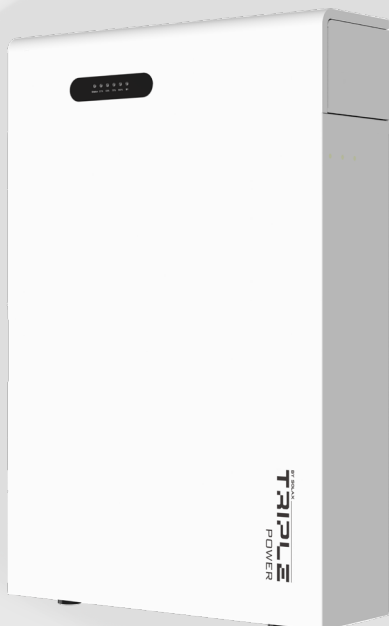




T-BAT-SYS-HV-5.8

Installation Manual

Version 3.0

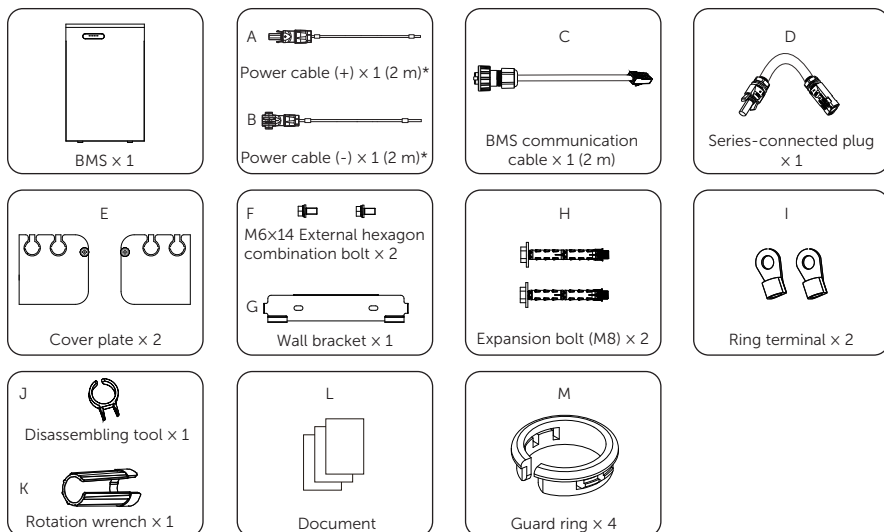
www.solaxpower.com



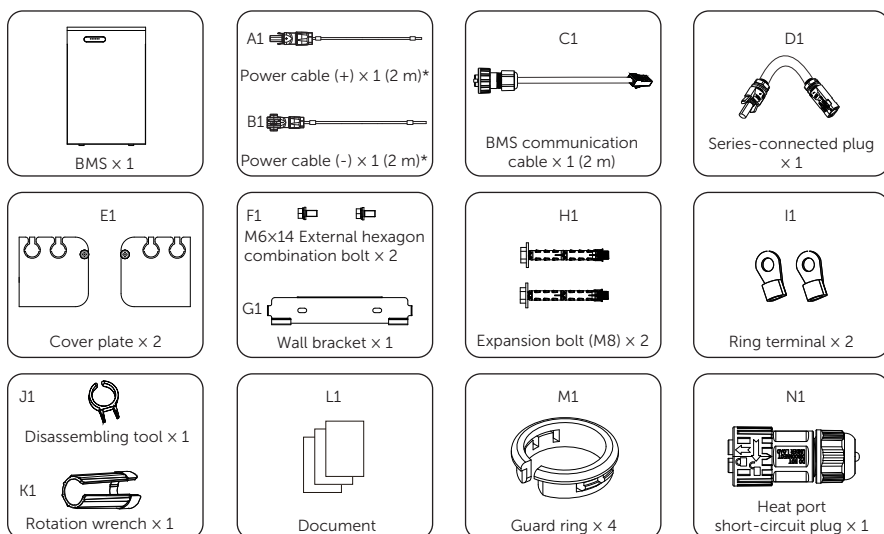
Scan the QR code at www.solaxpower.com

Packing List / Packliste / Liste du matériel livré / Lista de piezas / Lista da embalagem / Paklijst / Contenuto della confezione / Zawartość opakowania / Seznam balení / Packlista / Listă de ambalare / Опаковъчен лист / Pakkeliste / Λίστα συσκευασίας / Pakkeleht / Pakkausluettelo / Popis pakiranja / Csomaglista / Pakuotės turinys / Iepakoјuma saraksts / Zoznam položiek balenia / Seznam pakiranja / Kutu Listesi / Lista de Embalagem / قائمة التعمية

BMS (T-BAT H 5.8 V3)

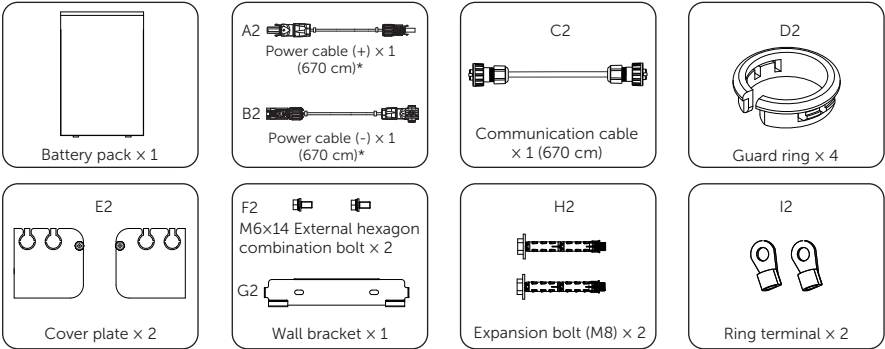


BMS (T-BAT H 5.8H V3)

