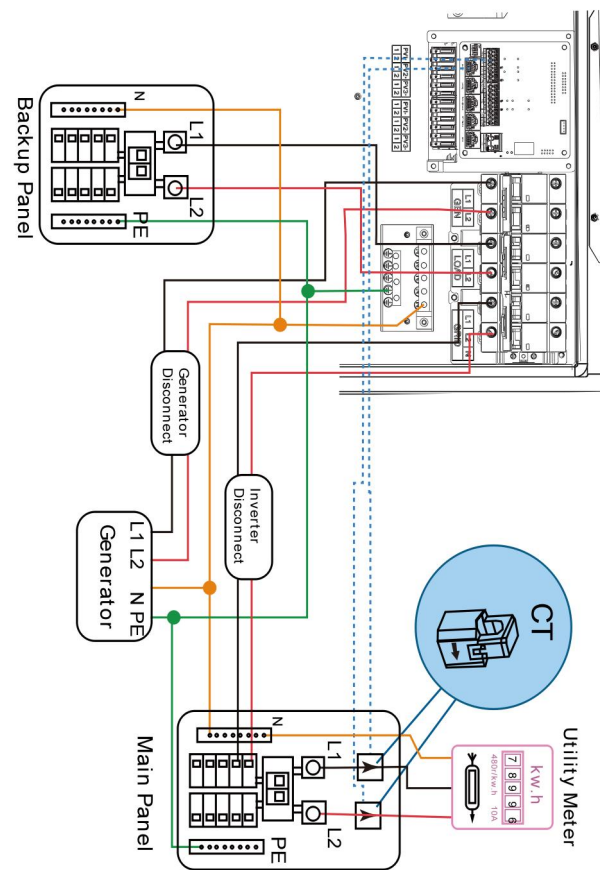


A.NTC: Connection for temperature sensor of Lead acid battery.
 B.CT Interface: please check Chapter 6.7.4 for Pin definition.
 C.GEN(NO): Connection for generator auto-start function. dry contact signal for startup the diesel generator. When the "GEN signal" is active, the open contact (GS) will switch on (no voltage output).
 D.±12V for RSD: Power supply for RSD PLC transmitter(Max current 500mA).
 E.EPO: Reserved for external EPO.
 F.Meter RS485: for meter communication.
 G.ATS: 240V output port when inverter is on.
 H.Battery Communication port (CAN&485): please check Chapter 6.6.2 for Pin definition.
 I.Parallel Communication port (CAN&485): please check Chapter 6.9.1 for Pin definition.
 J.Parallel CAN matching resistance: Set DIP Switch when use inverters in Parallel.




Pin	Description
1	BAT RS485 A
2	BAT RS485 B
3	NC
4	BAT CAN H
5	BAT CAN L
6	NC
7	BAT RS485 B
8	BAT RS485 A

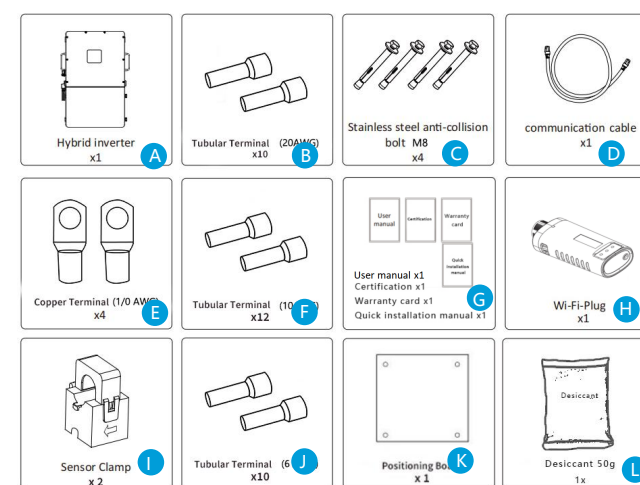
Please look at the figure horizontally



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?



Item	QTY	Description	Item	QTY	Description
A	1	Hybrid inverter	B	10	Tubular Terminal (20AWG)
C	4	Stainless steel anti-collision bolt M8	D	1	communication cable
E	4	Copper Terminal (1/0AWG)	F	12	Tubular Terminal (10AWG)
G	1	Certification x1 Warranty card x1 Quick installation x1 Manual x1	H	1	Wi-Fi-Plug
I	2	Sensor Clamp	J	10	Tubular Terminal (6AWG)
K	1	Mounting Bracket	L	1	Desiccant 50g

3.8 WiFi Indication

LED	State	Indication	
	Red LED:Inverter communication indication		Green LED:Network communication indication
	Cycle for 2S: flash once quickly, then glowing	Cycle for 2S: flash once quickly, then glowing	
	Not glow more than 20S	The power supply to the Wi-Fi&BLE stick is abnormal or damaged: 1. Check whether the power supply of the Aerial Plug Interface on the inverter is normal 2. Wi-Fi&BLE stick abnormal, contact the dealer	
	Cycle for 2S: flash once quickly, then off	Communication failure: Check whether the connection between the Wi-Fi&BLE stick and inverter is loose or poor contact	
	When powered on, continuously glows 3S, and then off	Power on indication	
	Glow more than 5S	Communication is normal	
	During the long glowing, flash occasionally	Network transmit data	
	Cycle for 20S: flash once quickly, then off	The route is not connected: 1. Check whether the password is right 2. Check the strength of the router	
	Cycle for 20S: flash 3 times continuously, then off	Connect to the route, but can't connect to the cloud server: 1. Check whether the router has Internet access permission 2. Check the firewall setting	
	Cycle for 20S: flash 4 times continuously, then off	Wi-Fi&BLE stick information error: Please contact the dealer	

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.