



INSTALLATION MANUAL

200KWH ESS BATTERY CLUSTER



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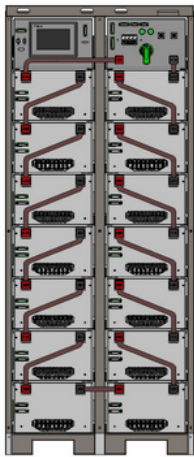
ATTENTION

- Please read the user manual carefully to understand the product information and safety precautions before installing the equipment. Failure to store, transport, install, and use the equipment in accordance with the contents of this document and user manual will result in damage to the equipment and is not covered by the equipment warranty.
- Due to product version upgrades or other reasons, the content of this document will be updated from time to time. Unless otherwise agreed, this document is only used as a guide. All statements, information and recommendations in the document do not create any warranty, express or implied.
- All operations on the equipment must be performed by trained professional electrical technicians. Operators should be fully familiar with the composition of the entire system, working principles, and relevant standards of the country/region where the project is located.
- It is prohibited to transport the Energy Storage System- battery cluster (hereinafter referred to as ESS) after installing the battery pack.
- Insulated tools must be used when installing the equipment. For personal safety, please wear personal protective equipment.
- If the equipment is bumped during transportation or installation and the paint peels off, please use RAL7035 outdoor paint for touch-up.
- For the binding locations of the mounting hardware, screws, etc. that are delivered with the box, please refer to the Packing List.

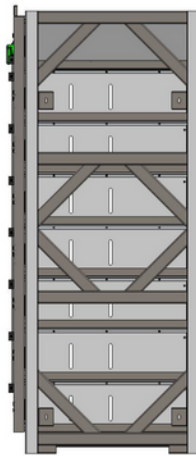


1. Product Appearance

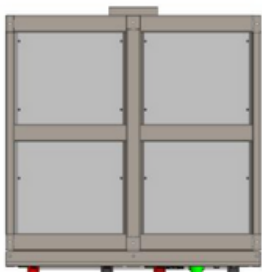
FRONT VIEW



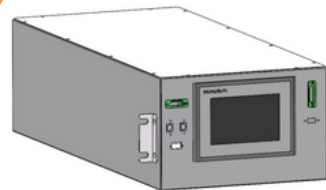
SIDE VIEW




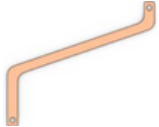

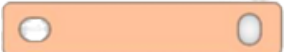


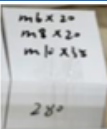
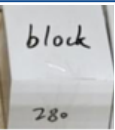


TOP VIEW



BCU BOX



1. Packing List

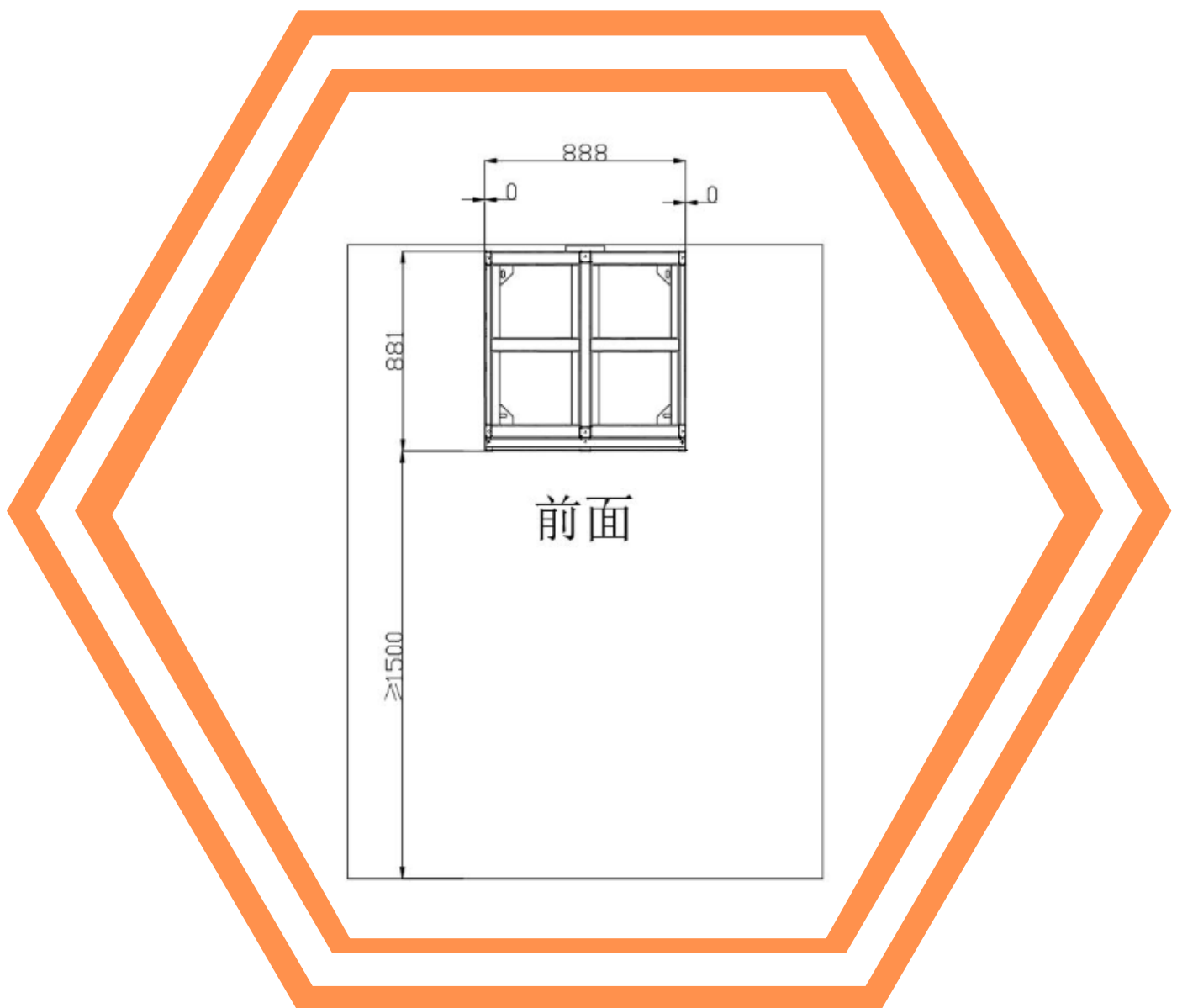
Product	Specification	Qty.	Picture
Copper bars for serial connection 1	T2, 207*20*3mm	1	
Copper bars for serial connection 2	T2, 276*272*3mm	12	
Copper bars of positive terminal	T2, 460*102*3mm	1	
Copper bars of negative terminal	T2, 104*20*3mm	1	
Wire		1	
Power cable		1	
Screws	M6*20/M8*20 /M10*35	1	
Blocks	SPCC1969*30 *1.5mm/ SPCC 1969*50*1.5m m	1	
Tools		1	
Hook		1	

