



TP-LD53

Installation Manual

Version 0.0

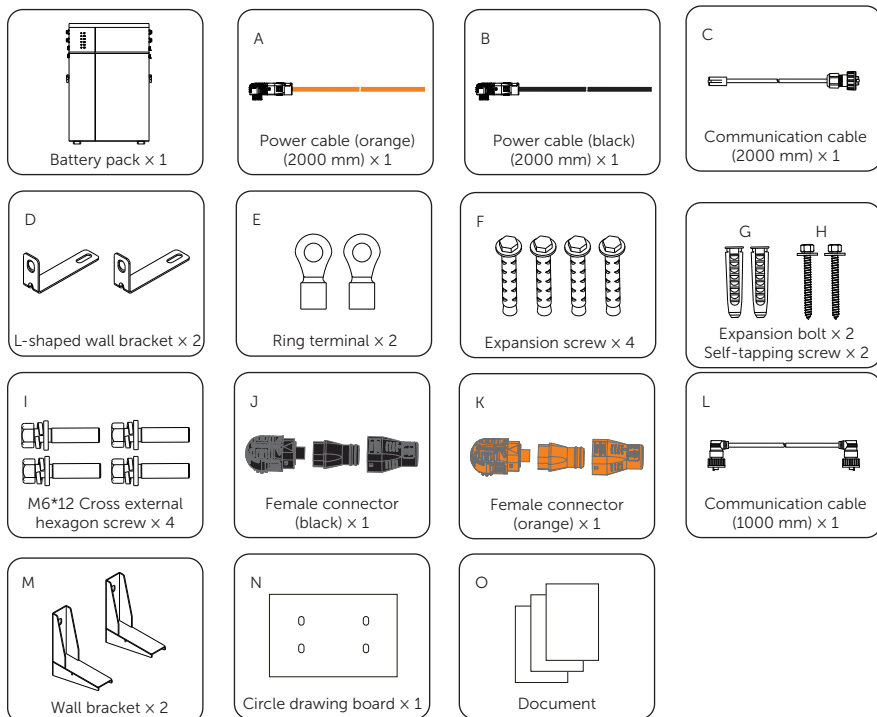
www.solaxpower.com



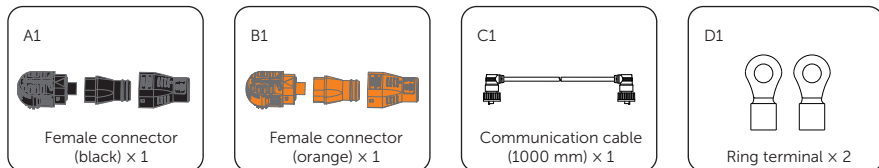
eManual in the QR code or
at www.solaxpower.com

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 / Iepakoījuma saraksts / Zoznam položiek balenia / Seznam pakiranja / Kutu Listesi / Lista de Embalagem

One Battery Pack (TP-LD53)



Accessories Kit for Cables (for two adjacent battery packs)



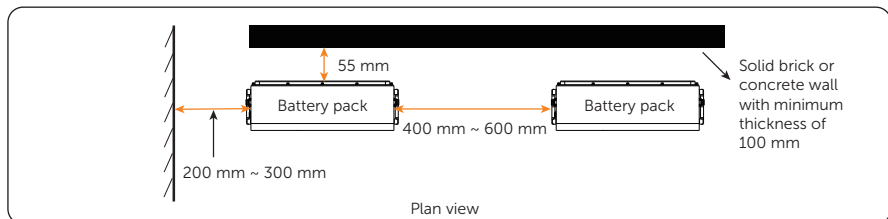
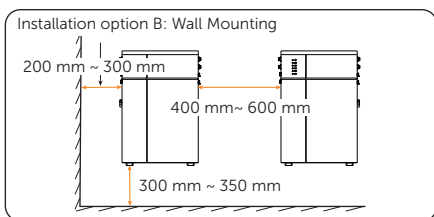
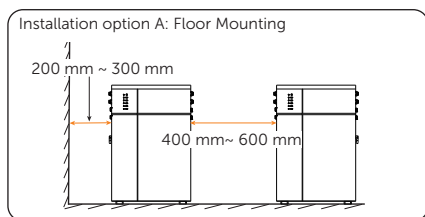
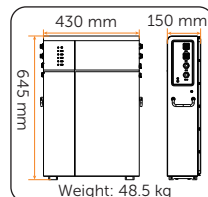
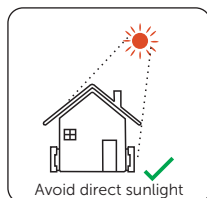
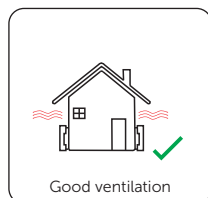
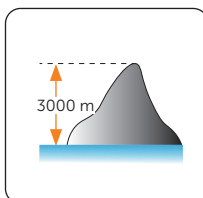
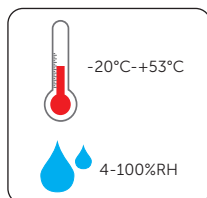
NOTICE!

