



Meaningful Innovation.

WEEE Number: 80133970

INSTRUCTION MANUAL

RECHARGEABLE LI -ION BATTERY SYSTEM



10 YEAR
WARRANTY*

SKU	DESCRIPTION
12259	RECHARGEABLE LI-ON BATTERY MODULE 51.2V 206AH -RACKABLE
12260	RACKS FOR 10PCS BATTERIES AND 1PC BMS
12261	HIGH VOLTAGE BATTERY CLUSTER CONTROL BOX WITH COM AND POWER CABLES

INTRODUCTION

Thank you for selecting and buying VTAC Product. V-TAC will serve you the best. Please read these instructions carefully & keep this user manual handy for future reference. If you have any another query, please contact our dealer or local vendor from whom you have purchased the product. They are trained and ready to serve you at the best.



**MULTI-LANGUAGE
MANUAL QR CODE**
Please scan the QR code
to access the manual in
multiple languages.



Points de collecte sur www.quefairedemesdechets.fr

In case of any query/issue with the product please reach out to us at: support@vtac.eu

For More products range, inquiry please contact our distributor or nearest dealers.

V-TAC EUROPE LTD. Bulgaria, Plovdiv 4000, bul.L.Karavelow 9B

CONTENT

1. Important information in the manual	3
1.1 Scope	3
1.2 Description of OHR-206	3
1.3 Meaning of Symbols	4
1.4 General Safety Information	6
1.5 Disclaimer	6
1.6 Installation environment	6
1.7 Requirements for Installation Personnel	8
2. Safety	9
2.1 Safety rules	9
2.2 Safety information	9
3. Transport to the end customers	9
3.1 Provisions on Shipping of Battery Modules:	9
3.2 Permissible and Impermissible Storage Positions of a Packaged Battery Module	10
4. Description and installation of OHR-206 battery	11
4.1 Installation Precautions	11
4.2 OHR-206 Product Description	11
4.3 Technical Data	11
4.4. Preparation	13
4.4.1 Tools required	13
4.4.2 OHR-5.5U-HRACK-12 Parts description	13
4.4.3 Installation of Rack	14
4.5 Description of Battery Module	20
4.6 Description of high-voltage BMS box	21
4.7 Description of Battery Module in Rack	22
4.8 Installation of the Battery Module to the Rack	24
4.9 Battery cluster connected to inverter	27
4.10 System startup and shutdown	28
4.10.1 Startup procedure	28
4.10.2 Shutdown procedure	28
5 OHR'S User Interface	29
5.1 Time setting	29

5.2 Main Interface	31
5.3 User login	31
5.4 Detail	32
5.5 Alarm Setup	33
5.6 Alarm	34
5.7 Data Log (The display requires a USB flash drive)	34
5.8 Connection	35
6 Battery Module Storage	36
7 Maintenance	37

IMPORTANT NOTES

- This product contains battery type "Secondary" (rechargeable).
- Electrical and electronic equipment that has become waste is known as old equipment/device. Old devices must not be disposed of with other household waste.
- Owners of old devices at the end of its service life must return the device by taking them to the collection points set up by public waste disposal authorities or distributors. This return does not entail any costs for you.
- Owners of old devices have an obligation to remove accessible batteries / rechargeable batteries as well as non-destructively removable lamps from the old device prior to return. This does not apply if old devices are being prepared for reuse with the participation of a public law firm.
- Battery removal warning: The battery contained in this product must be removed only by professional personnel only. The battery must never be removed by the end user, if not removed correctly it could damage the battery which could cause fire.
- Batteries removed from an old electronic device should be disposed of separately. This return of battery does not entail any costs for you and the user is obliged to return the battery.
- Please make sure that this product is not powered on when removing the battery. Fire hazard! Avoid short-circuiting the contacts of a detached battery. Do not incinerate the battery. Please handle the battery with Caution!
- If electrical appliances or batteries are disposed of in landfills or dumps, hazardous substances can leak into the groundwater and get into the food chain, damaging your health and well-being.



- The symbol of "Crossed rubbish bins "indicates that this product should not be disposed of with other household wastes and must be collected separately from unsorted municipal waste at the end of its service life.
- Please use the link below to view the online directory of the collection and return points: <https://www.ear-system.de/ear-verzeichnis/sammel-und-ruecknahmestellen>



This marking indicates that this product should not be disposed of with other household wastes.



Caution, risk of electric shock.



1. Important information in the manual

1.1 Scope

The installation and operation manual applies to the modular battery energy storage system. Please carefully read this installation and operation manual to ensure the safe installation, preliminary debugging, and maintenance of OHR-206. Installation, preliminary debugging, and maintenance must be carried out by qualified and authorized personnel. Please keep this installation and operation manual and other applicable documents near the battery energy storage system, so that all personnel involved in installation or maintenance can access this installation and operation manual at any time.

This installation and operation manual only applies to countries meeting the certification requirements. Please observe the applicable local laws, regulations, and standards. Standards and legal provisions of other countries may be inconsistent with the provisions and specifications in this manual. In this case, please contact our after-sales service personnel.

1.2 Description of OHR-206

Model	System energy (kWh)	Rated DC power(kW)	Discharge depth	Composition
OHR105.4K-206	105.4	51.2	90%	OHR-206 *10+OHR-HV250H*1

1.3 Meaning of Symbols

This manual contains the following types of warnings:



Danger! It may cause an electric shock.

Even when the equipment is disconnected from the power grid, the voltage-free state will have a time lag.



Danger! If the instructions are not observed, death or severe injury may

occur.



Warning! If the instructions are not observed, a loss may occur.



Attention! This symbol represents information on the device use.

Symbols on equipment:

The following types of warning, prohibition, and mandatory symbols are also used on the equipment.



Attention! The risk of chemical burns

If the battery is damaged or fails, it may lead to electrolyte leakage, which in turn causes the formation of a small amount of hydrofluoric acid, among other effects. Contact with these liquids can cause chemical burns.

- Do not subject the battery module to severe impact.
- Do not open, disassemble or mechanically change the battery module.
- In case of contact with an electrolyte, wash the affected area with clean water immediately and seek medical advice promptly.



Attention! The risk of explosion

Incorrect operation or fire may cause the lithium-ion battery unit to ignite or explode, leading to serious injury.

- Do not install or operate the battery module in explosive or high-humidity areas.
- Store the battery module in a dry place within the temperature range specified in the data sheet.
- Do not open, drill through or drop the battery cell or module.
- Do not expose the battery cell or module to high temperatures.
- Do not throw the battery cell or module into the fire.
- If there is a fire from the battery, please use the CO2 extinguisher. If there is a fire near the battery, please use a dry powder extinguisher.
- Do not use defective or damaged battery modules.



Caution! Hot surface

- If a malfunction occurs, the parts will become very hot, and touching them may cause serious injury.
- If the energy storage system is defective, please shut it down immediately.
- If the fault or defect becomes obvious, special care should be taken when handling the equipment.



No open fire! It is prohibited to handle open flames and ignition sources near the energy storage system.



Do not insert any objects into the opening in the housing of the energy storage system! No objects, such as screwdrivers, may be inserted through openings in the casing of the storage system.



Wear safety goggles! Wear safety goggles when working on the equipment.



Follow the manual! When working and operating the equipment, the

installation and operation manual provisions must be observed.

1.4 General Safety Information



Danger! Failure to comply with the safety information can lead to life-threatening situations.

1. Improper use can cause death. Operators of OHR-206 must read this manual and observe all safety information.
2. Operators of OHR-206 must comply with the specifications in this manual.
3. This manual cannot describe all conceivable situations. For this reason, applicable standards and relevant occupational health and safety regulations are always given priority.
4. In addition, the installation may involve residual hazards in the following circumstances:
 - Incorrect installation.
 - The installation is carried out by personnel who did not receive relevant training or guidance.
 - Failure to observe the warnings and safety information in this manual.

If there are any questions, please contact V-TAC after service.

1.5 Disclaimer

V-TAC Europe Ltd shall not be liable for personal injury, property loss, product damage and subsequent losses under the following circumstances.

- Failure to comply with the provisions of this manual.
- Incorrect use of this product.
- Unauthorized or unqualified personnel repair the product, disassembly the rack and perform other operations.
- Use of unapproved spare parts.
- Unauthorized modifications or technical changes to the product.

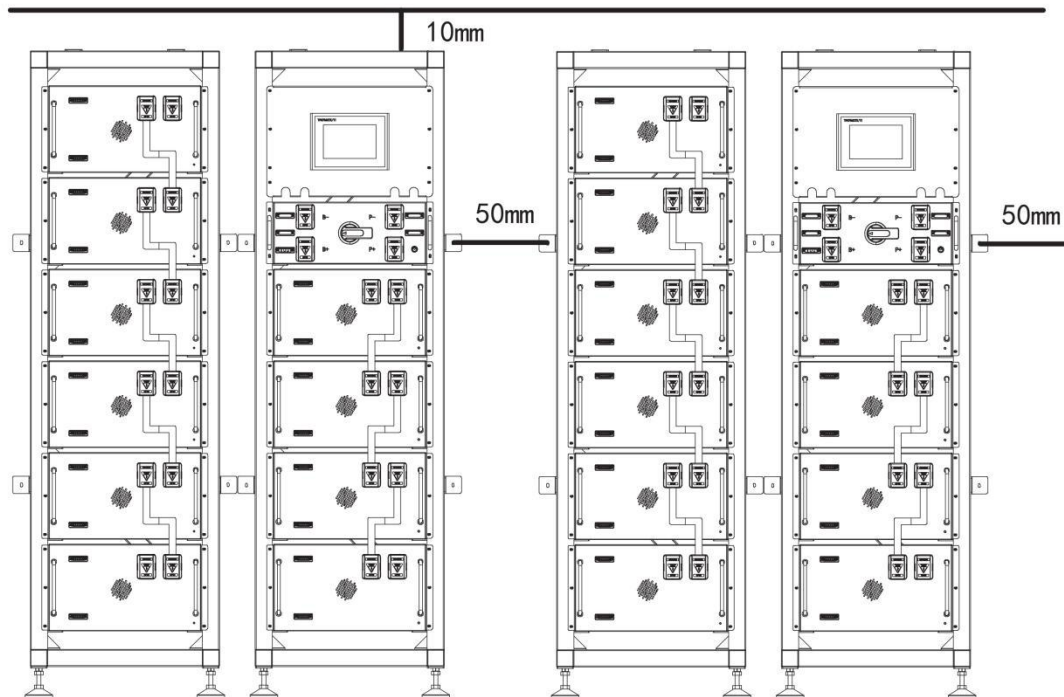
1.6 Installation environment

- The battery energy storage system can only be installed and operated in an enclosed space. The working environment temperature range of OHR-206 is -20°C~ 55°C, and the maximum humidity is 85%. The battery module shall not be exposed to the sun or placed directly beside the heat source.
- The battery module shall not be exposed to a corrosive environment.

