



Quick Installation Guide

ALP 5.0L-E2 US



Installation environment



Max.+50°C (+122°F)



Min.-10°C (+14°F)



RH.+5%~+95%

Installation tools

The following tools are required to install the PACK:



5mm Allen key



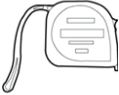
Screwdriver

M6	2 Nm (17.6inlbs)
M4	2 Nm (17.6inlbs)
M3	1 Nm (8.8inlbs)



Wrench

M8	2 Nm (17.6inlbs)
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Measuring tape

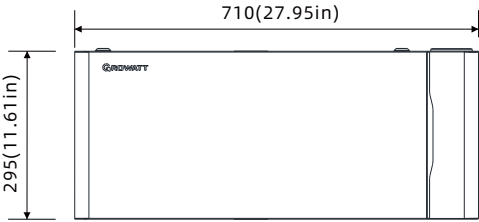


Multimeter



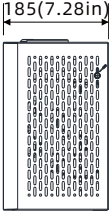
Marker

Dimensions



710(27.95in)

295(11.61in)

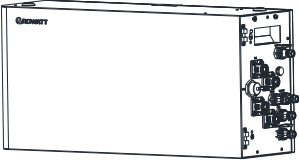


185(7.28in)

Unit:mm

1.Check

1-1 Check the Packing List



ALP 5.0L-E2 US *1



A



B



C



D

A Quick installation Manual *1
B User Manual *1
C Warranty card *1
D Certificate of conformity *1



A



B



C



D

A Positive Parallel Power cable*1
B Negative Parallel Power cable *1
C Parallel communication cable *1
D Parallel ground cable*1



A



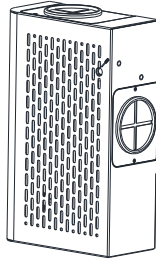
B



C

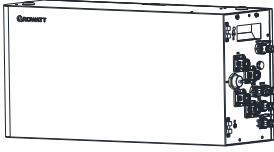
A Battery connecting piece *2
B M4X9 stainless steel screw*3
C M4 countersunk screw *6

1



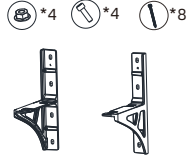
right trim cover *1

1-2 Check the accessories



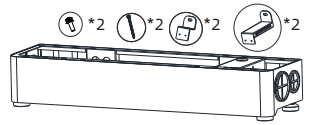
ALP 5.0L-E2 US

A



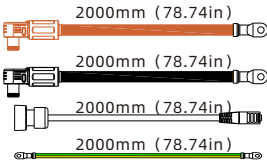
Wall bracket

B



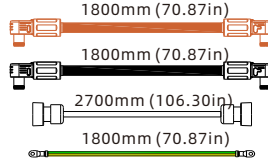
Base

C



ALP 5.0L Cable

D



ALP 5.0L Parallel Cable

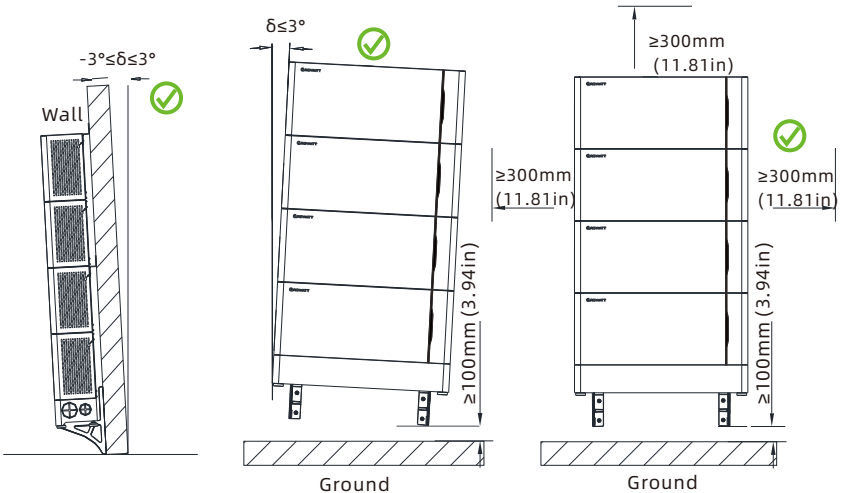
E

Installation Method	Compound Mode
Standard wall-mounted installation	$A*N+B+C+D$
Standard floor-mounted installation	$A*N+C+D$
Wall-mounted battery system stacked in two lines	$A*N+B*2+C*2+D+E$
Floor-mounted battery system stacked in two lines	$A*N+C*2+D+E$

Note: "N" stands for the number of batteries.