- The above accessories required for parallel operation are included in the battery accessories kit and do not need to be purchased. Only in the event of missing or damaged accessories on site is it necessary to purchase accessories kit.

Mounting Location / Installationsort / Site d'installation / Sitio de instalación / Local de instalação / Installatiesite / Sito di installazione / Miejsce instalacji / Místo 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

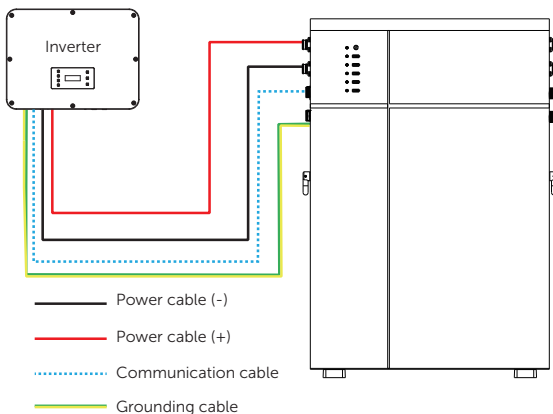
NOTICE!

- For outdoor installation, precautions against direct sunlight, rain exposure and snow laying up 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.

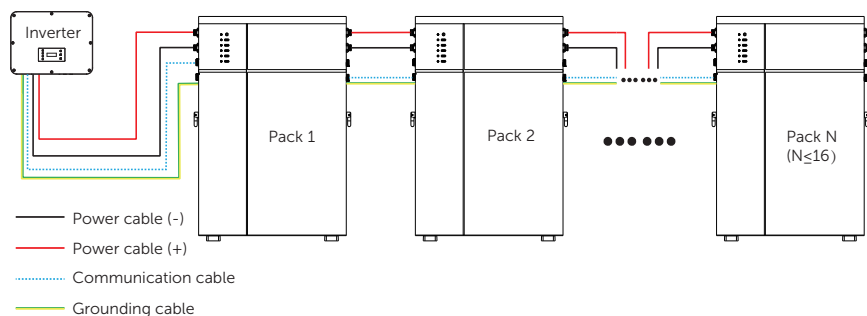


System Diagram / Mechanische Installation / Installation mécanique / Instalación mecánica / Instalação mecânica / Mechanische installatie / Installazione meccanica / Instalacja mechaniczna / Mechanická instalace / Mekanisk installation / Instalare mecanică / Механичен монтаж / Mekanisk installation / Μηχανική εγκατάσταση / Mehaaniline paigaldus / Mekaaninen asennus / Mehanička ugradnja / Mechanikai telepítés / Mechaninis montavimas / Mehāniskā uzstādīšana / Mechanická inštalácia / Mehanska nameštitev / mekanik kurulum / instalação mecânica

One battery pack



Two or more battery packs



NOTICE!

- Both the right and left electrical connection areas of the battery pack are allowed to conduct wiring with the inverter.

Mechanical Installation / Mechanische Installatie / 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 namestitvev / Mekanik kurulum / Instalação mecânica

Floor Mounting

Note!