- When installing the battery energy storage system, ensure that it stands on a sufficiently dry and flat surface with sufficient bearing capacity. Without the manufacturer's written approval, the installation site's altitude shall not be higher than 2,000 meters. The output power of the battery decreases with the altitude.
- In areas where flooding may occur, care must be taken to ensure that the battery module is installed at a suitable height and to prevent its contact with water.
- The battery energy storage system must be installed in a fireproof room. This room must have no fire source and must be equipped with an independent fire alarm device, which complies with local applicable regulations and standards. According to local applicable regulations and standards, the room must be separated by the T60 fire door. Similar fire-proof requirements apply to other openings in the room (such as windows).

Minimum product installation distance

The minimum distance to the surrounding building when the battery is installed is 10mm, and the minimum distance between the two products is 50mm.



Compliance with the specifications in this manual is also part of proper use.

The use of the OHR-206 system is prohibited in the following circumstances:

- Mobile use on land or in the air (use on water only with the manufacturer's consent and with the manufacturer's written consent).
- Used in medical devices.
- Used as a UPS system.

1.7 Requirements for Installation Personnel

All work shall comply with local applicable regulations and standards.

The installation of OHR-206 can only be completed by electricians with the following qualifications:

- Trained in dealing with hazards and risks associated with the installation and operation of electrical equipment, systems, and batteries.
- Trained on installation and debugging of electrical equipment.
- Understanding and complying with the technical connection conditions, standards, guidelines, regulations, and laws applicable.
- Knowledge of handling lithium-ion batteries (transportation, storage, disposal, hazard source).
- Understanding and complying with this document and other applicable documents.

2. Safety

2.1 Safety rules

To avoid property damage and personal injury, the following rules shall be followed when working on the hazardous live parts of the battery energy storage system:

- It is available for use.
- Ensure that it will not restart.
- Make sure there is no voltage.
- Grounding protection and short circuit protection
- Cover or shield adjacent live parts.

2.2 Safety information

Part damage or short circuit may cause electric shock and death. A short circuit can be caused by connecting battery terminals, resulting in current flow. This type of short circuit shall be avoided under any circumstances. For this reason, follow these instructions:

- Use insulated tools and gloves.
- Do not put any tools or metal parts on the battery module or high-voltage BMS box.
- When operating the battery, be sure to remove watches, rings, and other metal objects.
- Do not install or operate this system in explosive or high-humidity areas.
- When working on the energy storage system, first turn off the charging controller, then the battery, and ensure that they are not turned on again.

Improper use of the battery energy storage system can lead to death. The use of the battery energy storage system beyond its intended use is not allowed, because it may cause great danger.

Improper handling of the battery energy storage system can cause life-threatening risks, serious injury or even death.



Warning! Improper use can cause damage to the battery cell.

- Do not expose the battery module to rain or soak it in liquid.
- Do not expose the battery module to a corrosive environment (such as ammonia and salt).
- The battery energy storage system shall be debugged no later than six months after delivery.

3. Transport to the end customers

3.1 Provisions on Shipping of Battery Modules:

It is necessary to comply with the relevant regulations and provisions on roads for shipping lithium-ion products in the corresponding countries.



It is prohibited to smoke in the vehicle during transportation or in the vicinity during loading and unloading.



The dangerous goods transport vehicles shall meet relevant regulations concerning road transportation and shall be equipped with two tested CO2 fire extinguishers.



It is forbidden for the freight forwarder to open the outer package of the battery module. Use only approved lifting equipment to move the battery cabinet system. Use only the hanging lug on the top of the battery cabinet as the connection point. When lifting, the angle of the sling must be at least 60°.



Improper vehicle transportation can cause injury. Improper transportation or improper transportation locks may cause the load to slip or overturn, resulting in injury. The cabinet shall be placed vertically to prevent it from sliding in the vehicle, and a fixing belt shall be used.



A tilting of the battery rack may cause injury. The maximum weight of a single battery rack of OHR-206 can reach 87.0 kg. When tilted, they may overturn, causing injury and damage. Ensure that the battery cabinet is on a stable surface and that it does not tilt due to load or force.



The battery energy storage system can be damaged, if not properly transported. The battery module can only be transported vertically. Note that these parts may be top-heavy. Failure to follow this instruction may result in damage to the part.



During transportation, the battery storage rack may be damaged when it is installed with the battery module. The battery storage rack is not designed to be transported with the installed battery modules. Always transport the battery module and the battery rack separately. Once the battery module is installed, do not move the battery rack, and do not lift it by a lifting device.



If possible, do not remove the transport packaging before arrival at the installation site. Before removing the transport protector, check if the transport packaging is damaged, and check the impact indicator on the outer packaging of the battery converter. If the impact indicator is triggered, the possibility of transport damage cannot be ruled out.



Improper transportation of battery modules may cause injury. The single battery module weighs 87.0 kg. If it falls or slips, it may cause injury. Only use suitable transport and lifting equipment to ensure safe transport.



Wear safety shoes to avoid the danger of injury. When transporting the battery rack and battery module, their parts may be crushed due to their heavy weight. Therefore, all persons involved in transportation must wear safety shoes with toe caps. Please observe the safety regulations for transportation at the end customer's site, especially during loading and unloading.



During transportation and installation of unpacked battery storage cabinets, the risk of injury increases, especially on sharp metal panels. Therefore, all personnel involved in transportation and installation must wear protective gloves.



The maximum weight of a single rack of OHR-206 can reach 129.5kg. We suggest that at least 2-3 people work together to install the battery rack. The lifting device is helpful for heavy parts, and the pulley or cart for light parts. Be careful not to damage the case. The number of battery modules stacked shall not be more than 6.

Check whether the delivery is complete.

3.2 Permissible and Impermissible Storage Positions of a Packaged Battery Module

The battery module can only be transported in an upright position. Please note that the battery rack may be very top-heavy.

4. Description and installation of OHR-206 battery

4.1 Installation Precautions



WARNING! Possible damage to the building due to static overload

1. The total weight of the battery storage system is kgs. Ensure that the installation site has sufficient bearing capacity.
2. When selecting the installation site, consider the transportation route and necessary site cleanup.

4.2 OHR-206 Product Description

OHR-206 is a high-voltage lithium-ion battery system. It provides a reliable backup power supply for supermarkets, banks, schools, farms and small factories to smooth the load curve and achieve peak load transfer. It can also improve the stability of renewable systems and promote the application of renewable energy.

It is characterized by high integration, good reliability, long service life, wide working temperature range, etc. The battery energy storage system is modular. Each battery module has a capacity of 10.54kWh. It can support up to 15 battery modules in series. Its total energy can be expanded from 31.6 kWh to 158.2 kWh.

4.3 Technical Data

System Model	OHR105.4K-206
Installation Mode	Racked
Battery Type	LifePO4(LFP)
Battery Module Qty InSeries (Optional)	10
System Nominal Capacity (Ah)	206
System Nominal Voltage (V)	512.0
System Operating Voltage (V)	464.0~568.0
System Nominal Capacity (KWh)	105.4
Usable Capacity (KWh)	94.8
Dimension (mm)	1200*620*1870

Weight (Kg)	1029±2
Recommend Charge/Discharge Current (A)	100
Communicaiton	CAN
Ingress Protection	IP20
Altitude	≤2000m
Cycle Life	25±2°C,0.5C/0.5C,EOL70%≥6000
Monitoring Parameters	System voltage,Current,cell voltage,cell temperature,module temperature
SOC	Intelligent algorithm
Working Temperature	0°C~55°C Charge -20°C ~55°C Discharge
Storage Temperature	0~35°C

