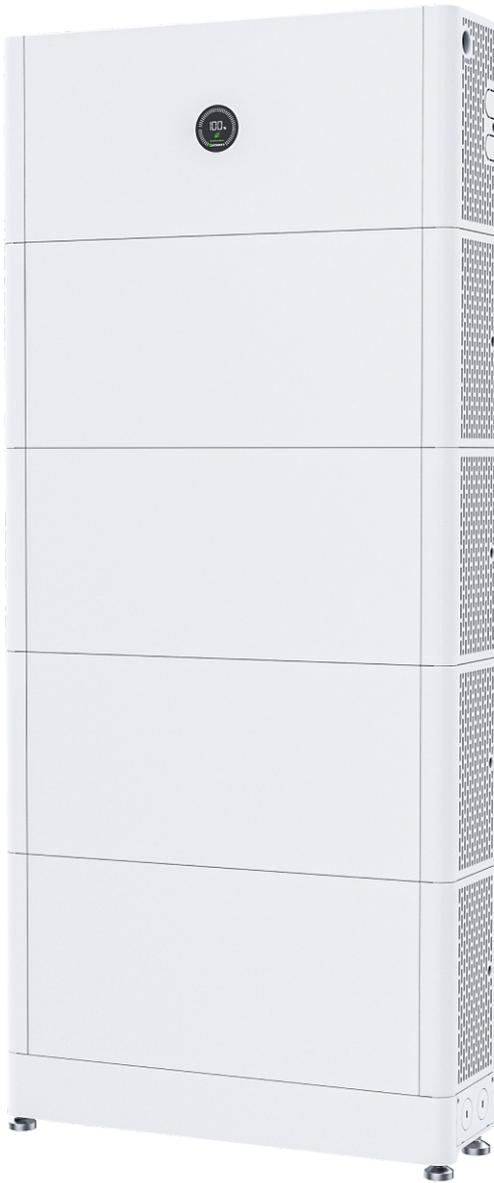




Quick Guide
APX 5.0~30.0P-S0-US



Growatt USA. Inc

Environment requirements



Max. +50°C (+122°F)

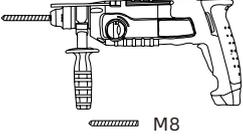


Min. -20°C (-4°F)



RH. 5%~95%

Installation tools



M8



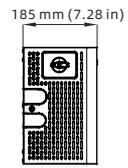
M8 2 Nm (17.6inlbs)



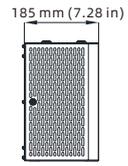
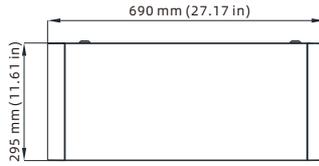
M6 2 Nm (17.6inlbs)
M4 2 Nm (17.6inlbs)
M3 1 Nm (8.8inlbs)

Dimensions

APX 55042-P0-US
(Power Module)

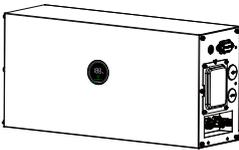


APX 5.0P-B1-US
(Battery Module)



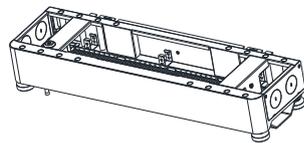
1. Inspection upon delivery

1-1 Checking the APX 55042-P0-US packing list

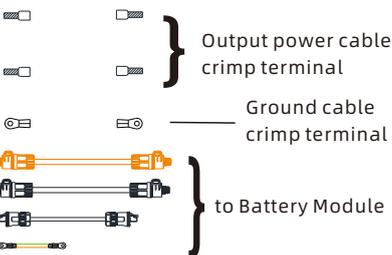


APX 55042-P0-US
(Power Module)

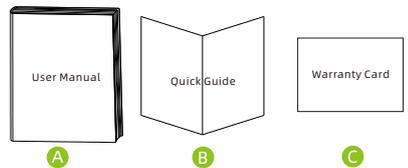
- Bottom battery connecting piece * 2
- M8 expansion screw * 2



