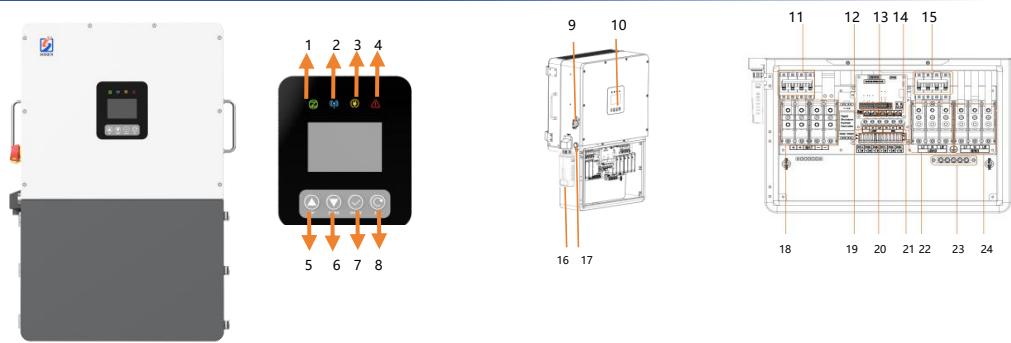


## 1. Overview



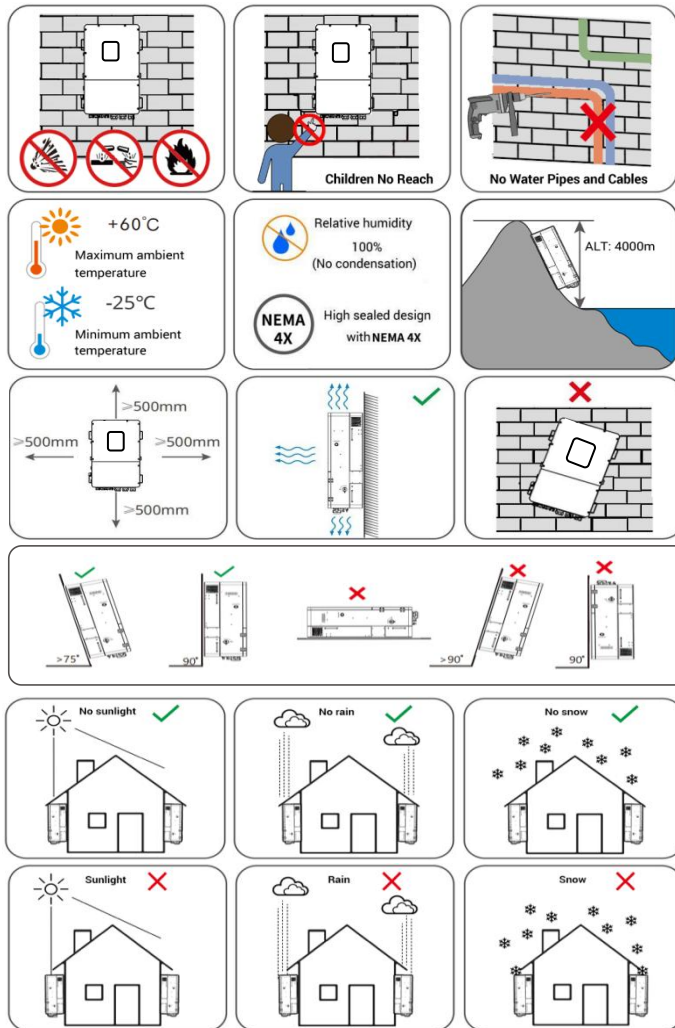
Name	NO.	Description	NO.	Description	NO.	Description
Indicator LED	1	Green : ON, The inverter is running ; Flash is Standby.	9	PV DC disconnect	17	ON/OFF button
	2	Blue : ON, Communication with BMS normal.	10	LCD Screen	18	Battery terminals
	3	Yellow : ON, The inverter is in EPS mode.	11	BAT Breaker	19	I Loads
	4	Red : The inverter is in fault mode.	12	Parallel RJ45 ports	20	3*PV Inputs
	5	UP:To go to previous selection	13	Input pinouts for sensors & accessories	21	Generator Terminals
	6	DOWN:To go to next selection	14	BMS RJ45 ports (RS485/CAN)	22	Load Terminals
	7	ENTER:To confirm the selection	15	Load Breaker	23	Ground busbar
	8	ESC:To exit setting mode	16	Wi-Fi	24	Grid Terminals