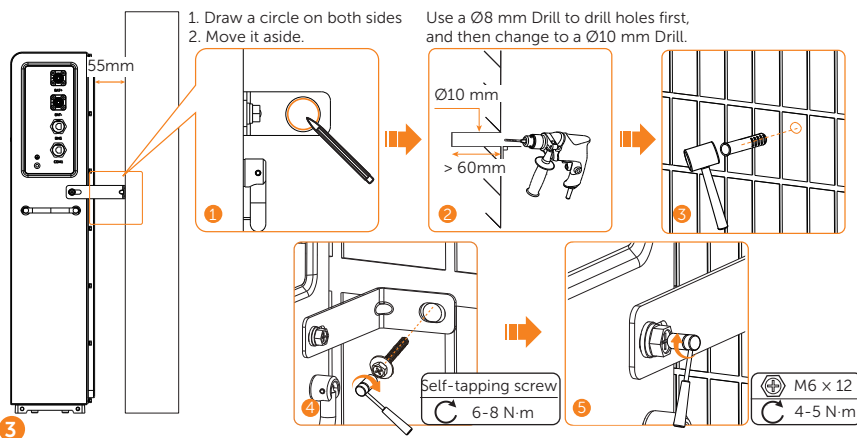
Do not tighten fully.

L-shaped wall bracket

M6 screw

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Note!

Up to sixteen (16) battery packs can be installed in a straight line.



Draw four circles

Use a Ø10 mm Drill to drill holes first, and then change to a Ø12 mm Drill.