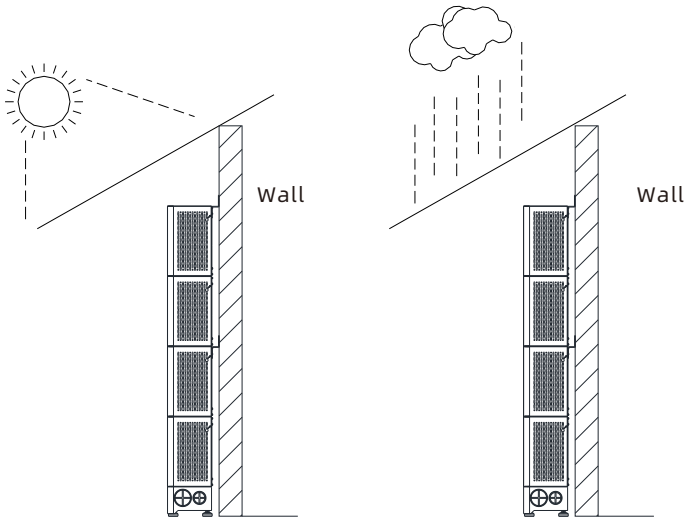
2. Basic installation requirements

2-1 Wall-mounted Installation



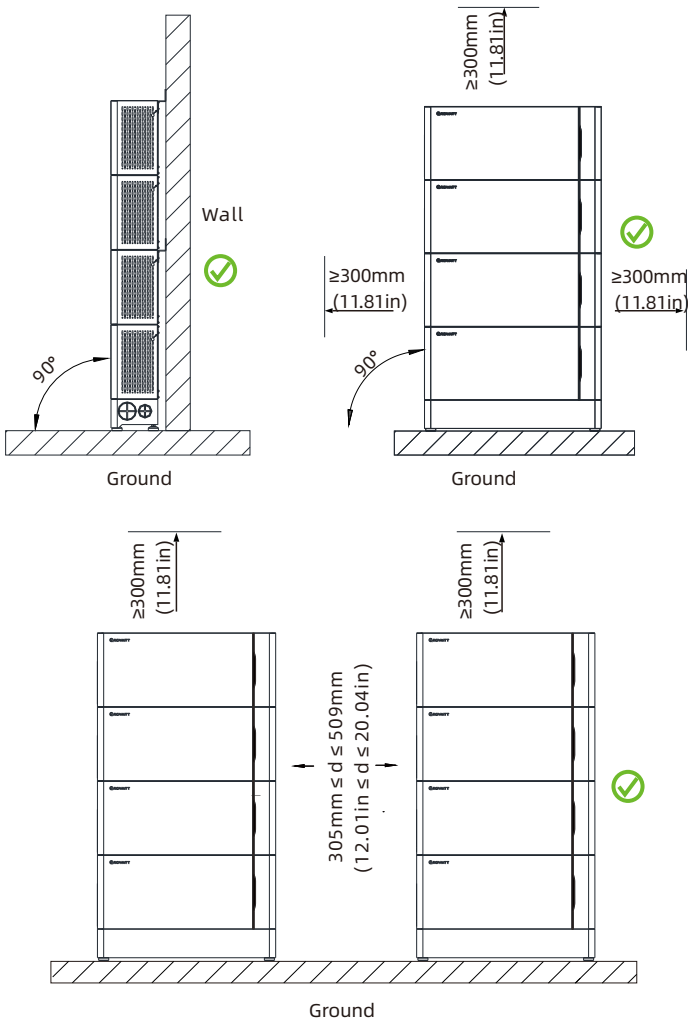
Note: The number of battery modules in wall-mounted installation should not exceed four. Ensure that load capacity of the wall exceeds 200kg (440lbs).