**WARNING**

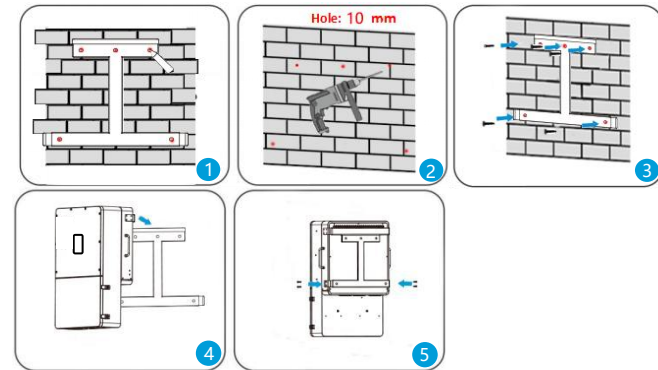
1.This file will be updated from time to time due to product upgrades or other reasons. Unless otherwise agreed, this document is intended as a guide only. All information and suggestions do not constitute an express or implied warranty. The final interpretation of the content is at company.  
2. This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

## 2. Installation

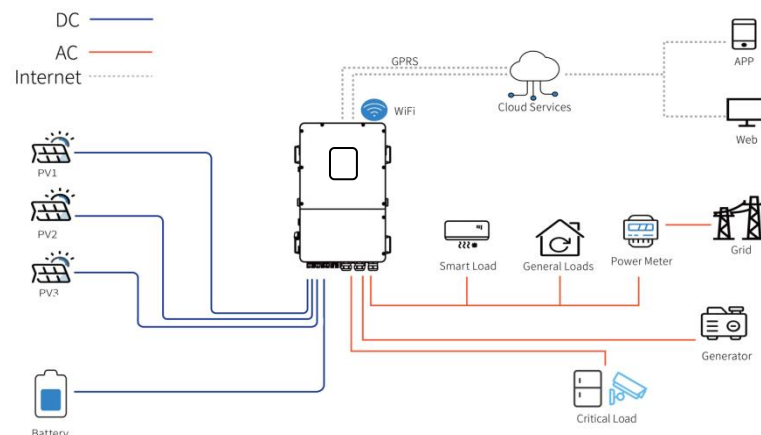
### 2.1 Installation Requirements



### 2.2 Installation Steps



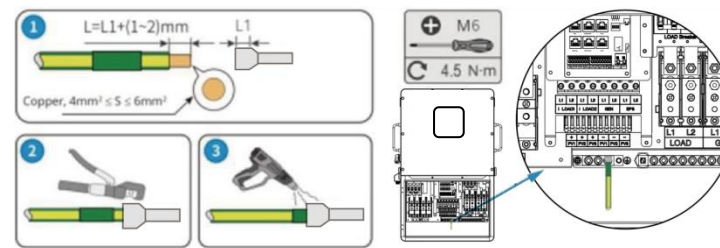
### 2.3 System View



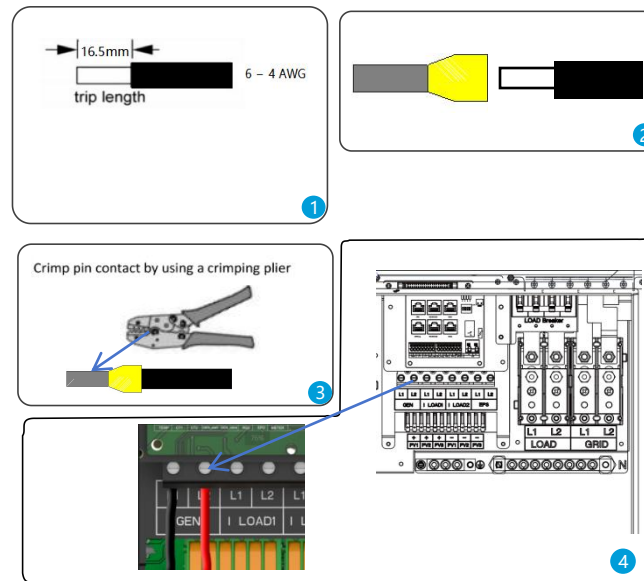
## 3. Connecting cables

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 back multi-core copper	Cable diameter ≥ 2/0 - 4/0 AWG	
5	Communication cable	CAT5E	/	

