

Quick Guide
APX 5.0~30.0P-S2



Environment requirements



Max.+50℃

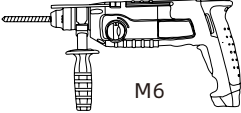


Min.-10℃



RH+5%~+95%

Installation tools



M6



M6 2 N·m

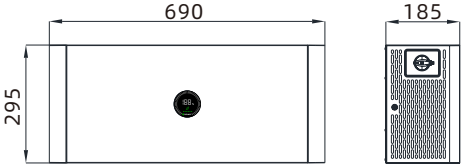


M4 1 N·m

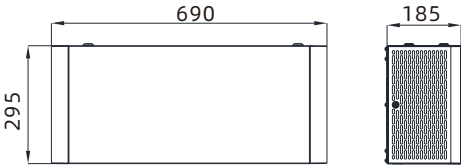
Dimensions

Unit:mm

APX 98034-P2
(Power Module)

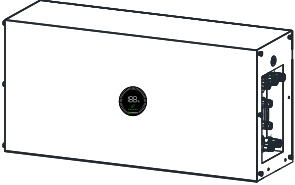


APX 5.0P-B1
(Battery Module)

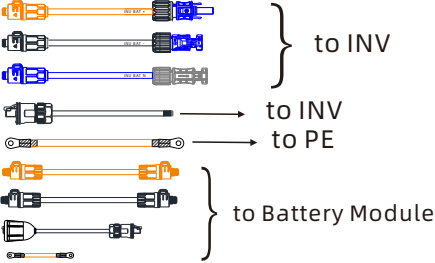


1. Inspection upon delivery

1-1 Checking the APX 98034-P2 packing list (New packaging)



APX 98034-P2 (PM)