2-2 Outdoor installation



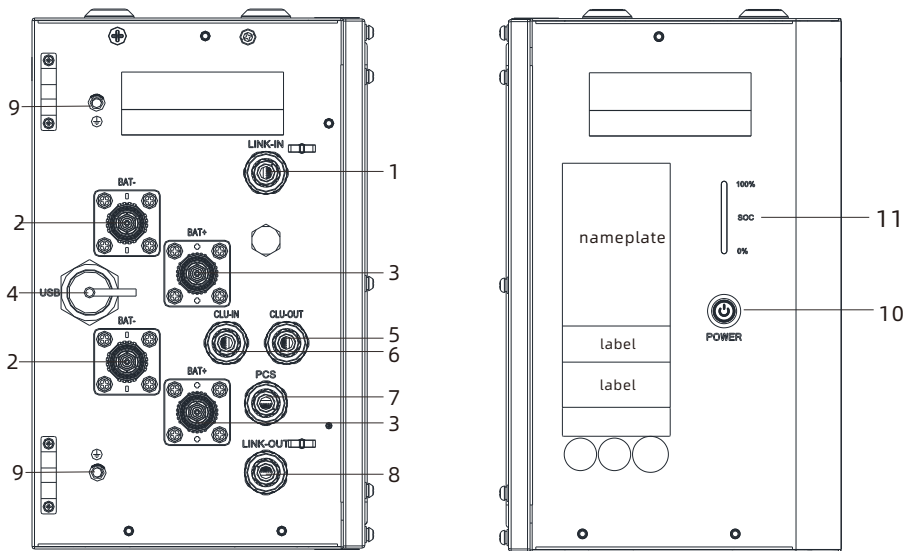
Note: When installing outdoors, avoid direct exposure to sunlight and rain. Install under an eave or build a sun and rain shade.

2-3 Floor-mounted Installation



Note: Do not install the PACK upside down, and ensure that the floor is level.
A maximum of 4 battery packs can be stacked. If there are more than 4 of them, please install them in two lines.

3. Introduction to the battery operation panel

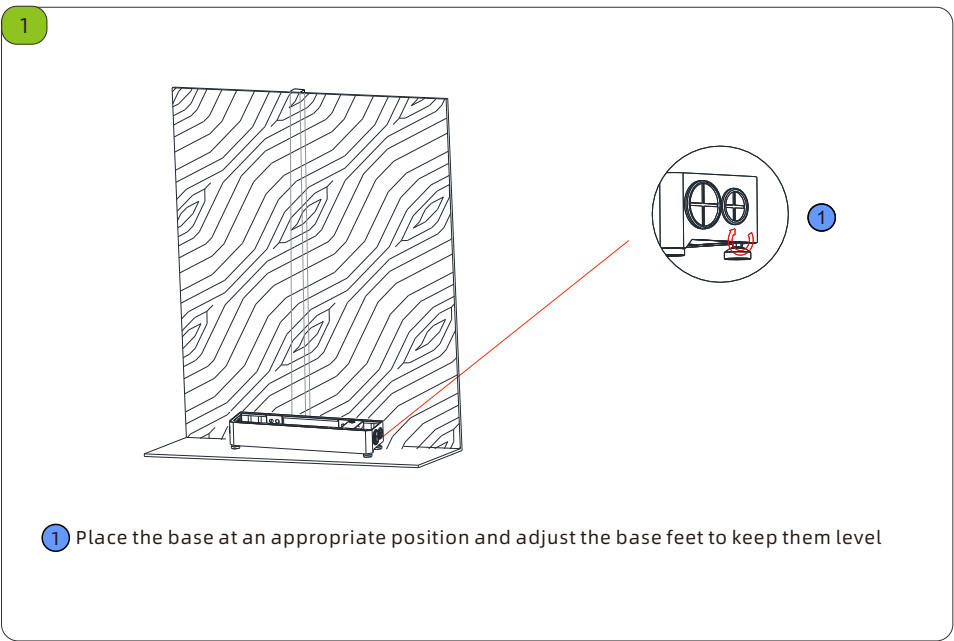


1	LINK -IN CAN communication	7	PCS CAN communication
2	Negative terminal	8	LINK-OUT CAN communication
3	Positive terminal	9	GND terminal
4	USB interface	10	Power Button
5	Cluster-out communication	11	LED
6	Cluster-in communication		

4. Installation

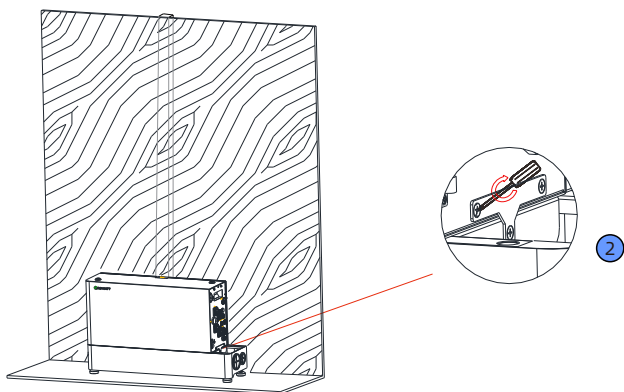
4-1 Floor-mounted Installation

Note: You can connect the battery and inverter in two ways. For top cable routing, you should use fixed anti-tip connecting pieces during installation; for rear cable routing, you should use adjustable anti-tip connecting pieces during installation.



