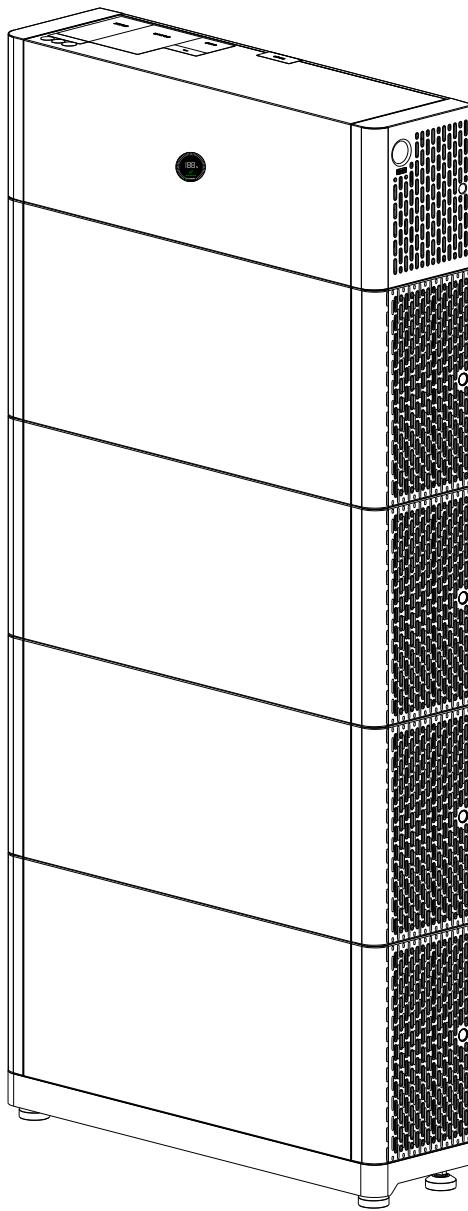


**GROWATT**

**Quick Installation Manual**  
**APX 5.0~30.0P-S0**



## Environmental conditions



Max.+50°C

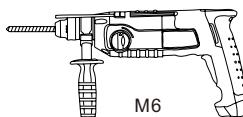


Min.-10°C



RH.+5%~+95%

## Installation tools



M6



Hexagon M6 2N · m

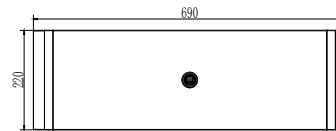


Cross M4 1N · m

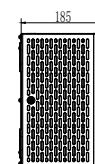
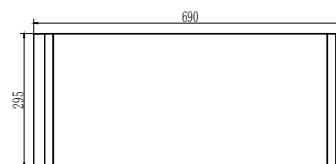
## System size

Unit:mm

APX 55027-P0  
(Power Module)



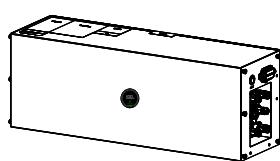
APX 5.0P-B1  
(Battery Module)



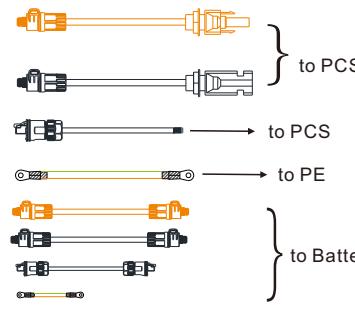
## 1.Check

### 1-1 Check APX 55027-P0 List

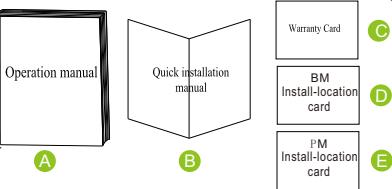
Please note the following accessories



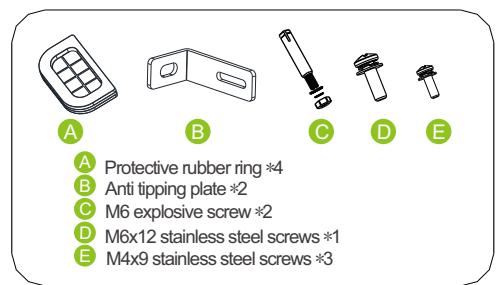
APX 55027-P0 (PM)



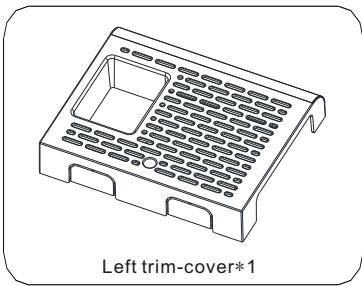
System cable



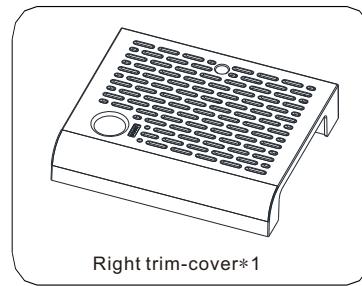
- A** Operation Manual \*1
- B** Quick installation manual \*1
- C** Warranty Card \*1
- D** BM Install-location card \*1
- E** PM Install-location card \*1