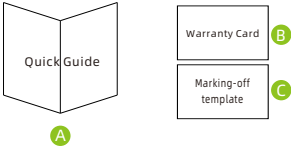
System cable

to INV

to INV

to PE

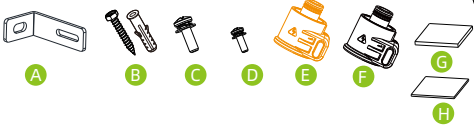
to Battery Module



A Quick Guide *1

B Warranty Card *1

C Marking-off template *1



A Anti tipping plate *2

B M6 expansion bolt *2

C M6x12 stainless steel screws *1

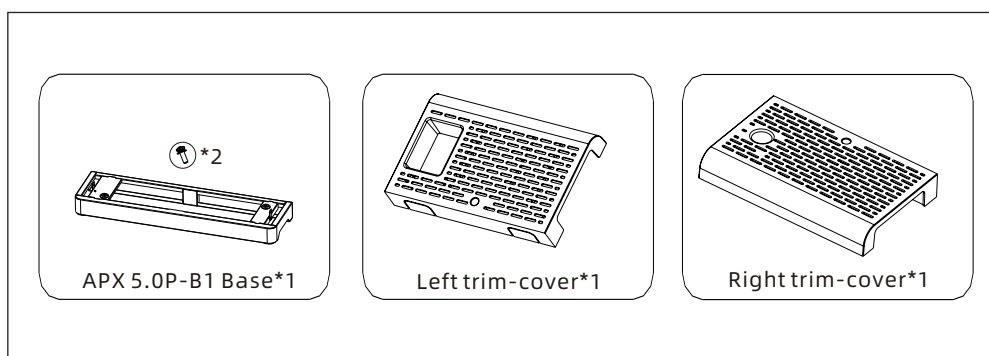
D M4x9 stainless steel screws *3

E Orange Waterproof Plug *1

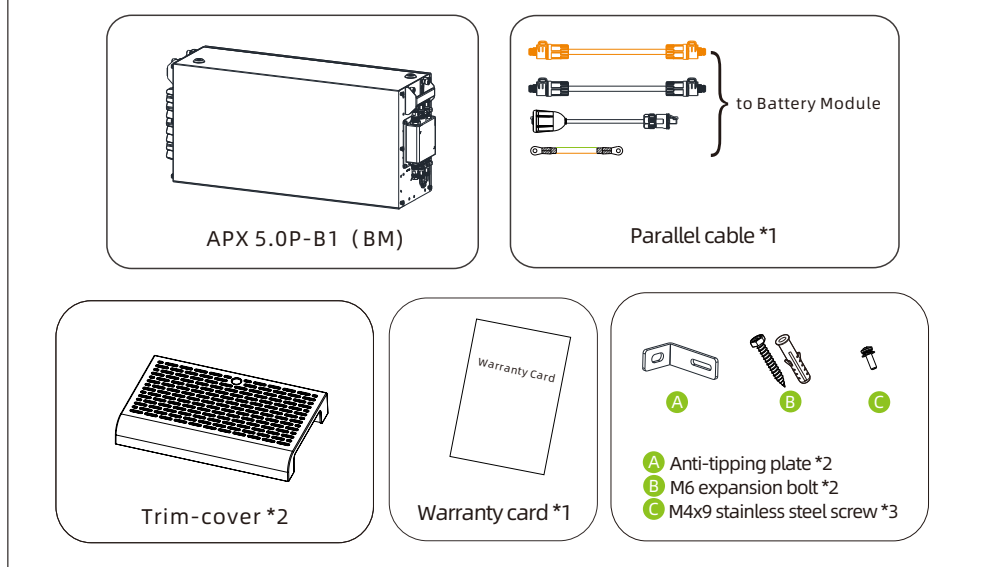
F Black Waterproof Plug *1

G 2 mm thick shims *4

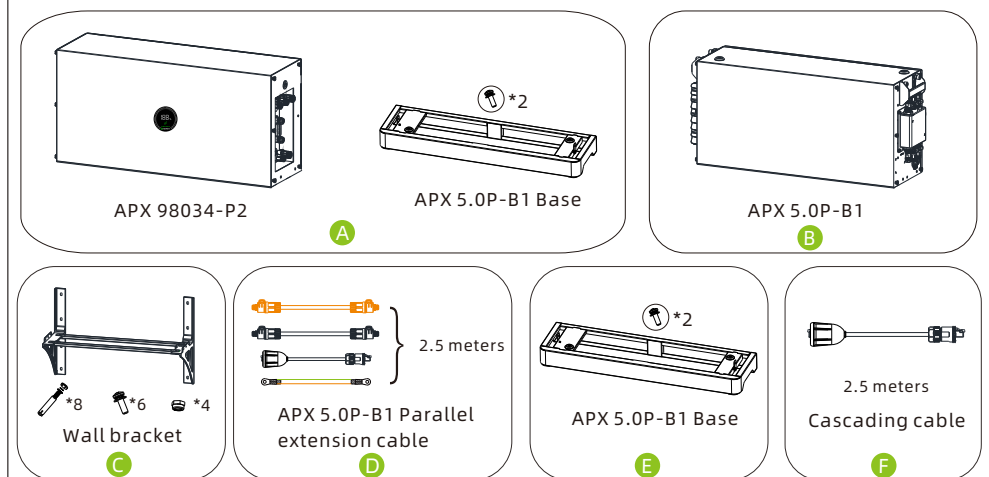
H 1 mm thick shims *4



1-2 Checking the APX 5.0P-B1 packing list

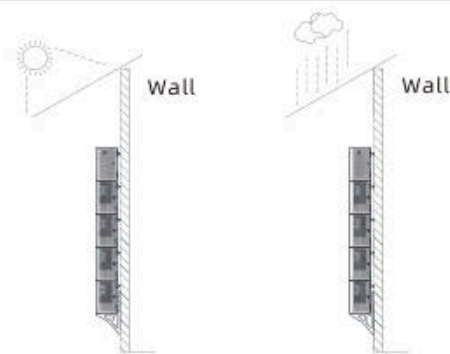


1-3 Check the APX Battery System of different capacities



Battery System Capacity	Floor-mounted Installation Compound Mode	Wall-Mounted Installation Compound Mode
5kWh	A+B	A+B+C
10kWh	A+B*2	A+B*2+C
15kWh	A+B*3	A+B*3+C
20kWh	A+B*4	A+B*4+C
25kWh	A+B*5+E+D	A+B*5+C*2+D
30kWh	A+B*6+E+D	A+B*6+C*2+D
40kWh	A*2+B*8+F	A*2+B*8+C*2+F
50kWh	A*2+B*10+E*2+D*2+F	A*2+B*10+C*4+D*2+F
60kWh	A*2+B*12+E*2+D*2+F	A*2+B*12+C*4+D*2+F

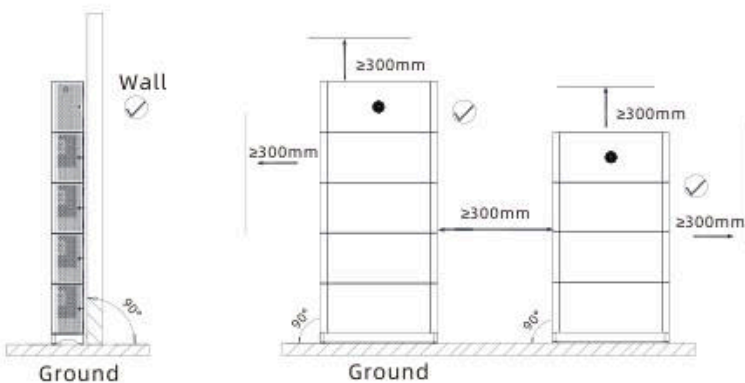
2.Installation environment requirement



Note : When installed outdoors, build a sun/rain shelter to protect the battery system from direct sunlight and rain.