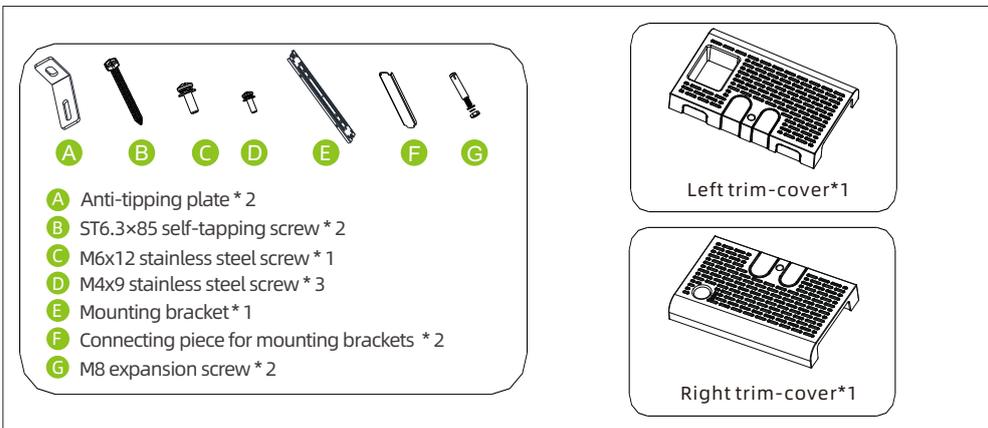
APX 5.0P-B1-US Base



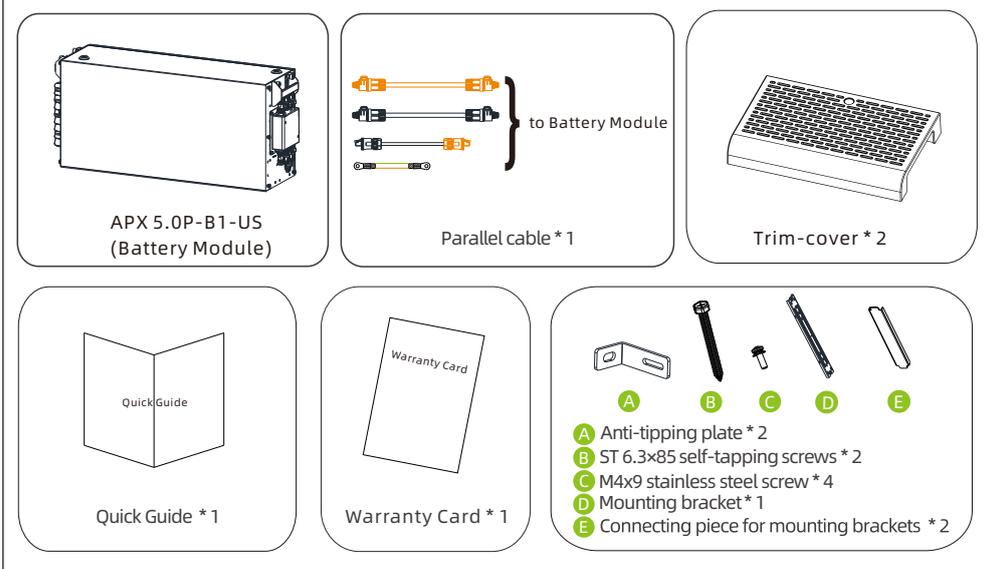
System Cable



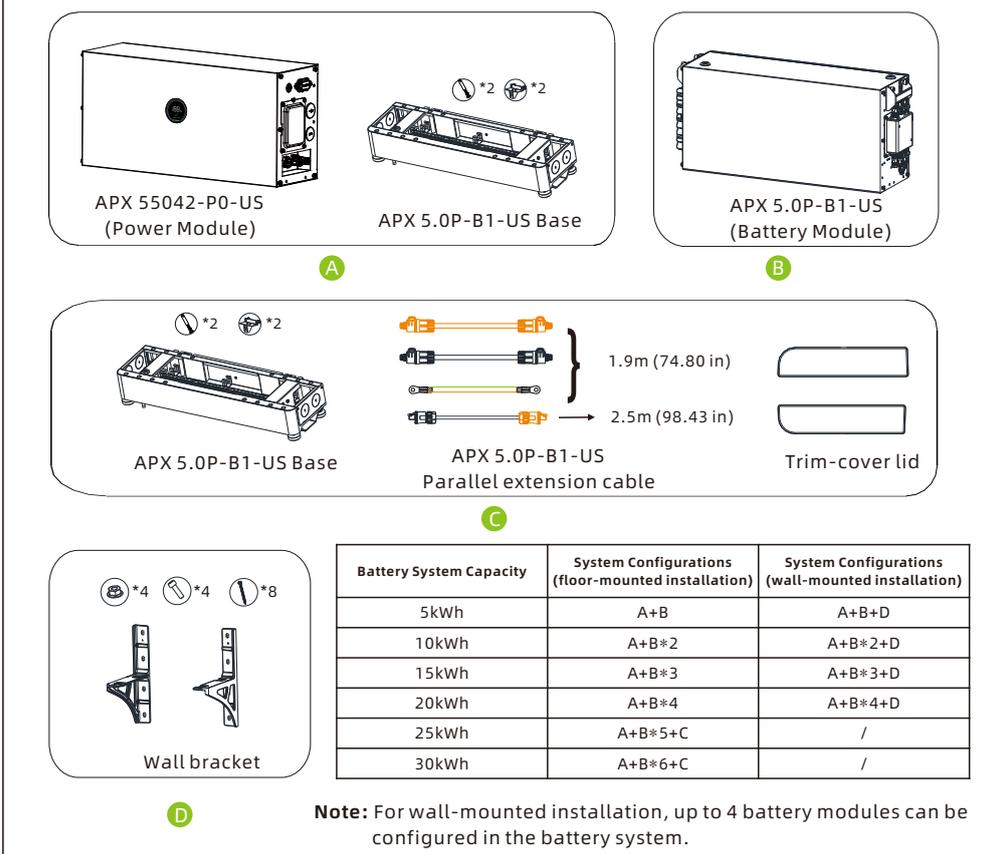
- A User Manual * 1
- B Quick Guide * 1
- C Warranty Card * 1



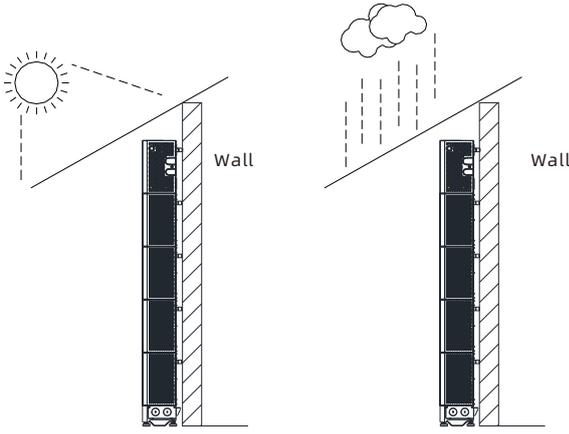
1-2 Checking the APX 5.0P-B1-US packing list