2. Space Requirements

Attention:

The following figure shows the minimum space requirements for installation and operation.

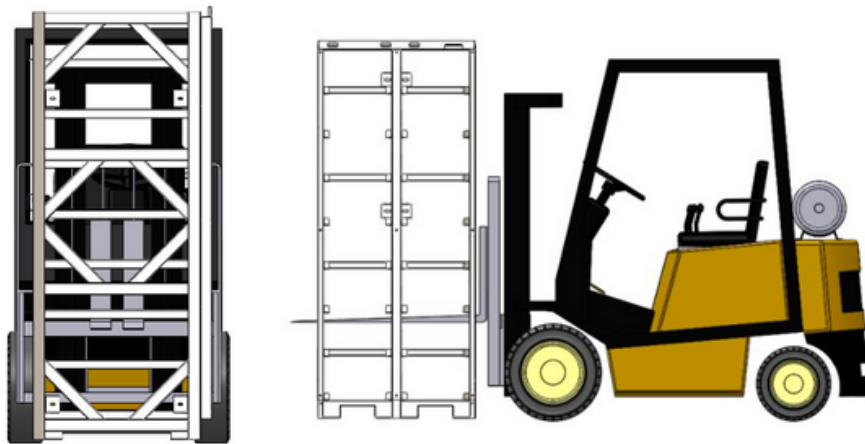
Reserve 1.5 meters in front, no space required on the left and right sides.



3. Cluster Installation

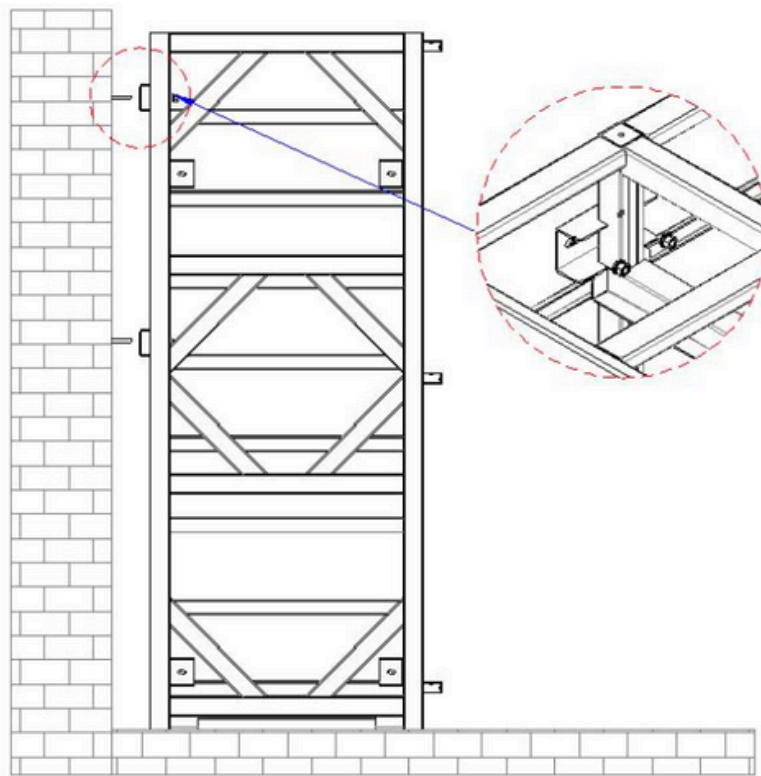
USE FORKLIFT

- Forklift lifting height requirements: When the foundation height is $\leq 0.3\text{m}$, the lifting height should $\geq 2\text{m}$; When the foundation height is $> 0.3\text{m}$, the lifting height should increase accordingly.
- The forklift meets the load-bearing requirements: $\geq 2\text{t}$.



3.1 Rack Installation

- a. M12 nuts or M12 studs are pre-embedded in the wall (the studs should protrude 30-40mm from the wall)
- b. Use M12 bolts or M12 nuts to secure the rack. A total of 4 positions need to be fixed.



