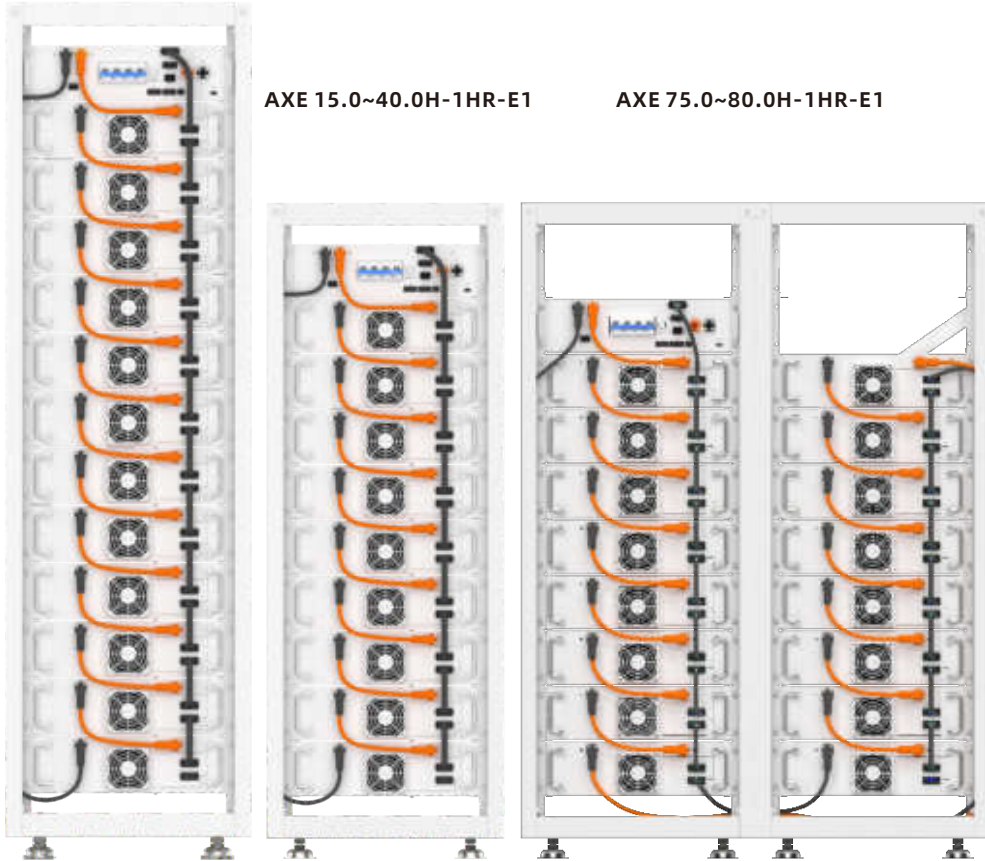
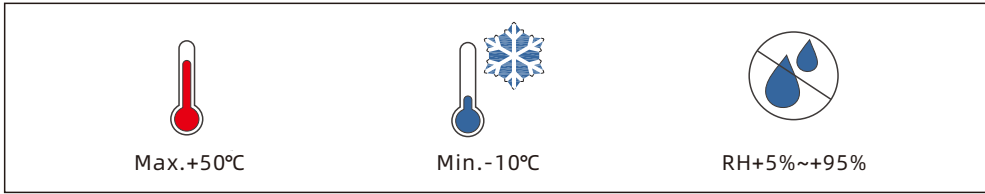