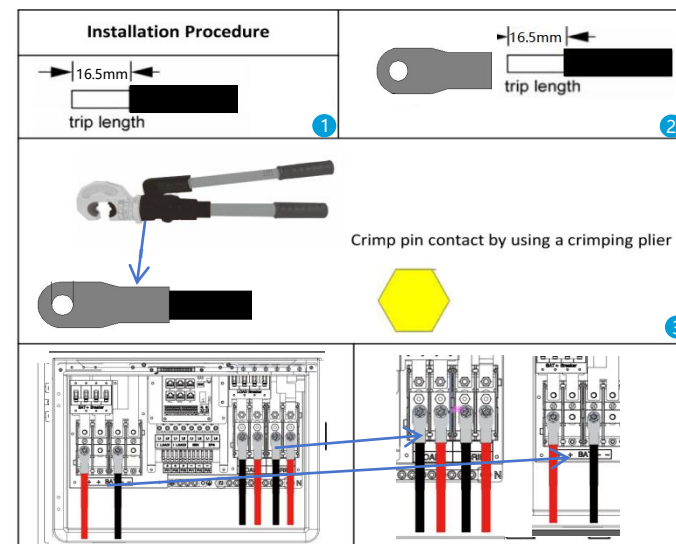
### 3.1 Grounding



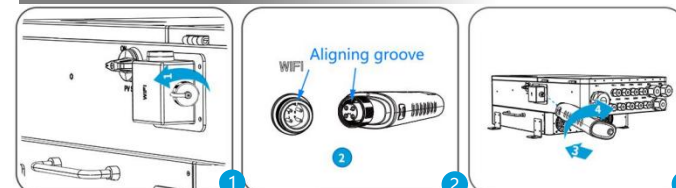
### 3.2 GEN Wiring



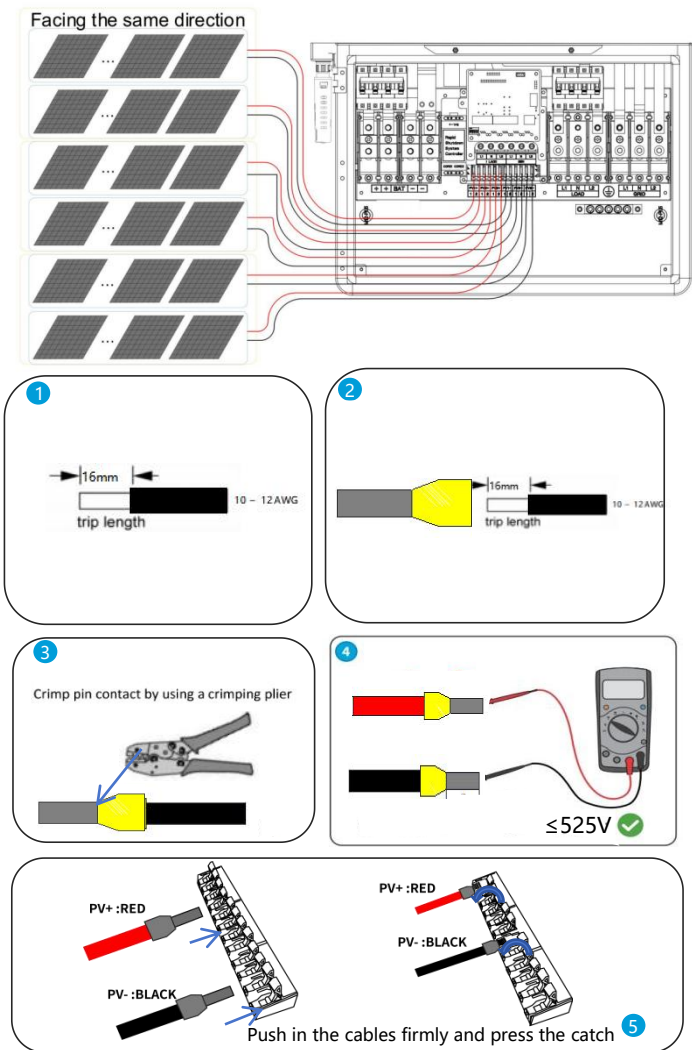