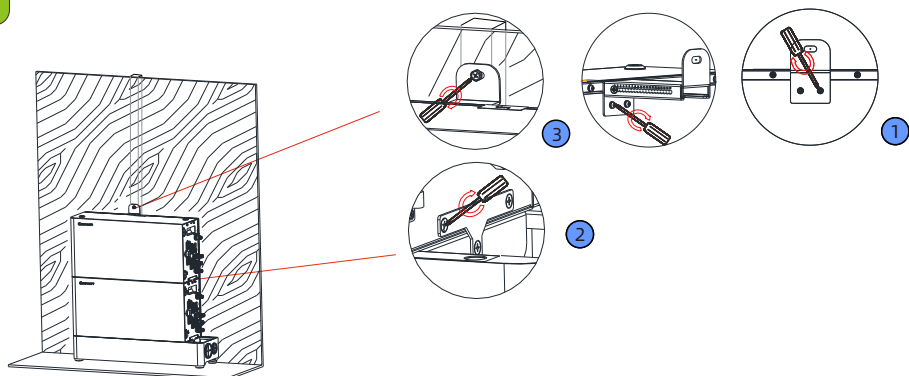
1 Place the base at an appropriate position and adjust the base feet to keep them level

2



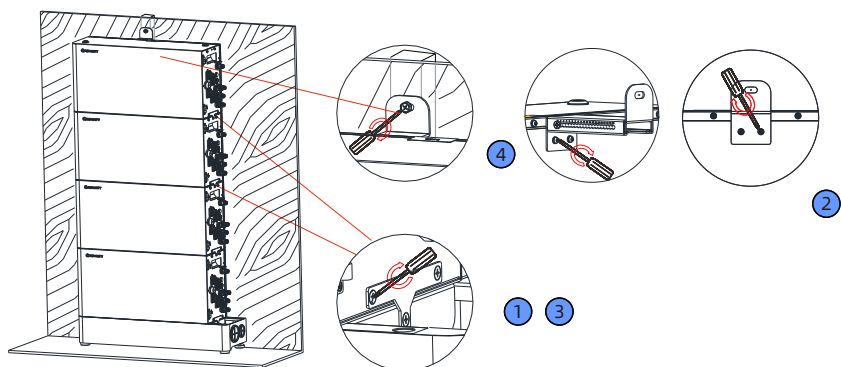
- ① Place the first battery module onto the base.
- ② Secure the connecting pieces on both sides

3



- ① Attach the anti-tip plate to the back cover of the second battery module using the M4*9 screws
- ② Stack the second battery module onto the first one, then attach it by securing the connecting pieces on both sides using the M4*8 screws
- ③ Attach the anti-tip plate to the wall using the M8*95 self-tapping screw

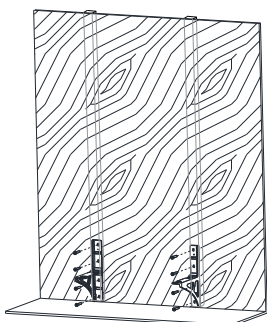
4



- ① Stack the third battery module onto the second one, then fix it by securing the connecting pieces on both sides
- ② Attach the anti-tip plate to the back cover of the fourth battery module using the M4*9 screws
- ③ Stack the fourth battery module, then attach it by securing the connecting pieces on both sides using the M4*8 screws
- ④ Attach the anti-tip plate to the wall using the M8*95 self-tapping screw

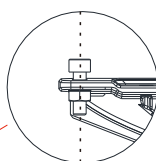
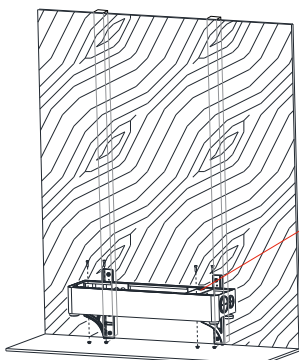
4-2 Wall-mounted Installation

1



- ① Position the mounting template on the wall, keeping it level. Find the appropriate hole spacing (12in, 16in, 20in, or 24in) and mark the hole positions for drilling.
- ② Attach the mounting bracket to the wall using the M8*95 screws