Quick Guide

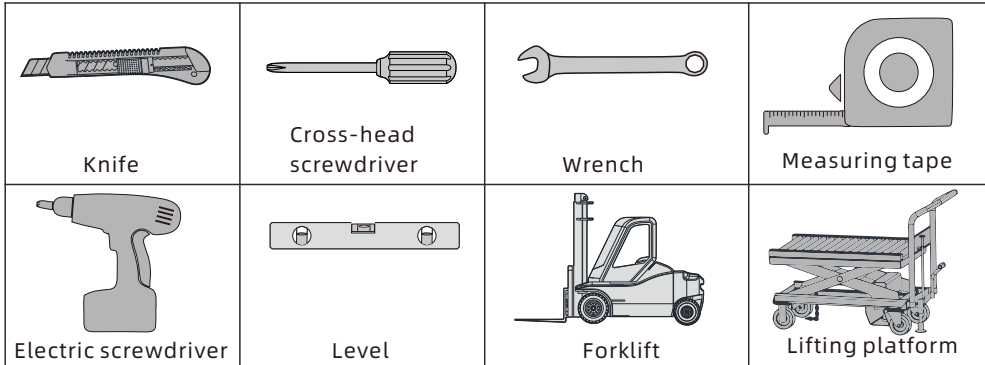
AXE 45.0~60.0H-1HR-E1



Installation environment

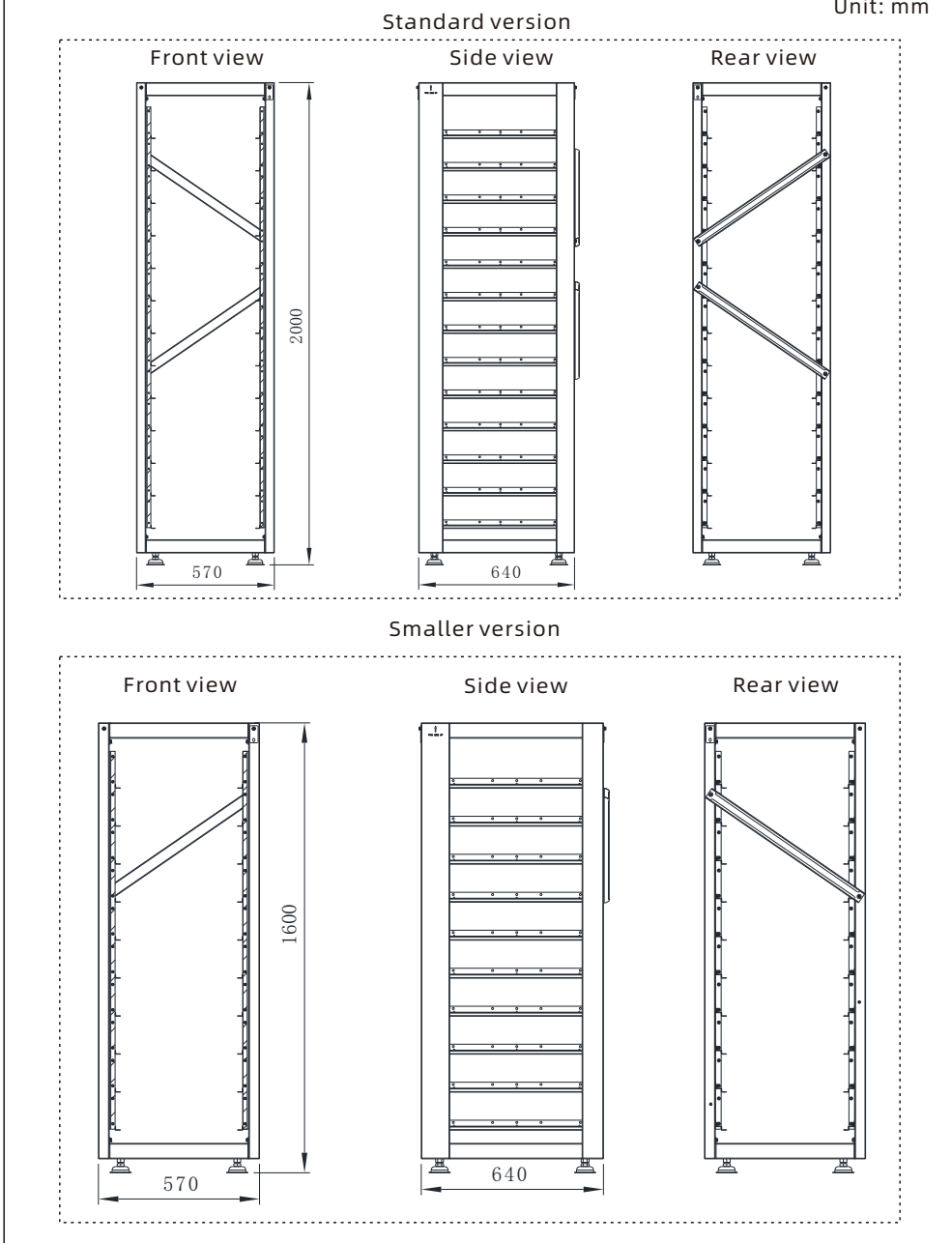


Installation tools

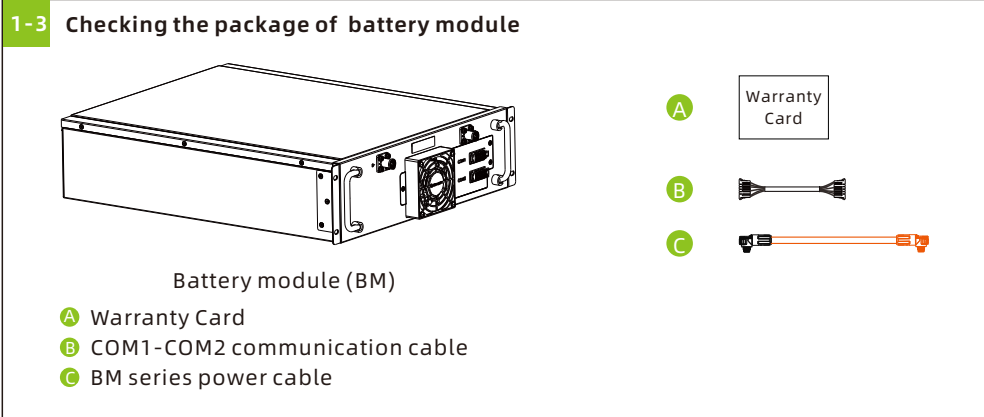
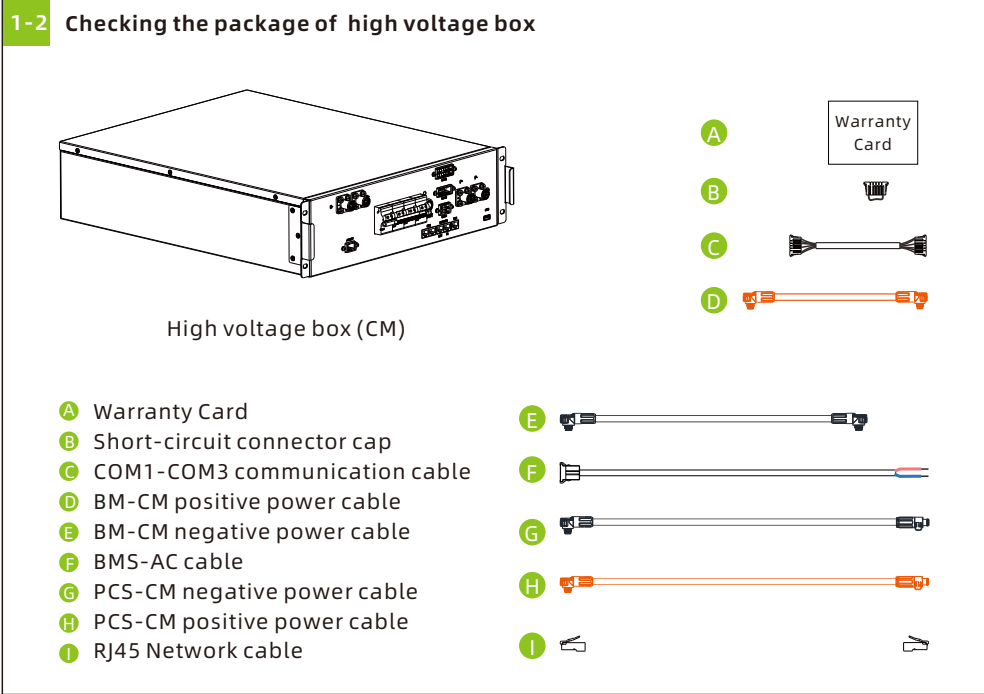
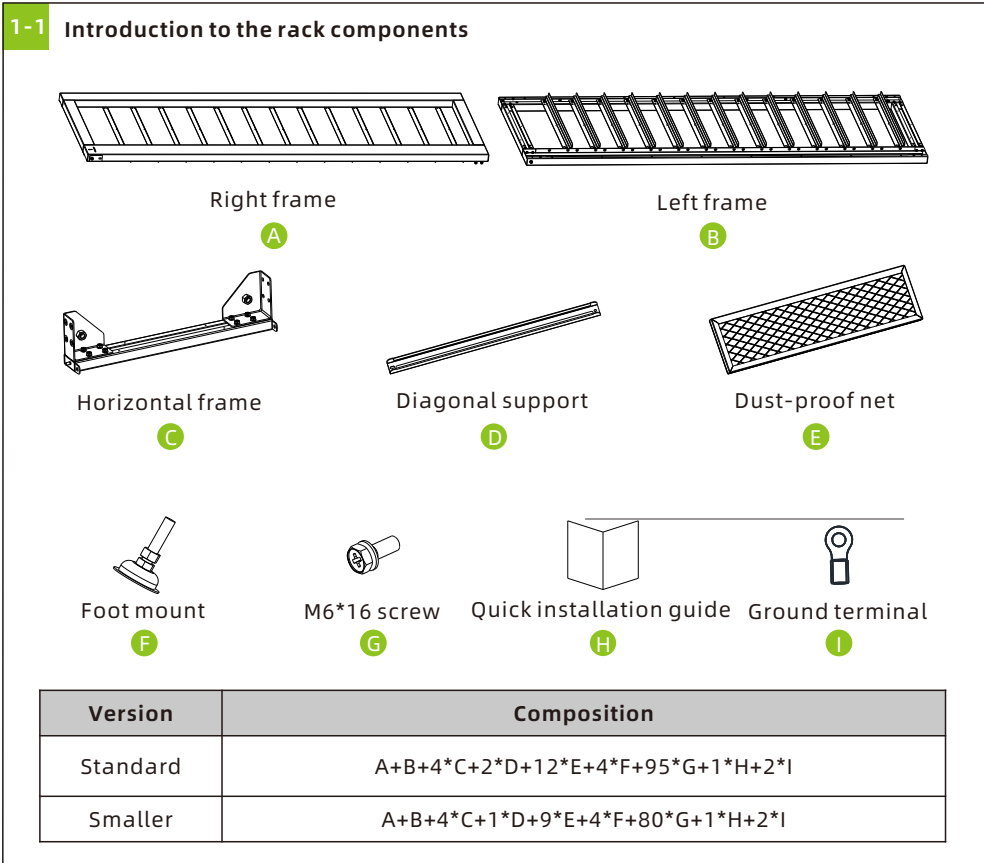