Ø12 mm

> 90mm

Expansion screw

14-16 N·m

300 mm ~ 350 mm

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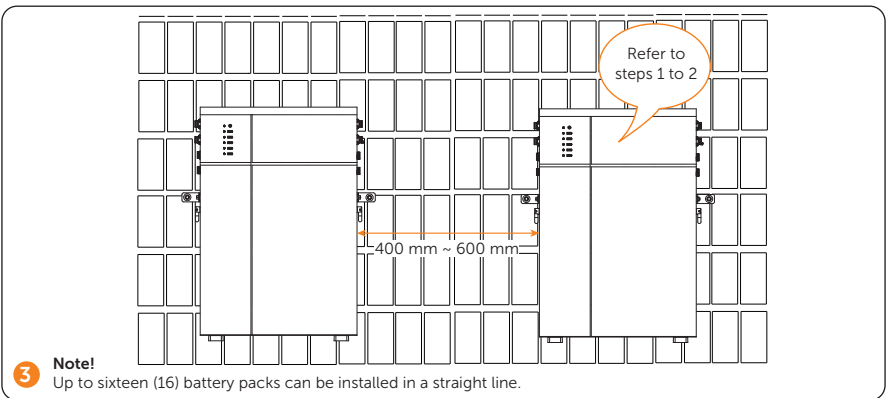
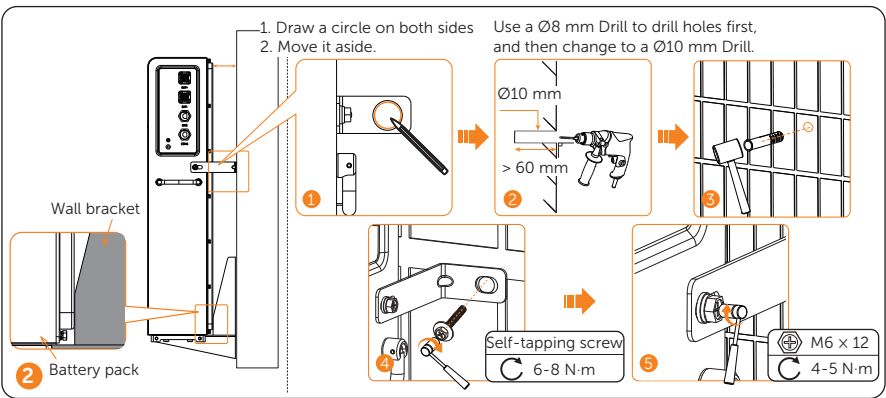
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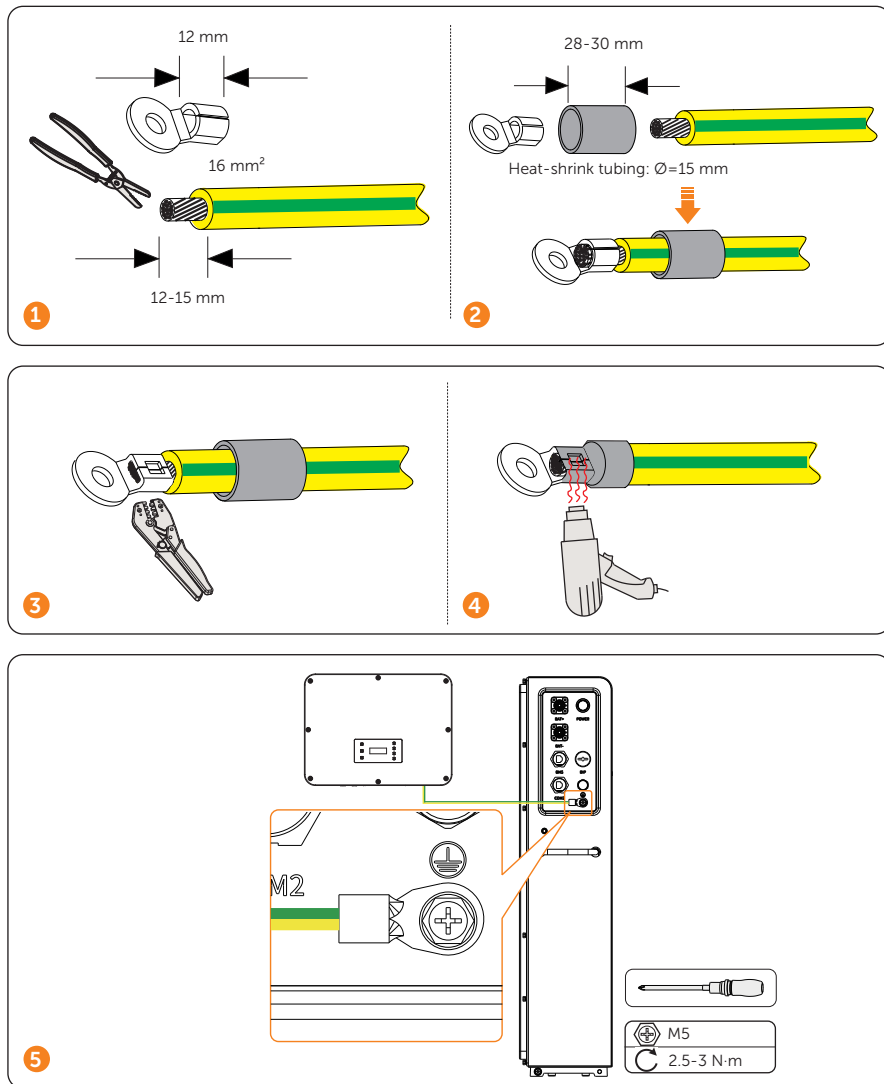
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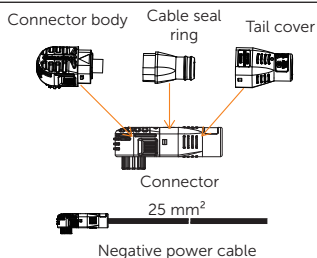
PE Connection



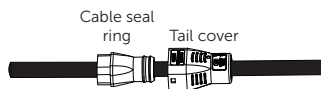
Female Connector Installation

NOTICE!

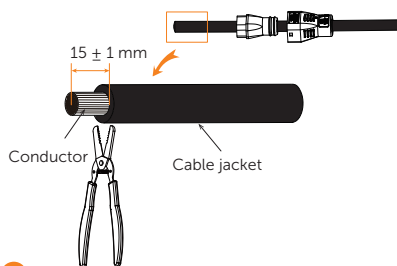
- Female connectors are required to be made and fitted over both the negative and positive power cables, respectively, in the event that two or more battery packs are purchased.