- A** Protective rubber ring \*4
- B** Anti tipping plate \*2
- C** M6 explosive screw \*2
- D** M6x12 stainless steel screws \*1
- E** M4x9 stainless steel screws \*3

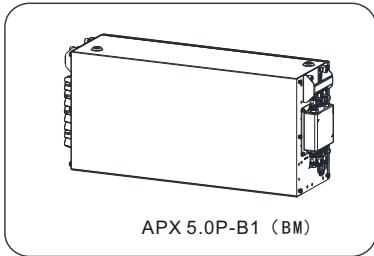


Left trim-cover\*1

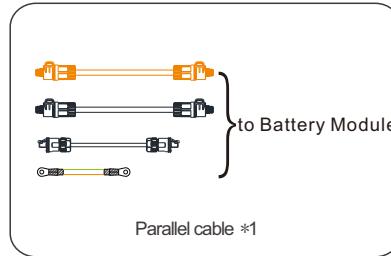


Right trim-cover\*1

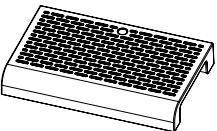
### 1-2 Check APX 5.0P-B1 List



APX 5.0P-B1 (BM)



Parallel cable \*1



Trim-cover \*2

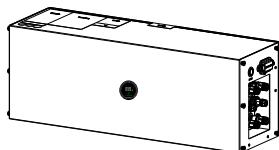


Warranty card \*1



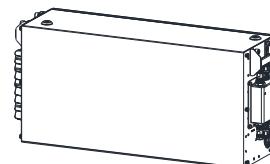
**A** Anti tipping plate \*2  
**B** M6 explosive screw \*2  
**C** M4x9 stainless steel screws \*3

### 1-3 Check accessories



APX 55027-P0

**A**



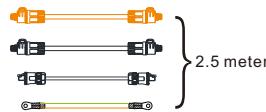
APX 5.0P-B1

**B**



Wall bracket

**C**



APX 5.0P-B1 Parallel extension cable

**D**

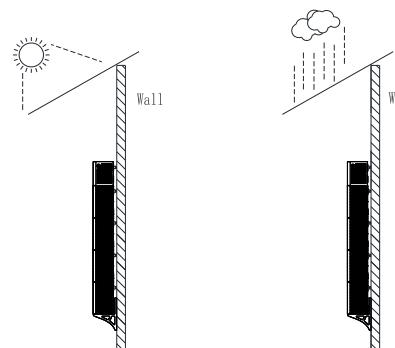


APX 5.0P-B1 Base

**E**

Battery Capacity	Floor Installation Compound Mode	Wall-Mounted Installation Compound Mode
5kWh	A+B+E	A+B+C
10kWh	A+B*2+E	A+B*2+C
15kWh	A+B*3+E	A+B*3+C
20kWh	A+B*4+E	A+B*4+C
25kWh	A+B*5+E*2+D	A+B*5+C*2+D
30kWh	A+B*6+E*2+D	A+B*6+C*2+D