Appearance & Dimensions

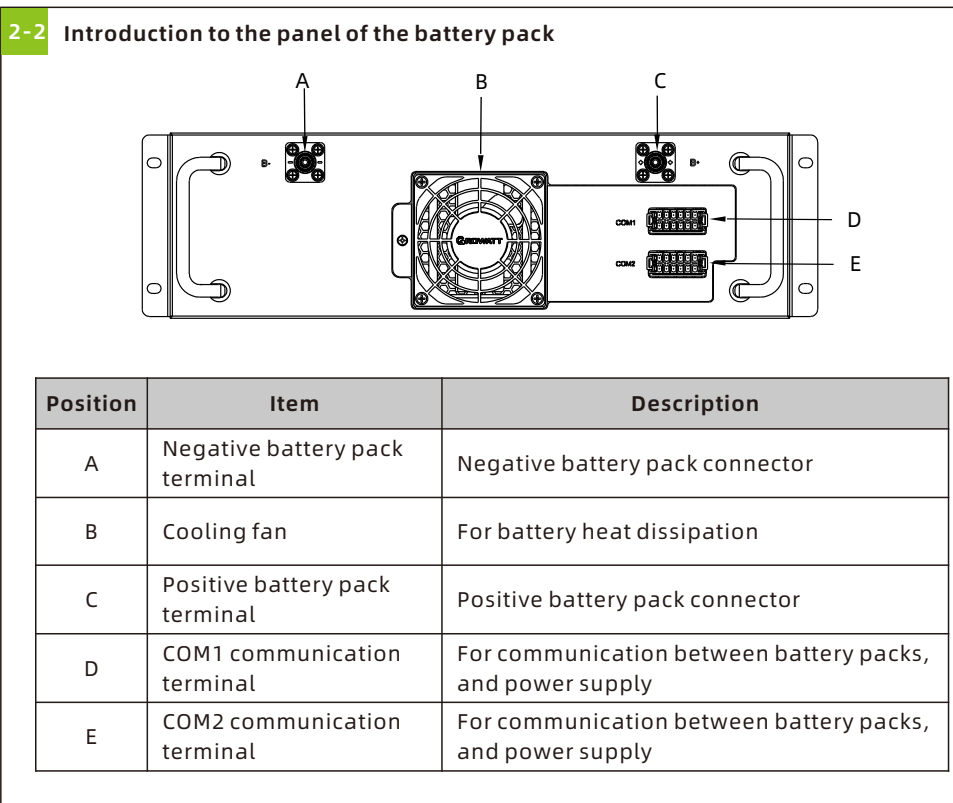
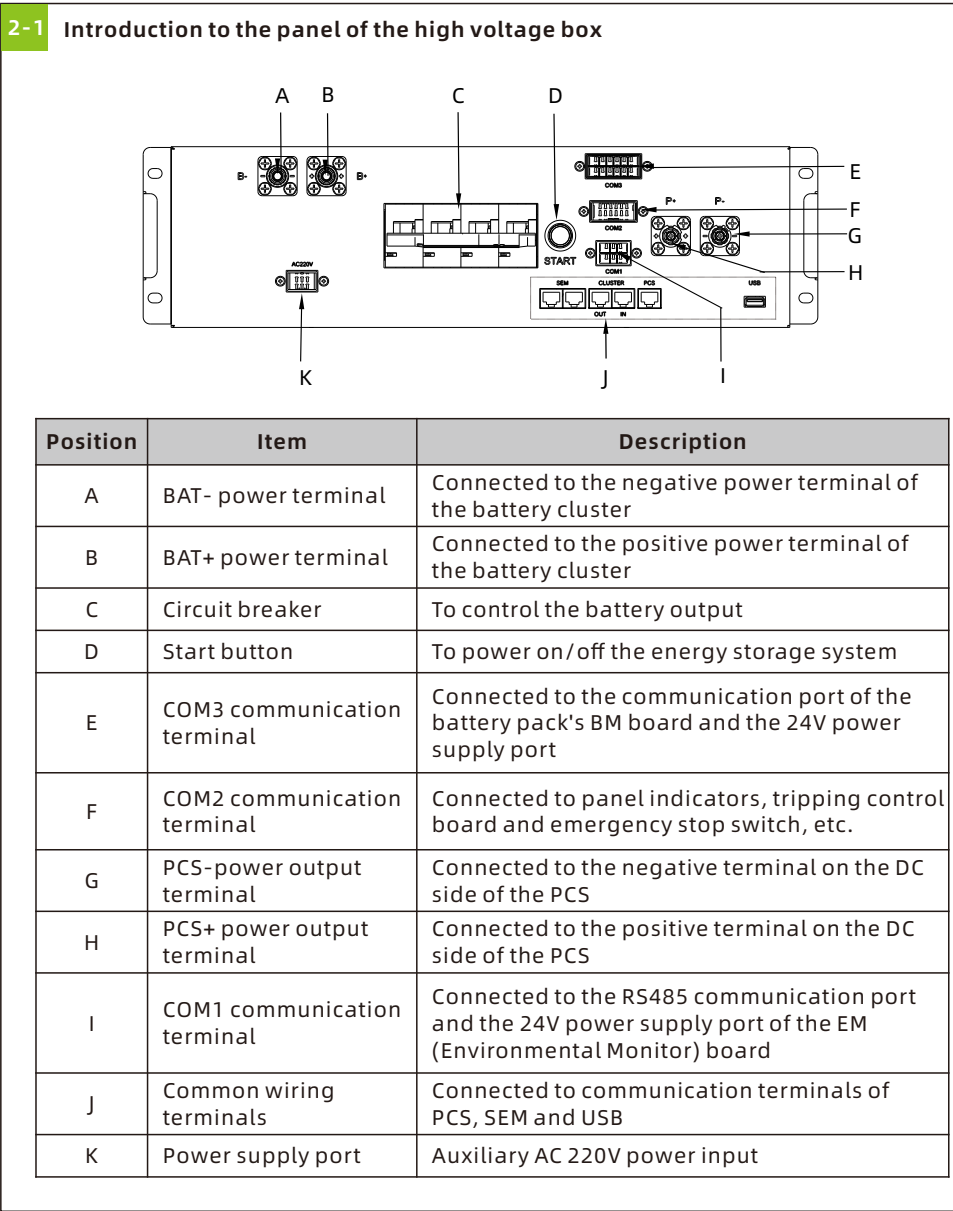
This battery rack comes in two versions: for the standard version, up to 12 battery modules can be installed; for the smaller version, a maximum of 9 battery modules can be installed.