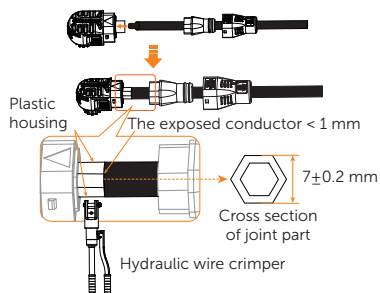
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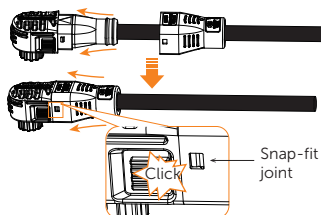
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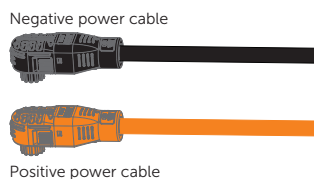
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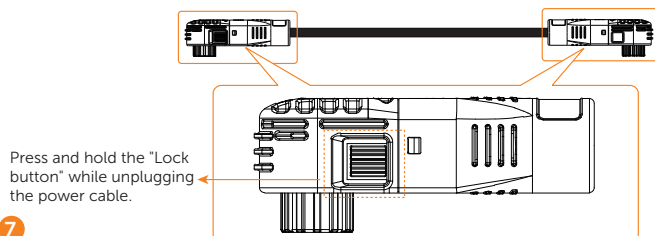
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7

Cable Connection for one battery pack



WARNING!

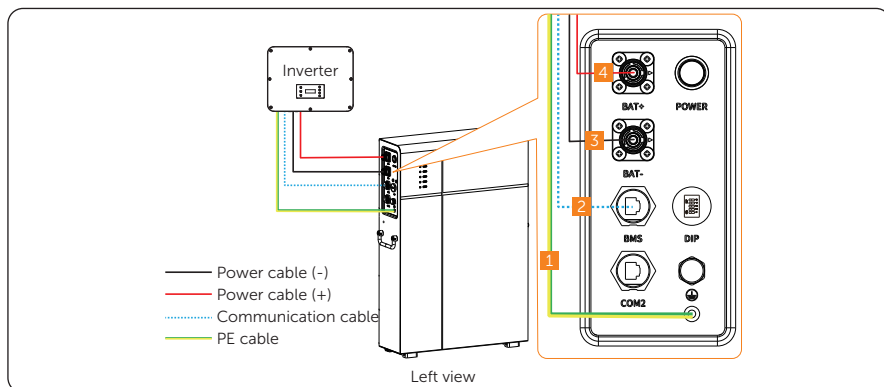
- The order of power cable connection: negative power cable → positive power cable.

NOTICE!

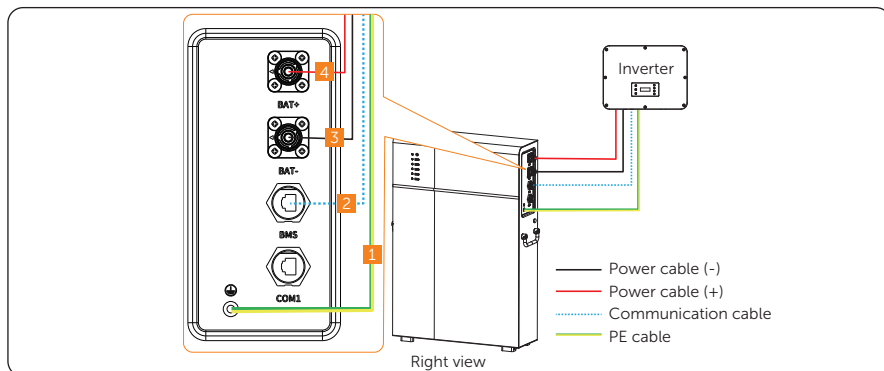
If any of the following ports BAT+/BAT-, BMS, or COM1/COM2:

- are connecting cables, please remove waterproof caps;
- aren't connecting cables, please don't remove waterproof caps.