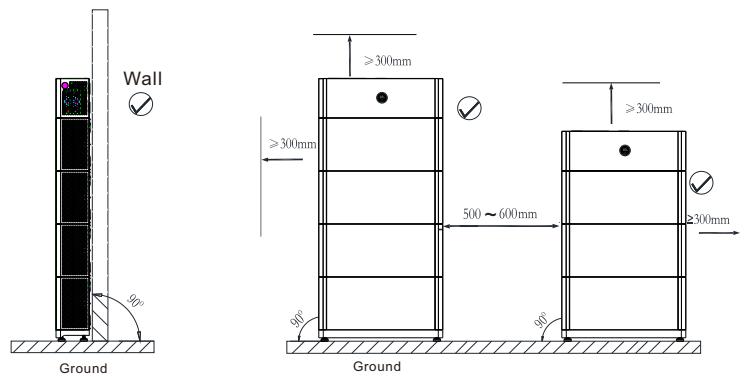
## 2. Install Environment



**Note:** Build sun&rain shade for modules to avoid the direct exposure of sunlight and rain.

## 3. Floor installation with base

### 3-1 Installation Location Requirements

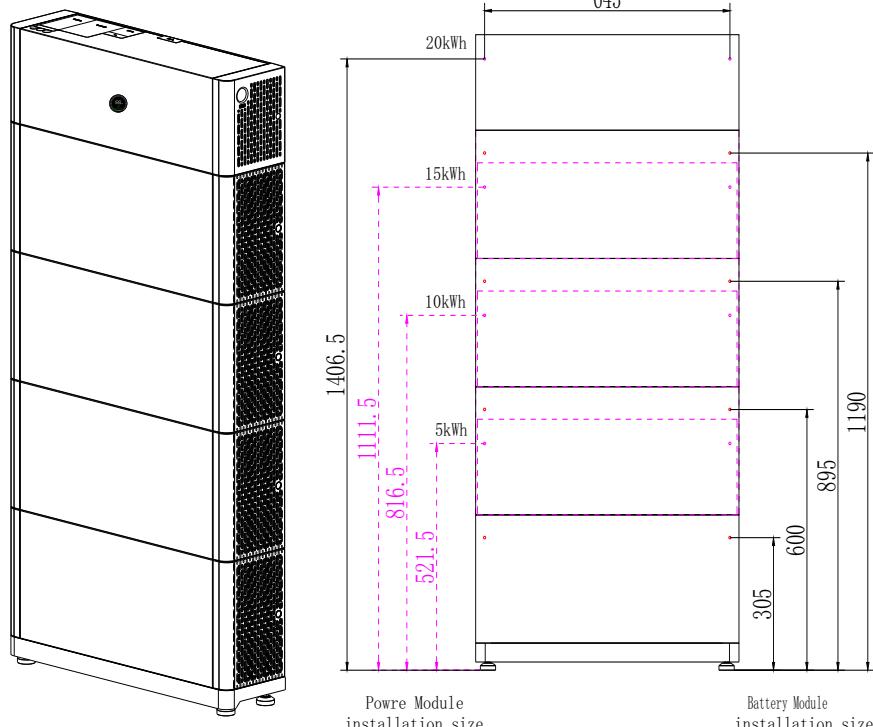


**Note:** For floor installation with base, the maximum stack number of the battery is six. But if the battery number is greater than four, we recommend stacking them in two lines .

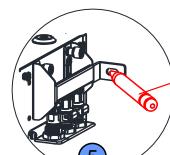
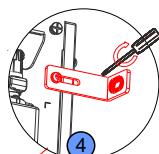
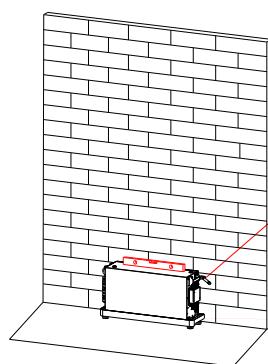
### 3-2 Installation Procedure

Unit:mm

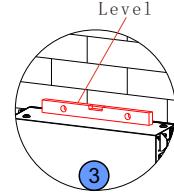
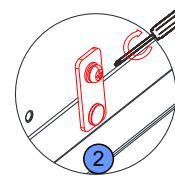
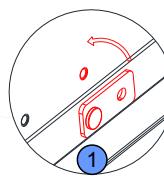
Mounting Hole Dimensions



1



marking pen

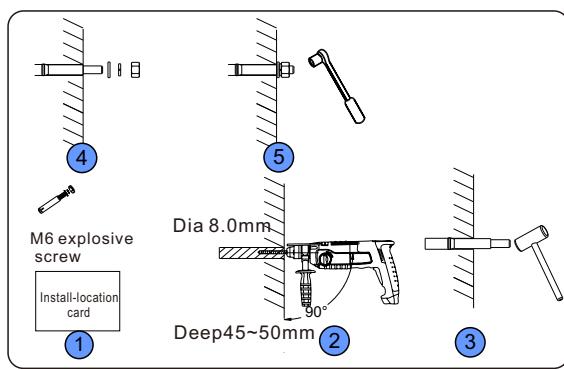
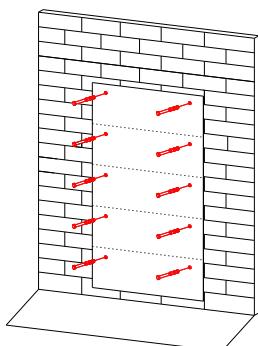


Level

- ① ② Install the connecting pieces on both sides and tighten the two screws .  
 ④ Install the anti tipping plate on both sides and tighten the two screws .

- ③ Keep the level of Battery Module  
 ⑤ make a mark on wall to punch then fix the module

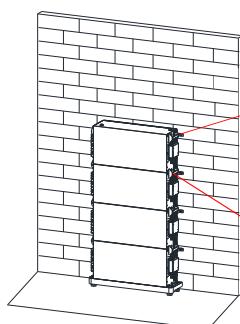
2



- ① Install-location card ensures alignment marks on the wall.  
 ② ③ ④ ⑤ fix the M6 explosive screw in the wall.

3

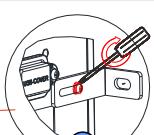
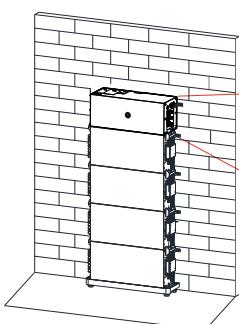
- ③ Install the connecting pieces on both sides and tighten the two screws .



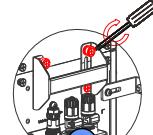
- ④ secure the module on both sides to the wall.

- ① Loosen two screw, move up 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 .