1-3 Check the APX Battery System of different capacities



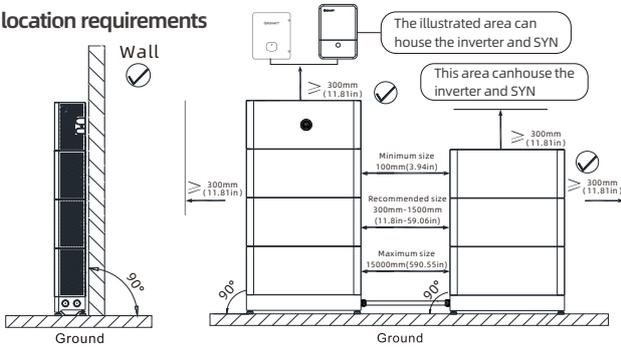
2. Installation environment requirement



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

3. Floor-mounted installation

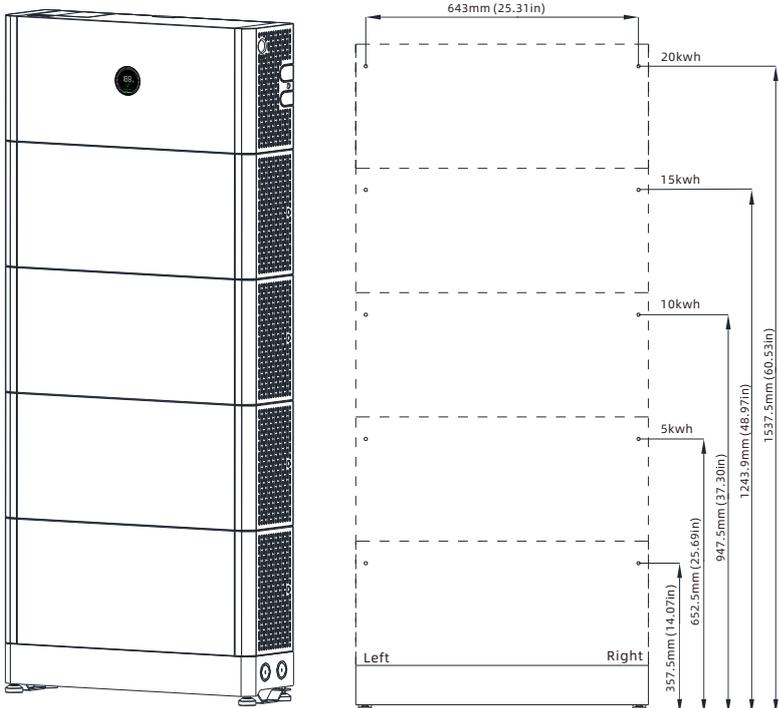
3-1 Installation location requirements



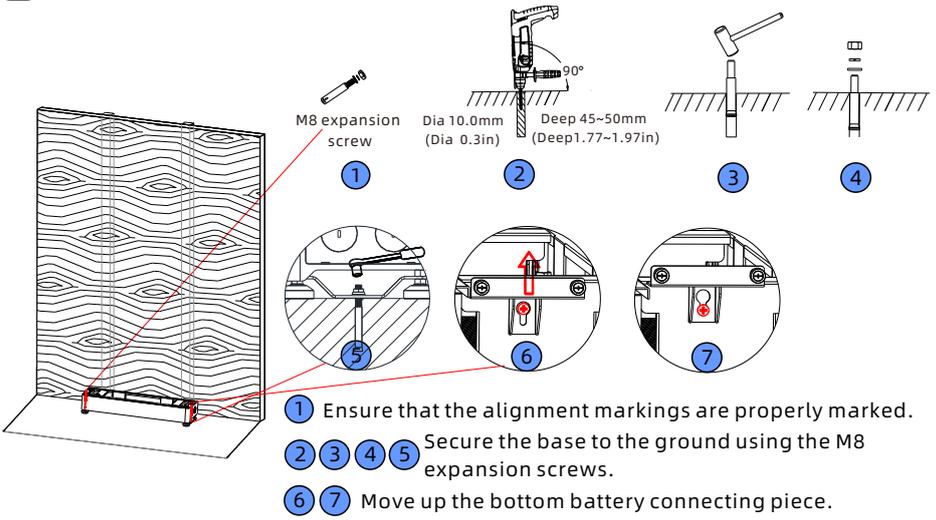
- Note:**
1. For the floor-mounted installation with the base, a maximum of six battery modules can be configured. If the number of the battery modules to be installed is greater than four, you are advised to install them in 2 columns. Up to five battery modules can be stacked in one column.
 2. You can install the inverter or SYN in areas where the clearance requirements illustrated above are met.
 3. When two stacks are installed, the distance between the two stacks is at least 100mm (based on 9540A certification safety considerations), the recommended distance is 300mm-1500mm (11.8in-59.06in) (based on the length of the matching wire of the heat sink), and the maximum distance is not more than 15000mm (590.55in) (based on the quality of communication considerations).