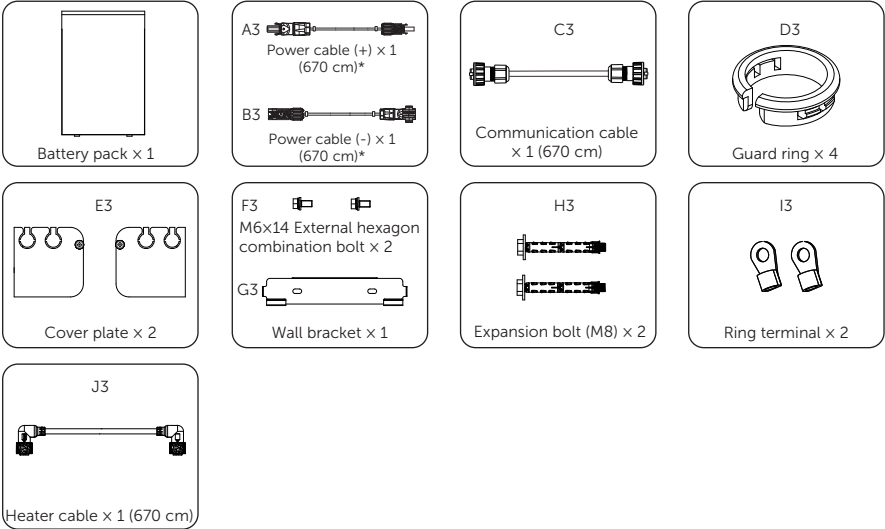


* The connector on one end of the power cable, connecting battery and inverter, is delivered with the inverter's kit. Both the power cables meet the requirements of B2ca.

Battery Pack (HV11550 V3)



Battery Pack (HV11550H V3)

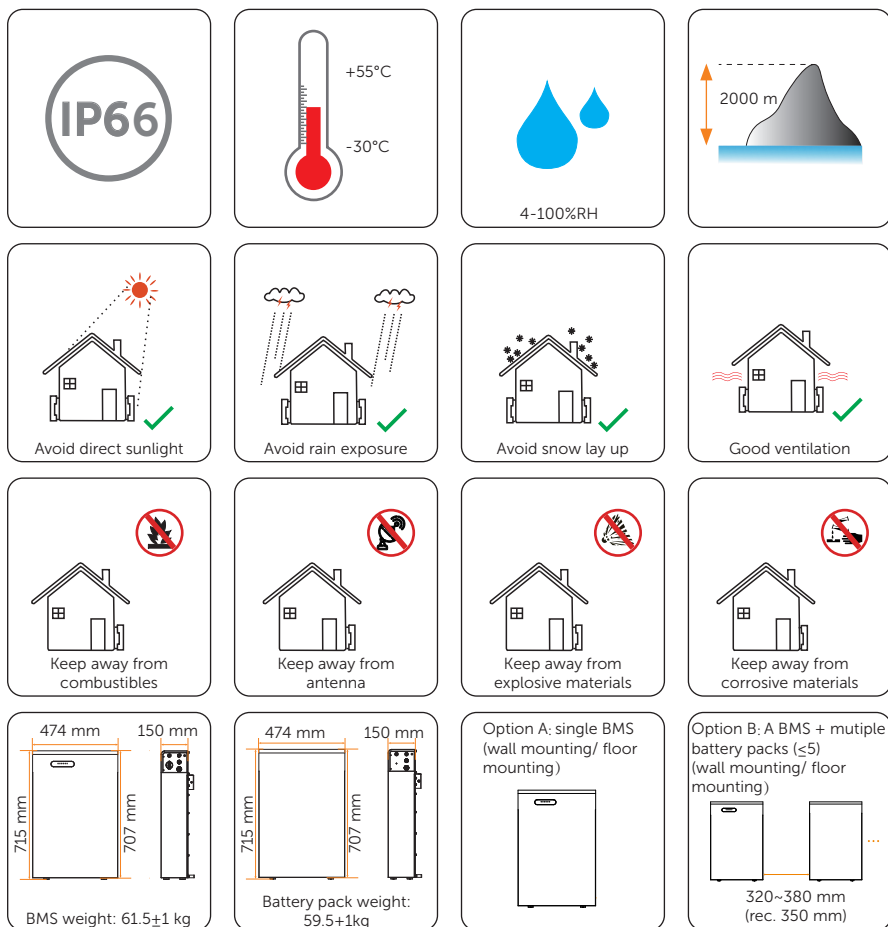


* The cable is used to connect BMS and one battery pack or to connect two battery packs.