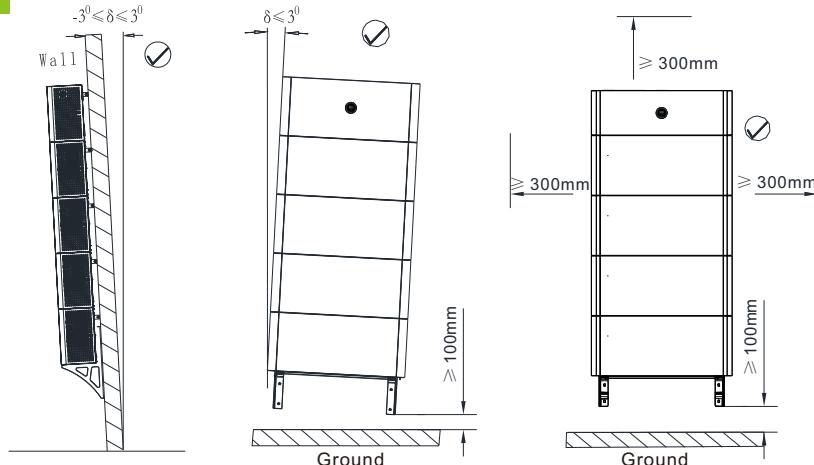
- ④ secure the module on both sides to the wall.

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

## 4. Wall-Mounted Installation Process

4-1

### Installation Location Requirements

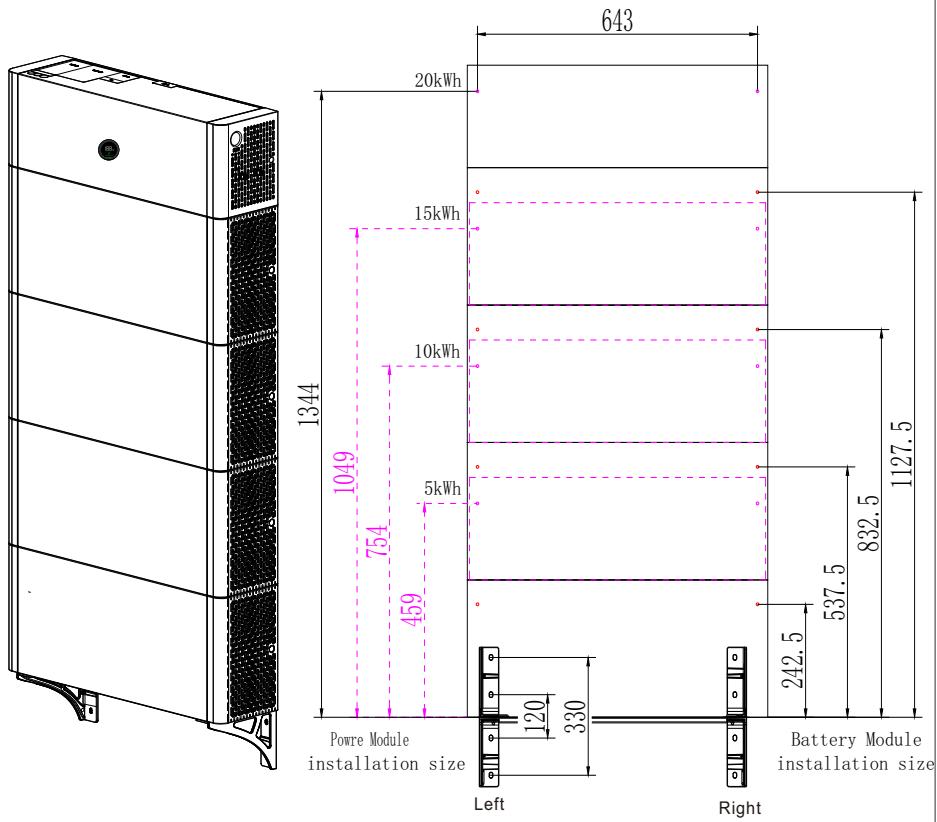


**Note:** The number of wall-mount installations should not exceed five.  
Please make sure that the weight capacity of wall should exceed 280kg.

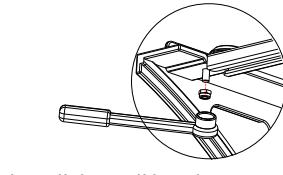
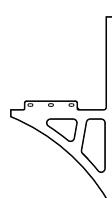
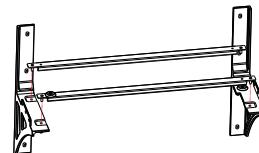
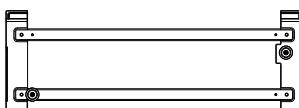
4-2 Installation Procedure

Unit:mm

### Mounting Hole Dimensions

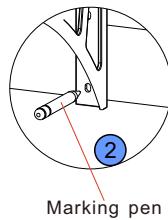
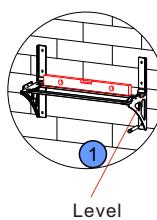
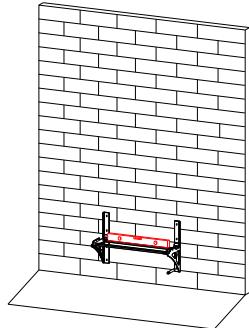


1



install the wall bracket

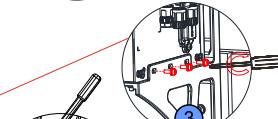
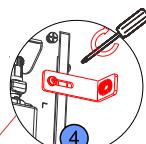
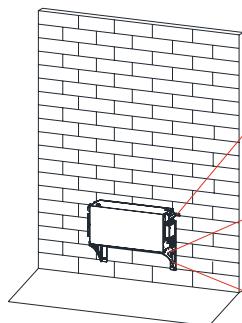
2



Dia 8.0mm  
Deep 45~50mm  
90°

- 1 Keep the level of Battery Module.
- 2 make a mark on wall to mounting holes fixing module.
- 3 mounting eight hole.