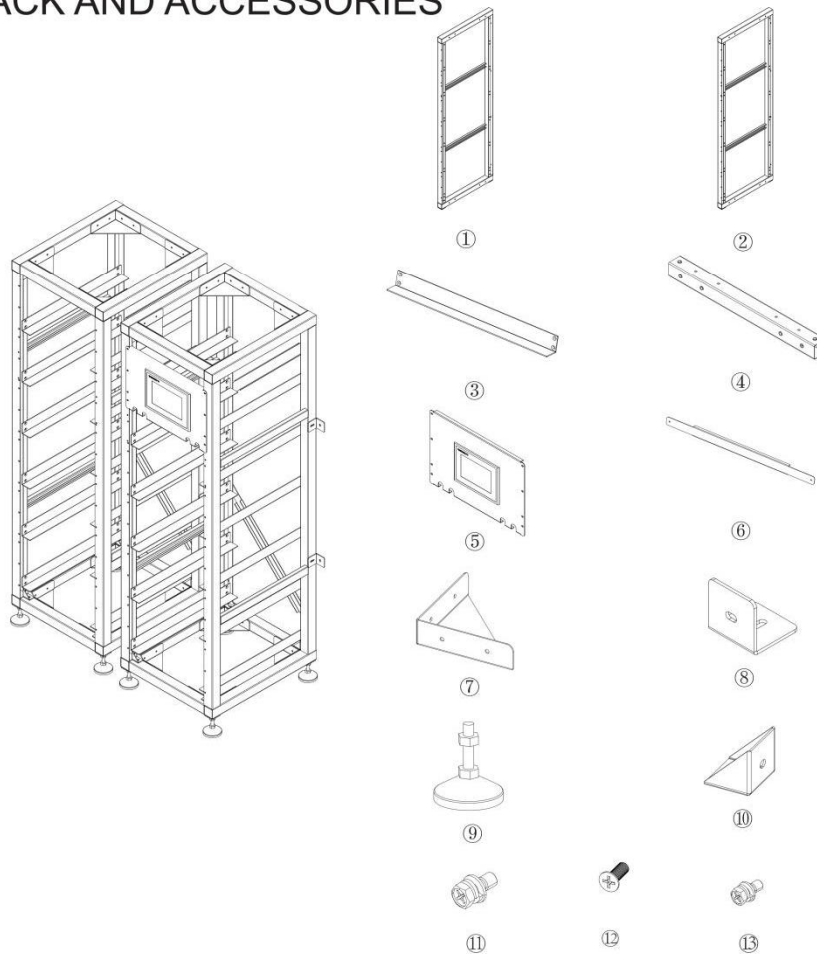
4.4. Preparation

4.4.1 Tools required

- ① PHILIP2# crosshead screwdriver;
- ② 10mm hexagon socket
- ③ 24mm wrench

4.4.2 OHR-5.5U-HRACK-12 Parts description

RACK AND ACCESSORIES



No.	Description	Quantity
①	Side beam L	2
②	Side beam R	2
③	L support crossbeam	22
④	Top and bottom beam	8
⑤	display panel	1
⑥	diagonal brace	4
⑦	right-angle connectors	16
⑧	Rack fastener	8
⑨	Base	8
⑩	Side beam connectors	16
⑪	M6 hexagonal three combination bolt	148+2
⑫	M6 cross countersunk bolt	88+2
⑬	M5 hexagonal three combination bolt	8+2

4.4.3 Installation of Rack

1. ****Step 1:**** First, lay Side Beam L (a) flat on a horizontal surface. Install the six L Support Crossbeams one by one from left to right onto Side Beam L (pay attention to the installation direction). Assemble Side Beam R (b) in the same way as (a), and then install the base (i) at the bottom of a and b. Rotate it to the end and tighten it with a wrench.

- ****Note:**** Use Type I screws for fixing.

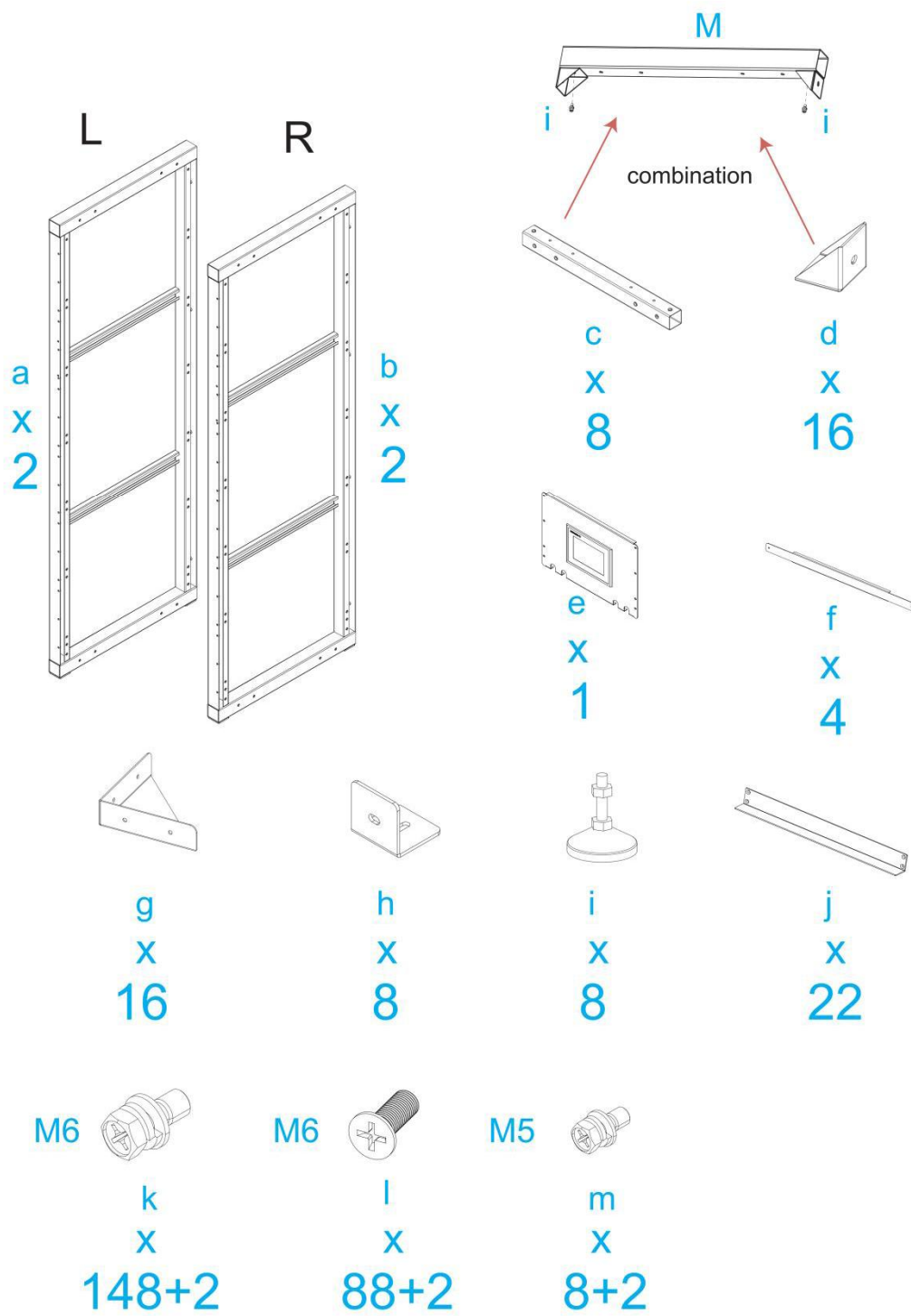
2. ****Step 2:**** Use Type K screws to fasten c and d (pay attention to the installation direction). A total of 8 sets are required for the two brackets.

3. ****Step 3:**** Secure the assembled Side Beam L (a) to M using Type K screws in sequence from 1 to 2. After securing all four sets of M, fasten the assembled Side Beam R (b) to the other side of M using Type K screws.

4. ****Step 4:**** Fix g in the direction shown in the diagram using Type K screws, with 8 screws needed for each bracket. After securing g, fasten f as shown in the diagram using Type K screws. Stand the bracket upright, and install h according to the diagram, with 6 screws needed for each bracket. The other end of h is used to secure it to the wall. Secure flexibly based on actual installation, with a minimum of 4 screws required.

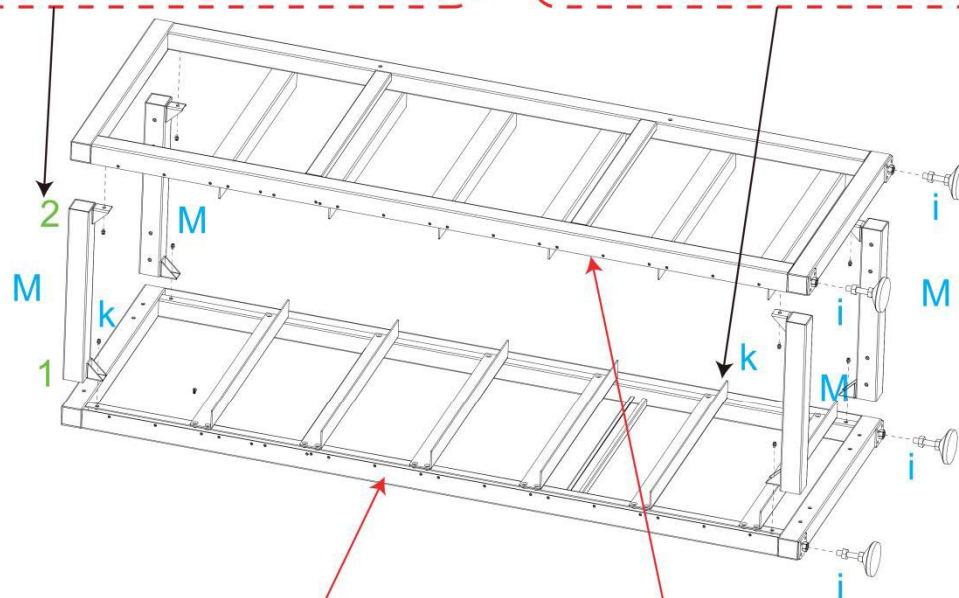
5. ****Step 5:**** After assembling the battery module bracket, install the display battery module bracket (installation is the same as the battery module bracket). The difference is that the display battery module bracket (1) does not have an L Support Crossbeam on the top layer, and (2) requires the installation of the display. Stand the bracket upright after installation.

6. ****Step 6:**** After assembly, check whether the bracket screws are tightened properly. Adjust any screws that are not fully tightened.



First of all, the 4 M's tighten the screws in the order identified by 1 and 2 in the picture.