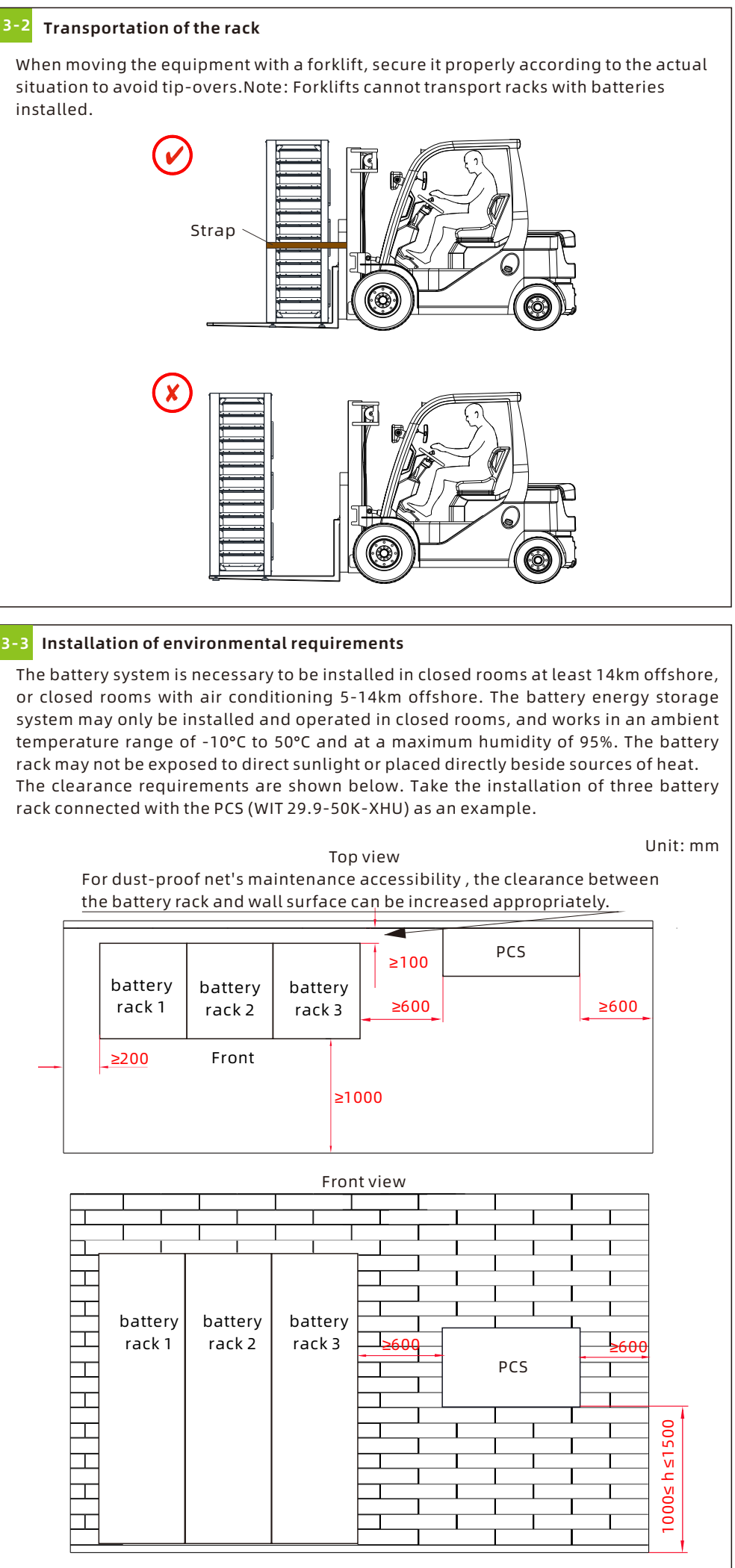
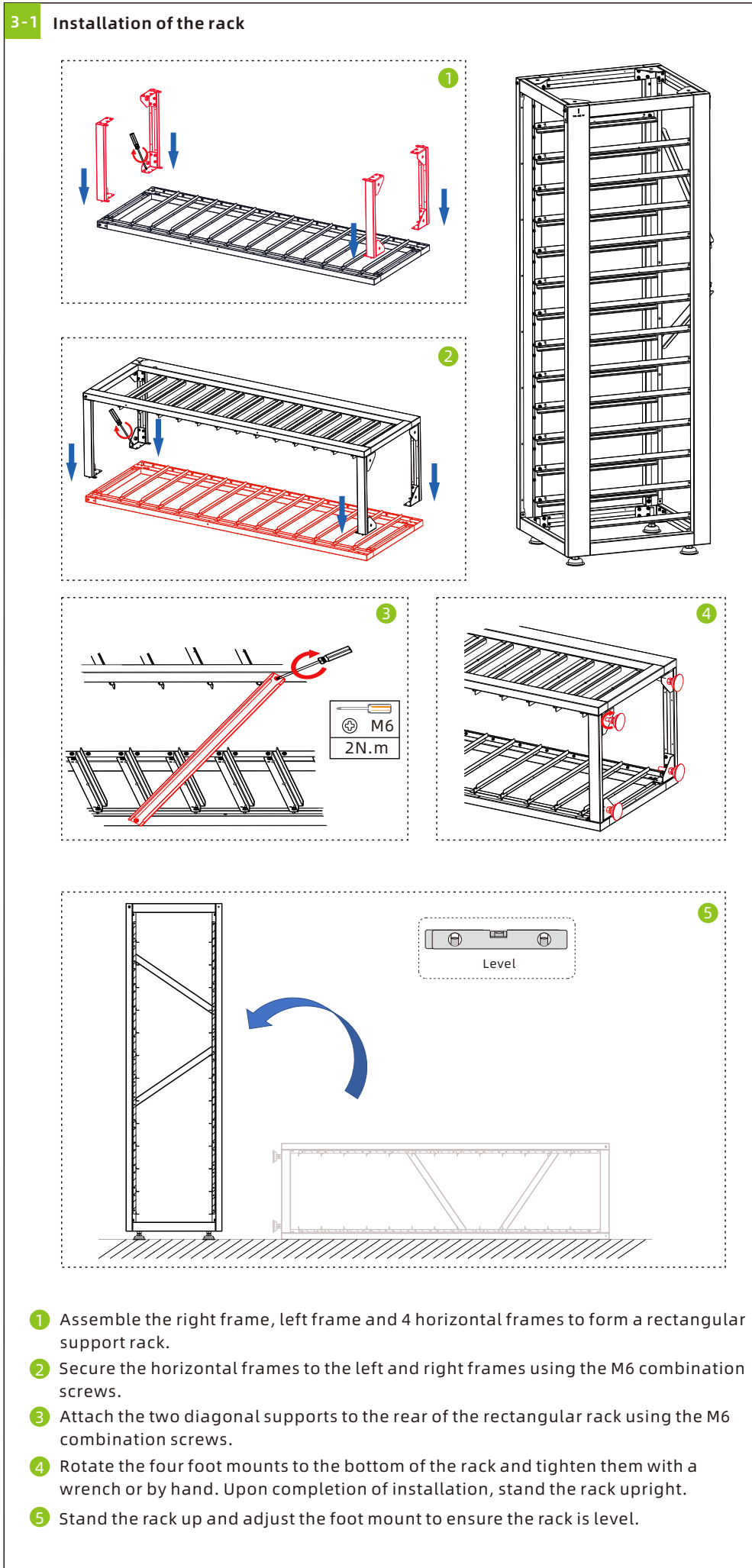
1.Checking before installation