Installation Site / Installationsort / Site d'installation / Sitio de instalación / Local de instalação / Installatiesite / Sito di installazione / Miejsce instalacji / Misto instalace / Installationsplats / Loc de instalare / Монтажен объект / Monteringssted / Τόπος εγκατάστασης / Paigaldamise koht / Asennuspaikka / Lokacija ugradnje / Telepitési helyszín / Montavimo vieta / Uzstādīšanas vieta / Miesto inštalácie / Mesto namestitve / Kurulum Yeri / Local de Instalação / بيكرتال عقموم

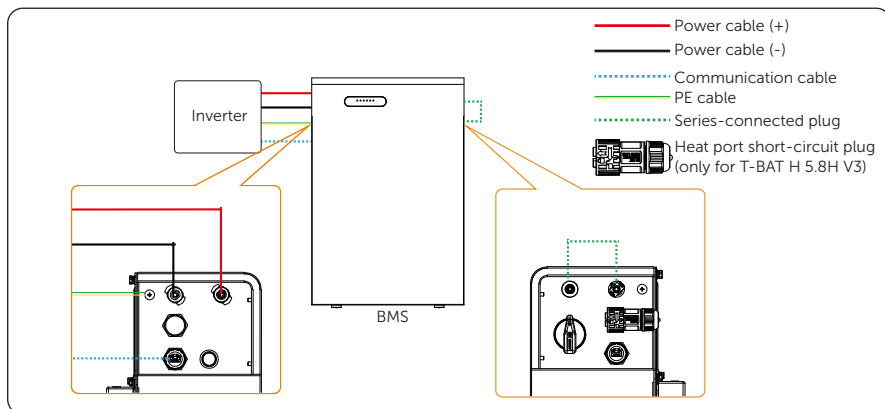
NOTICE!

- For outdoor installation, precautions against direct sunlight, rain exposure and snow layup are recommended.
- Exposure to direct sunlight raises the temperature inside the battery. This temperature rise poses no safety risks, but may impact the battery performance.
- Please ensure that the installation site has a bearing capacity of at least 4 times the weight of the entire battery system. For instance, if the user purchases one BMS, two battery packs, the load-bearing capacity $\geq (\text{BMS weight} + 2 * \text{battery pack weight}) * 4$.

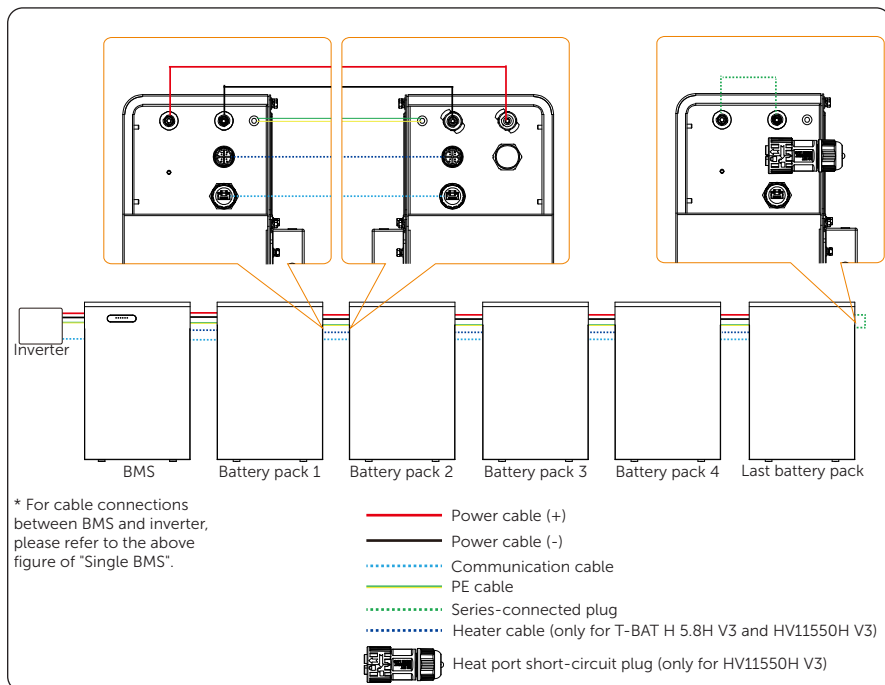


Wiring Diagram / Schaltplan / Schéma de câblage / Diagrama de cableado /
 Diagrama de ligação / Bedradingsschema / Schema elettrico / Schemat połączeń /
 Schéma zapojení / Kopplingsschema / Schemă de conexiuni / Схема на свързване
 / Ledningsdiagram / Διάγραμμα συνδεσμολογίας / Ühendusskeem / Kytentäkaavio
 / Dijagram ožičenja / Kapcsolási rajz / Elektros laidų montavimo schema /
 Elektroinstalācijas shēma / Schéma zapojenia / Električna shema / Bağlantı Şeması /
 Diagrama de fiação / لال س آل ط ط خ م

- Single BMS



- One BMS and multiple battery packs (up to five)



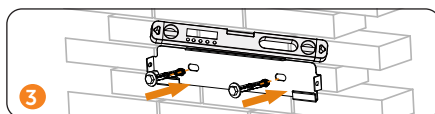
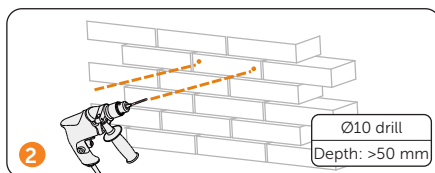
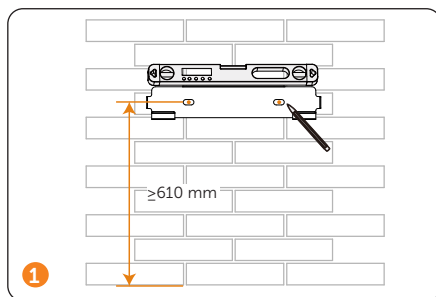
Mechanical Installation / Mechanische Installation / Installation mécanique / Instalación mecánica / Instalação mecânica / Mechanische installatie / Installazione meccanica / Instalacja mechaniczna / Mechanická instalace / Mekanisk installation / Instalare mecanică / Механичен монтаж / Mekanisk installation / Μηχανική εγκατάσταση / Mehaaniline paigaldus / Mekaaninen asennus / Mehanička ugradnja / Mechanikai telepítés / Mechaninis montavimas / Mehāniskā uzstādīšana / Mechanická inštalácia / Mehanska nameštitev / Mekanik Kurulum / Instalação Mecânica / بيكرتالاي كين اكي مل