3-2 Installation procedure

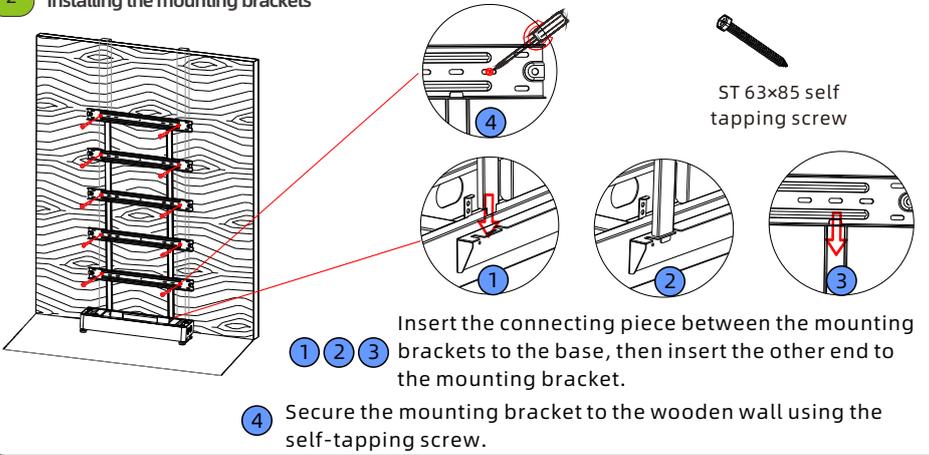
Mounting Hole Dimensions



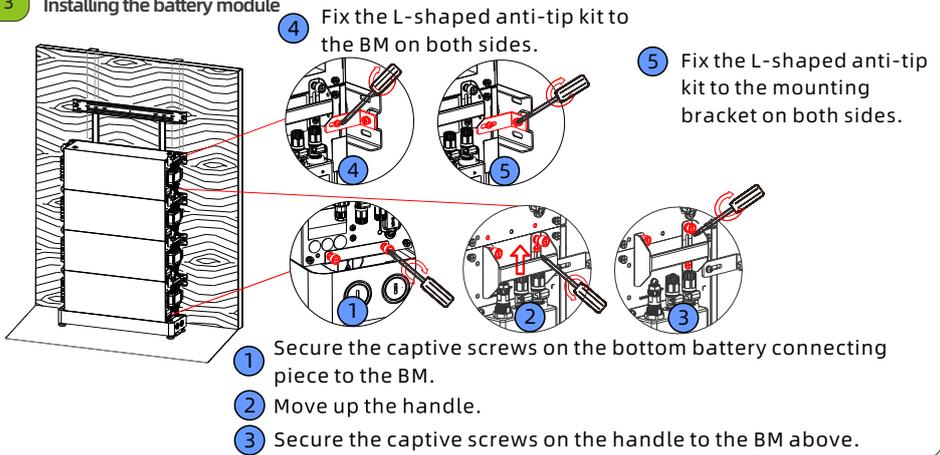
1 Securing the base



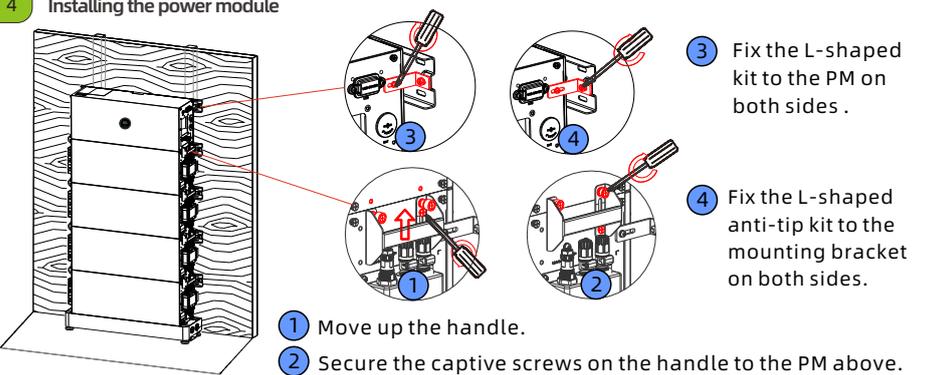
2 Installing the mounting brackets



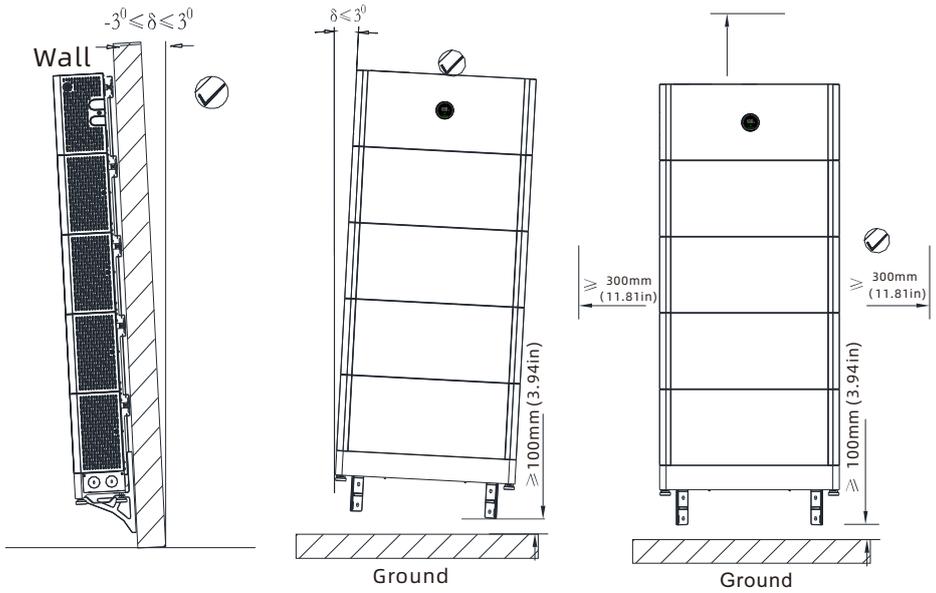
3 Installing the battery module



4 Installing the power module



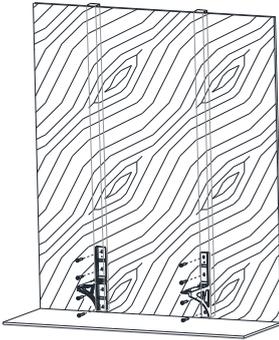
4. Wall-mounted installation



Note:

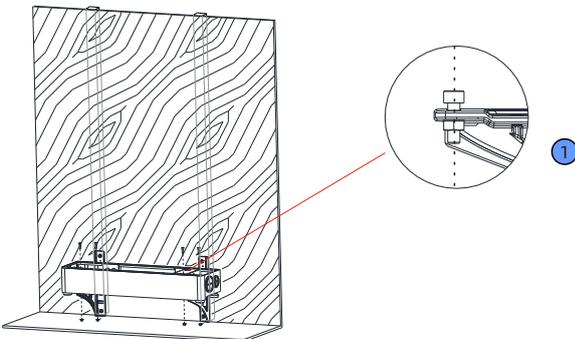
1. When mounted on the wall, a maximum of four battery modules can be stacked. Please ensure that the load-bearing capacity of the wall exceeds 280 kg (617.29 lbs).
2. You can install the inverter or SYN in areas where the clearance requirements illustrated above are met.

1 Installing the wall brackets



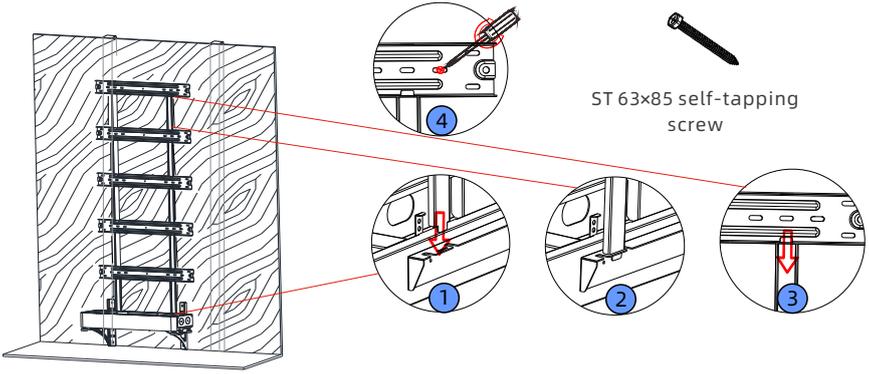
- 1 Stick the paper template for drilling holes onto the wall and keep it level. Please select the appropriate installation dimensions (12 in, 16 in, 20 in or 24 in), and mark the hole positions using a marker
- 2 Fix the mounting bracket to the wall using the M8*95 screws