3

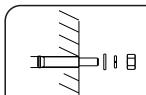
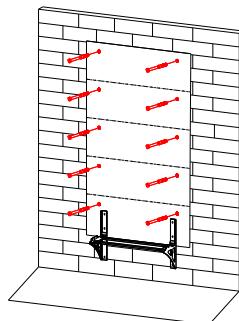


- 4 Install the anti tipping plate on both sides and tighten the two screws.

1 2 fix the bracket on the wall.

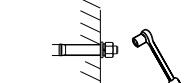
3 fix the battery module on the bracket.

4



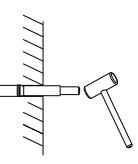
M6 explosive screw

Install-location card



Dia 8.0mm

Deep 45~50mm

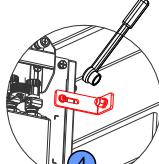
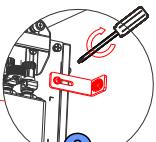
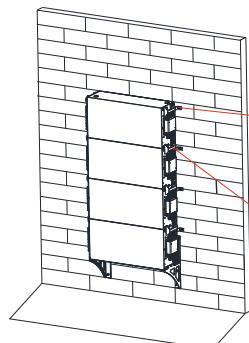


1 Install-location card ensures alignment marks on the wall.

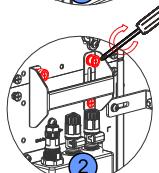
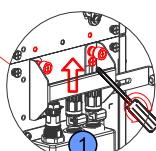
2 3 4 5 Fix the M6 explosive screw in the wall.

5

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



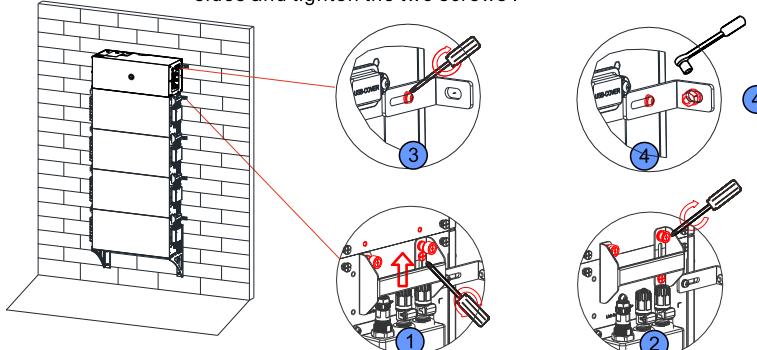
4 secure the module on both sides to the wall



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

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

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

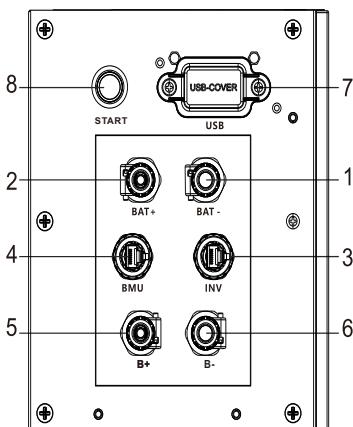


① Loosen two screws, move up handle on both sides.

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

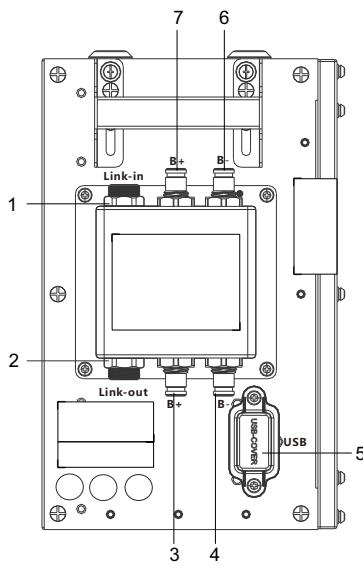
## 5.Wire Connection

### 5-1 APX 55027-P0 Connection end face introduction



1	<b>BAT -</b>	Battery negative terminal to PCS
2	<b>BAT +</b>	Battery positive terminal to PCS
3	<b>INV</b>	Inverter communication to PCS
4	<b>BMU</b>	Battery module communication to battery( <b>Link-in</b> )module
5	<b>B+</b>	Battery module positive terminal to battery( <b>B+</b> ) module
6	<b>B-</b>	Battery module negative terminal to battery( <b>B-</b> ) module
7	<b>USB</b>	USB terminal
8	<b>Start</b>	Start key