4. Parts Installation

4.1. Battery Module Installation

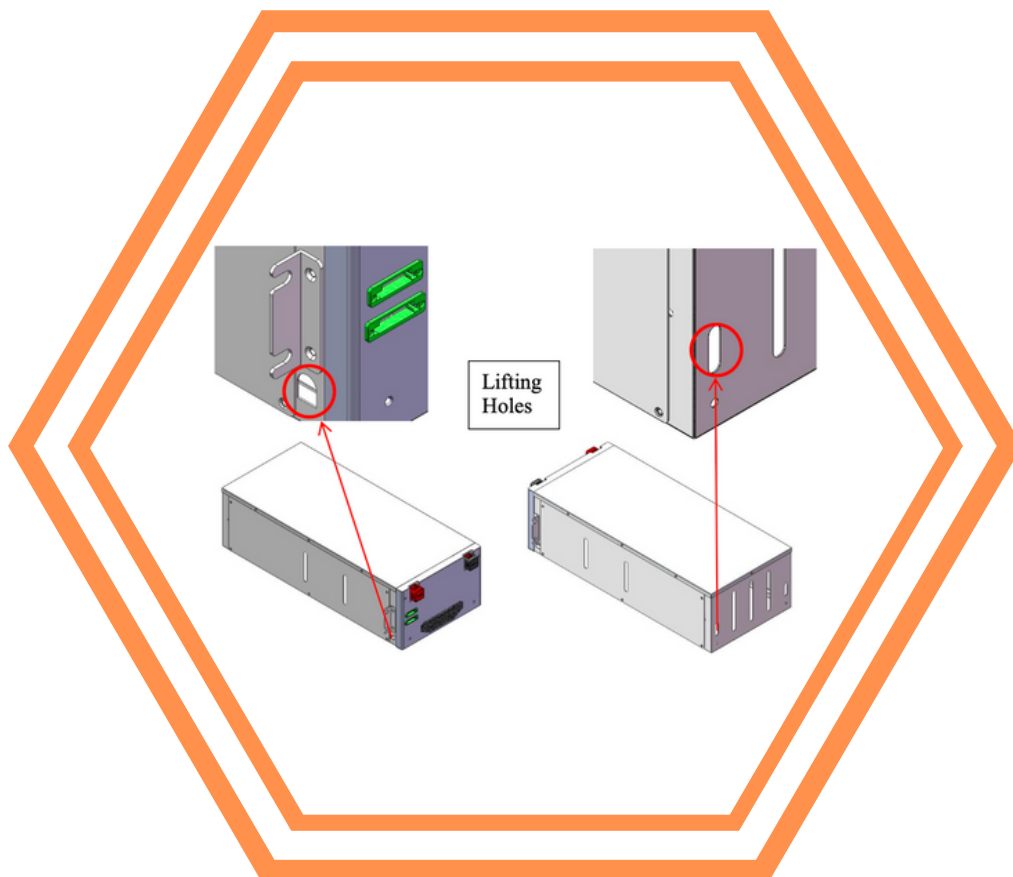
Attention

- Before installation, please make sure the battery module is stored indoors instead of in an open air area. It should meet other storage requirements specified in the user manual.
- The status of the battery module must be checked before installation. Do not use the battery module if the outer packaging box has been exposed to rain, damaged, or deformed, or if the battery module leaks, falls, etc.
- Avoid installing the battery module in rain, snow, fog, etc. To prevent the battery module from being corroded by water vapor and rain.

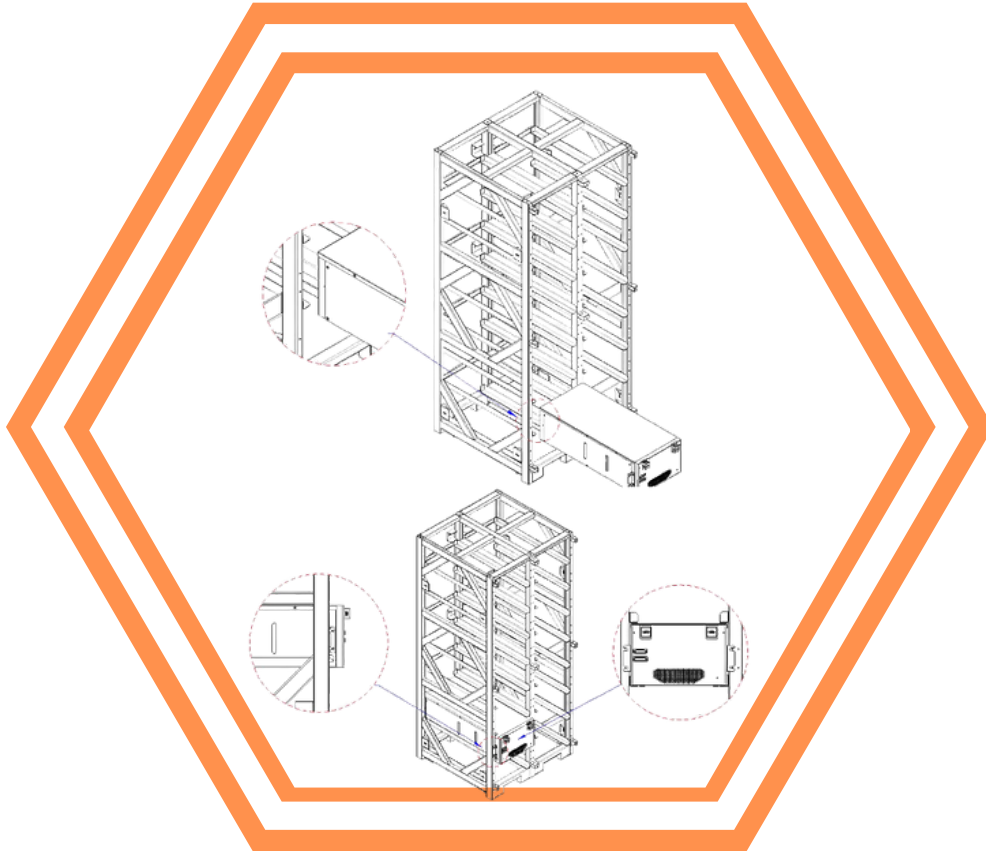
a. Take out the battery module.