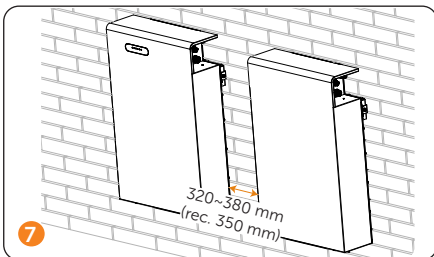
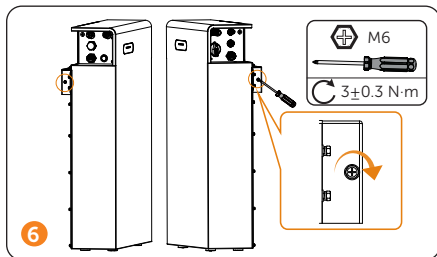
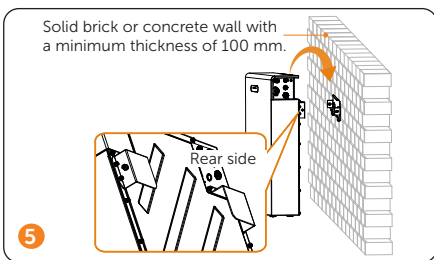
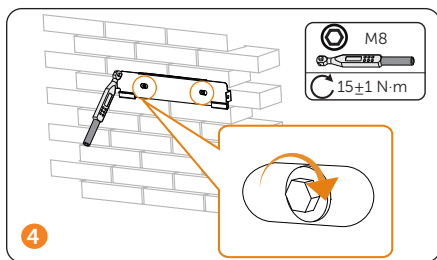
NOTICE!

- Before installing the device, connect the grounding cable first. For details, see "PE Connection".
- The steps for installing T-BAT H 5.8 V3, T-BAT H 5.8H V3, HV11550 V3 and HV11550H V3 are the same.
- To make sure the normal operation of heating function, it is recommended that BMS with heating function should be used together with battery pack with heating function, so as the BMS without heating function should be used together with battery pack without heating function.
- T-BAT H 5.8 V3, T-BAT H 5.8H V3, HV11550 V3 and HV11550H V3 cannot be used with T-BAT-Charger or BMS Parallel Box-II G2.
- It is not recommended to pair different models (T-BAT H 5.8/V2/(H)V3 and HV11550/V2/(H)V3) of batteries. However, if used, please strictly follow the compatibility table below for pairing:

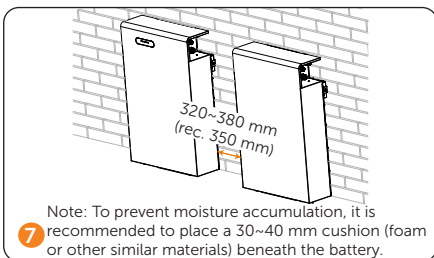
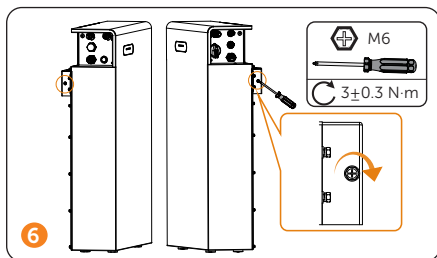
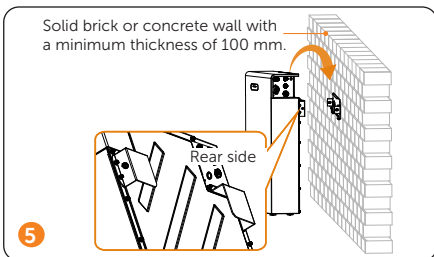
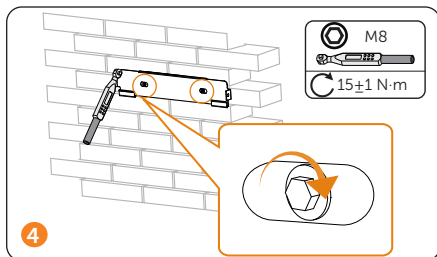
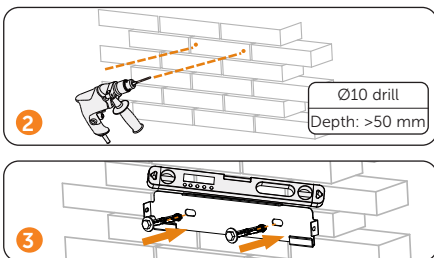
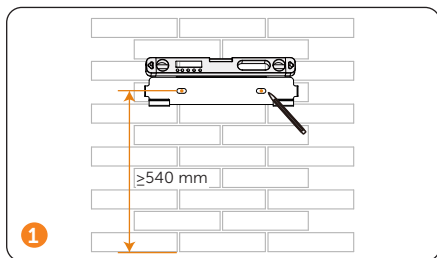
Compatibility between BMS and battery pack	HV11550	HV11550 V2	HV11550 V3	HV11550H V3
T-BAT H 5.8	√ (up to three battery pack)	√ (up to three battery pack) * HV11550 V2's program version cannot be upgraded.	×	×
T-BAT H 5.8 V2	√ (up to three battery pack) * HV11550's program version can be upgraded.	√ (up to three battery pack)	√ (up to three battery pack) *Only when T-BAT H 5.8 V2 upgrades to the latest program version of V3 (cannot rollback to V2 program version).	
T-BAT H 5.8 V3	√ (up to five battery pack) *Avoid configuring HV11550/ HV11550 V2 as the fourth or fifth battery pack when pairing with four or five battery packs.		√ (up to five battery pack)	
T-BAT H 5.8H V3				