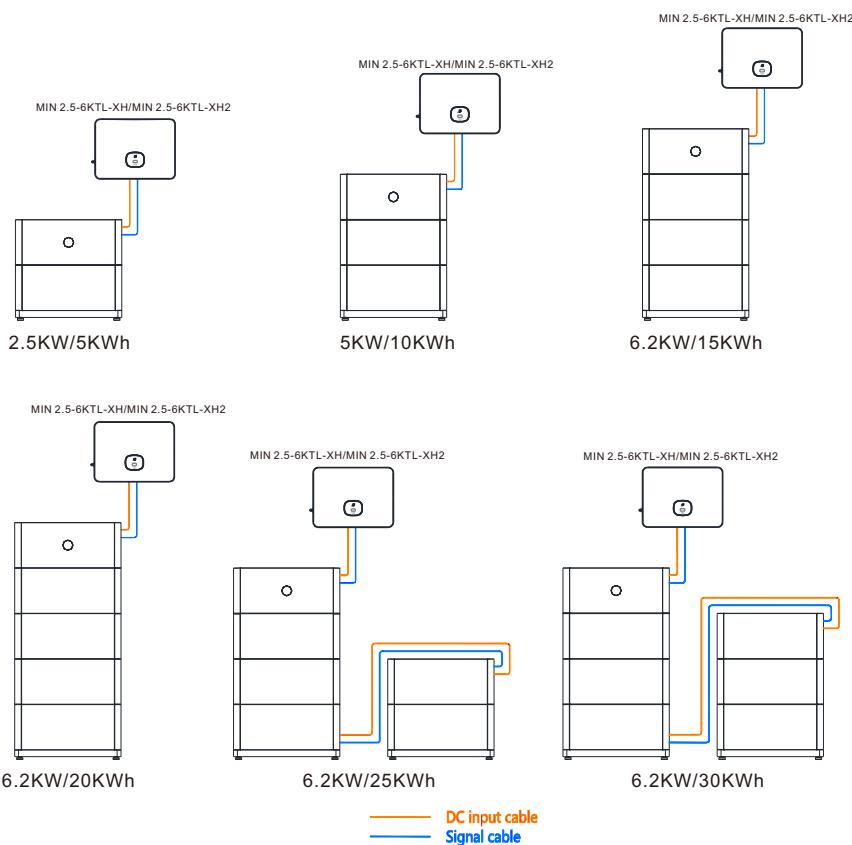
### 5-2 APX 5.0P-B1 Connection end face introduction



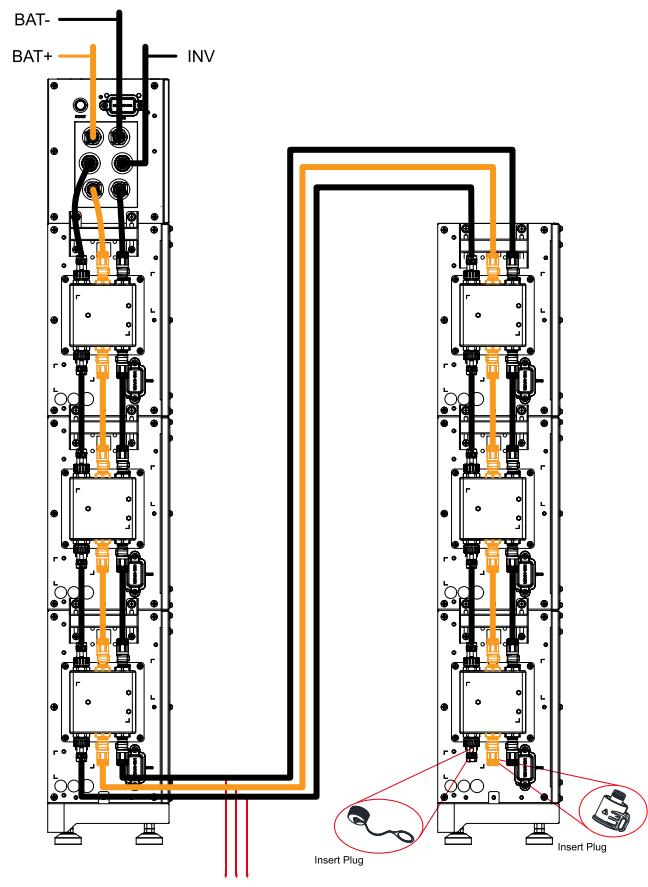
1	<b>Link-in</b>	Link-in communication to another battery( <b>Link-out</b> ) or power module( <b>BMU</b> )
2	<b>Link-out</b>	Link-out communication to another battery( <b>Link-in</b> ) module
3	<b>B+</b>	Battery positive terminal to another battery( <b>B+</b> ) module
4	<b>B-</b>	Battery negative terminal to another battery ( <b>B-</b> ) module
5	<b>USB</b>	USB terminal
6	<b>B-</b>	Battery negative terminal to another battery( <b>B-</b> ) or power module ( <b>Module-</b> )
7	<b>B+</b>	Battery positive terminal to another battery( <b>B+</b> ) or power module ( <b>Module+</b> )

### 5-3 Battery Capacity Description

The battery supports power and capacity expansion. Two power control modules can be connected in parallel. One power control module supports a maximum of four battery expansion modules.