Attention

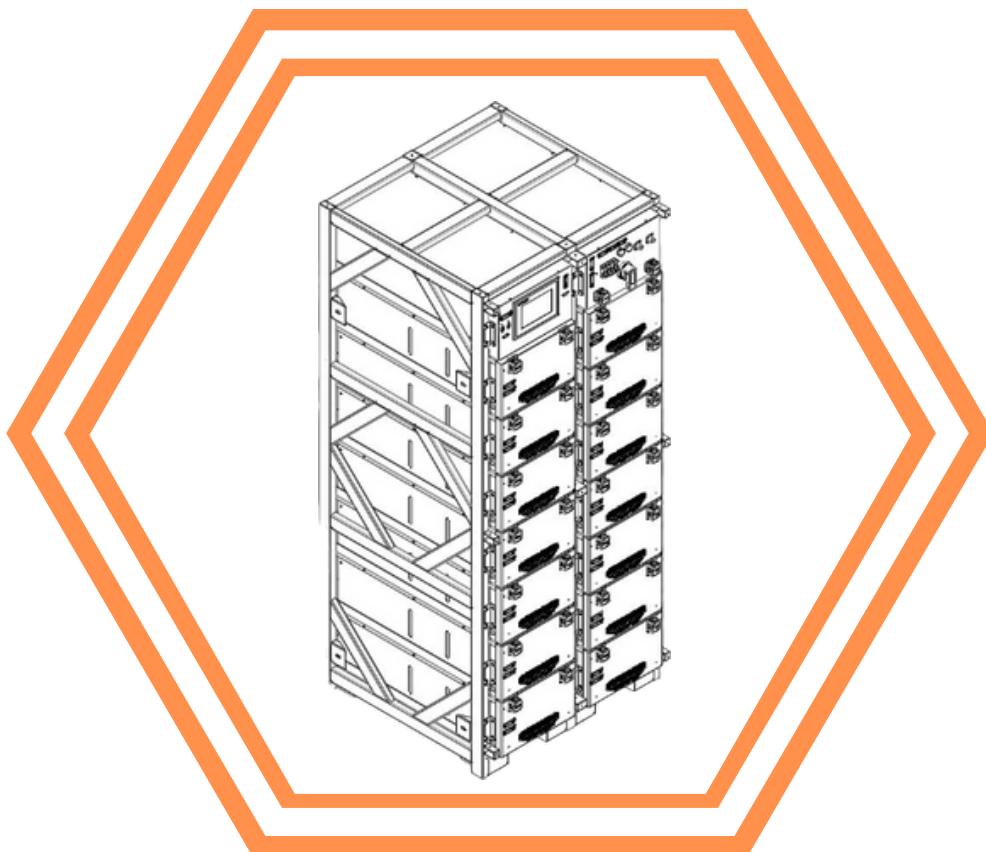
- Need at least 4 people to carry the battery pack, cannot be less than 4 people.
- Use hooks to hook into the 4 lifting holes as shown in the following picture.



- b. Use a forklift to transport the battery to the front of the rack. Then install the battery module into the rack.



Install all the battery modules as shown in the picture.



4.2 Copper Bars Installation

- Only need one person when installing copper bars.
- Must wear insulating gloves during installation.
- The corresponding plug-in protective cover can only be removed when installing the corresponding copper bars.
- When one copper bar is installed, the plug-in protective cover must be put back before the next copper bar can be installed.
- The copper bars must be installed in the order of 1, 2, 3... (as shown as Figure 3)

- a. Remove the protective covers of the corresponding copper bar plugs (step 1 in Figure 4)
- b. Fix the copper bars (step 2 in Figure 4)
- c. Put back the plug protective cover (Step 3 in Figure 4)