Pay attention to all Louis Zapote Crosbime installation directions

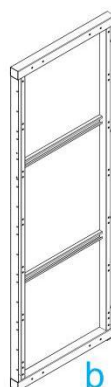


L
combination



a
x
1

j
x
8

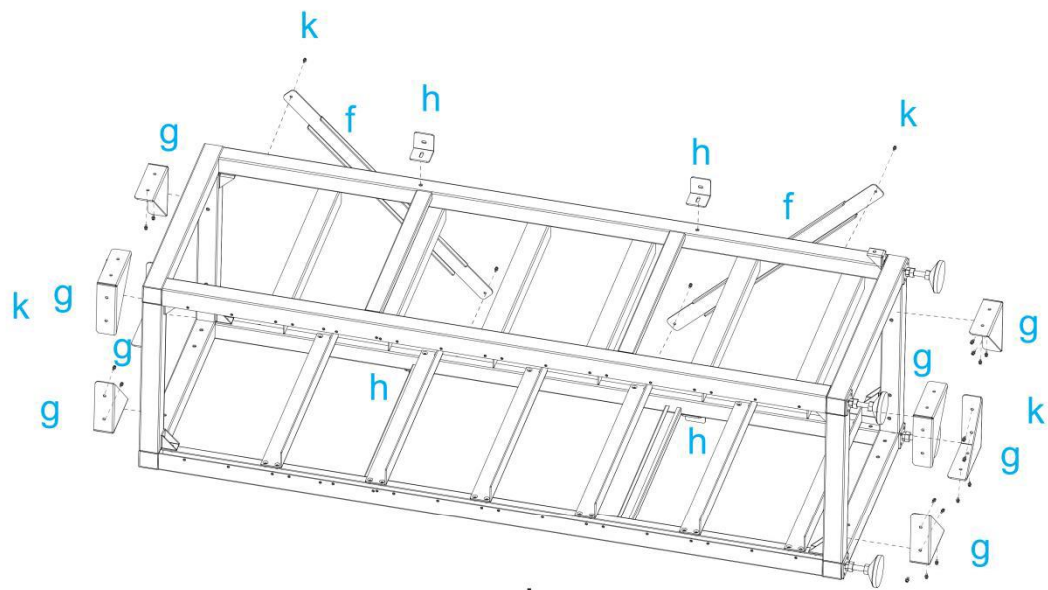


R
combination

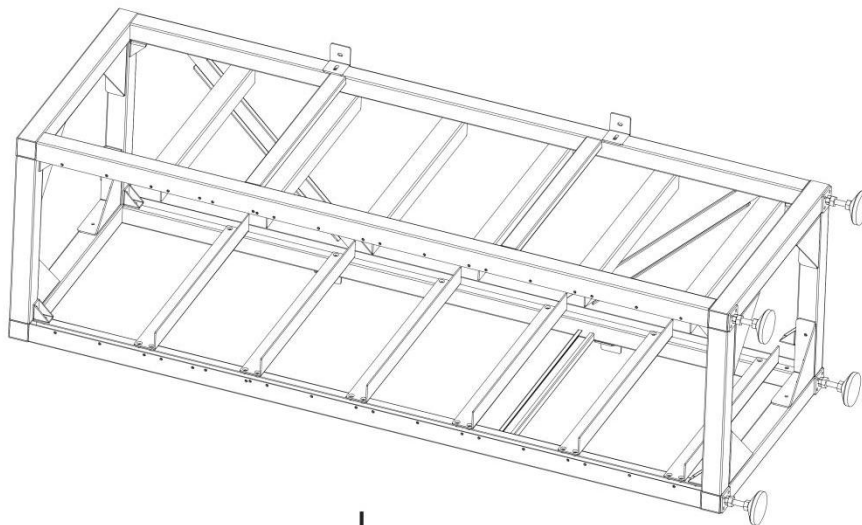


b
x
1

j
x
8

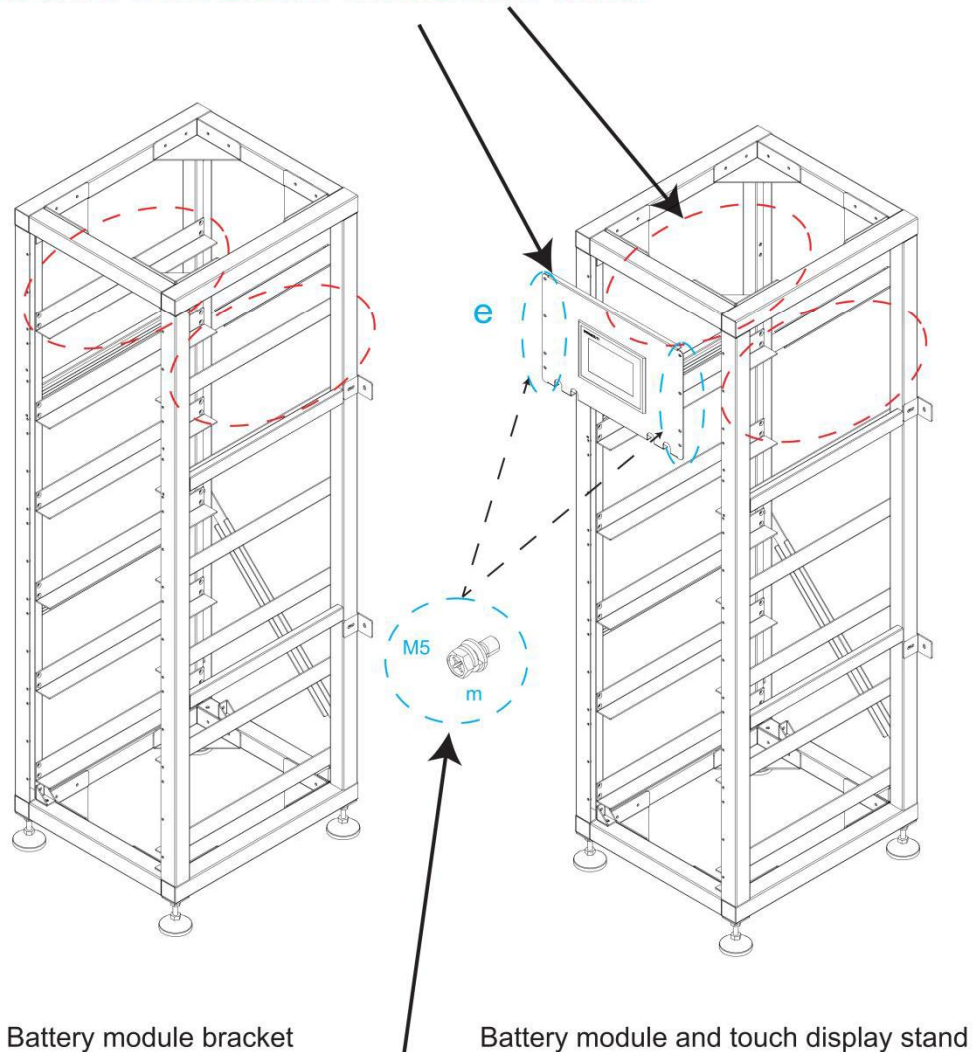


Install g, f, and h sequentially

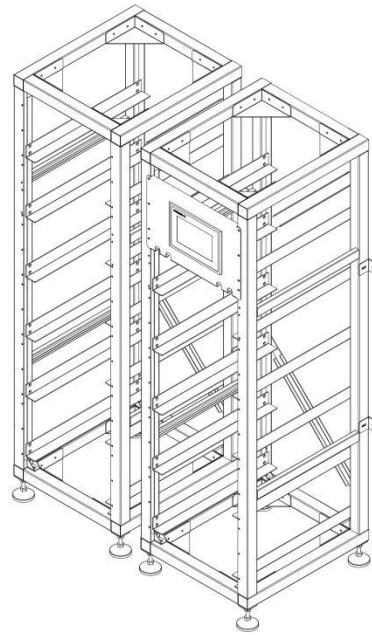
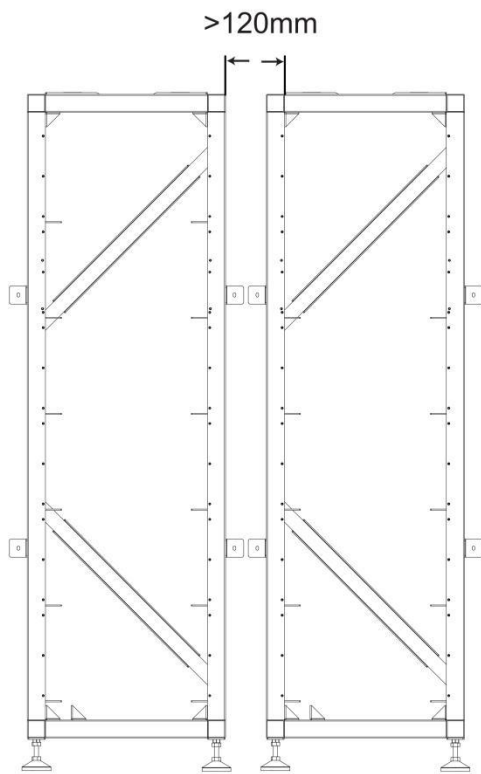


Installation finished, set the rack upright

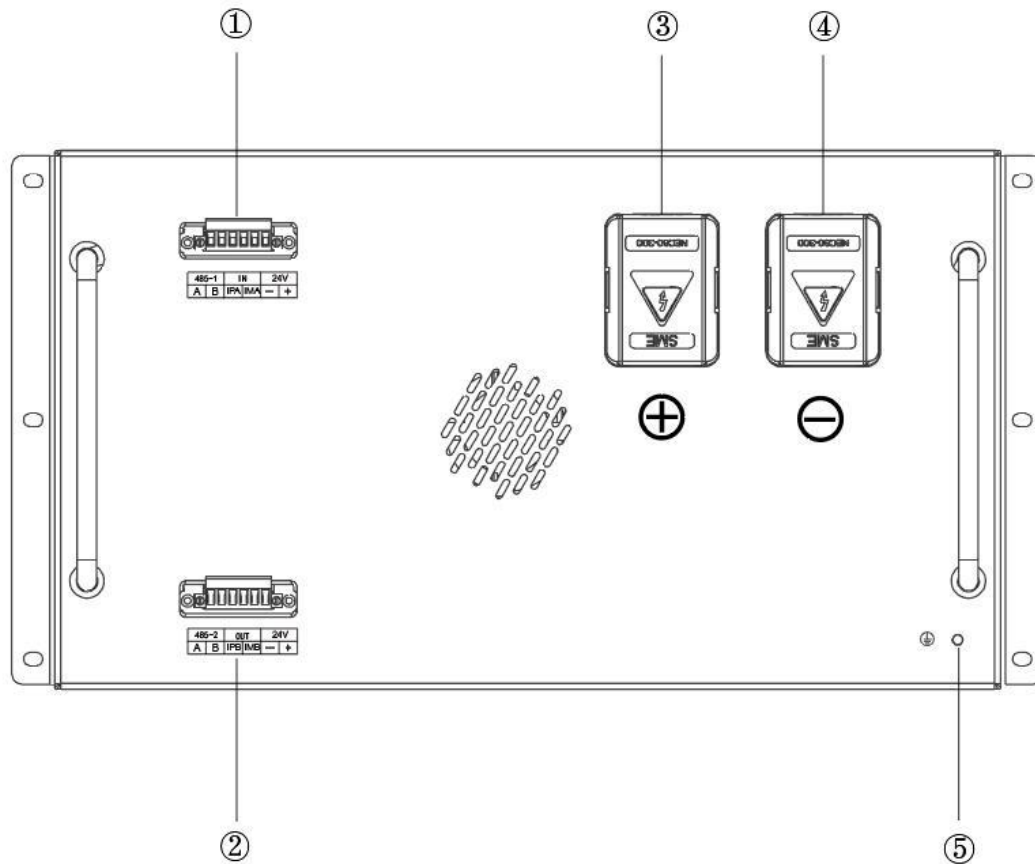
Note: There are two differences between the battery module bracket and the display battery module bracket.
First: the display battery module holder contains the display panel (Inkludin, Tuchsklin).
Second: There is no Louis Saport Crosbeam on the upper layer of the display battery module bracket.