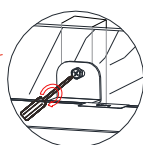
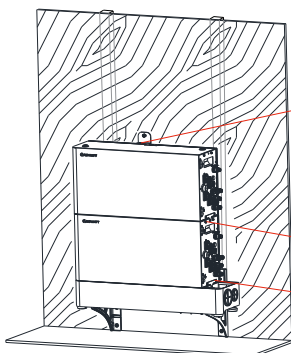
2



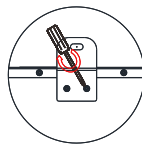
②

- ① Place the base onto the mounting bracket
- ② Insert the four M6*20 screws into the holes on the base, then tighten them with the M6*20 bolts from the bottom

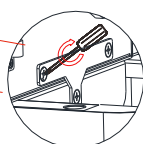
3



④



②

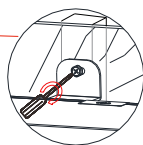
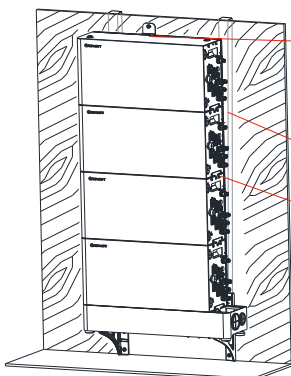


①

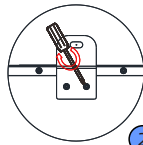
③

- ① Place the first battery module onto the base and secure the connecting pieces on both sides
- ② Attach the anti-tip plate to the back cover of the second battery module using the M4*9 screws
- ③ Stack the second battery module onto the first one, then attach it by securing the connecting pieces on both sides using the M4*8 screws
- ④ Attach the anti-tip plate to the wall using the M8*95 self-tapping screw

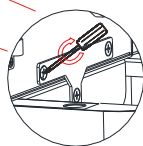
4



④



②



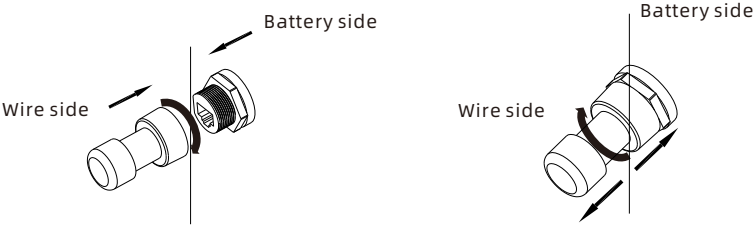
①

③

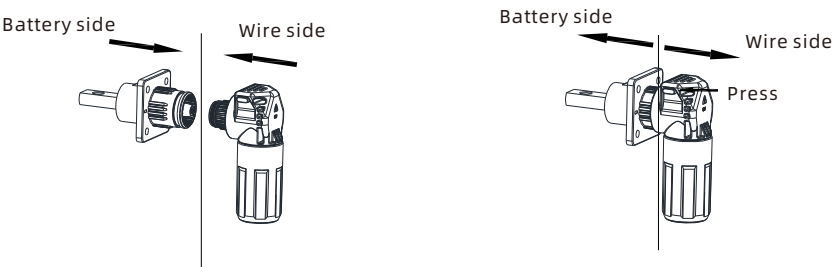
- ① Stack the third battery module onto the second one, then secure the connecting pieces on both sides
- ② Attach the anti-tip plate to the back cover of the fourth battery module using the M4*9 screws
- ③ Stack the fourth battery module, then attach it by securing the connecting pieces on both sides using the M4*8 screws
- ④ Attach the anti-tip plate to the wall using the M8*95 self-tapping screw