3.Floor-mounted installation

3-1 Installation Location Requirements

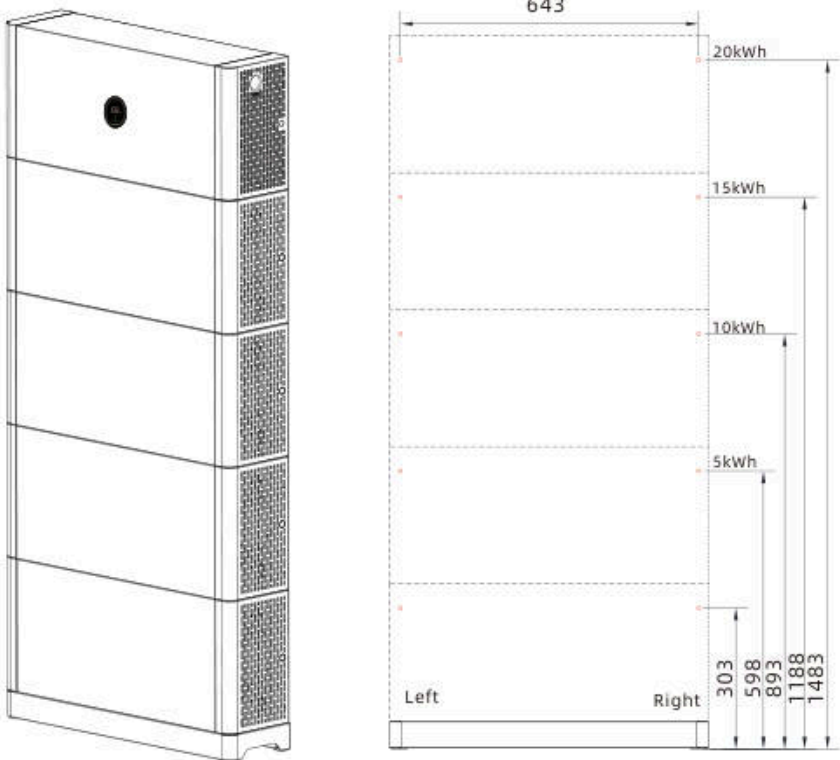


Note:
For the floor-mounted installation with the base, a maximum of six battery modules can be configured.
If the number of the battery modules to be installed is greater than four, you are advised to install them in 2 columns.

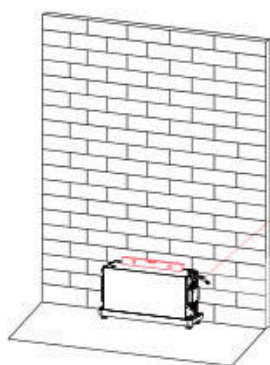
3-2 Installation procedure

Unit:mm

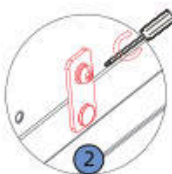
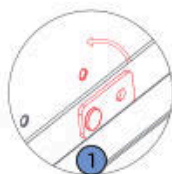
Mounting Hole Dimensions



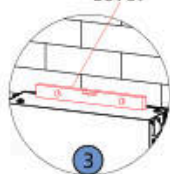
1



Marking pen

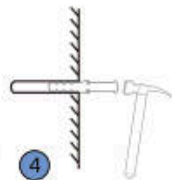
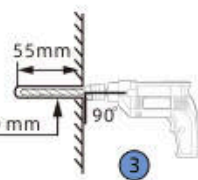
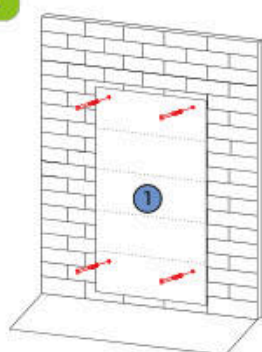


Level



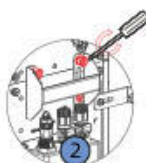
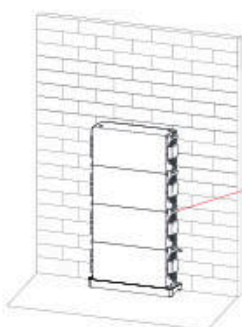
- 1 2 Install the connecting pieces on both sides and tighten the two screws .
 3 Level the battery module using a level.
 4 Install the anti-tipping plates on both sides and tighten the two screws .
 5 Mark the hole positions.