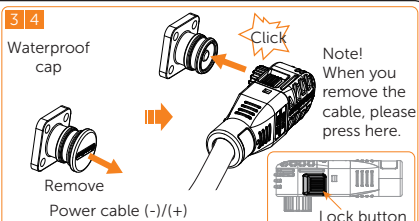
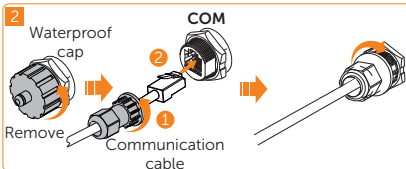
Left electrical connection area



Right electrical connection area



1 For PE cable, you could see PE connection on page 6.



Cable Connection for two or more battery packs



WARNING!

- The order of power cable connection: negative power cable → positive power cable.

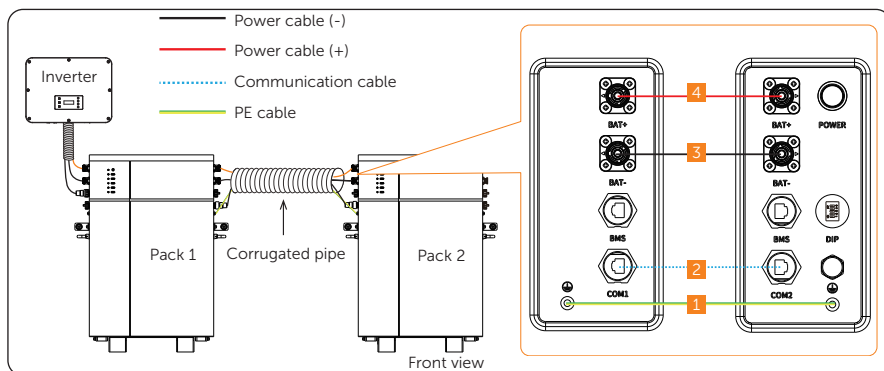
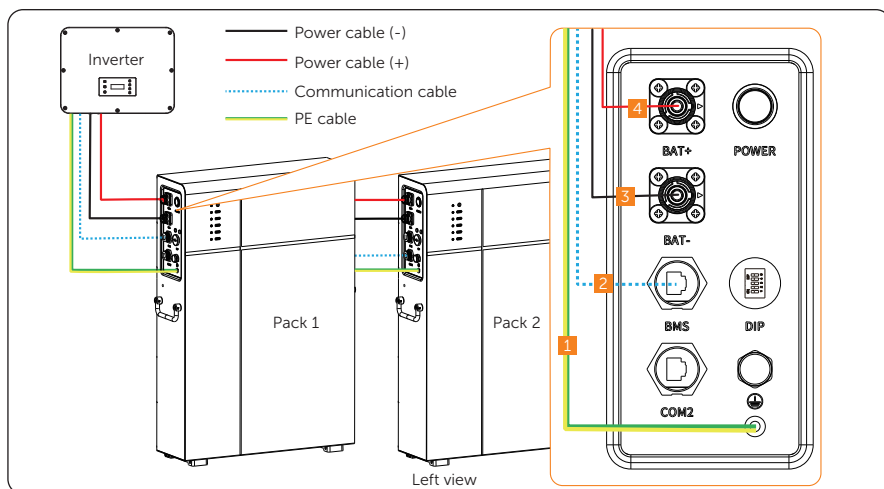
NOTICE!

- While plugging in the power cables, a "Click" sound indicates that the cable connectors are properly plugged into the port.
- Don't violently remove the power cables when they are locked.
- A corrugated pipe with an external diameter of 60 mm is recommended for use to keep cable insulation in place and avoid potential damages, when conducting wiring between two adjacent battery packs.