### 3.4 GRID, Load and Battery Wiring



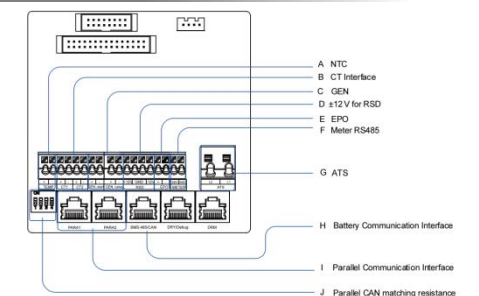
### 3.5 WiFi dongle Installation



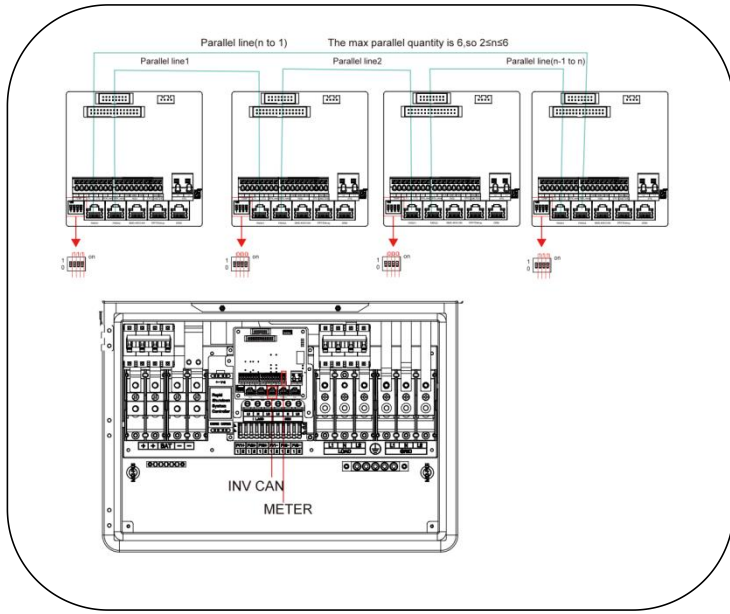
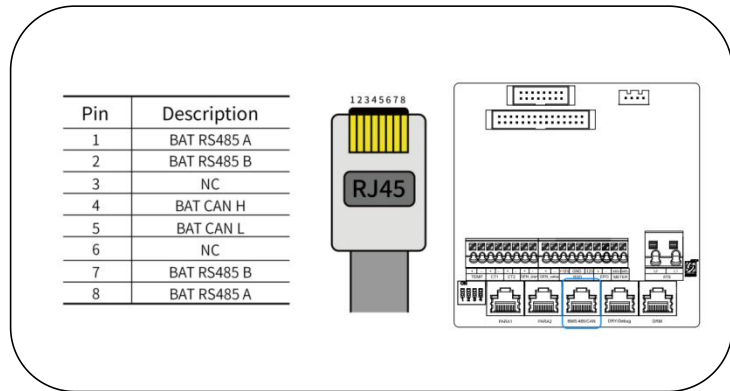
### 3.1 PV Wiring