2 Installing the base



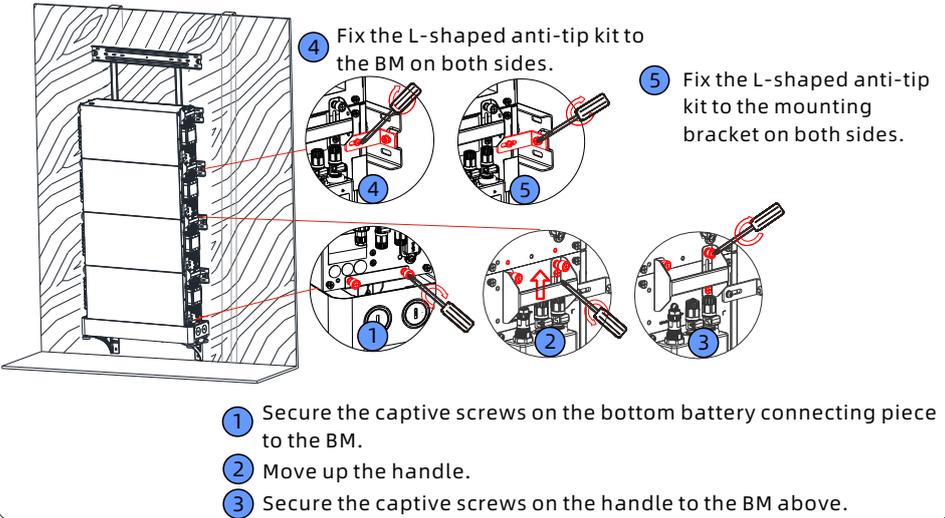
- 1 Place the base onto the mounting bracket
- 2 Insert the four M6*20 screws into the holes on the base, then tighten them with the M6*20 bolts from the bottom

3 Installing the mounting brackets



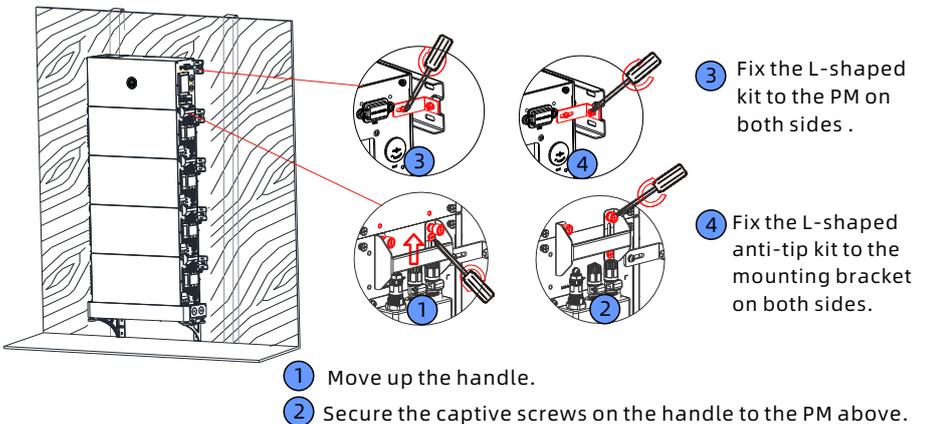
- 1 2 3 Insert the connecting piece between the mounting brackets to the base, then insert the other end to the mounting bracket.
- 4 Secure the mounting bracket to the wooden wall using the self-tapping screw.

4 Installing the battery module



- 1 Secure the captive screws on the bottom battery connecting piece to the BM.
- 2 Move up the handle.
- 3 Secure the captive screws on the handle to the BM above.
- 4 Fix the L-shaped anti-tip kit to the BM on both sides.
- 5 Fix the L-shaped anti-tip kit to the mounting bracket on both sides.

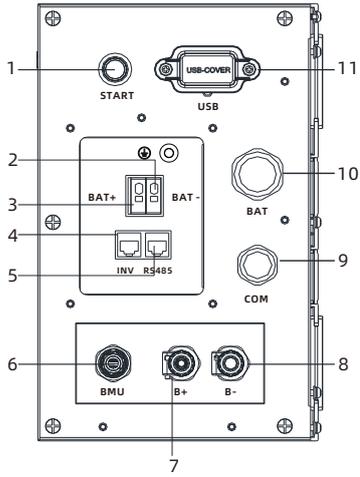
5 Installing the power module



- 1 Move up the handle.
- 2 Secure the captive screws on the handle to the PM above.
- 3 Fix the L-shaped kit to the PM on both sides.
- 4 Fix the L-shaped anti-tip kit to the mounting bracket on both sides.

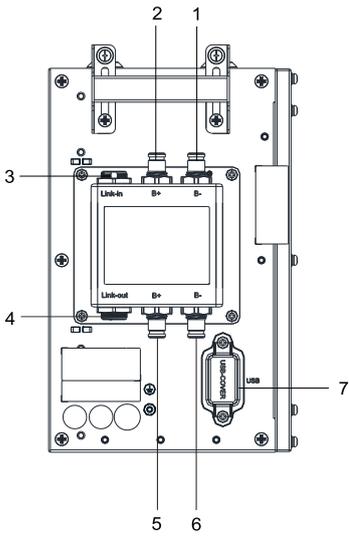
5. Cable connection

5-1 APX 55042-P0-US terminal & key description



1	START	Start key
2	BAT-	Battery negative terminal connected to the INV
3	BAT+	Battery positive terminal connected to the INV
4	INV	Communication port connected to the INV
5	Rs485	Communication port connected to another Power Module (RS485)
6	BMU	Communication port connected to the Battery Module (Link-in)
7	B+	Connect to the positive battery terminal of the Battery Module (B+)
8	B-	Connect to the negative battery terminal of the Battery Module (B-)
9	COM	Inverter communication cable routing hole
10	BAT	Battery positive/negative cable routing hole
11	USB	USB terminal