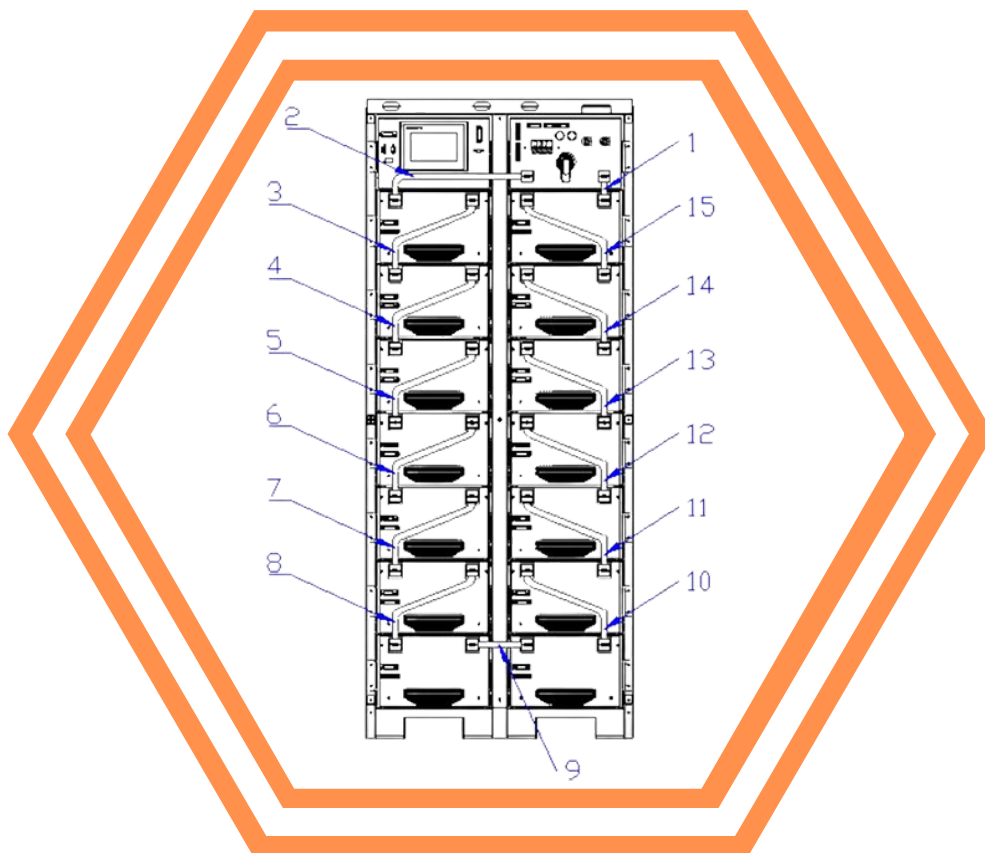


FIGURE 3

4.2 Copper bars installation

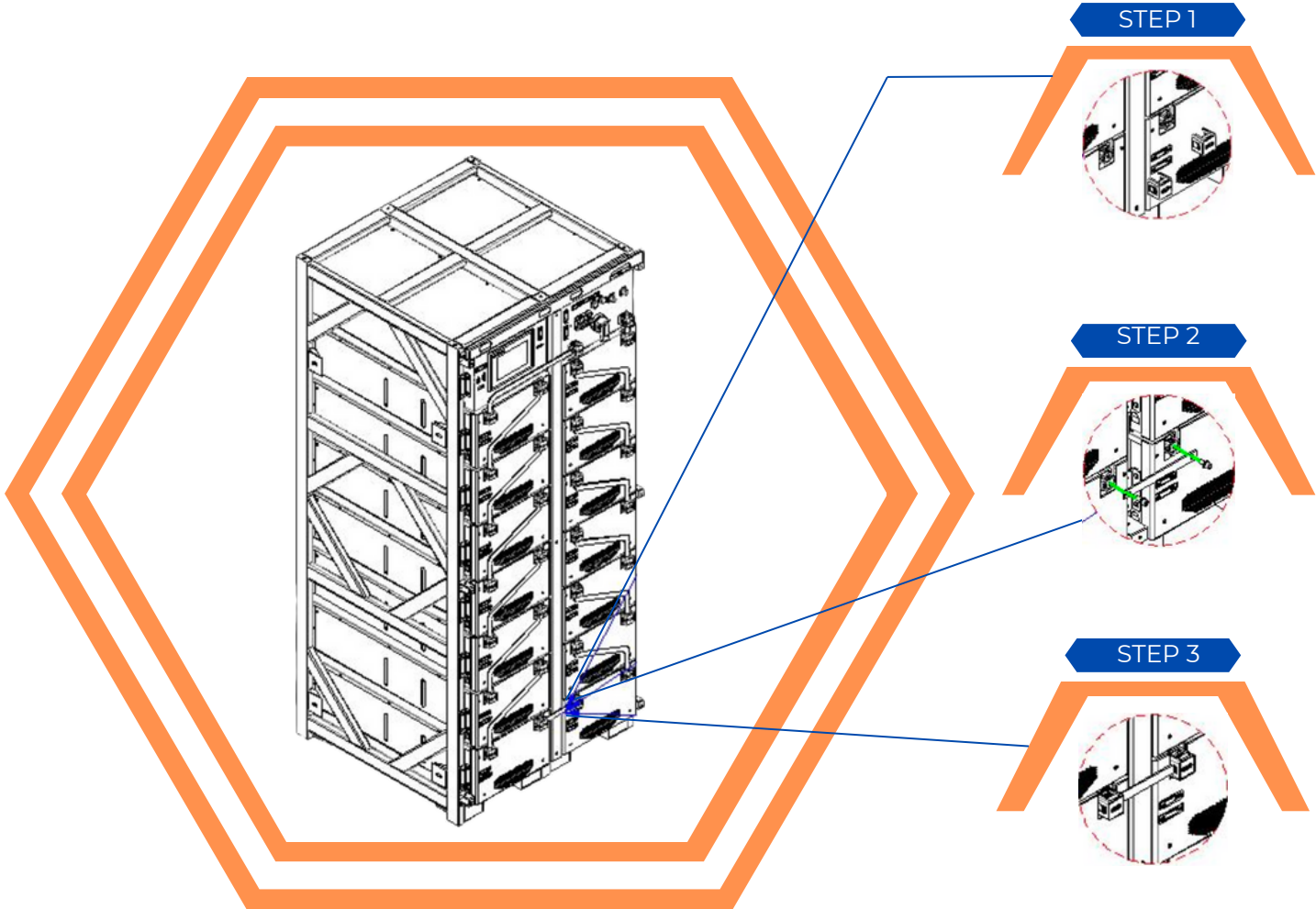