Please use M5 hexagonal three combination bolt to fix the display panel

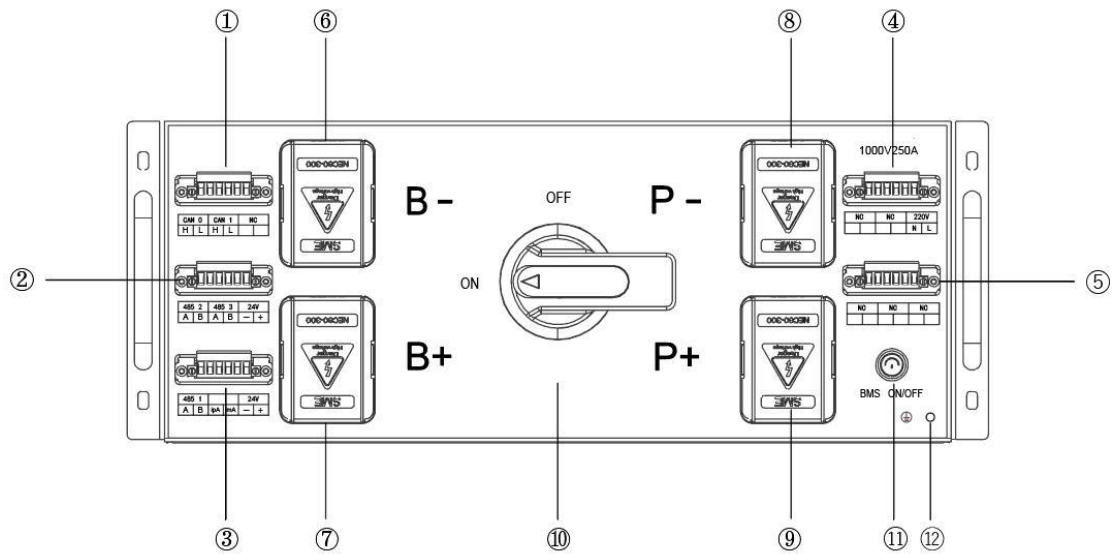


4.5 Description of Battery Module



NO.	Name	Description.	Position
①	COM	Connection position of battery module communication supply input or output.	Front
②	COM	Connection position of battery module communication and power supply input or output.	Front
③	B+	Battery module positive pole (orange)	Front
④	B-	Battery module negative pole (black).	Front
⑤	Earthing wire	Battery module grounding location	Front

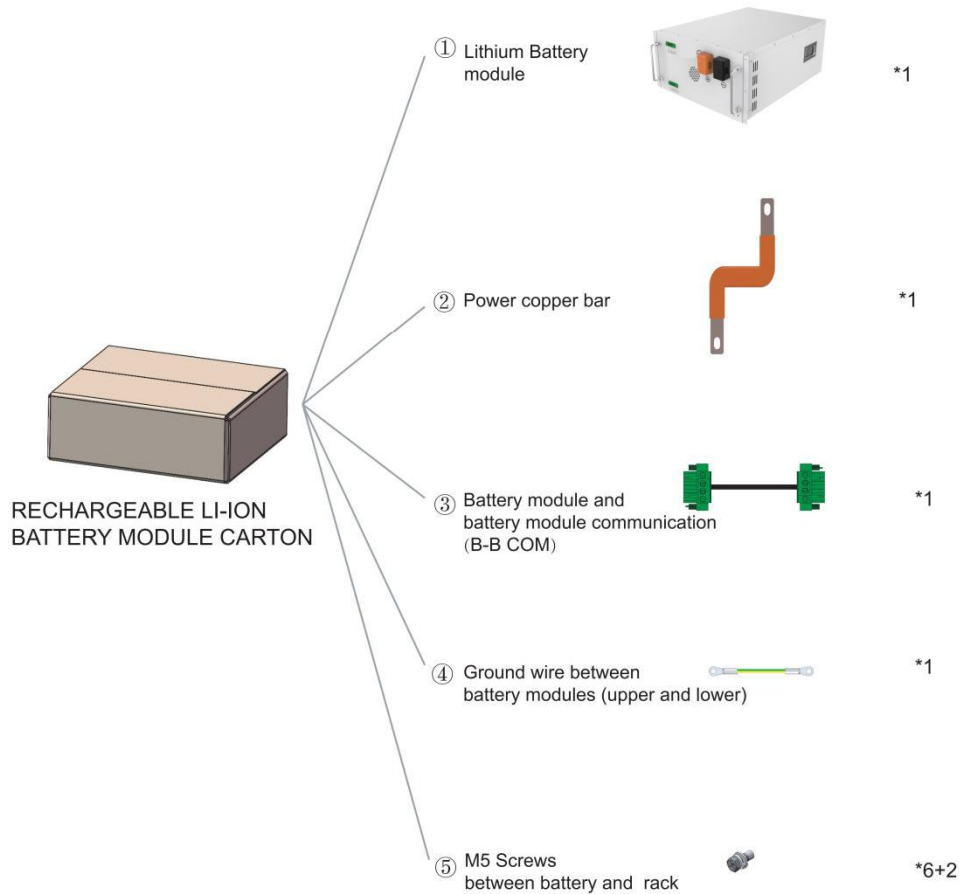
4.6 Description of high-voltage BMS box



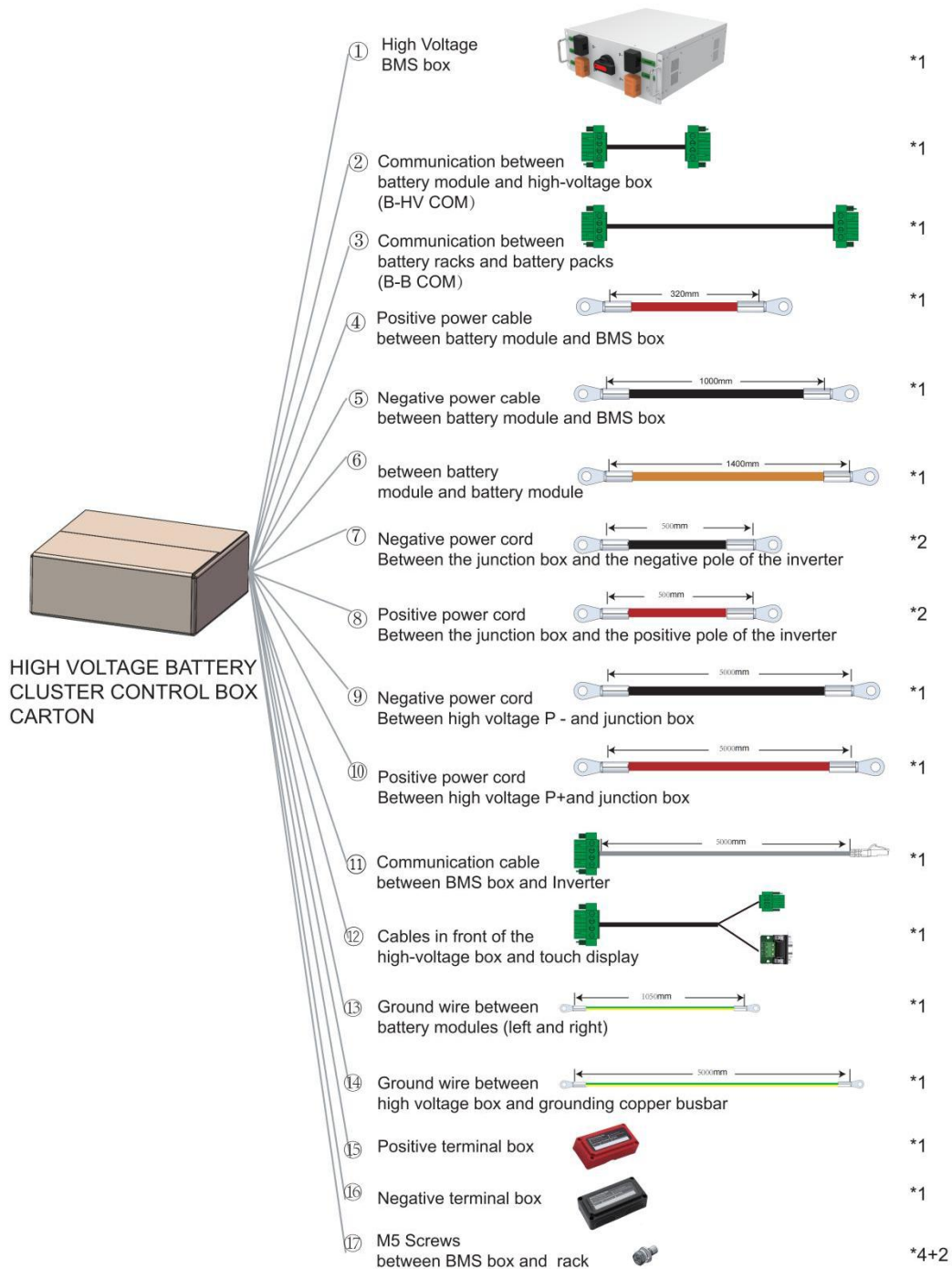
NO.	Name	Description.	Position
①	COM	Inverter communication port	Front
②	COM	Communication connection between high voltage BMS box and LCD screen	Front
③	COM	Communication port between battery and high-voltage BMS box	Front
④	COM	220V AC input port (reserved)	Front
⑤	COM	Reserved Ports	
⑥	B-	High voltage box module negative pole (black).	Front
⑦	B+	High voltage box module positive pole (orange)	Front
⑧	P-	Connect the high-voltage box to the negative pole of the inverter	Front
⑨	P+	Connect the high-voltage box to the positive pole of the inverter	Front
⑩	Air switch	Used to manually control the connection between the battery rack and external devices.	Front
⑪	BMS ON/OFF	BMS start button	Front
⑫	Earthing wire	Grounding wire between high voltage box and grounding copper busbar	Front

4.7 Description of Battery Module in Rack

RECHARGEABLE LI-ION BATTERY MODULE



HIGH VOLTAGE BATTERY CLUSTER CONTROL BOX



4.8 Installation of the Battery Module to the Rack



Insufficient or no grounding may cause an electric shock. Device malfunctions, and insufficient or no grounding may cause device damage and life-threatening electric shocks.