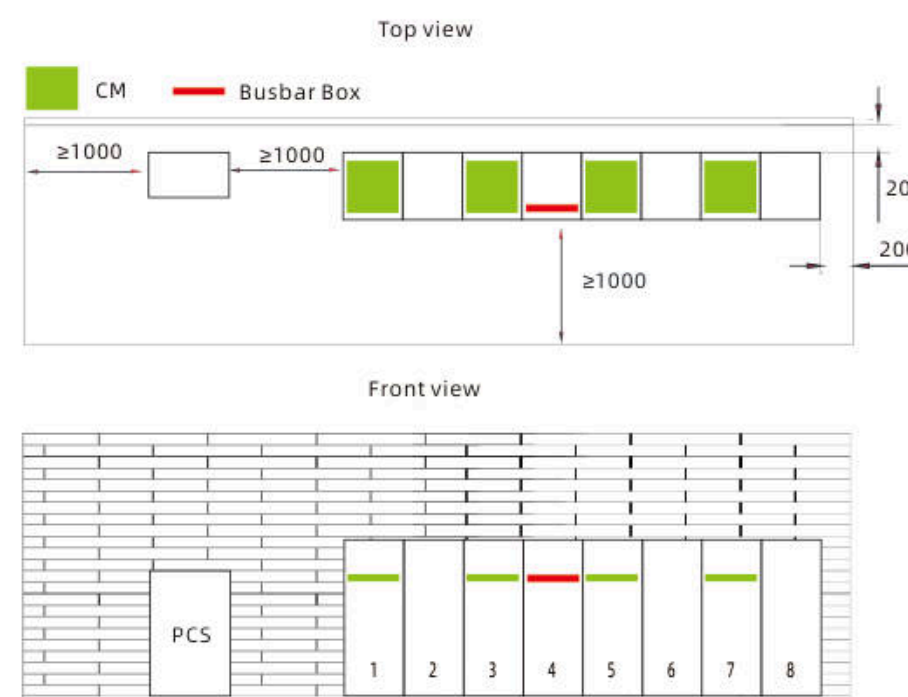
2.Component description



3. Installation

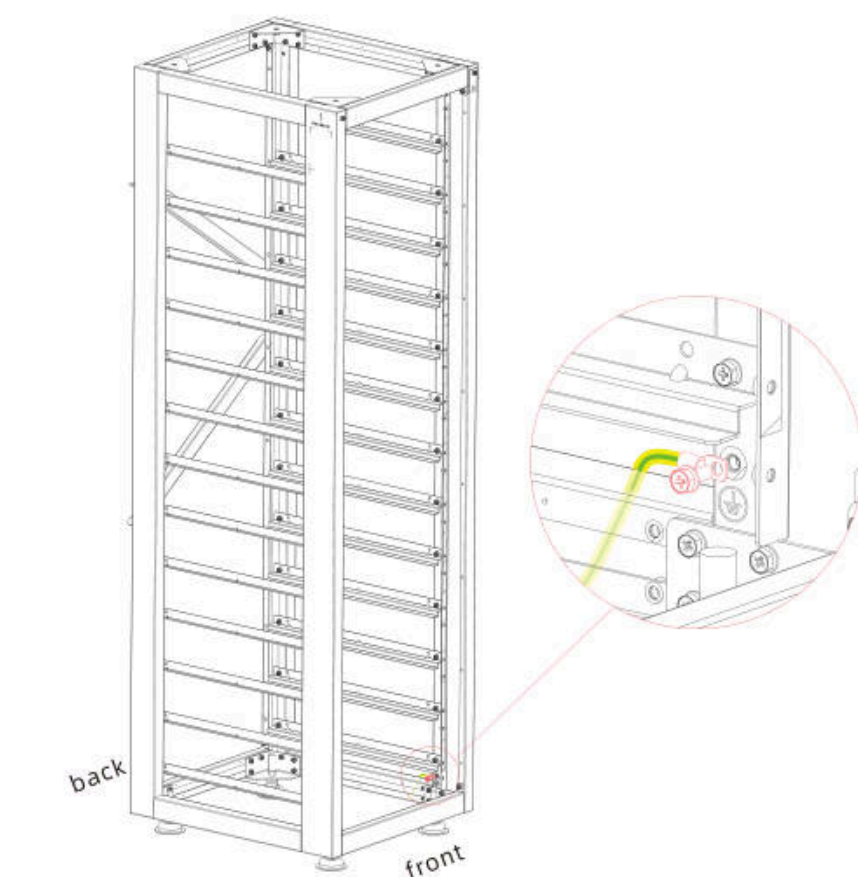


The clearance requirements are shown below. Take the installation of eight battery rack connected with the PCS (WIT 50-100K-HU) as an example.