2



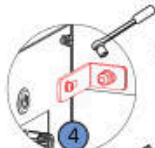
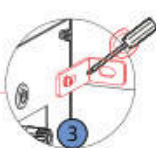
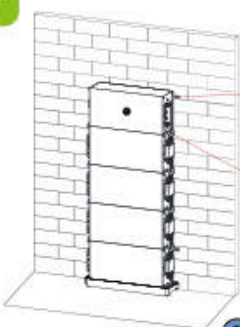
- 1 The marking-off template ensures that the alignment marks are properly.
 2 3 4 Install the M6 expansion bolt and tighten the nut.

3

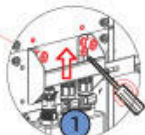


- 1 Loosen two screw, move up handle on both sides.
 2 Tighten the two screws, fix the two battery modules.

4



- 3 Install the connecting pieces on both sides and tighten the two screws.



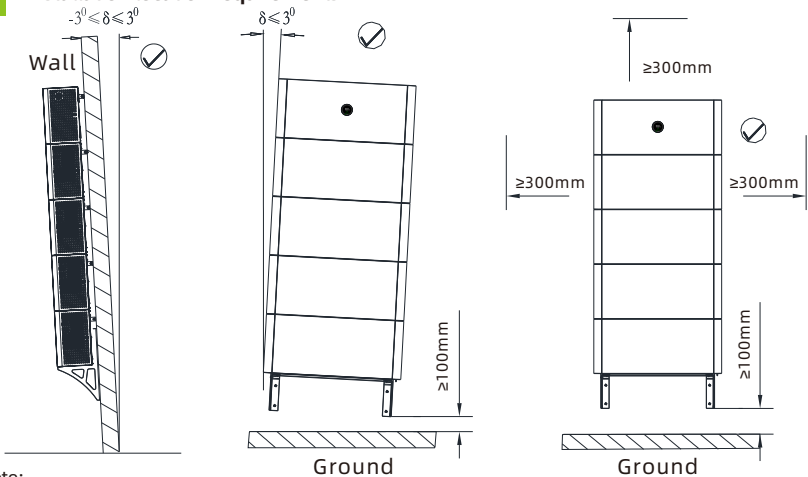
- 4 Secure the module on both sides to the wall.

- 1 Loosen two screw, move up the handle on both sides.
 2 Tighten the two screws, fix the battery and the power modules.

4. Wall-mounted Installation

4-1

Installation location requirements



Wall

Ground

Ground

Note:

When mounted on the wall, a maximum of six battery modules can be configured.

If the number of the battery modules to be installed is greater than four, you are advised to install them in 2 columns.

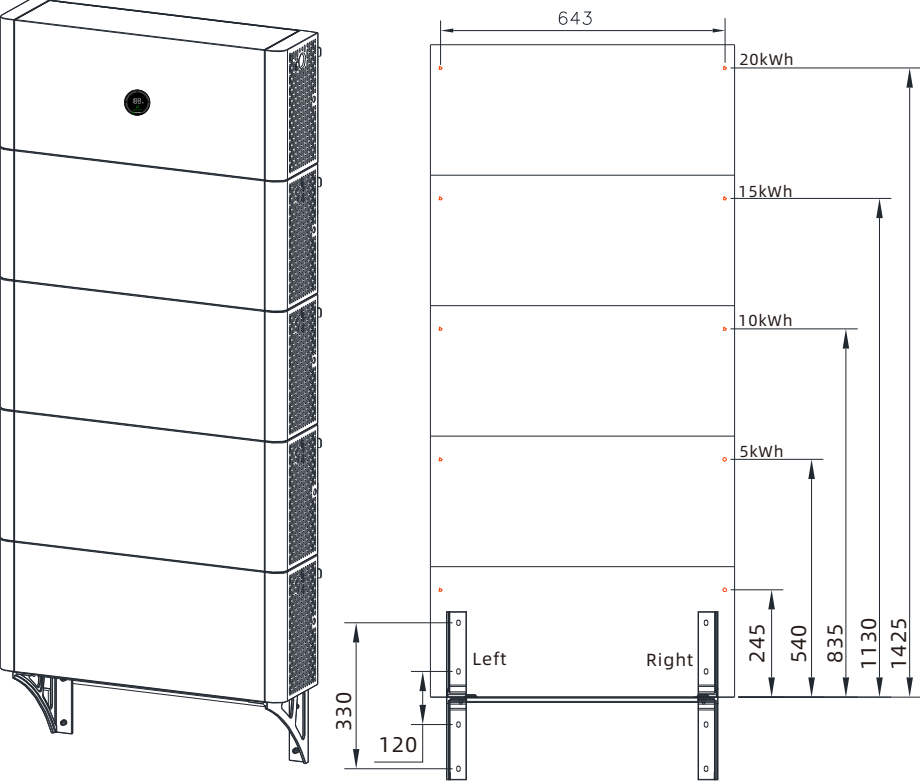
Ensure that the load-bearing capacity of the wall exceeds the total weight of the system (each PM weighs 16 kg and each BM weighs 50 kg).