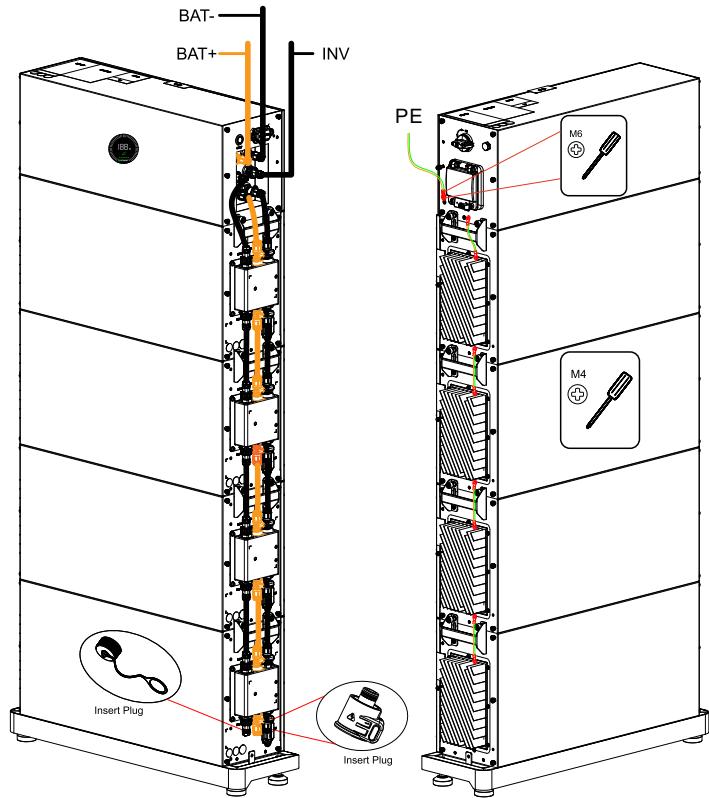


### 5-4 Diagram of wiring connection



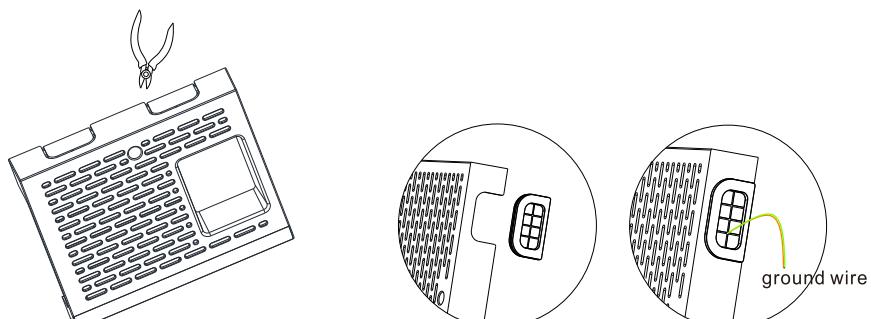
wire connection sequence:

ground cable → communication cable → power cable

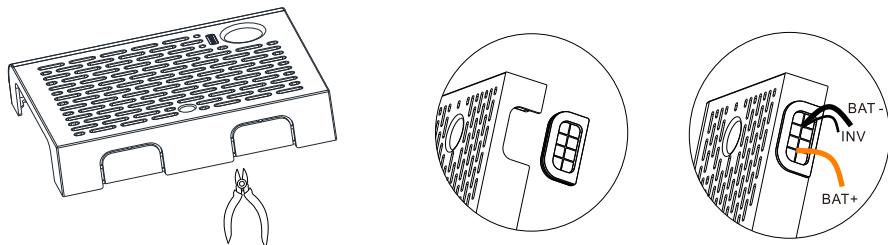


**Note:** It is not recommended to install a DC circuit breaker between the battery system and the PCS, if you want to install a DC circuit breaker with rated working voltage greater than 600V and rated working current greater than 63A, do not operate the DC circuit breaker with power on, otherwise the machine may be damaged.