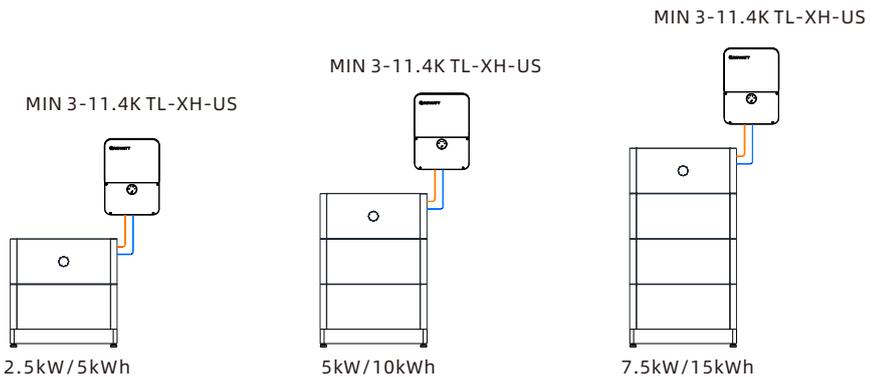
5-2 APX 5.0P-B1-US terminal description



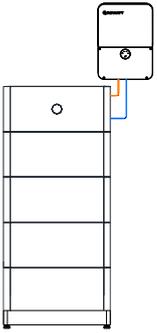
1	B-	Battery negative terminal Connect to another BM (B-) or the PM (B-)
2	B+	Battery positive terminal Connect to another BM (B-) or the PM (B-)
3	Link-in	Communication terminal Connect to another BM(Link-out) or the PM (BMU)
4	Link-out	Communication terminal Connect to another BM(Link-in)
5	B+	Battery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

5-3 Battery capacity description

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

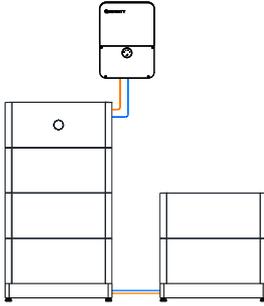


MIN 3-11.4K TL-XH-US



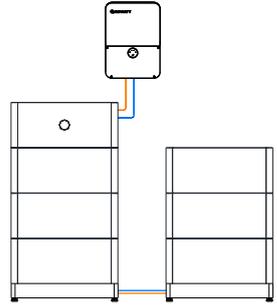
10kW/20kWh

MIN 3-11.4K TL-XH-US



12kW/25kWh

MIN 3-11.4K TL-XH-US

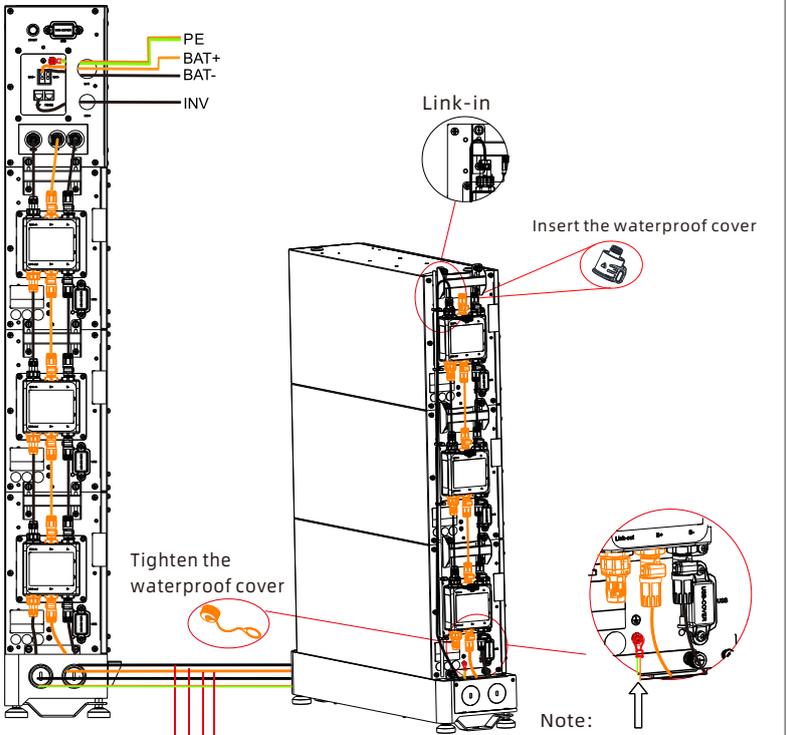


12kW/30kWh

— Power cable
— Communication cable

5-4 System wiring diagram

① Parallel wiring diagram



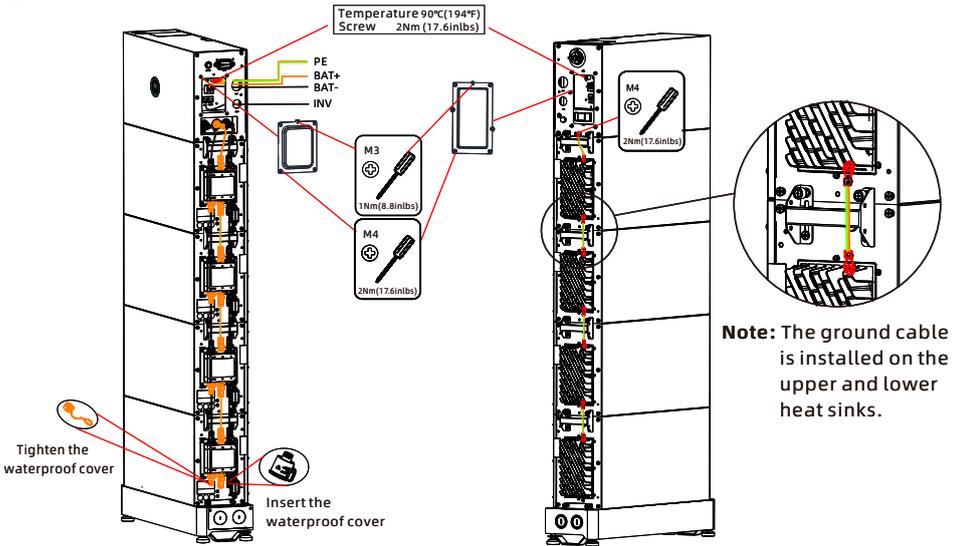
APX 5.0P-B1-US Parallel extension cable
wiring sequence:

Grounding cable ⇄ Communication cable ⇄ Power cable

Note: 1.The RJ45 connector (in orange) of the communication cable is to be connected to the Link-out port (in orange) on the battery module.