5. Electrical Connection

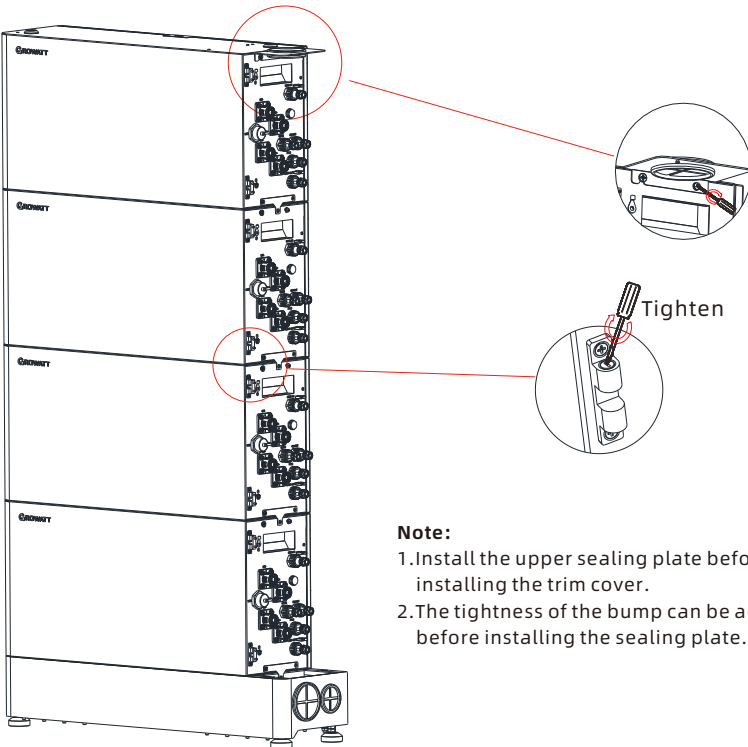
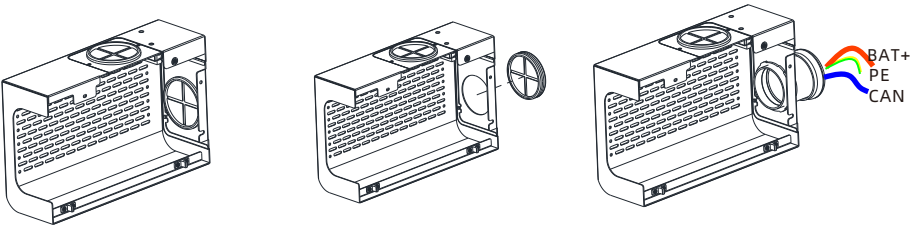
5-1 Communication terminal



5-2 Power terminal



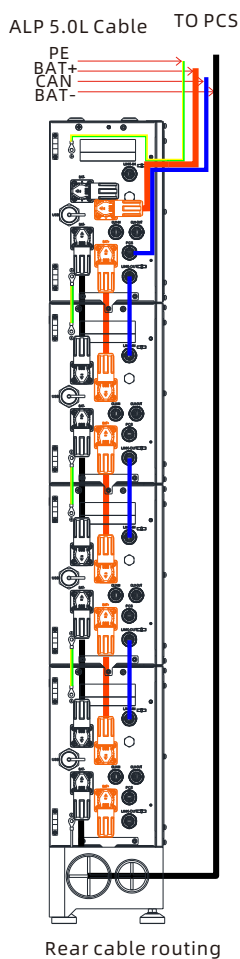
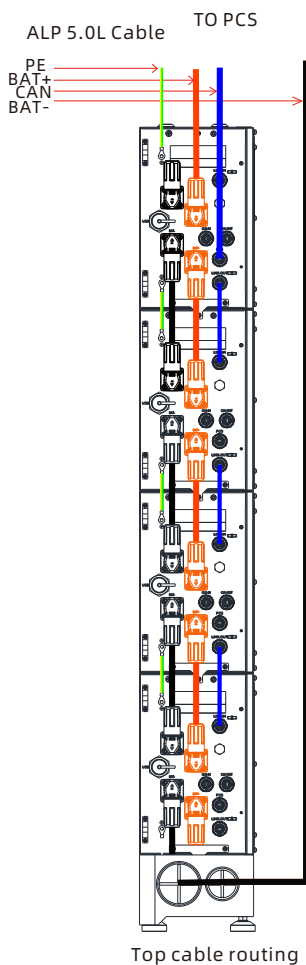
5-3 Install the Trim Cover



- Note:**
- 1. Install the upper sealing plate before installing the trim cover.
 - 2. The tightness of the bump can be adjusted before installing the sealing plate.