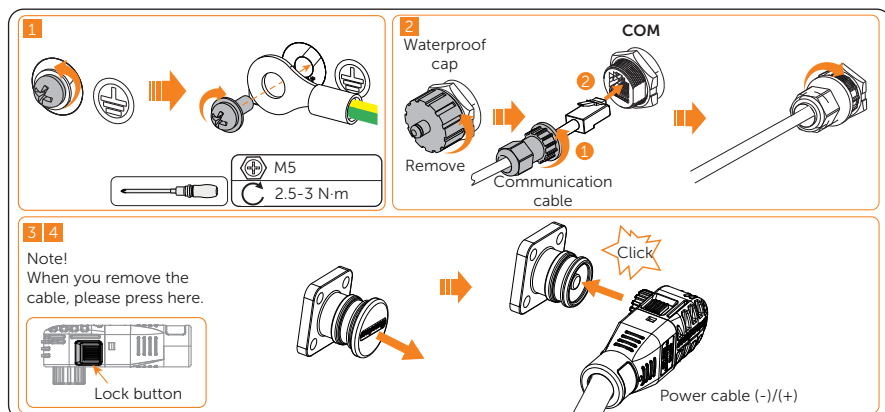
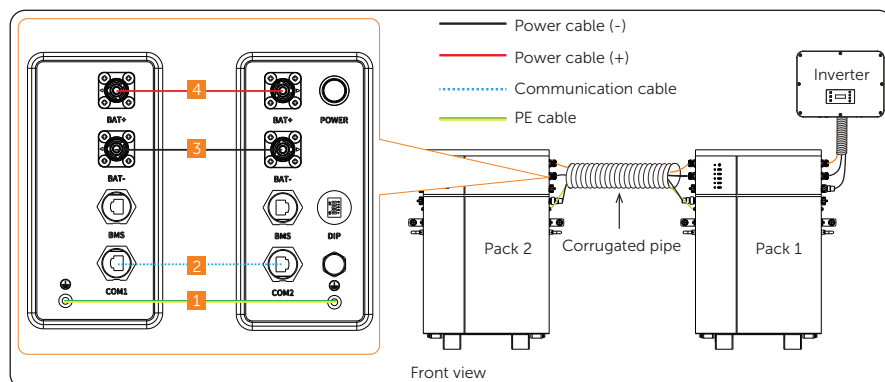
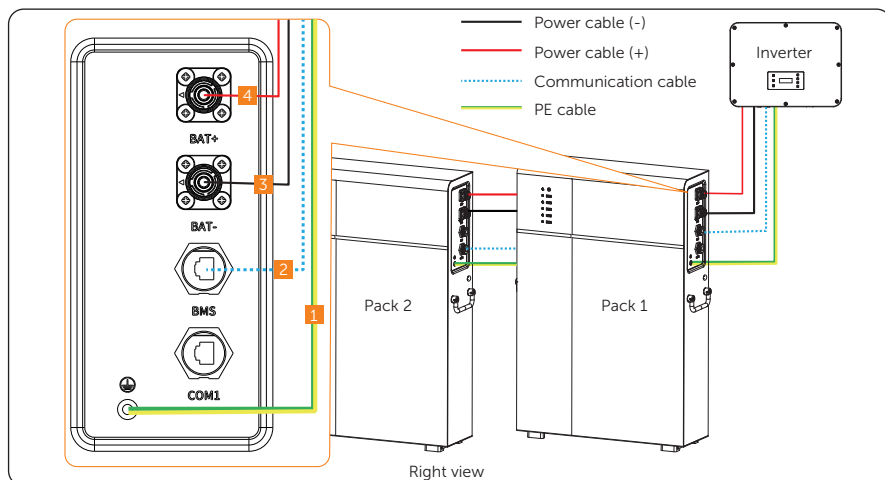
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Left electrical connection area



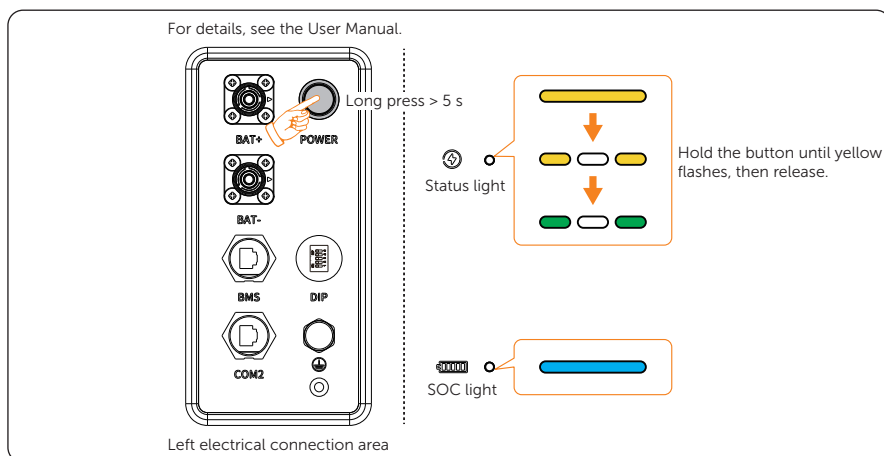
Right electrical connection area



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 helyezése / Įjungti sistemą / Ieslēdziet sistēmu / Zapnite system / Vklópite sistem / Sistemin Gücü / Ligar o sistema