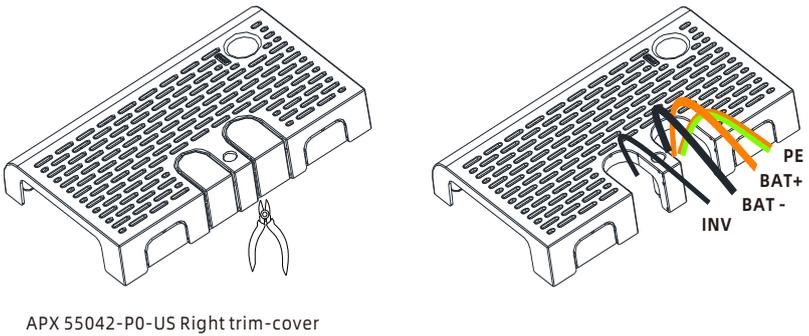
2.When wiring the communication cable, remember to tighten the protective cover of the communication cable; otherwise it might undermine the waterproof performance. (Water penetration caused by failure to do so is beyond the scope of warranty.)

② Single line wiring diagram



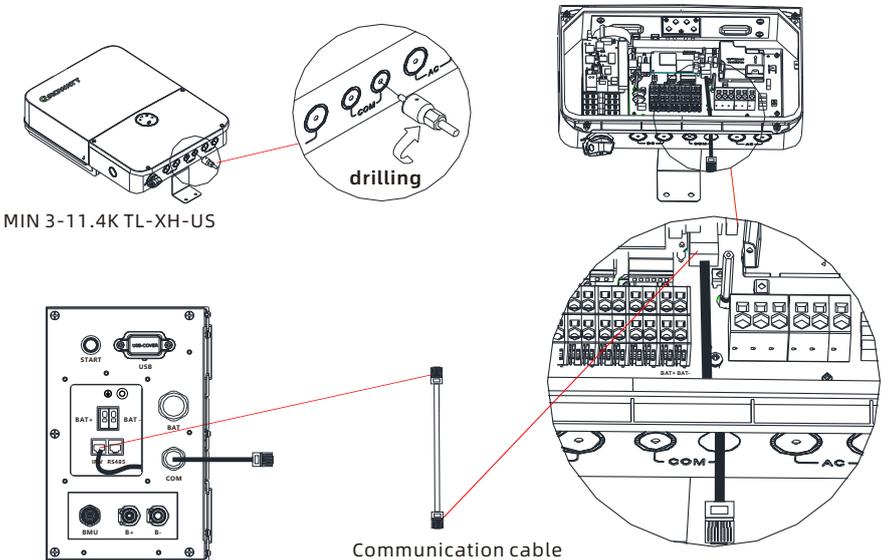
Note: It is not recommended to install a DC circuit breaker between the battery system and the INV. If you need to install a DC circuit breaker, the rated voltage of the DC breaker should be greater than or equal to 600V and the rated current should be greater than or equal to 50A. Do not operate the DC circuit breaker with power on, otherwise the machine may be damaged.

5-5 Routing cables out of the cable hole

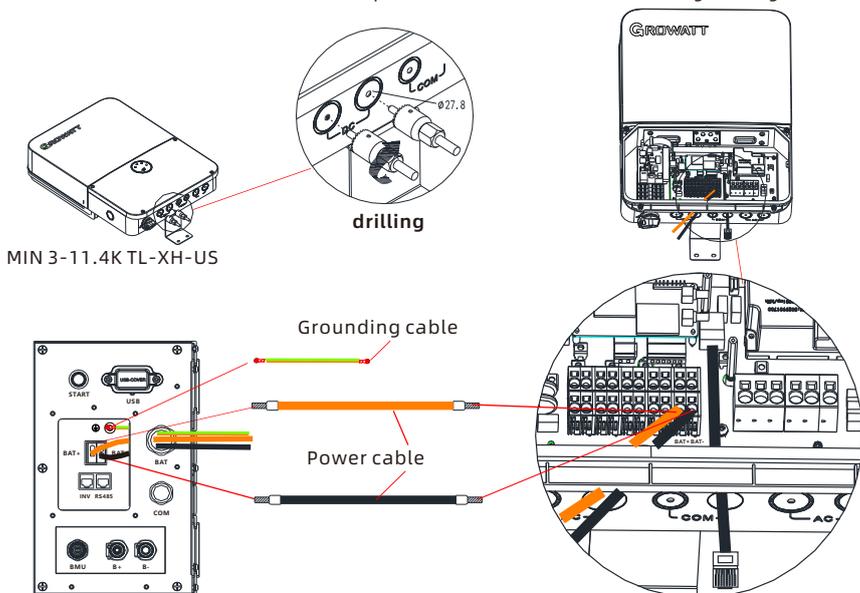


5-6 Connecting to the inverter

Note: Please be careful with the components inside the inverter during drilling



Note: Please be careful with the components inside the inverter during drilling

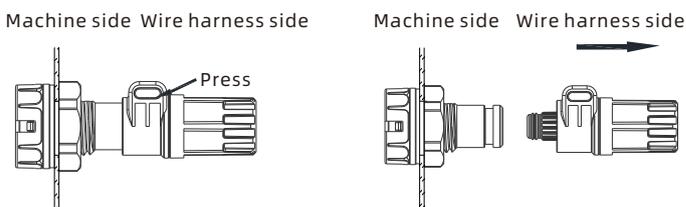


Please prepare the cables listed below before electrical connections
(The cable length should not exceed 5 m / 196.85 in.)