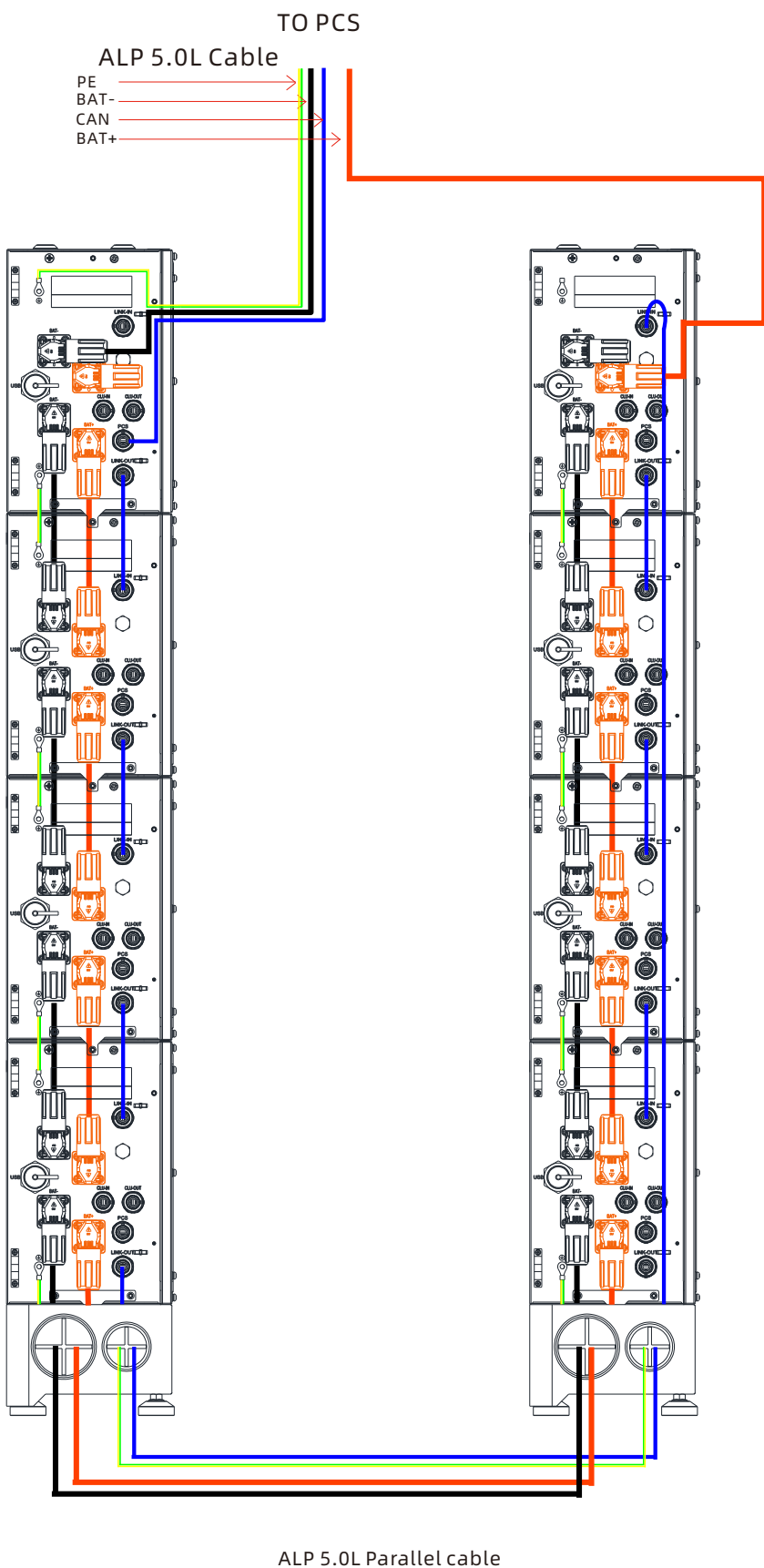
5-4 Single-column wiring



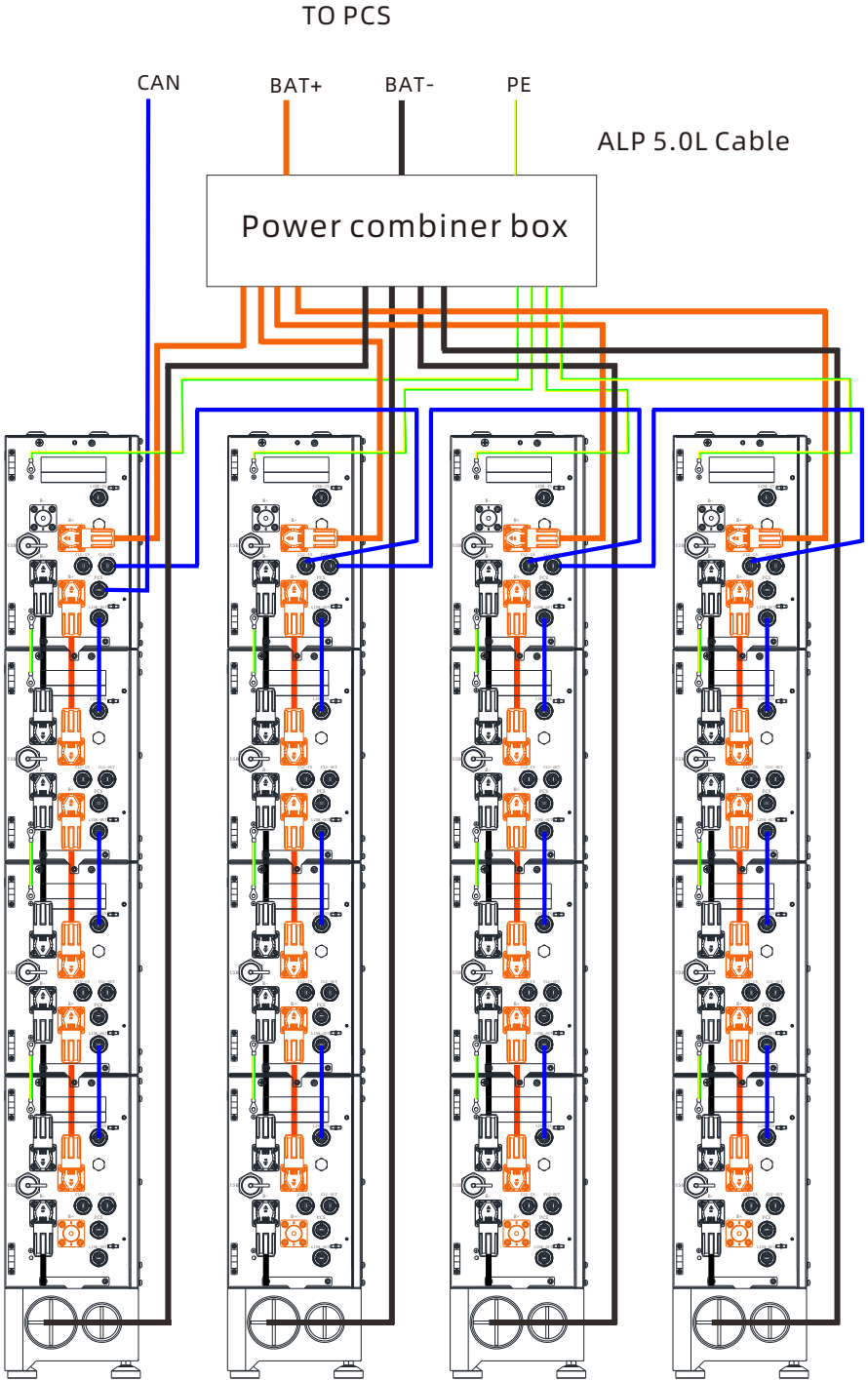
Note:

1. The battery should not be installed in the running state, and all the RUN lights of battery modules should be off before installation.
2. To ensure proper operation and safety, do not forget to install the ground wire.
3. For the power cable connections from the battery stack to the PCS, the positive (+) power cable is connected at the top battery module, and the negative (-) power cable is connected at the bottom battery module.

5-5 Two-column wiring



5-6 Wiring of Multi-clusters battery in parallel

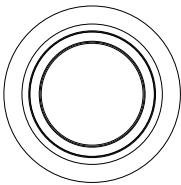


- Note:** 1.Supports up to 8 clusters in parallel.
2.The power combiner box needs to be prepared by the user.
3.The number of batteries in each cluster needs to be the same

6. Power on and off the Battery

6-1

Power On



POWER

1. Press the POWER button for 3 seconds. Observe the LED indicator on the panel.

2. The battery LED indicator lights up to indicate that the battery has been turned on.

Power on the PACK by pressing the power button(t>3S)		
Step	Procedures	Acceptation criteria
1	Connect the battery and PCS	Make sure the wiring harnesses are tight and secured
2	Press the POWER button for three to five seconds. Observe the LED indication on panel.	1.If both RUN/ALM and SOC lights are on and green normally, PACK is powered on successfully. 2.If RUN/ALM light turns red, power down the system, fix the fault and restart.

Power on the PACK by PCS		
1	Connect the battery and PCS	Make sure the wiring harnesses are tight and secured
2	Power on the PCS. PCS outputs a wake up signal of 5V or an output main circuit voltage signal of 46-58V	1.If both RUN/ALM and SOC lights turn on and green normal, PACK powers on successfully. 2.If RUN/ALM light turns red, there is a fault and you should solve it before powering on the PACK again.

6-2

Power off

Press the power button to turn off the PACK and five LED lights will flicker three times. If multiple packs are connected in parallel, turning off one of the PACKs will shut down the whole battery system.

7.Service and contact

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