### 5-5 Routing Cables Out of the Cable Hole



APX 55027-P0 Left trim-cover

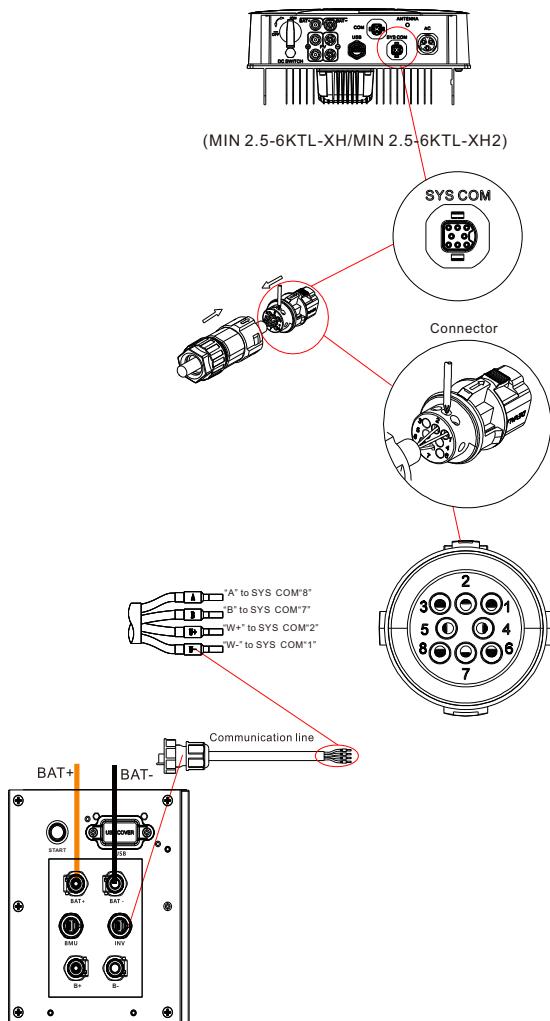


APX 55027-P0 Right trim-cover

**5-6**

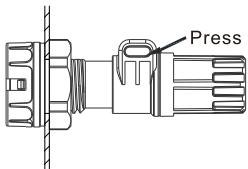
## Communication port connection

APX 5.0-30.0P-S0			(MIN 2.5-6KTL-XH/MIN 2.5-6KTL-XH2)		
Silk screen	Terminal serial number	Definition	Silk screen	Terminal serial number	Definition
INV	1	WAKE-(W-)	SYS COM	1	Enable-
	2	WAKE+(W+)		2	Enable+
	7	RS485_B(B)		7	BAT_B
	8	RS485_A(A)		8	BAT_A

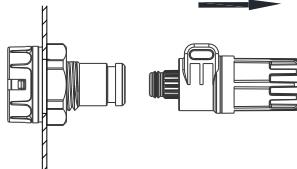
**6.Termination Connection****6-1**

## Power terminal

Battery side      Wire harness side

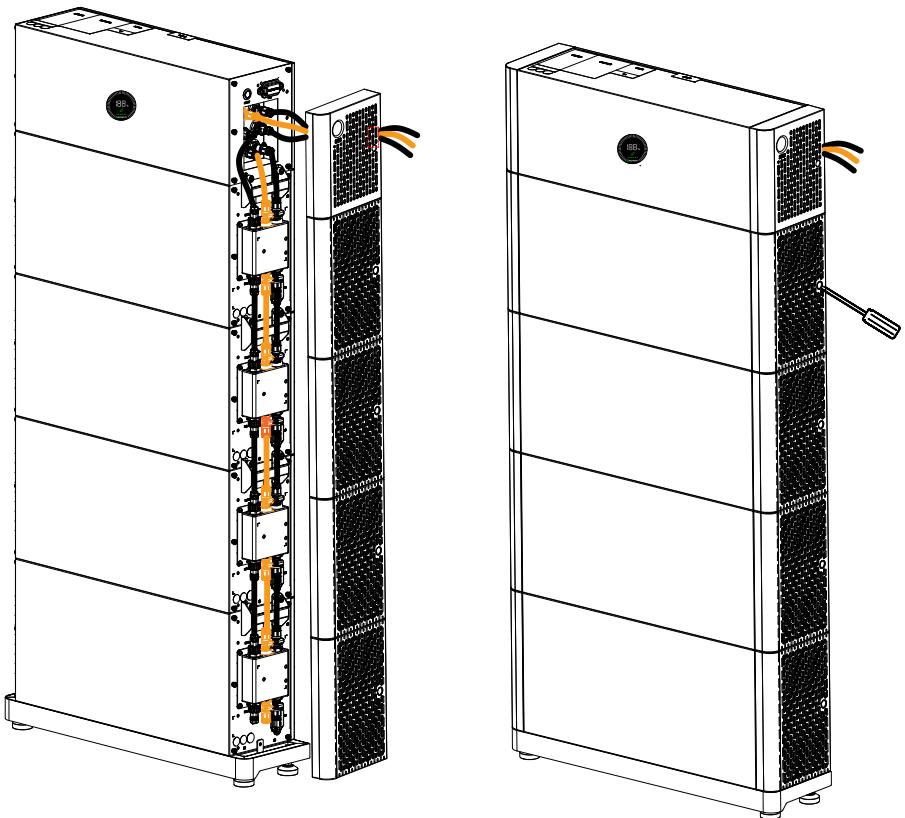


Battery side      Wire harness side

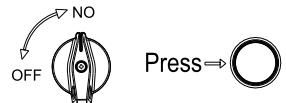
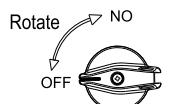


**Note:** Press the position indicated in the figure above before disconnecting the power terminal.

## 6-2 Install Trim-cover



## 7.Key operation

Power on	1.Turn on DC Switch 2.Press the start key more than 5S	
System off	Turn off DC Switch (waiting more than 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 on and make sure that the LOGO (GROWATT) 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 and module to start the system.

## 8.Service and contact

### Shenzhen Growatt New Energy Co., Ltd

4-13/F, Building A, Sino-German(Europe) Industrial Park,  
Hangcheng Ave, Bao'an District, Shenzhen, China

+86 755 2747 1942 service@ginverter.com

W:www.ginverter.com



Download Manual

Growatt New Energy

GR-UM-379-A-00