Note: Before installing the battery, please turn the manual switch of the high-voltage control box to the off position.



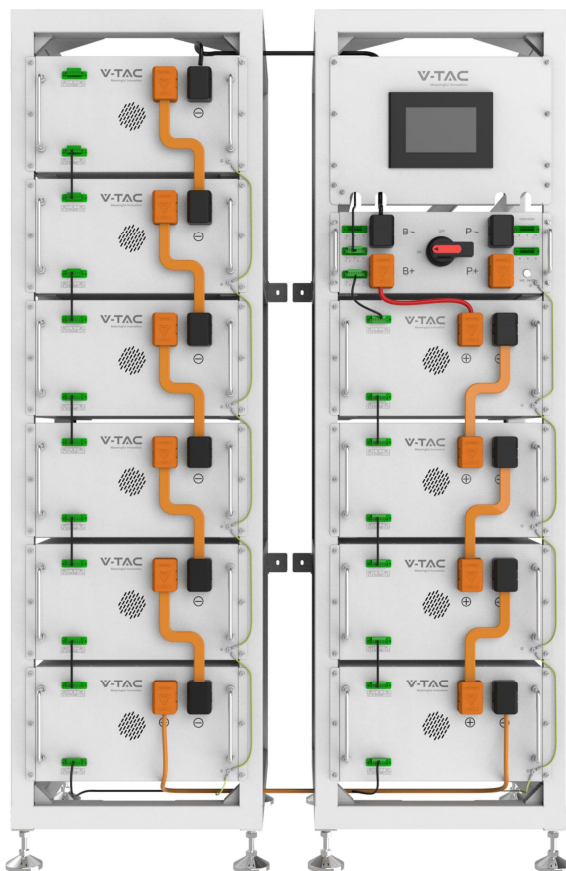
CAUTION

Remember that this battery is heavy! Please be careful when lifting out from the package.



CAUTION

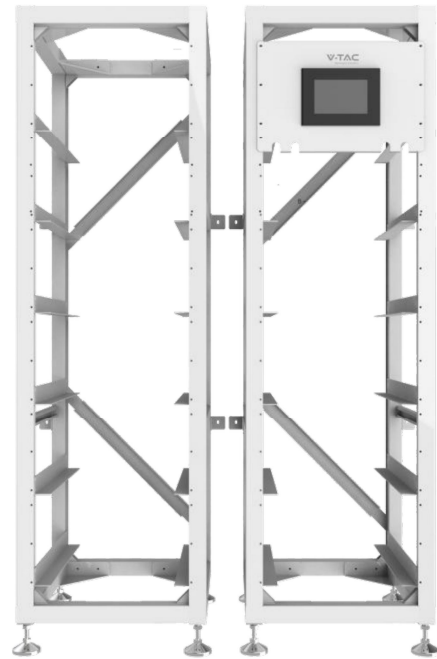
Note the allowable installation modes :

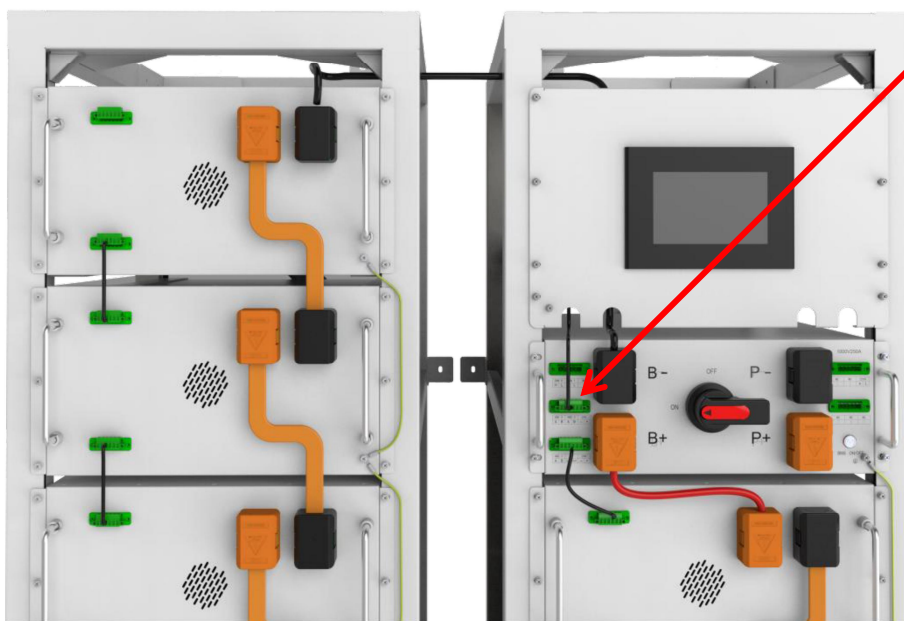
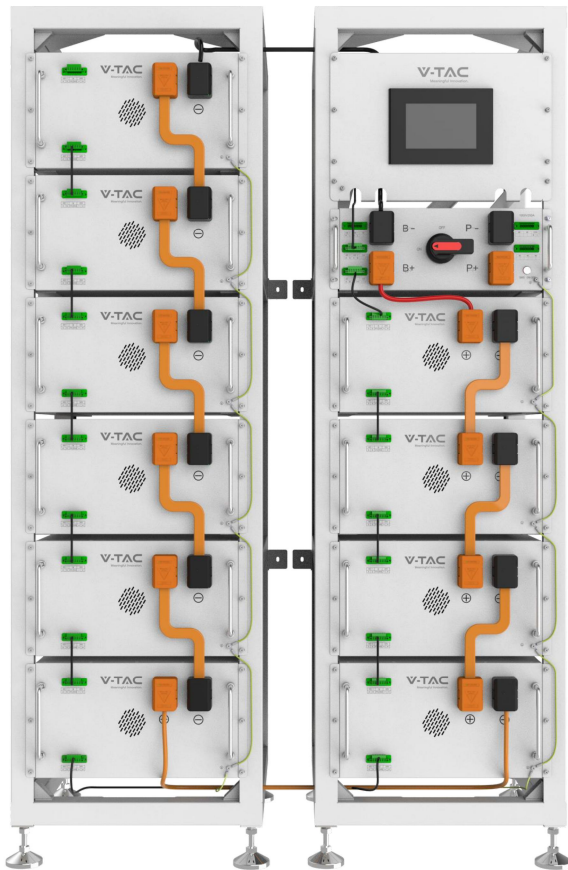


① Insert the first battery module into the bottom battery module holder; Then from the bottom to the top, continue to install in the same way until the battery is installed. In the picture position, insert the high voltage BMS box into the opposite position.

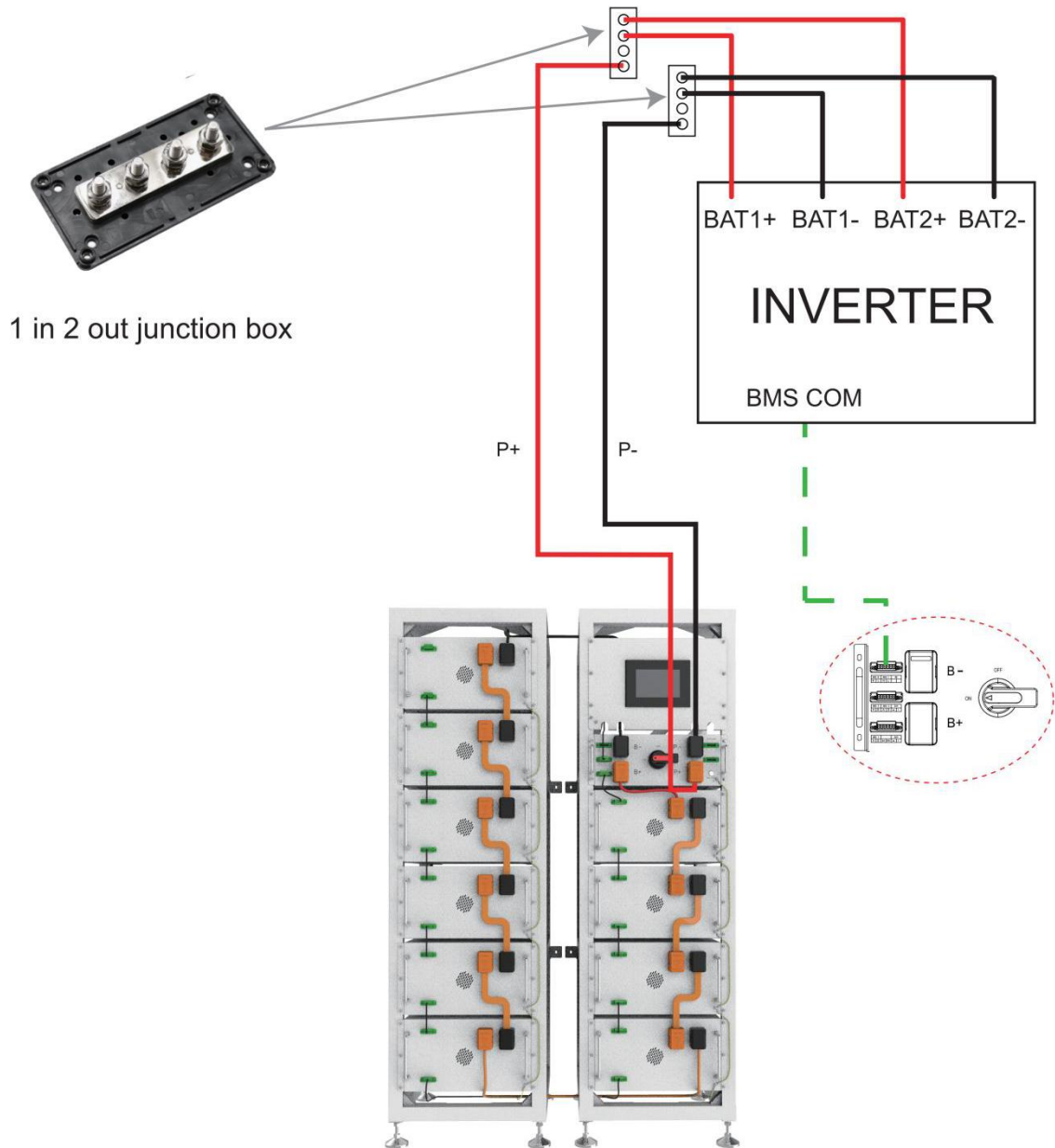
② After the battery module and control box is inserted into the rack, use M5* 12 outer hexagon cross combination screws to fix all the lugs of the battery module and control box on the side beam in turn.