4-2

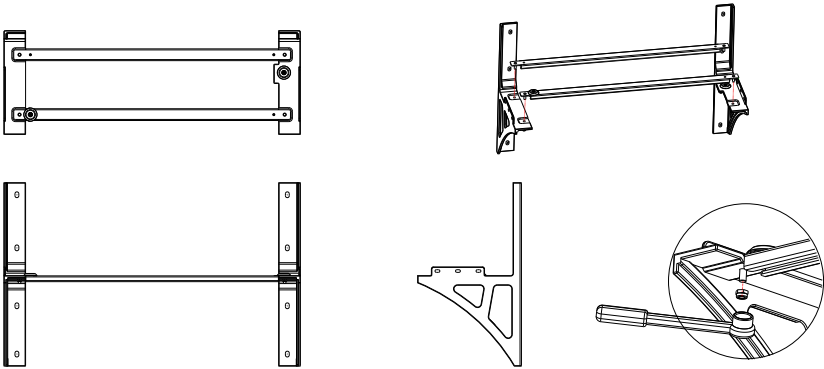
Installation procedure

Unit:mm

Mounting Hole Dimensions

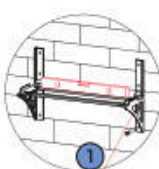
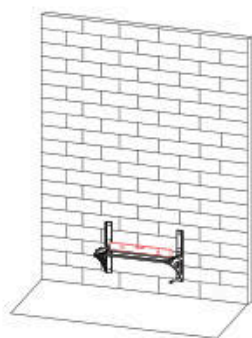


1

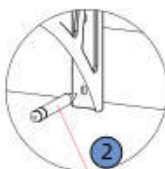


install the wall bracket

2



Level



Marking pen

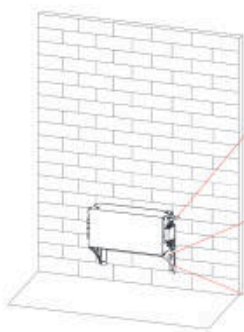


① Level the battery Module using a level.

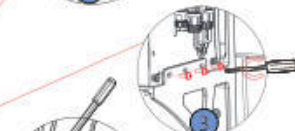
② Mark the hole positions.

③ Drilling eight holes.

3



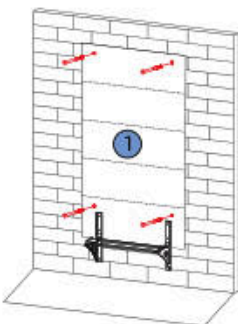
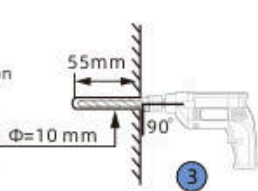
④ Install the anti-tipping plates on both sides and tighten the two screws.



① ② Fix the bracket on the wall.

③ Fix the battery module on the bracket.

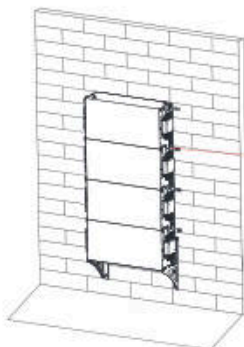
4

M6 expansion screw
Marking-off template

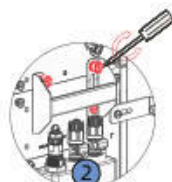
① Install-location card ensures alignment marks on the wall.

② ③ ④ Install the M6 expansion bolt and tighten the nut.

5



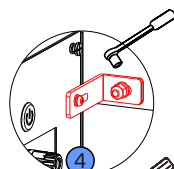
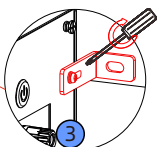
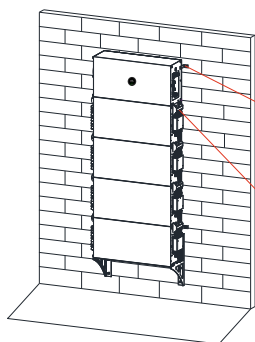
① Loosen two screws, move up handle on both sides.



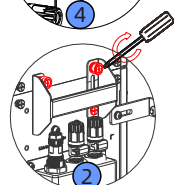
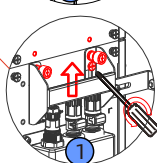
② Tighten the two screws, fix the two battery modules.

6

- 3 Install the connecting pieces on both sides and tighten the two screws.



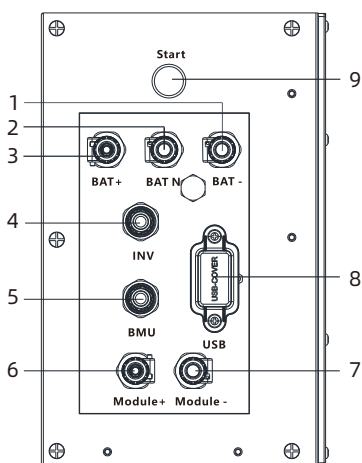
- 4 Secure the module on both sides to the wall.