Power On

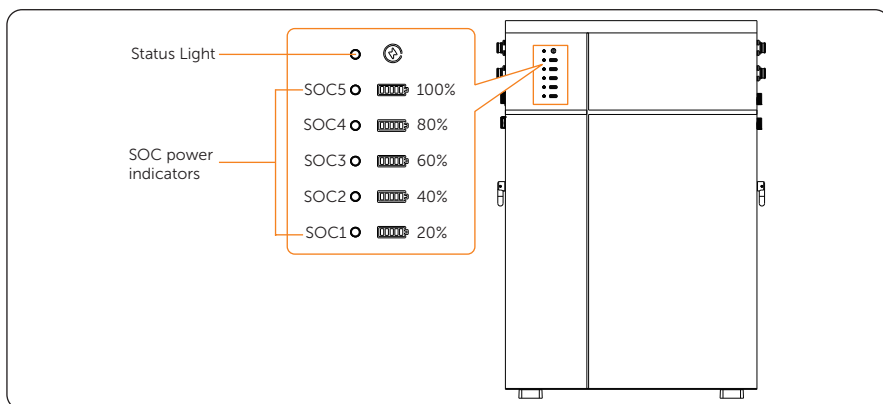
	Solid yellow	Flash yellow	Flash green
Status light			
SOC light			
Process	Start self test	End self test and Start address assignment	End address assignment



Power Off

Long press the POWER button (> 3 s) until the status light turns yellow. Then release the button.

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



Description	Status light	SOC lights
Startup	Flashing green	Solid blue
Shutdown	Solid yellow → Off	Solid blue → Off
Standby	Solid green	Solid blue
Charging	Flashing green	See table below.
Discharging	Flashing green	See table below.
Fault	Flashing red	Solid blue
Black start	Yellow quick flashing (every 0.8 second)	Solid blue
Self test	Solid yellow	Solid blue

Charging

SOC value	SOC1	SOC2	SOC3	SOC4	SOC5
80% < SOC ≤ 100%					
60% < SOC ≤ 80%					
40% < SOC ≤ 60%					
20% < SOC ≤ 40%					
0% < SOC ≤ 20%					
SOC = 0%					

Discharging

SOC value	SOC1	SOC2	SOC3	SOC4	SOC5
80% < SOC ≤ 100%					
60% < SOC ≤ 80%					
40% < SOC ≤ 60%					
20% < SOC ≤ 40%					
0% < SOC ≤ 20%					
SOC = 0%					

Technical Data / Technische Daten / Fiche technique / Datos técnicos / Dados Técnicos / Technische gegevens / Dati tecnici / Dane techniczne / Technické údaje / Tehniska 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 / Dados Técnicos

Battery pack	TP-LD53
Nominal Voltage (d.c. V)	51.2
Operating Voltage Range (d.c. V)	45-58
Nominal Capacity (Ah)	104
Nominal Energy (kWh)	5.32
Usable Energy 95% DOD (kWh) ¹	5.05
Max. Output Current (d.c A) ²	100
Peak Charge/Discharge Current (d.c. A)	200 (10 seconds)
Battery Round-trip Efficiency (0.2 C, 25°C/77°F)	95%
Cycle Life 95% DOD ³	> 6000 cycles
Charge Temperature	0°C ~ 53°C
Discharge Temperature	-20°C ~ 53°C
Storage Temperature	30°C ~ 50°C (6 months), -20°C ~ 30°C (12 months)
Ingress Protection	IP65
Protection Class	I

NOTICE!

- ¹ Test conditions: 95% DOD, 0.5 C 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 ± 2°C, 0.5C charge & discharge, 70%EOL.

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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