• Wall Mounting





• Floor Mounting



كأس ألاتا لي صوت

- For PE cable, power cable and communication cable connection to inverter, please refer to the inverter's user manual.
- For T-BAT H 5.8H V3/ HV11550H V3, remove the waterproof cap of HEAT port before connecting heater cable or heat port short-circuit plug.
- Make sure that the electricity is turned off before wiring the BMS into the inverter.
- Don't violently remove the cables when they are connected.

6.4 mm

6 mm²

Length=8~10 mm

1

Length=28~30 mm

Heat-shrink tubing

2

M5

1.0 ± 0.1 N·m

3

4

For single BMS

To inverter

5

For one BMS and multiple battery packs

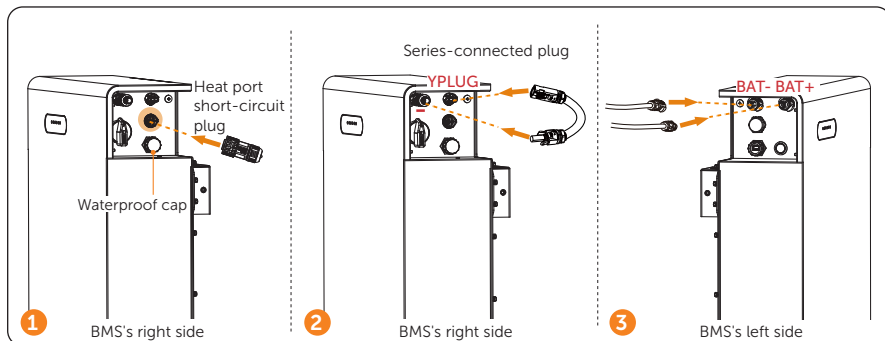
To inverter

- The wire size of 6 mm² for PE cable is recommended.

Cable Connection for single BMS

NOTICE!

- Cable connection for single T-BAT H 5.8 V3: ② ③ ④
- Cable connection for single T-BAT H 5.8H V3: ① ② ③ ④

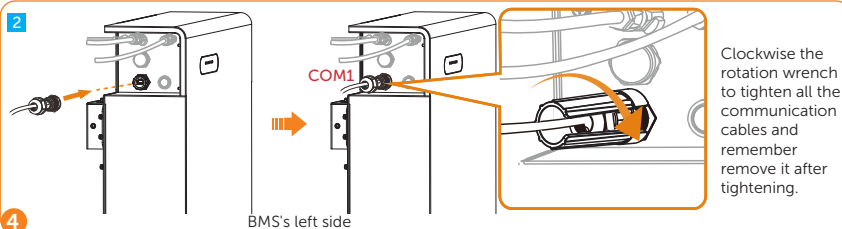
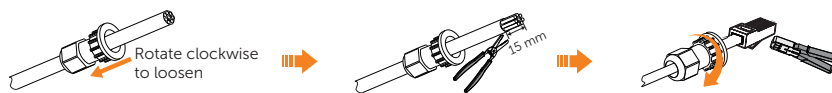


1 (Optional) Process the communication cable if you need to change its length according to the actual situation.

- 1) White with orange stripes
- 2) Orange
- 3) White with green stripes
- 4) Blue
- 5) White with blue stripes
- 6) Green
- 7) White with brown stripes
- 8) Brown