- 1 Loosen two screws, move up the handle on both sides.
2 Tighten the two screws, fix the battery and the power modules.

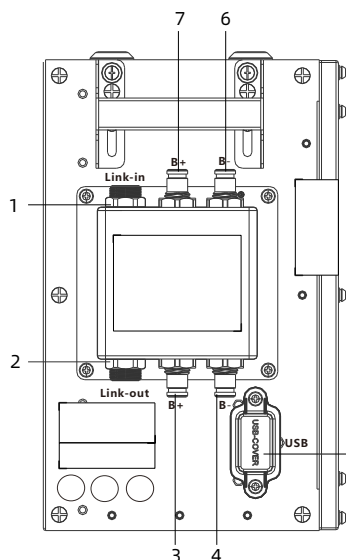
5. Cable connection

5-1 APX 98034-P2 terminal & key description



1	BAT -	Battery negative terminal to connected to the INV
2	BAT N	Battery neutral terminal to connected to the INV
3	BAT+	Battery positive terminal to connected to the INV
4	INV	Communication terminal connect to the INV
5	BMU	Communication terminal connect to the battery module (Link-in)
6	Module+	Connect to the positive battery terminal of the Battery Module (B+)
7	Module-	Connect to the negative battery terminal of the Battery Module (B-)
8	USB	USB terminal
9	Start	Start key