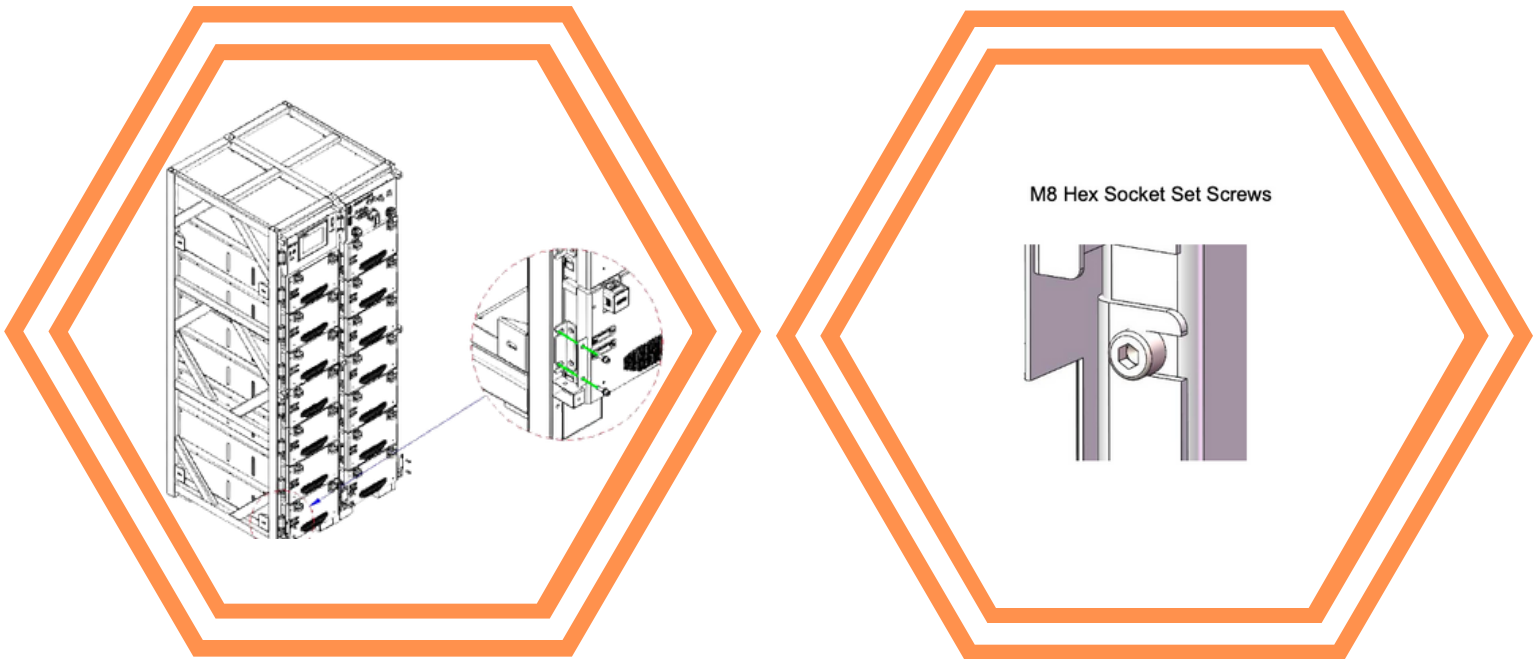
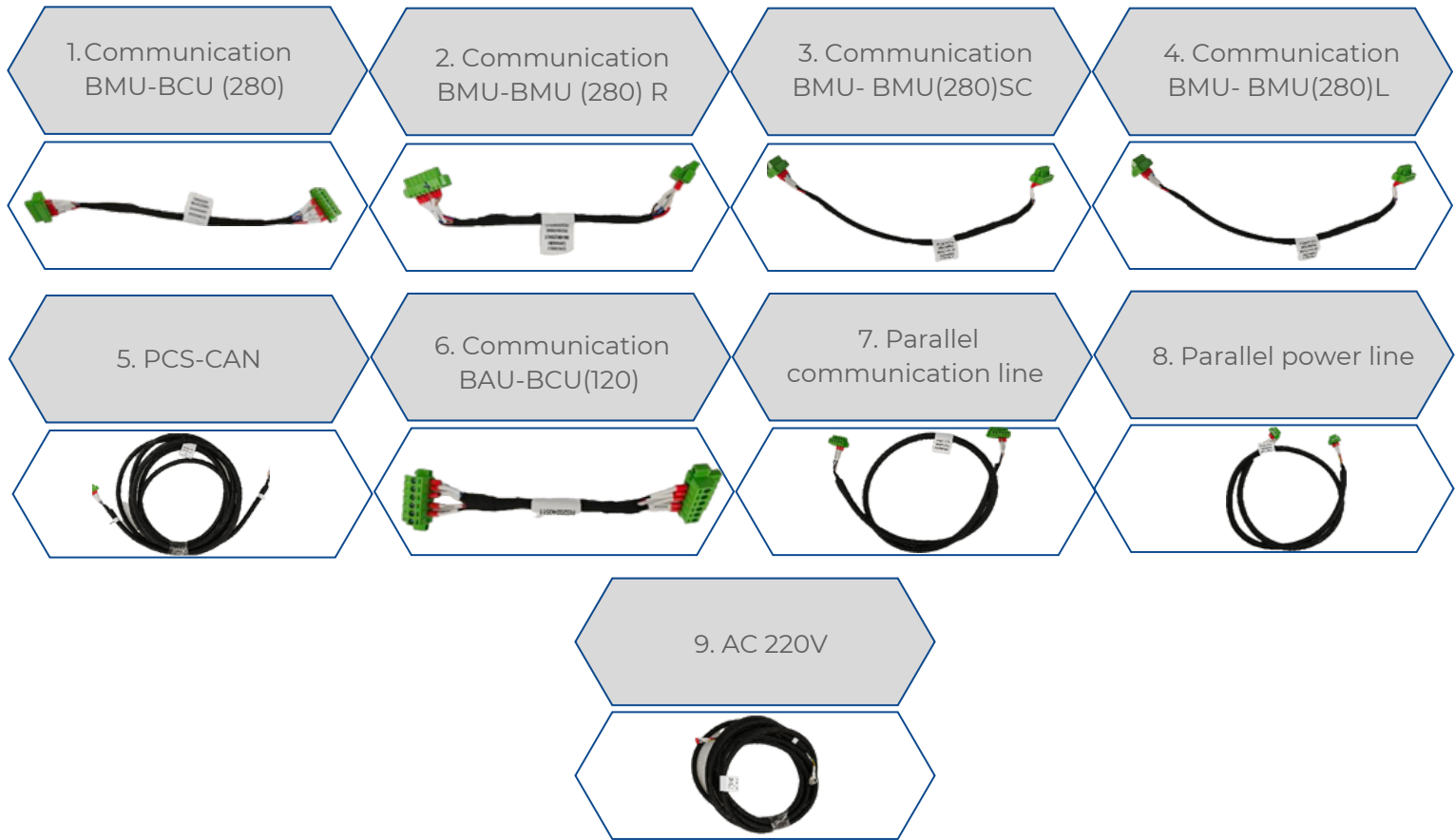