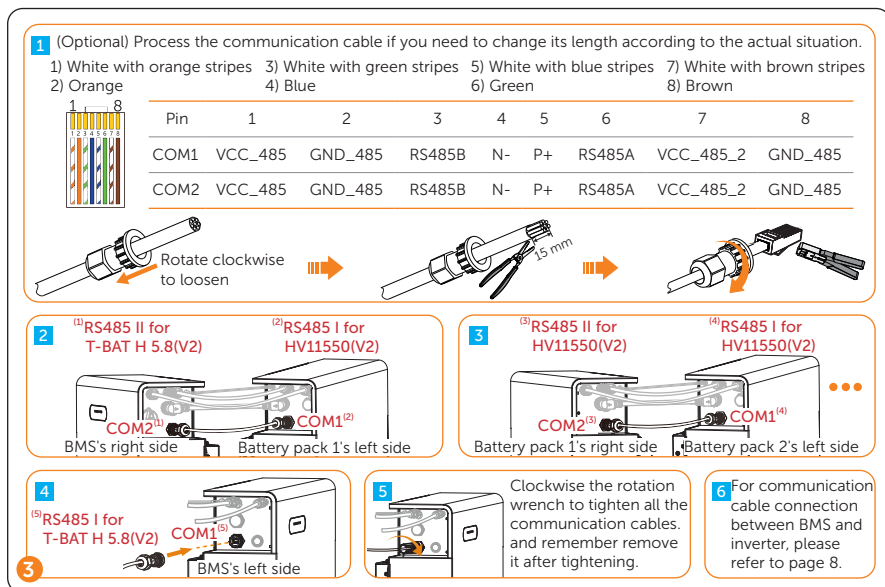
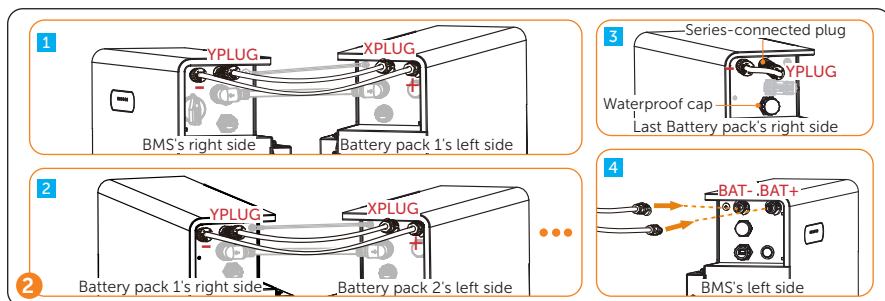
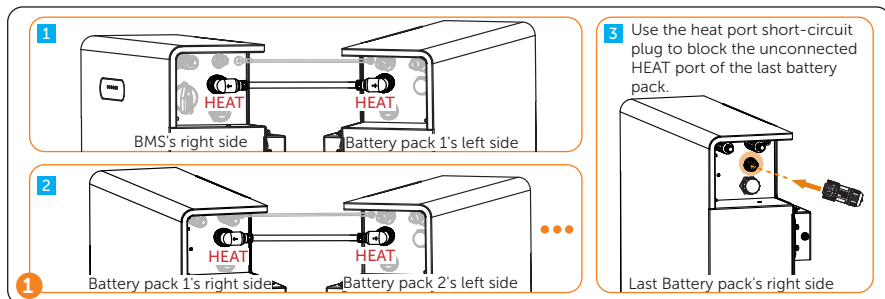
Pin	1	2	3	4	5	6	7	8
BMS	/	GND	/	BMS_H	BMS_L	/	RS485A	RS485B



Cable Connection for one BMS and multiple battery packs

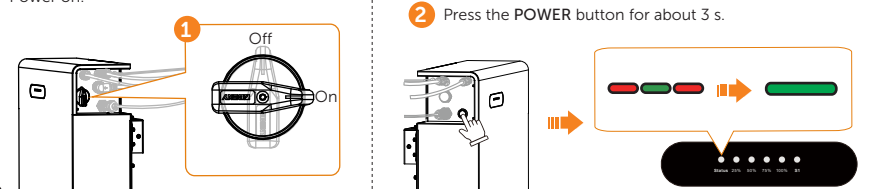
NOTICE!

- Cable connection for T-BAT H 5.8 V3 and HV11550 V3: ② ③
- Cable connection for T-BAT H 5.8H V3 and HV11550H V3: ① ② ③

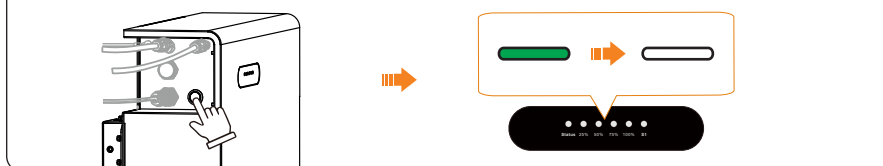


Power On and Off the System / Schalten Sie das System ein / Mise sous tension du système / Encienda el sistema / Ligue o sistema / Het systeem inschakelen / Accensione del sistema / Włączanie systemu / Zapnutí systému / Slå på systemet / Pornire sistem / Включване на системата / Tænd for systemet / Ρεύμα στο σύστημα / Süsteemi sisselülitamine / Kytke järjestelmän virta päälle / Napajanje sustava / Rendszer áram alá helyezésé / Įjungti sistemą / Ieslēdziet sistēmu / Zapnite system / Vklópite sistem / Sistemini Gücü / Ligar o sistema / هل ي غشت فاق ي او ماطن لا لي غشت

Power on:



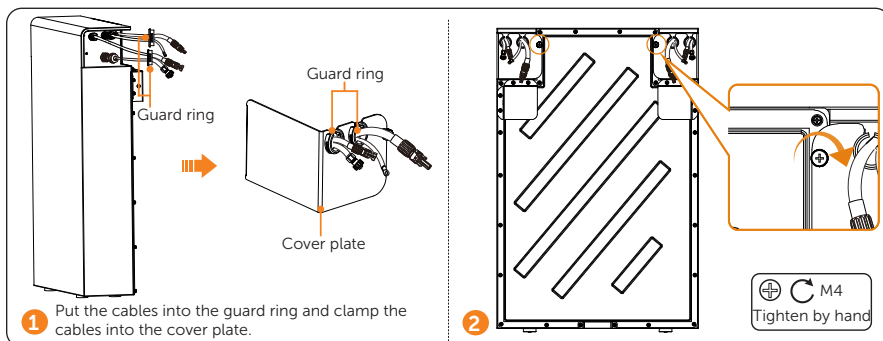
Power off: press the POWER button for about 3 s.