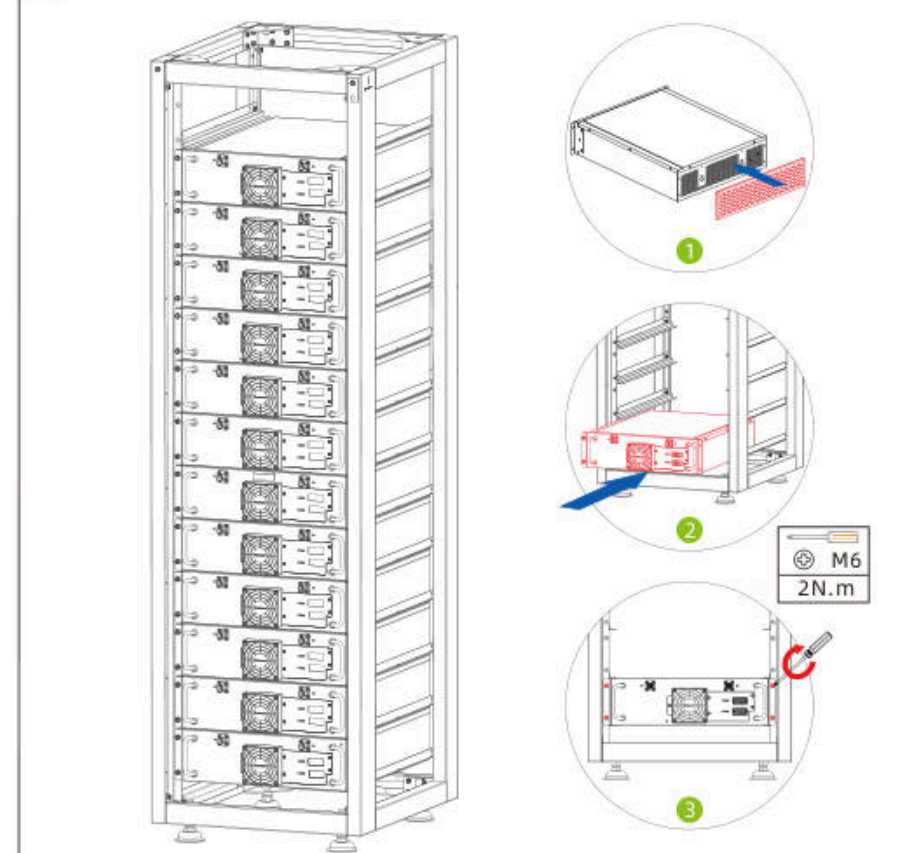


4. Installation of battery modules and cable connections

4-1 Wiring of the grounding cable of the rack



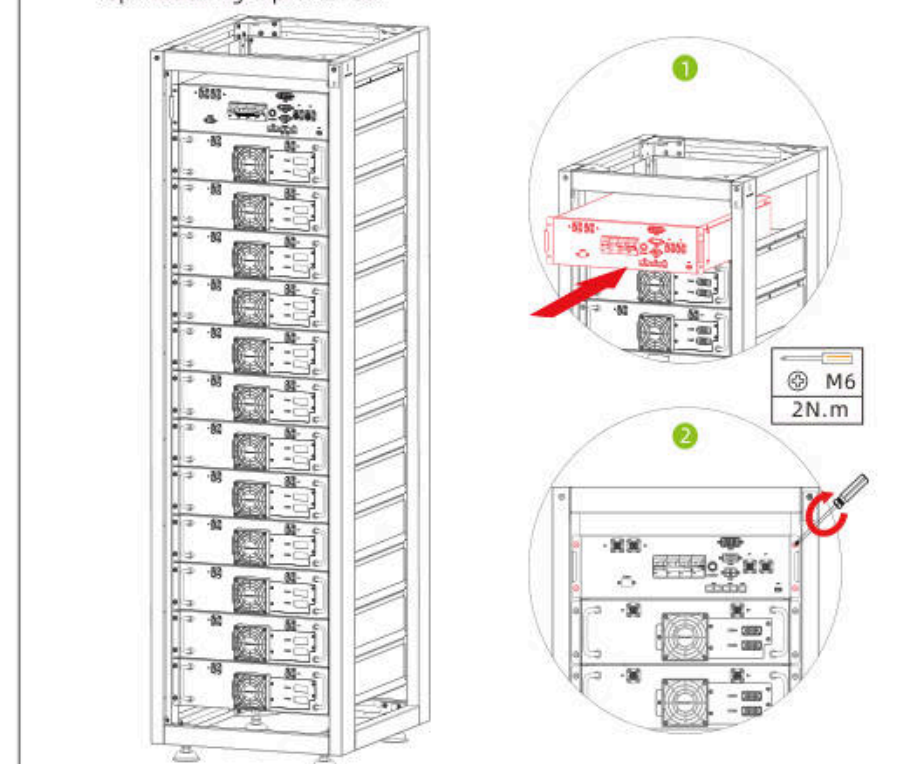
4-2 Installation of battery modules



- 1 Install the dust filter at the rear of the battery module.
- 2 Install the battery modules into the slots of the rack from bottom to top.
- 3 Secure the battery modules to the rack using the M6 combination screws.

4-3 Installation of the high voltage box

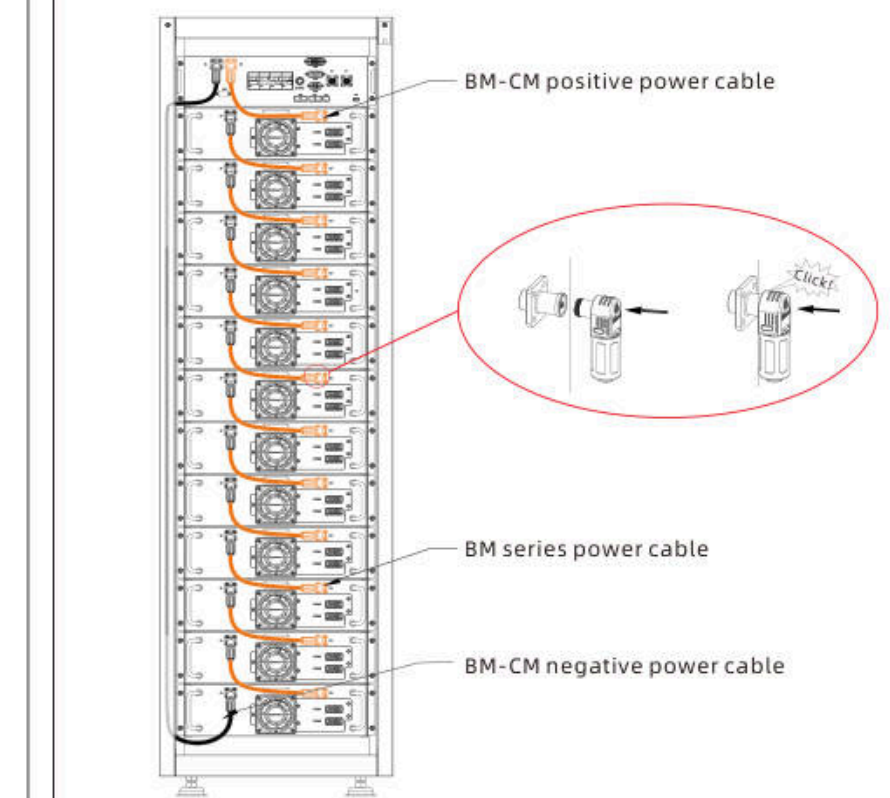
The high-voltage box can be installed on the top or bottom of the battery rack. Top mounting is preferred.