No	Cable name	Type	Recommended specification
1	Grounding cable	One yellow and green multi-core copper cable	AWG10sWire diameters≤AWG8
2	Power cable	Red and black multi-core copper cables	AWG10sWire diameters≤AWG8
3	Communication cable	CAT5E suggested	/

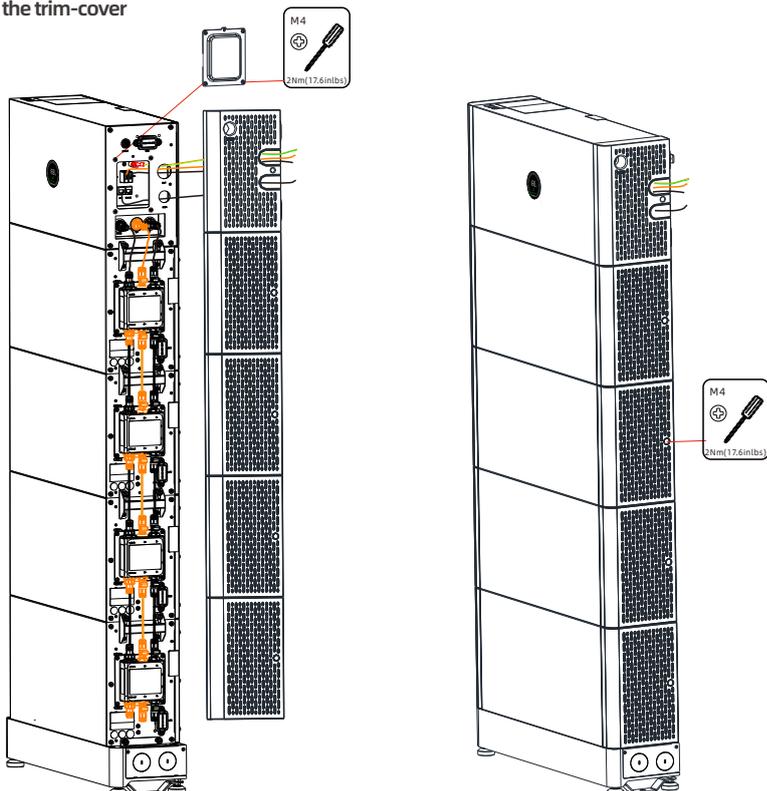
6.Terminal connection

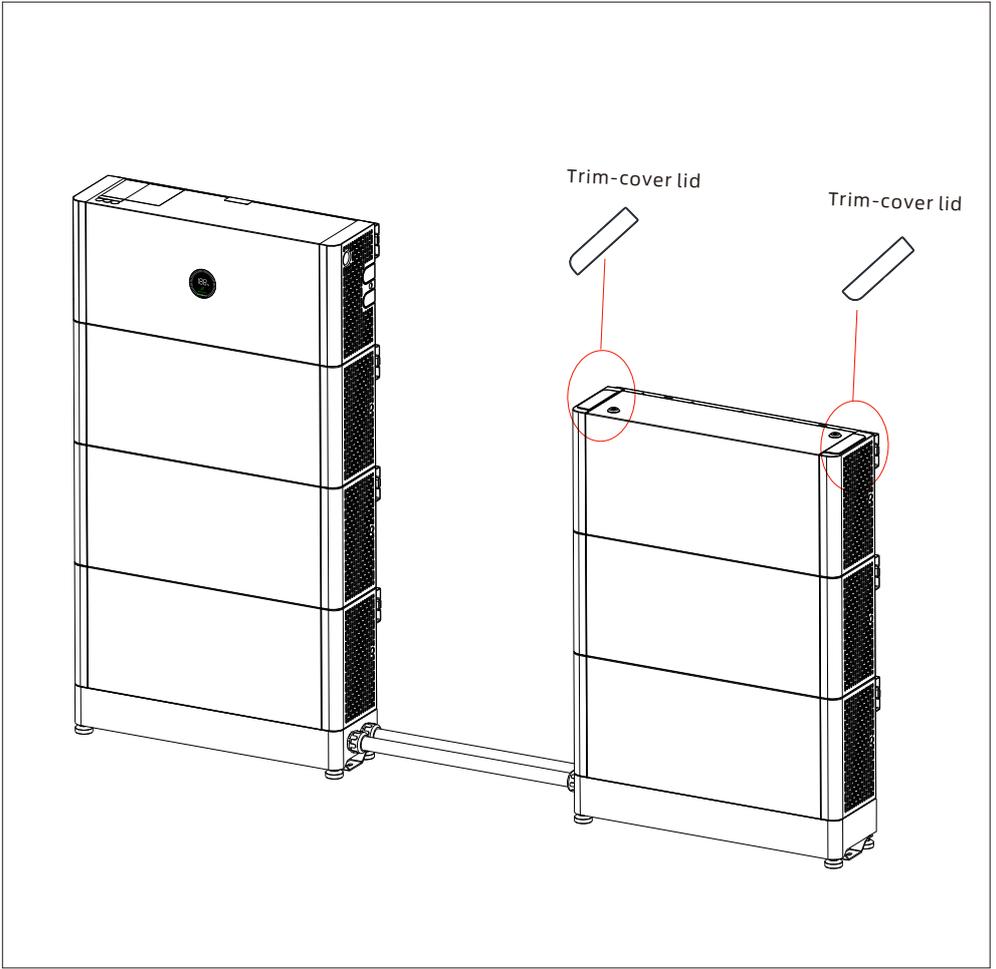
6-1 Power terminal



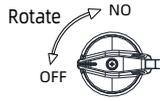
Note: Press the position indicated in the figure above before disconnecting the power terminal.

6-2 Installing the trim-cover





7. Powering on/off the battery system

<p>Power on</p>	<p>1. Turn on the DC Switch 2. Press the Start key for more than 5S</p>	
<p>Power off</p>	<p>Turn off the DC Switch (wait for over 90S)</p>	

Note:

- Before performing maintenance and repair work, ensure that the AC circuit breaker, DC switch of the INV, and DC switch of the APX Power module are in the OFF position. **Wait for 15 minutes after the system is powered OFF and make sure that the LOGO (GROWATT) indicator on the APX is off.** Do not perform any operations until the system has completely shut down.
- The content of this document is continually reviewed and amended, where necessary. Growatt 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. Growatt reserves all rights for final interpretation.

8. Service and contact

Growatt USA, Inc

9227 Reseda Blvd, #435 Northridge, CA 91324, USA.

+1-866-686-0298 usaservice@ginverter.com

<https://us.growatt.com>



Download
Manual



🔍 Growatt New Energy

GR-UM-321-A-02 (PN:044.0120002)