Installation of Cover Plate / Montage der Abdeckplatte / Installation de la plaque de protection / Instalación de la placa de cubierta / Instalação de placa de cobertura / Installatie van de afdekplaat / Installazione della piastra del coperchio / Montaż płyty osłonowej / Instalace krycí desky / Installation av täckplåt / Instalarea plăcii de acoperire / Монтаж на покриваща плоча / Montering af dækplade / Εγκατάσταση πλάκας κάλυψης / Katteplaadi paigaldamine / Kansilevyn asentaminen / Ugradnja pokrovne ploče / Fedél felszerelésé / Dangtelio montavimas / Pārsega plāksnes uzstādīšana / Inštalácia krycej dosky / Namestitev pokrivne plošče / Kapak Plakasının Takılması / Instalação da placa de cobertura / عا طغ لا ءحول بي كرت

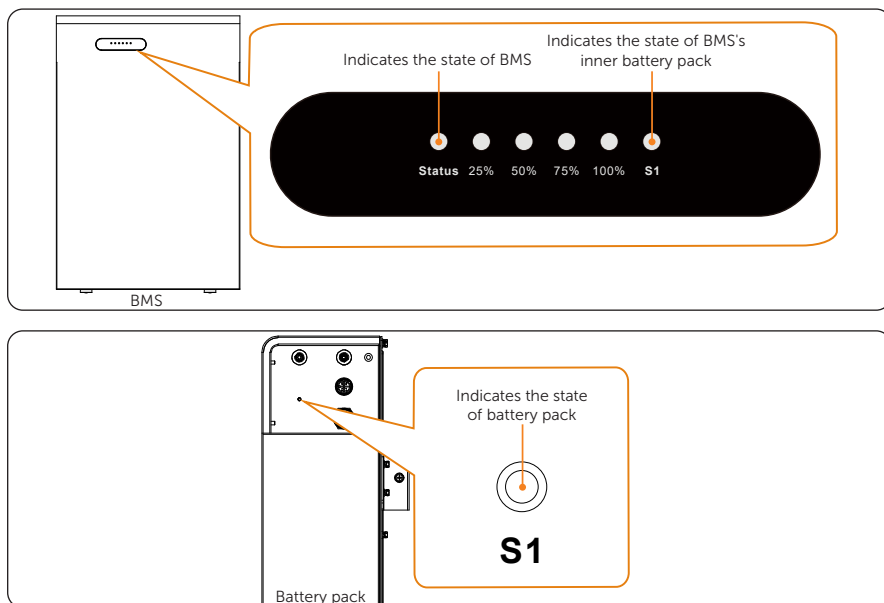
NOTICE!

- Cover plates need to be installed on both sides. The installation steps are available for both BMS and battery pack.



LED Indicators / LED-Indikatoren / Indicateurs LED / Indicadores LED / Indicadores LED / LED-indicatoren / Indicatori LED / Wskaźniki LED / LED indikátory / LED-indikatorer / Indicatori LED / LED индикатори / LED-indikatorer / Ενδεικτικές λυχνίες LED / LED-indikaatorid / LED-merkkivalot / LED pokazatelji / LED kijelzők / LED indikatoriai / LED indikatori / LED indikátory / LED kazalniki / LED Göstergeleri / Indicadores LED / LED تاراشنوم

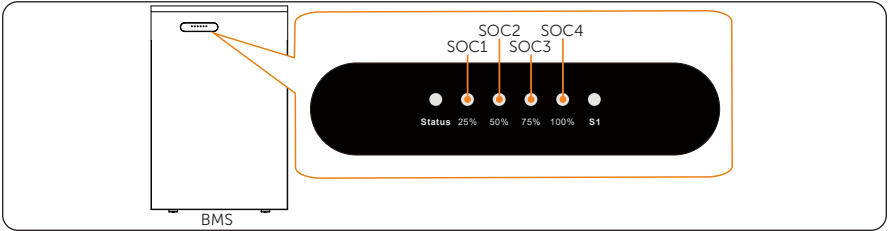
- Status and S1 indicators



Indicator	Mode	Description
Status	Power on	Red and green LED flash alternately.
	Standby	Green LED lights on for 1 s briefly, and then lights off for 4 s.
	Power off	Yellow LED flashes briefly.
	Fault	Red LED flashes slowly.
	Idle command from inverter	Yellow LED briefly lights on for 1 s, and lights off for 1 s.
	Charging	Solid green.
	Discharging	Solid green.
	BMS upgrading	Green LED flashes briefly when receiving data.
		Red LED flashes briefly when conducting a formal upgrade.
	Activation	Red and green LED flash alternately.

Indicator	Mode	Description
S1	Standby	 Green LED lights on for 1 s briefly, and then lights off for 4 s.
	Battery pack upgrading	 Green LED flashes briefly.
	Charging	 Green LED lights on for 1 s briefly, and then lights off for 4 s.
	Discharging	 Green LED lights on for 1 s briefly, and then lights off for 4 s.
	Fault	 Fault occurs when RS485 communication is losing, LED stays solid red for 10 minutes, after that it lights on for 1 s briefly, and then lights off for 4 s.  In other cases, yellow LED lights on for 1 s briefly, and then lights off for 4 s.

- SOC indicators



SOC value during charging	SOC1	SOC2	SOC3	SOC4
SOC=0%				
$0\% < \text{SOC} \leq 25\%$				
$25\% \leq \text{SOC} \leq 50\%$				
$50\% \leq \text{SOC} \leq 75\%$				
$75\% \leq \text{SOC} \leq 100\%$				

SOC value during discharging	SOC1	SOC2	SOC3	SOC4
SOC=0%				
$0\% < \text{SOC} \leq 25\%$				
$25\% \leq \text{SOC} \leq 50\%$				
$50\% \leq \text{SOC} \leq 75\%$				
$75\% \leq \text{SOC} \leq 100\%$				

SOC value during Black Start 10-second cycle: SOC1/4 and SOC2/3 alternately light on for 1 s each.