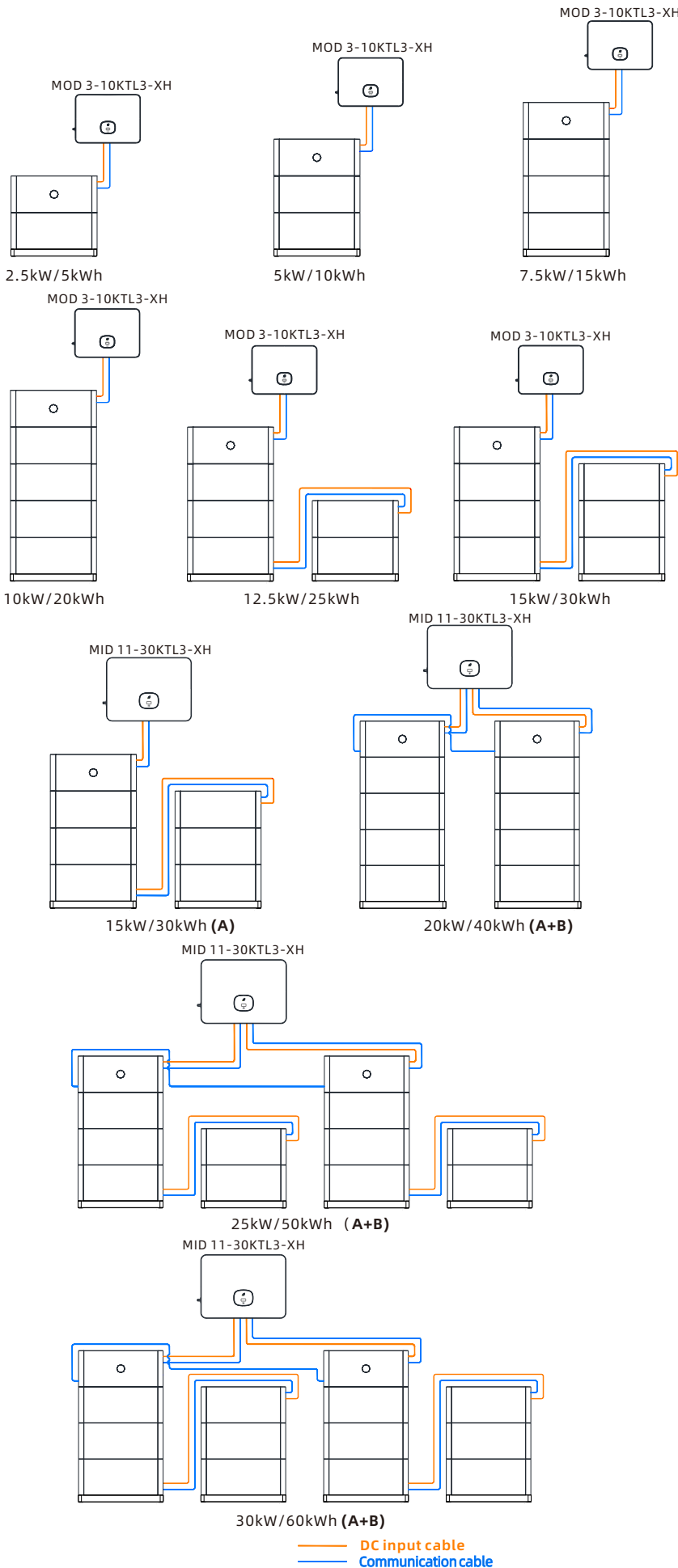
5-2 APX 5.0P-B1 terminal description



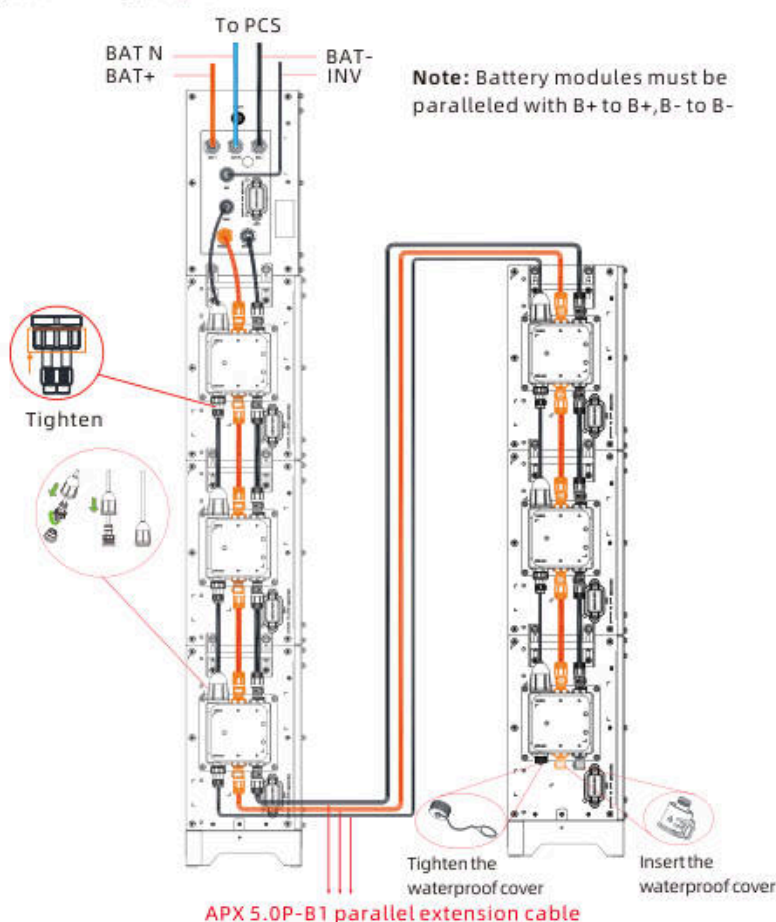
1	Link-in	Communication terminal Connect to another BM (Link-out) or the PM(BMU)Communication
2	Link-out	Communication terminal Connect to another BM(Link-in) or the PM(BMU)Communication
3	B+	Battery positive terminal Connect to another BM(B+)
4	B-	Battery negative terminal Connect to another BM (B-)
5	USB	USB terminal
6	B-	Battery negative terminal Connect to another BM(B-) or the PM (Module-)
7	B+	Battery positive terminal Connect to another BM(B+) or the PM (Module+)

5-3 Battery capacity description

The battery system supports power and capacity expansion. Two power control modules can be connected in parallel. A maximum of six battery modules can be connected to a single power module.



5-4 System wiring diagram

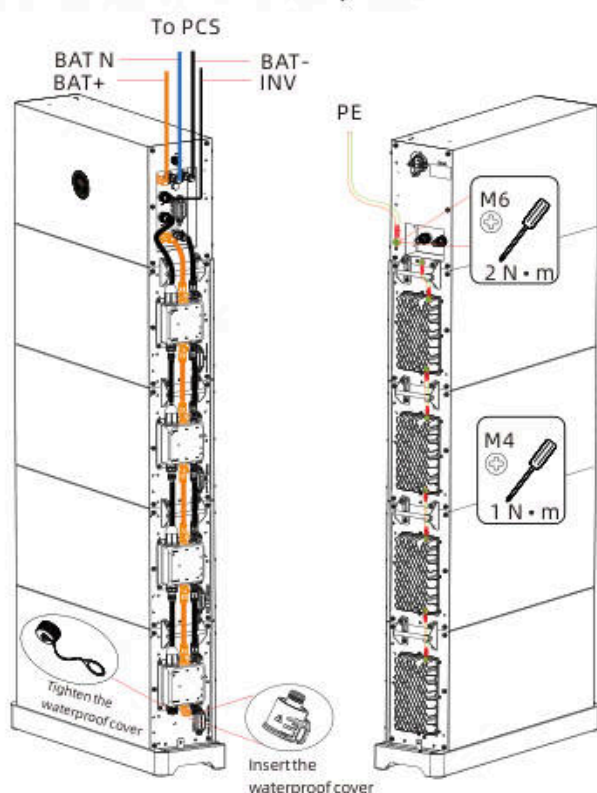


Wiring sequence:

Grounding cable → Communication cable → Power cable

Note:

1. When wiring the communication cable, remember to tighten the protective cover of the communication cable; otherwise it might undermine the waterproof performance. Water penetration caused by failure to do so is beyond the scope of warranty.)
2. The waterproof cover for the power module accessory kit must be connected to the power terminals B+ and B- at the base of the final battery module.