FIGURE 4

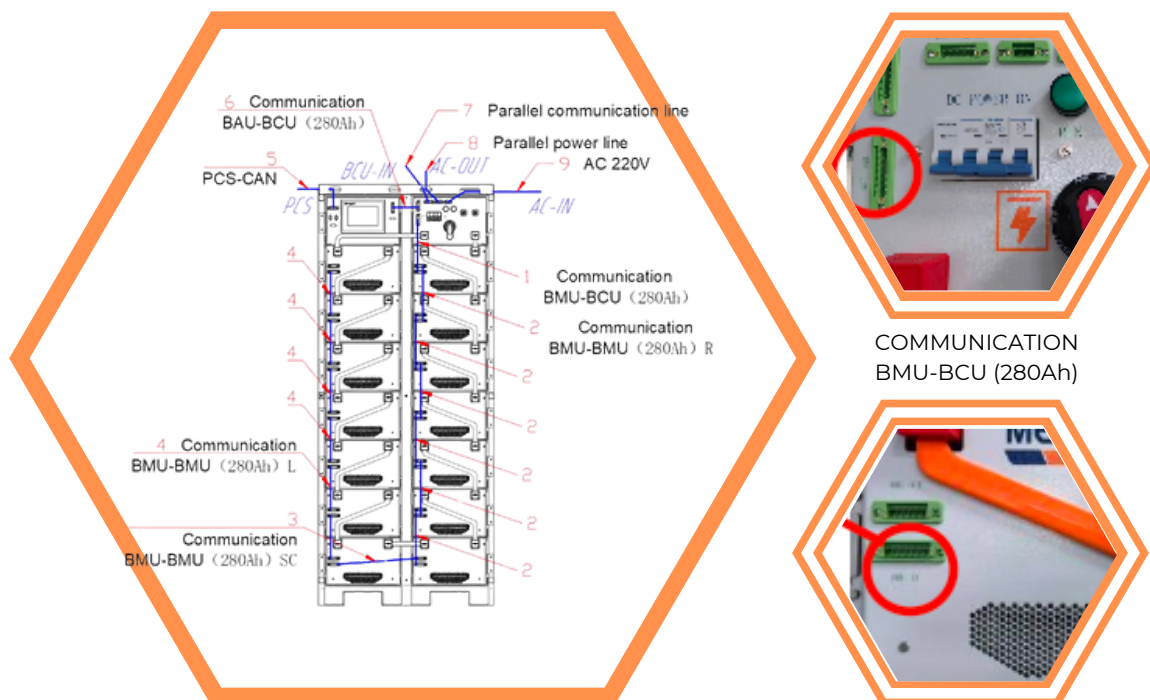
d. Use the supplied screws to secure the battery modules.



4.3 Communication Cable Connection



- a. Install the corresponding cables according to the serial number, 1(BMU COM)-1(BMU IN), 2(BMU OUT)-2(BMU IN)