Technical Data / Technische Daten / Fiche technique / Datos técnicos / Dados Técnicos / Technische gegevens / Dati tecnici / Dane techniczne / Technické údaje / Tekniska data / Date tehnice / Технически данни / Tekniske data / Τεχνικά δεδομένα / Tehnilised andmed / Tekniset tiedot / Tehnički podaci / Műszaki adatok / Techniniai duomenys / Tehniskie dati / Technické údaje / Tehnični podatki / Teknik Bilgiler / Datos Técnicos / داتا تېکنیکي

• General

Model	T-BAT H 5.8 V3/ T-BAT H 5.8H V3	T-BAT H 11.5 V3/ T-BAT H 11.5H V3	T-BAT H 17.3 V3/ T-BAT H 17.3H V3	T-BAT H 23 V3/ T-BAT H 23H V3	T-BAT H 28.8 V3/ T-BAT H 28.8H V3	T-BAT H 34.6 V3/ T-BAT H 34.6H V3
Nominal voltage [d.c. V]	115.2	230.4	345.6	460.8	576	691.2
Operating voltage range [d.c. V]	100~130	200~260	300~390	400~520	500~650	600~750
Rated capacity [Ah]	50					
Nominal energy [kWh]	5.8	11.5	17.3	23.0	28.8	34.6
Usable energy (95% DOD) [kWh] ⁽¹⁾	5.5	10.9	16.4	21.9	27.4	32.9
Rated power [kW]	2.9	5.8	8.6	11.5	14.4	17.3
Max. power [kW]	4	8.1	12.1	16.1	20.2	24.2
Recommend charge / discharge current [d.c. A]	25					
Max. charge / discharge current [d.c. A] ⁽²⁾	35					
Max. short circuit current [d.c. A]	2082	3183	3862	4324	4658	4908
Depth of discharge [%]	95					
Cycle Life (95% DOD) ⁽³⁾	>6000 Cycles					

• Environmental requirements

Model	T-BAT H 5.8 V3/ T-BAT H 5.8H V3	T-BAT H 11.5 V3/ T-BAT H 11.5H V3	T-BAT H 17.3 V3/ T-BAT H 17.3H V3	T-BAT H 23 V3/ T-BAT H 23H V3	T-BAT H 28.8 V3/ T-BAT H 28.8H V3	T-BAT H 34.6 V3/ T-BAT H 34.6H V3
Charge temperature [°C]	0~+55 (Off heating function) -30~+55 (On heating function) ⁽⁴⁾					
Discharge temperature [°C]	-30~+55 ⁽⁴⁾					
Cooling concept	Natural					
Storage temperature [°C]	-20~+30 (12 months); +30~+55 (6 months)					
Relative humidity [%]	4 ~ 100 (Condensing)					
Max. operating altitude [m]	2000					
Installation type	Wall mounting/ Floor mounting					
Ingress protection	IP66					
Environment	Outdoor/ Indoor					

• General information (BMS)

Model	T-BAT H 5.8 V3/ T-BAT H 5.8H V3
Battery type	LFP
Number of modules	1
Module capacity [kWh]	5.8
Dimensions (WxHxD) [mm]	474 x 715 x 150
Net weight [kg]	61.5 ± 1

• General information (Battery pack)

Model	HV11550 V3/ HV11550H V3
Battery type	LFP
Number of modules	1~5
Module capacity [kWh]	5.8
Dimensions (WxHxD) [mm]	474 x 715 x 150
Net weight [kg]	59.5 ± 1

• Communication interfaces

Model	T-BAT H 5.8 V3/ T-BAT H 5.8H V3	T-BAT H 11.5 V3/ T-BAT H 11.5H V3	T-BAT H 17.3 V3/ T-BAT H 17.3H V3	T-BAT H 23 V3/ T-BAT H 23H V3	T-BAT H 28.8 V3/ T-BAT H 28.8H V3	T-BAT H 34.6 V3/ T-BAT H 34.6H V3
Communication interfaces	CAN 2.0 + RS485					

• Standard

Model	T-BAT H 5.8 V3/ T-BAT H 5.8H V3	T-BAT H 11.5 V3/ T-BAT H 11.5H V3	T-BAT H 17.3 V3/ T-BAT H 17.3H V3	T-BAT H 23 V3/ T-BAT H 23H V3	T-BAT H 28.8 V3/ T-BAT H 28.8H V3	T-BAT H 34.6 V3/ T-BAT H 34.6H V3
UN Number	UN3840					
Hazardous materials classification	Class 9					
Transport Testing Requirement	UN38.3					
Certifications	IEC 62619/EN 62619					

* Note:

- (1) Test conditions: 95% DOD, 0.2C charge & discharge @+25°C.
- (2) Current is affected by the number of batteries connected in parallel as well as temperature and SOC.
- (3) Test conditions: 25°C±2°C,0.5C charge & discharge,70%EOL.
- (4) - Discharge: In case of battery cell's temperature range of -20°C~+10°C and +45°C~+55°C, the discharge current will be reduced;
- Charge: In case of battery cell's temperature range of 0°C~+25°C and +45°C~+55°C, the charge current will be reduced.
- Product charge or discharge power depends on the actual temperature of battery pack.
- The battery can only be discharged and can not be charged when the battery cell's temperature range is between -20°C and 0°C.

Warranty Registration

Please visit the website: <https://www.solaxcloud.com/user-center/> to complete the warranty registration. For more detailed warranty terms, please visit SolaX official website: www.solaxpower.com.



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E-mail: info@solaxpower.com