③ Connect bronze, cable, communication harness in turn, and fix.





4.9 Battery cluster connected to inverter



4.10 System startup and shutdown

4.10.1 Startup procedure

- ① After connecting the battery cable, press the BMS start button and wait for the screen to light up..
- ② When the battery pack makes two clicks and the relay ON the display is closed, turn the circuit breaker to ON.
- ③ Complete the startup.

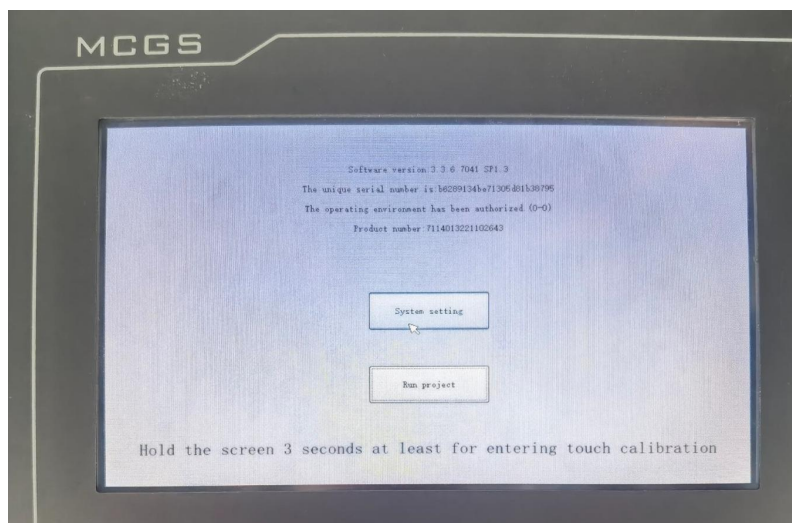
4.10.2 Shutdown procedure

- ① Stop load operation 。
- ② Press the DC circuit breaker ON the high voltage control box and set "On" to "OFF" position 。
- ③ Press the Start button again and wait for the screen to go off 。
- ④ Complete shutdown.

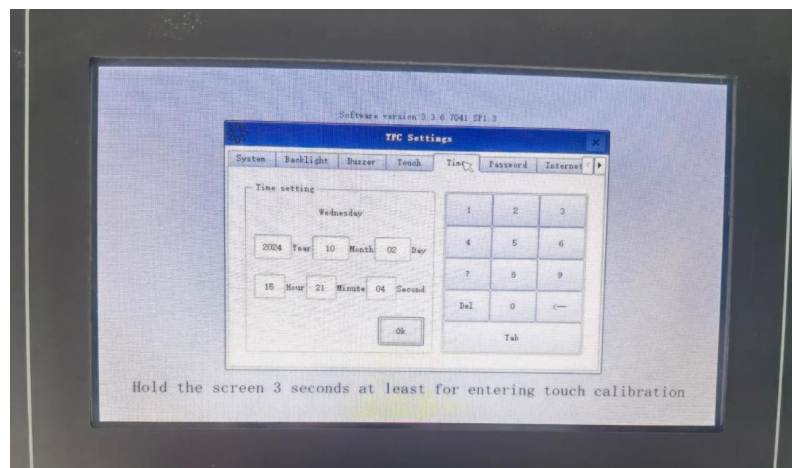
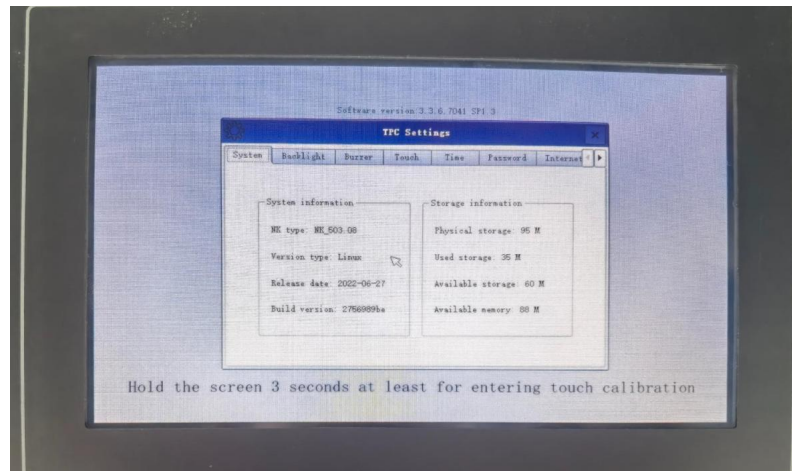
5 OHR'S User Interface

5.1 Time setting

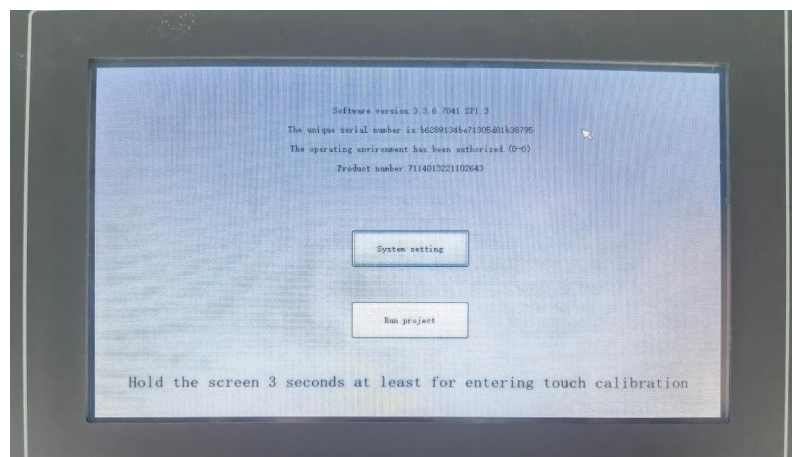
When the system starts, hold down the screen.



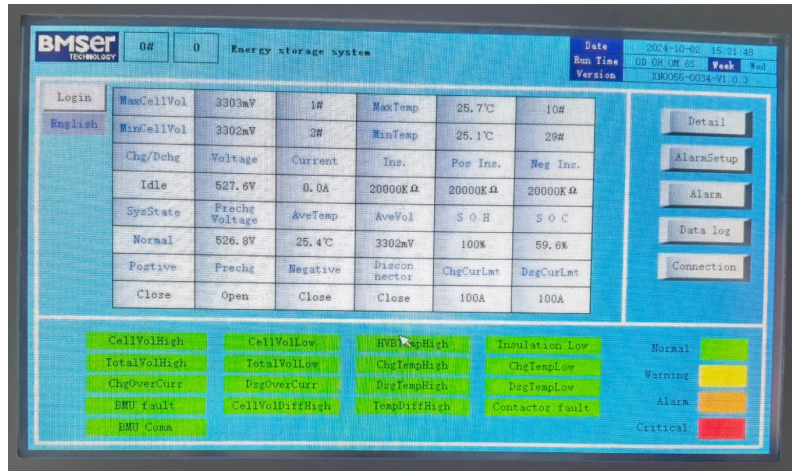
Enter the System setting, Select the Time button. Set according to local time. After setting up, press × to push out.



Enter the Run project.