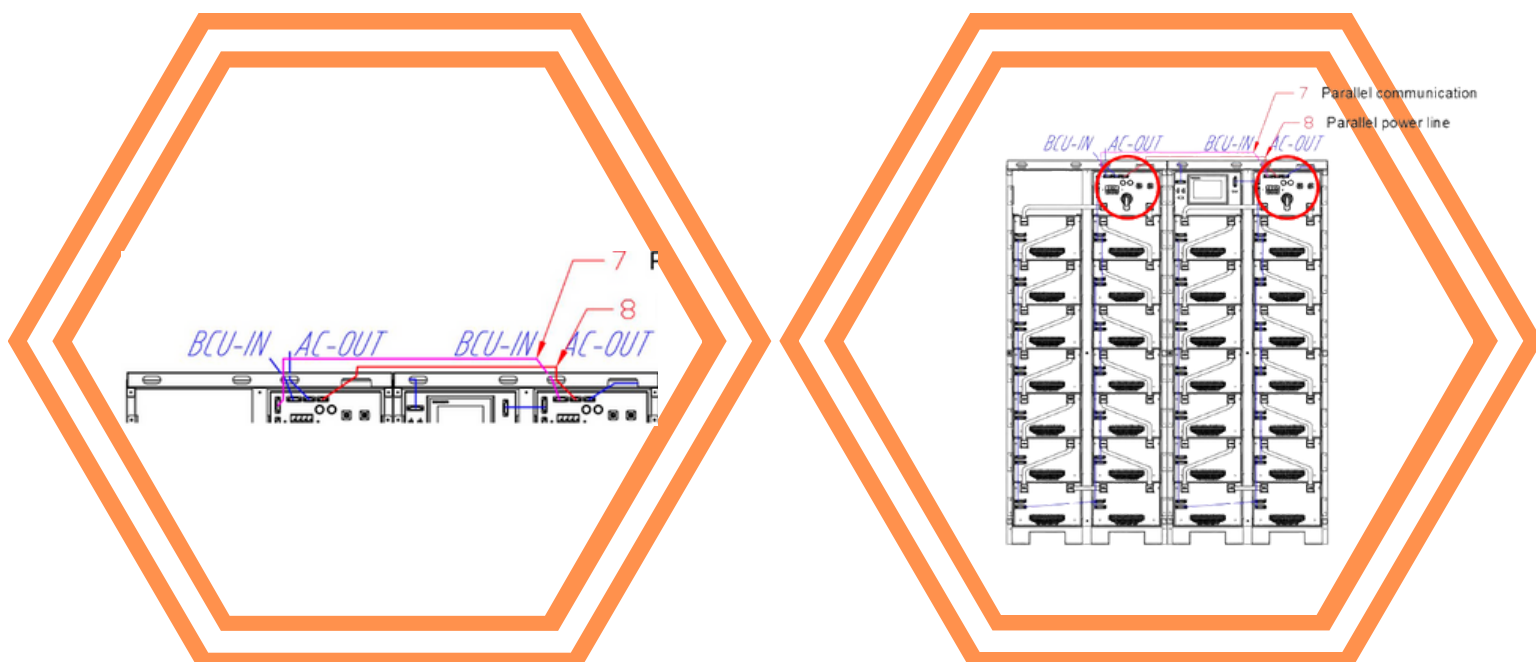


4.3 Communications cable connection

The other end of the AC 220V is connected to the load end of the Megarevo, and connected to one N line, and the rest can be connected to any one of A/B/C. (Make sure that the inverter end is not powered before connecting to avoid danger.)

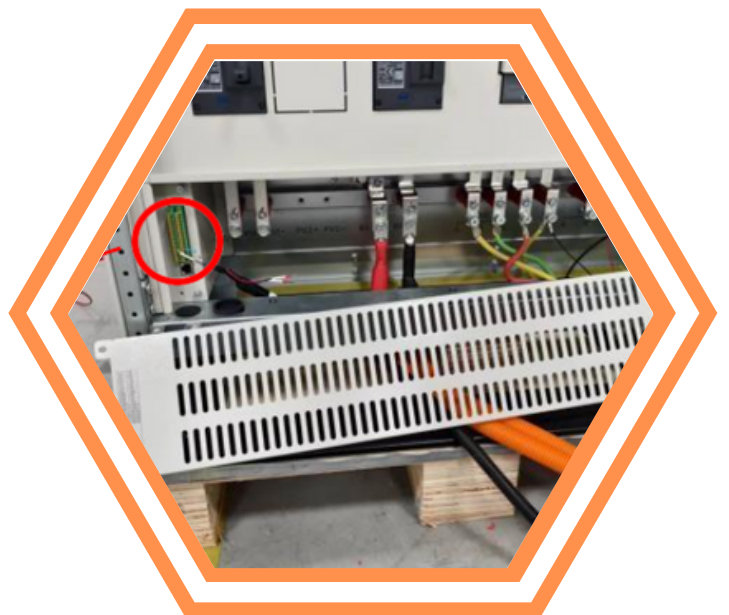
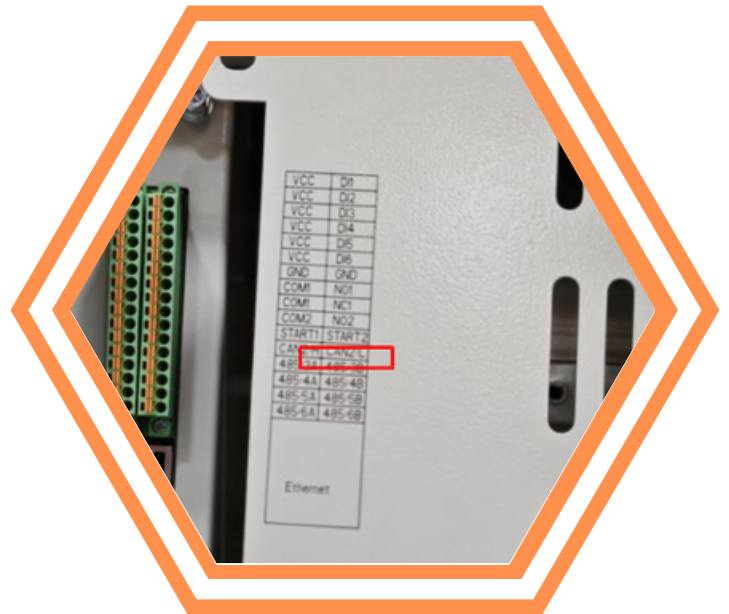


b. Schematic of connections in parallel of battery cluster.



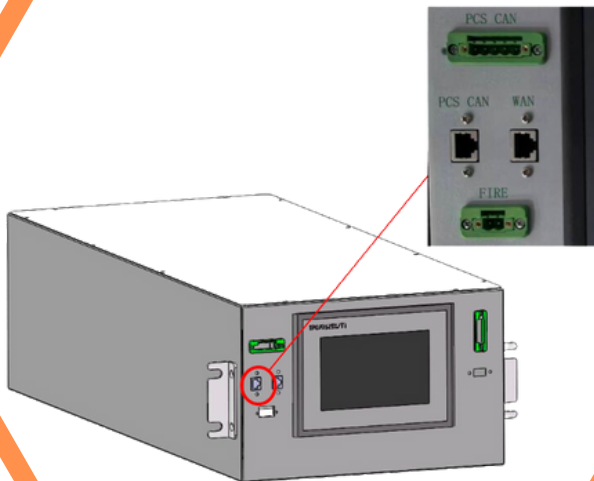
4.3 Communications cable connection

c. Connect the communication cables between the PCS(inverter) and the battery cluster. Connect one end to the PCS(inverter), CAN-H, CAN-L (please make sure the PCS is not powered), as shown in the picture. The fifth from the bottom.



4.3 Communications cable connection

The other end is connected to the PCS CAN of the main control box (BAU Box).



No.	RS485 Pin
1	/
2	/
3	/
4	CAN-H1
5	CAN-L1
6	/
7	/
8	/



4.4 Power Cable Connection

- a. Connect the power cable. First connect the power cable at the PCS (inverter) end, and then connect to the battery end.



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THANK
YOU