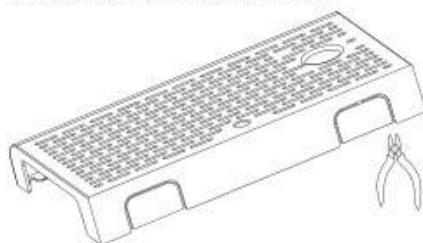
5-5 Routing cables out of the cable hole



APX 98034-P2 Left trim-cover



ground wire



APX 98034-P2 Right trim-cover



5-6 Communication port connection

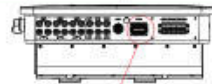
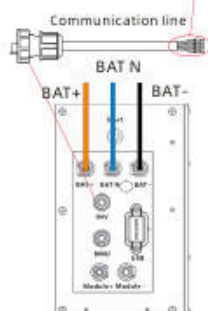
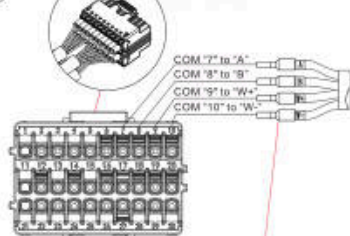
APX 5.0-30.0P-S2			MOD 3-10KTL3-XH			MID 11-30KTL3-XH			
Silk screen	Terminal serial number	Definition	Silk screen	Terminal serial number	Definition	Silk screen	Terminal serial number		Definition
							A	B	
INV	1	WAKE-(W-)	COM	10	BAT.EN-	COM	10	30	BAT.EN-
	2	WAKE+(W+)		9	BAT.EN+		9	29	BAT.EN+
	7	RS485_B(B)		8	RS485B2		8	28	RS485B2
	8	RS485_A(A)		7	RS485A2		7	27	RS485A2



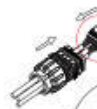
MOD3-10KTL3-XH



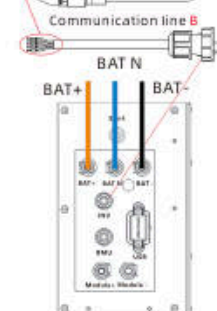
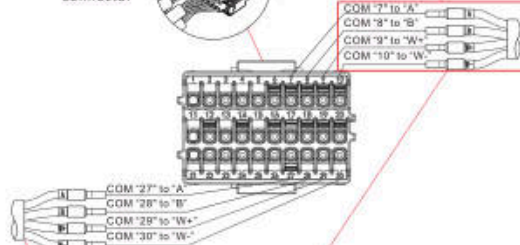
Connector



MID11-30KTL3-XH

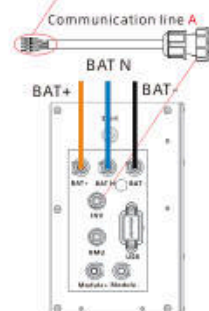


Connector



When wiring the communication cable to the inverter, connect it to PIN 7, 8, 9, 10 of the INV-COM terminal first.

COM '7' to 'A'
COM '8' to 'B'
COM '9' to 'W+'
COM '10' to 'W-'



6. Terminal connection

6-1 Power terminal

Machine side

Wire harness side

Machine side

Wire harness side

Note: Press the position indicated in the figure above before disconnecting the power terminal.

6-2 Installing the trim-cover

7. Powering on/off the battery system

Power on	1. Turn on the DC Switch 2. Press the start key for more than 5S	
Power off	Turn off the DC Switch (wait for over 90s)	

Note:

1. Before performing maintenance and repair work, ensure that the AC circuit breaker and the PV switch of the PCS, as well as the switch of the APX are disconnected. **Wait for 15 minutes after the system is powered off and make sure that the LOGO () indicator on the APX is off.** Do not perform any operations until the system is completely shut down.

2. When multiple battery systems are used in parallel connection, you only need to press the start key of one module to start the system.

3. The content of this document is continually reviewed and amended, where necessary.

reserves the right to make changes to the material at any time and without notice. Unless otherwise agreed, this document is for quick installation guidance only. All information and suggestions in this document do not constitute a warranty of any kind, express or implied. reserves all rights for final interpretation.

8. Service and contact

E

W

For local customer support, please visit com/support/contact

Download Manual

GR-UM-289-A-03 (PN: 044.0127901)