- 1 Push the high voltage box to the topmost slot.
- 2 Secure the high voltage box to the rack using the M6 combination screws.

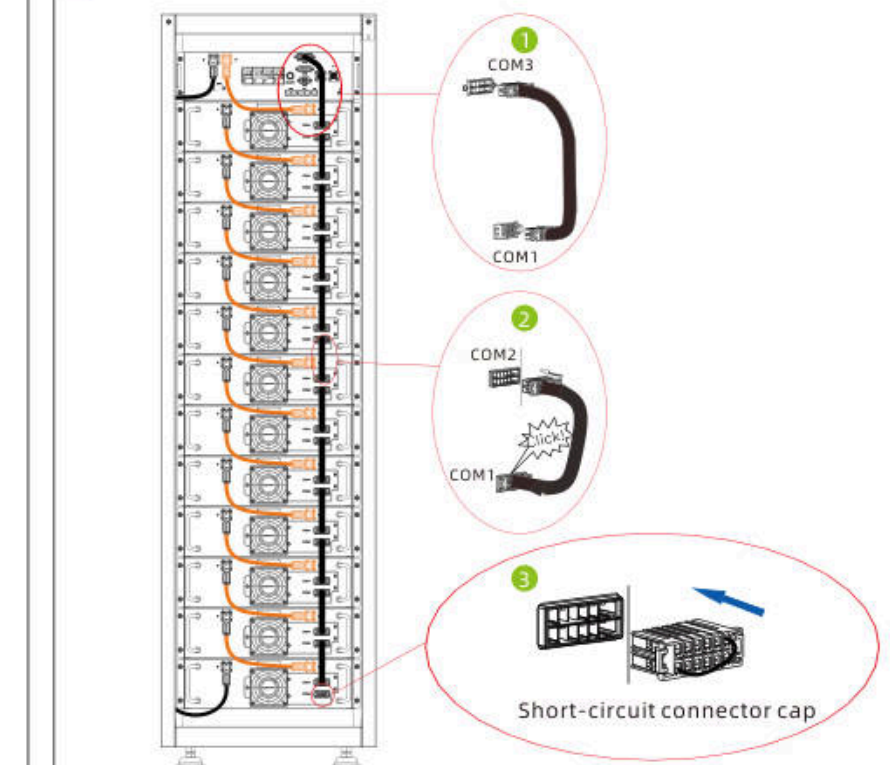
4-4 Cable connections

1 Wiring of power cables between battery modules



Please measure the voltage of each battery pack accurately before connecting the power cable. The bottom battery pack "B-" terminal is connected to the high-voltage box "B-" terminal. The "B +" terminal of the top battery pack is connected to the "B +" terminal of the high-voltage box.

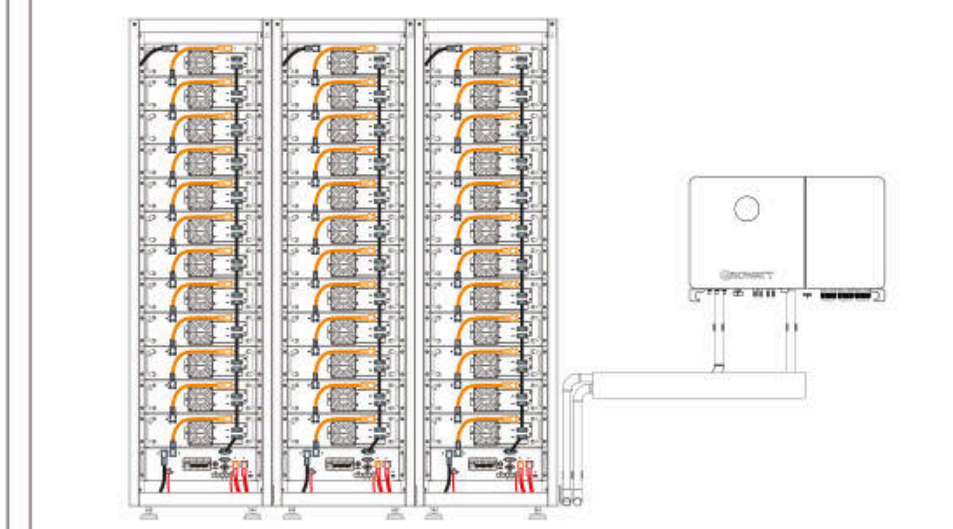
2 Wiring of communication cables between battery modules



- 1 The top battery pack COM1 is connected to the high-voltage box COM3 with a communication cable
- 2 Connect the COM1 and COM2 terminals between the battery packs with a communication cable
- 3 Bottom Battery Pack COM2 Terminal Insert short-circuit connector cap

3 Wiring of cables between the rack and the WIT 29.9-50K

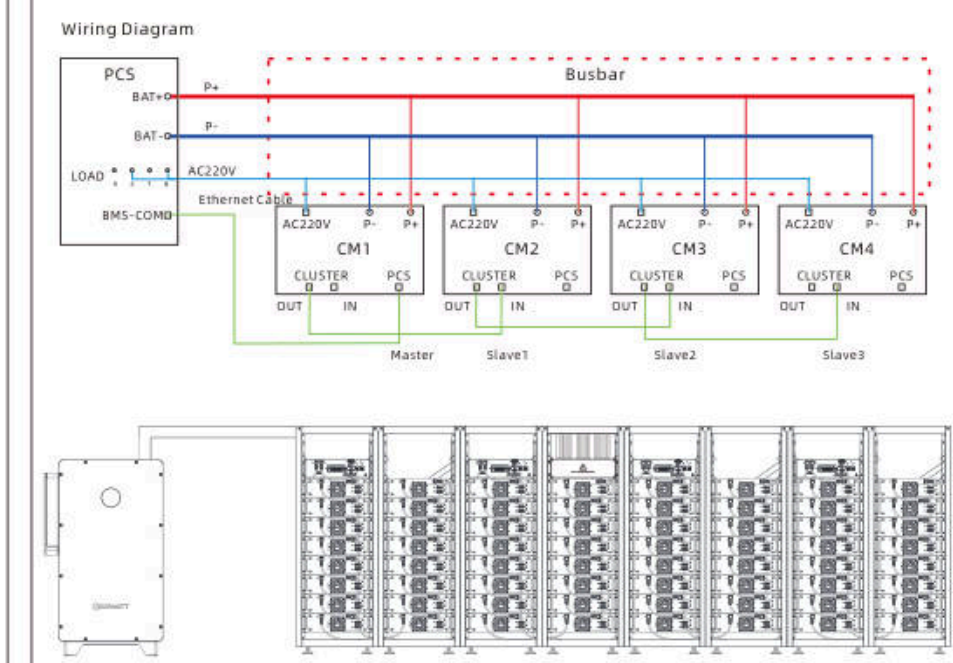
For multiple racks in parallel when working with the WIT 29.9-50K, a junction box is not required. Up to 3 racks can be connected in parallel, as show below:



Cable requirements for connecting the battery cabinet and the WIT 29.9-50K-XUH:
1. AXE AC auxiliary power supply wiring: The AC 220V terminal of the high-voltage box should be connected to the AC terminals of the PCS. When connecting, choose a phase on the load terminals of PCS to connect (either one of R/S/T phase +N wire). When connecting multiple battery cabinets, the auxiliary power connections should be distributed to different phases to balance the load.
2. BMS communication wiring: The PCS terminal of the high-voltage box is connected to the BMS1/BMS2/BMS3 terminal of the PCS.
3. The P+ / P- terminal of the high-voltage box is connected to the Battery+ / Battery- terminal of the PCS.

4 Wiring of cables between the rack and the WIT 50-100K

For multiple clusters in parallel when working with the WIT 50-100K, a busbar box is required. Up to 4 clusters can be connected in parallel, as show below:



Cable requirements for connecting the battery cabinet and the WIT 50-100K-UH:
1. For single cluster, the AC 220V and P+ of the high-voltage box should be directly connected to the PCS. For multiple clusters in parallel, the AC 220V and P+ of the high-voltage box should be connected in parallel through the busbar box and then connected to the PCS.
2. AXE AC auxiliary power wiring: The AC 220V terminals of the high-voltage box should be connected to the AC busbar of the busbar box, and then through the busbar box, connected to the AC terminals of the PCS. When connecting, choose a phase on the load terminals of PCS to connect (either one of R/S/T phase +N wire).

3. BMS communication wiring: The PCS terminal of the first cluster of high-voltage box is connected to the BMS terminal of the PCS. The OUT terminal of the CLUSTER terminal of the first cluster of high-voltage box is connected to the IN terminal of the CLUSTER terminal of the next cluster of high-voltage box, and this connection continues in this manner until the last cluster.
4. Power cable wiring: The P+ / P- terminals of the high-voltage box are connected to the B+ / B- busbars of the busbar box, and then through the busbars, they are connected to the B+ / B- terminals of the PCS.

5. Check before power-on

5-1 Routine check

No.	Checking item	Acceptance criteria
1	Equipment appearance	• The equipment is intact, free from damage, rust or paint loss. If the paint flakes off, please re-paint the spotted area. • Equipment labels are clear and damaged labels should be replaced in time.
2	Cable appearance	• The cable sheath is properly wrapped with no visible damage. • The cable conduits are intact.
3	Cable connection	• Cables are connected at the designate positions. • Wiring terminals are prepared as required and connected reliably. • Labels on both end of each cable is clear and facing toward the same direction.
4	Cable routing	• Electrical cables and extra low voltage cables are routed separately. • The cables are neat and tidy. • Cable tie joints are evenly cut without burs. • Leave the cable slack at bending points to avoid stress. • Cables are routed neatly without twists or crossovers.
5	Switch	• The switch on the external AC distribution panel or the distribution panel is in the OFF position. • The switch on the high voltage box is in the OFF position.

5-2 Rack inspection

No.	Checking item	Acceptance criteria
1	Installation	• Installation complies with the design requirements. • The rack is level, and each battery module can be properly installed.
2	Appearance	• The surface is free from cracks, dents and scratches. If the paint flakes off, re-paint the spotted area.
3	Rack grounding	• Each rack has at least one grounding point and should be grounded reliably. The site ground resistance should be less than or equal to 0.1Ω.
4	Label	• Labels are correct, clear and complete.

5-3 Internal inspection

No.	Checking item	Acceptance criteria
1	Battery module	The exterior of each battery module is free from damage.
2	High voltage box	The exterior of the high voltage box is free from damage.
3	Foreign object	All foreign objects have been removed from the rack, such as tools and leftover installation materials.

6. Power on/off the equipment

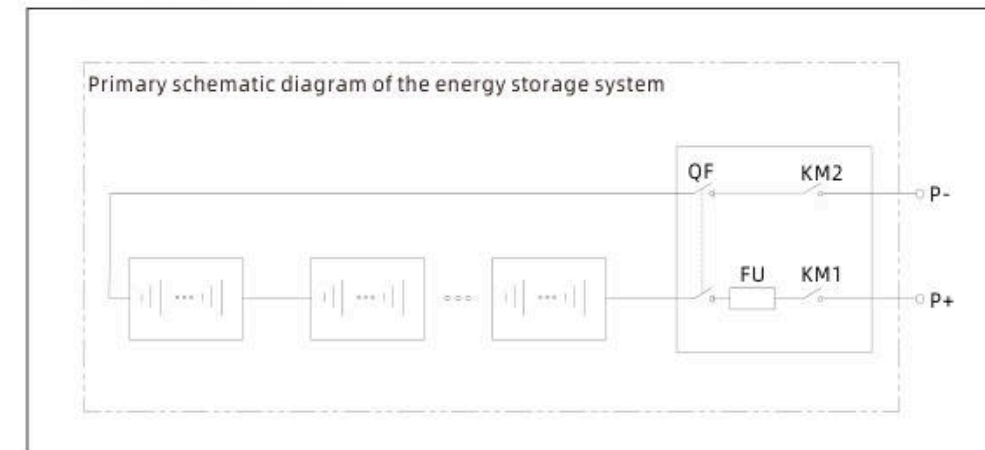
6-1 Power-on procedure

1	Turn on the DC and/or PV Switch on the Inverter and the circuit breaker on the AC side according to the Inverter operating instructions.
2	Turn on the circuit breaker on the high voltage box.
3	Press and hold the START button on the high voltage box for more than 2 seconds.

6-2 Power-off procedure

1	Turn off the DC and/or PV switch on the inverter and the circuit breaker on the AC side.
2	Turn off the circuit breaker on the high voltage box of battery system.

7. Electrical schematic



8. Service and contact

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For local customer support, please visit

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