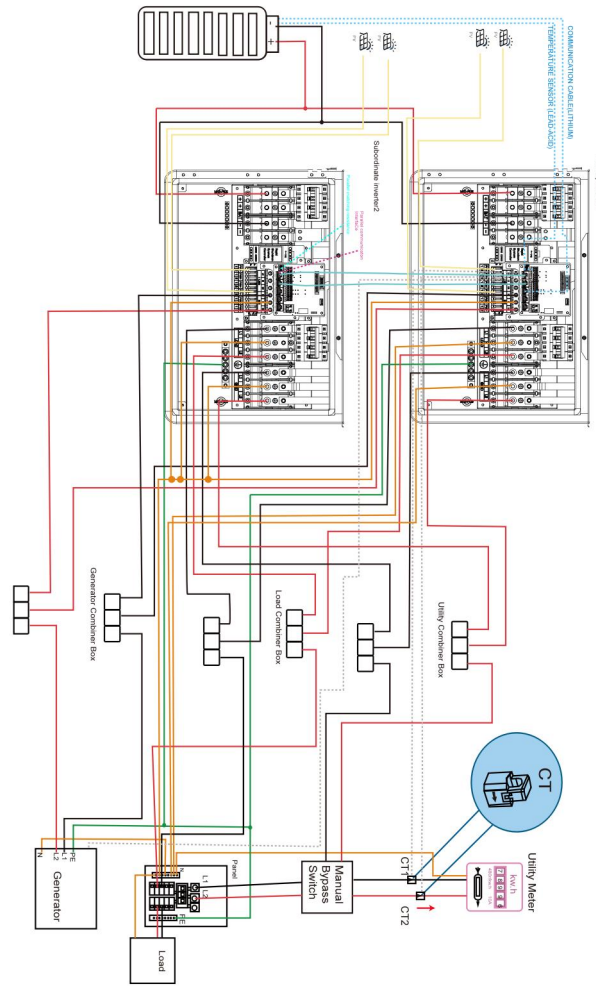
### 3.6. Communication



- 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.



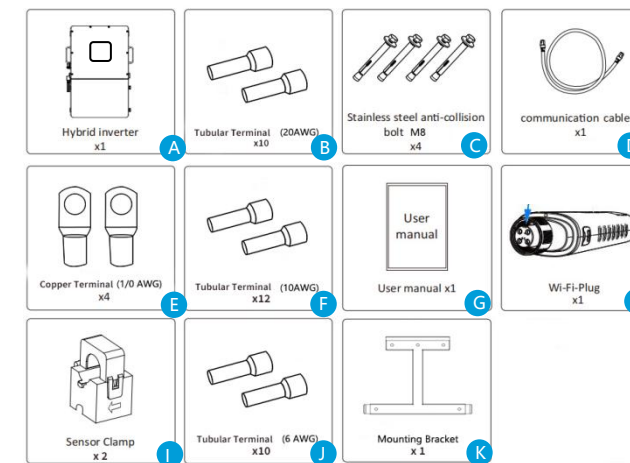
Please look at the figure horizontally



### 3.7 App Installation and Web Monitor

Item	Web View	APP	
QR Code			
Website	<a href="https://home.solarmapnpv.com/">https://home.solarmapnpv.com/</a>	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	2	Copper Terminal (1/0AWG)	F	12	Tubular Terminat (10AWG)
G	1	User manual	H	1	Wi-Fi-Plug
I	2	Sensor Clamp	J	10	Tubular Terminal (6AWG)
K	1	Mounting Bracket			

### 3.8 WiFi Indication

NET	COM	READY	Fault Description	Fault Cause	Solution
● NET	● COM	● READY			
Any state	OFF	Slow flash	Communicate with inverter abnormally	1.Connection between stick logger and inverter loosen. 2.Inverter does not match with stick logger's communication rate.	1.Check the connection between stick logger and inverter. Remove the stick logger and install again. 2.Check inverter's communication rate to see if it matches with stick logger's. 3.Long press Reset button for 5s, reboot stick logger.
OFF	ON	Slow flash	Connection between logger and router abnormal	1.Stick logger does not have a network. 2.Router WiFi signal strength weak.	1.Check if the wireless network configured. 2.Enhance router WiFi signal strength.
Slow flash	ON	Slow flash	Connection between logger and router normal, connection between logger and remote server abnormal.	1.Router networking abnormal. 2.The server point of logger is modified. 3.Network limitation, server cannot be connected.	1.Check if the router has access to the network. 2.Check the router's setting, if the connection is limited. 3.Contact our customer service.
OFF	OFF	OFF	Power supply abnormal	1.Connection between stick logger and inverter loosen or abnormal. 2.Inverter power insufficient. 3.Stick Logger abnormal.	1.Check the connection, remove the stick logger and install again. 2.Check inverter output power. 3.Contact our customer service.
Fast flash	Any state	Any state	Networking status	Normal	1.Exit automatically after 2mins. 2.Long press Reset button for 5s, reboot stick logger. 3.Long press Reset button for 10s, restore factory settings.
Any state	Any state	Fast flash	Restore factory settings	Normal	1.Exit automatically after 1mins. 2.Long press Reset button for 5s, reboot stick logger. 3.Long press Reset button for 10s, restore factory settings.

### 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.