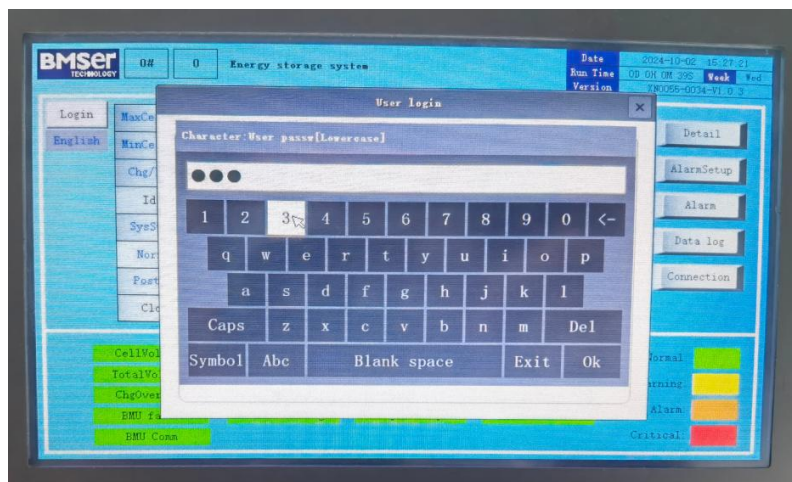
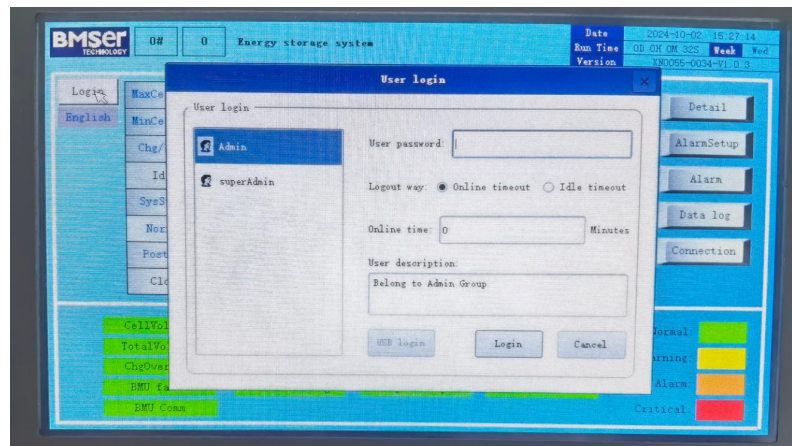
5.2 Main Interface



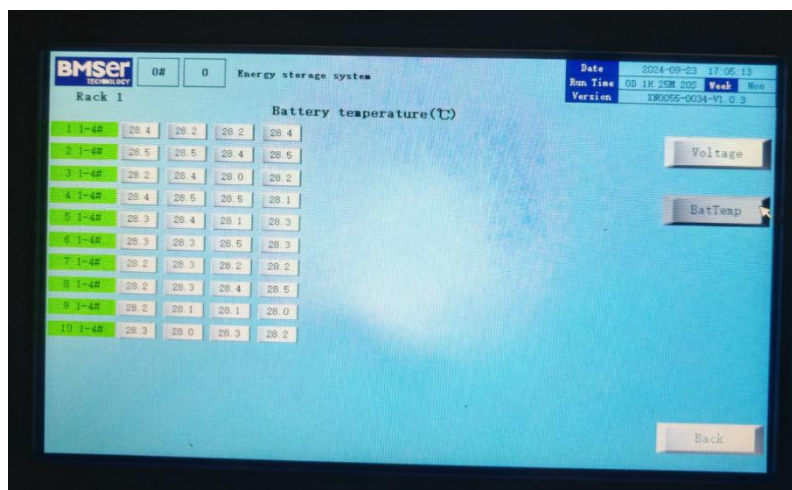
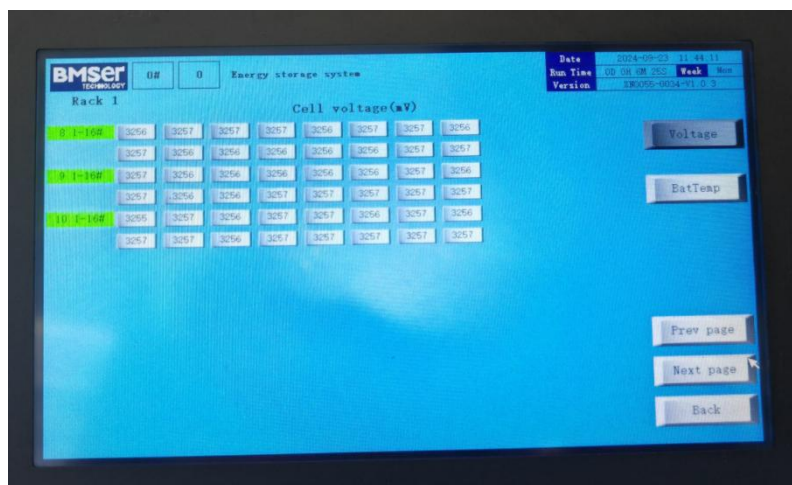
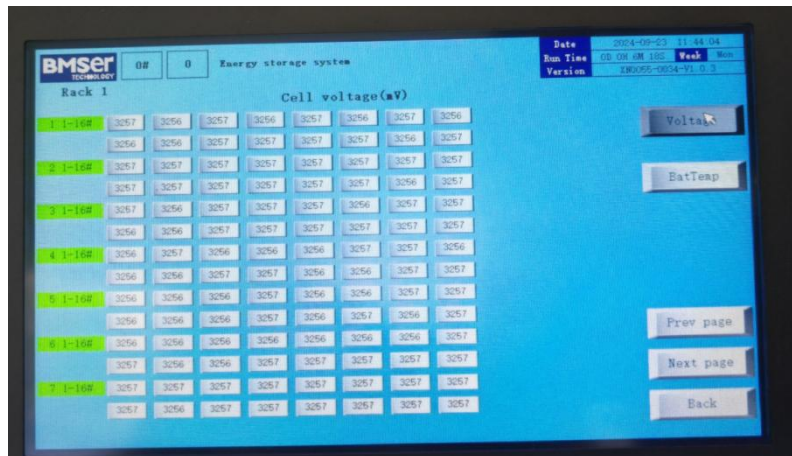
5.3 User login

Account: Admin Password:123

If need to modify the parameters, confirm with the dealer. For details, see the warranty agreement.



5.4 Detail



5.5 Alarm Setup

BMSEr TECHNOLOGY **ON** **0** Energy storage system Date: 2024-10-02 15:02:11
Run Time: 00:00:00:235 Week Wed
Version: Z80055-0034-V1.0.3

Rack 1

Warning limit setup

Alarm type	Alarm	Recover	Unit	Alarm type	Alarm	Recover	Unit
CellVolHigh	3450	3350	mV	ChgTempHigh	500	400	0.1℃
CellVolLow	3000	3100	mV	ChgTempLow	150	200	0.1℃
TotalVolHigh	5520	5400	0.1V	DsgTempHigh	500	400	0.1℃
TotalVolLow	4800	4960	0.1V	DsgTempLow	0	100	0.1℃
ChgOverCurr	1100	1000	0.1A	HVBTempHigh	800	750	0.1℃
DsgOverCurr	1100	1000	0.1A	TempDiffHigh	100	80	0.1℃
Insulation Low	100	200	Ω/V	CellVolDiffHigh	400	200	mV

Warning
Alarm
Critical
Back

BMSEr TECHNOLOGY **ON** **0** Energy storage system Date: 2024-10-02 15:02:53
Run Time: 00:00:00:315 Week Wed
Version: Z80055-0034-V1.0.3

Rack 1

Alarm limit setup

Alarm type	Alarm	Recover	Unit	Alarm type	Alarm	Recover	Unit
CellVolHigh	3520	3380	mV	ChgTempHigh	550	420	0.1℃
CellVolLow	2900	3000	mV	ChgTempLow	0	100	0.1℃
TotalVolHigh	5680	5520	0.1V	DsgTempHigh	550	420	0.1℃
TotalVolLow	4640	4800	0.1V	DsgTempLow	-200	-100	0.1℃
ChgOverCurr	1200	1100	0.1A	HVBTempHigh	900	750	0.1℃
DsgOverCurr	1200	1100	0.1A	TempDiffHigh	150	130	0.1℃
Insulation Low	500	600	Ω/V	CellVolDiffHigh	600	300	mV

Warning
Alarm
Critical
Back

BMSEr TECHNOLOGY **ON** **0** Energy storage system Date: 2024-10-02 15:03:00
Run Time: 00:00:00:165 Week Wed
Version: Z80055-0034-V1.0.3

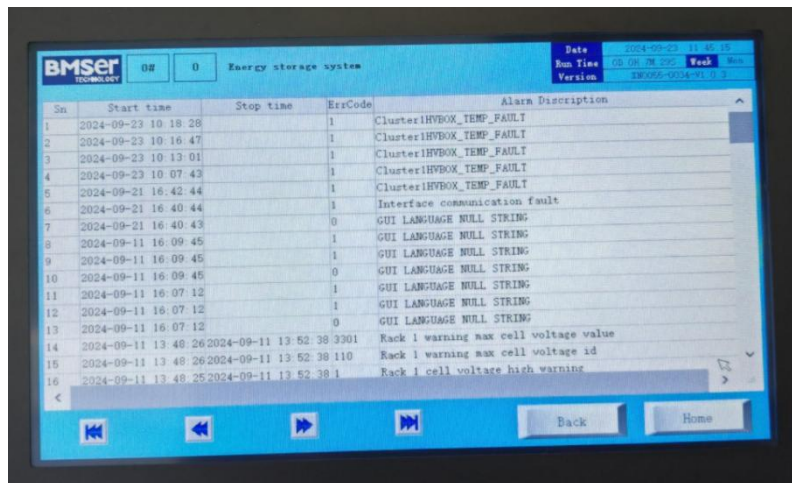
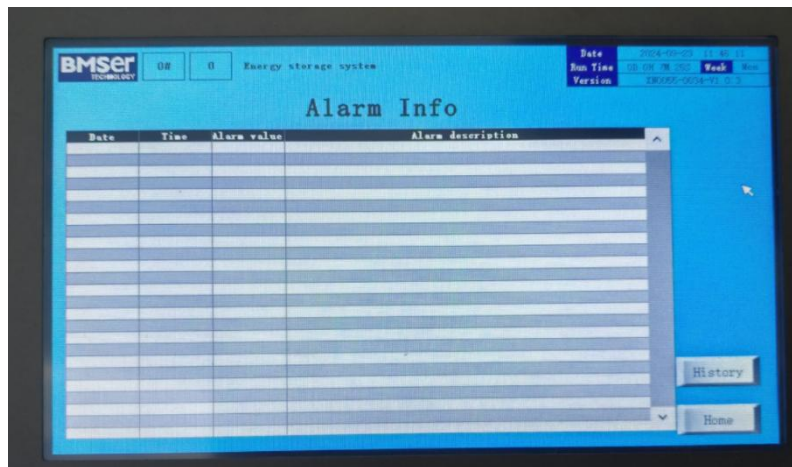
Rack 1

Critical limit setup

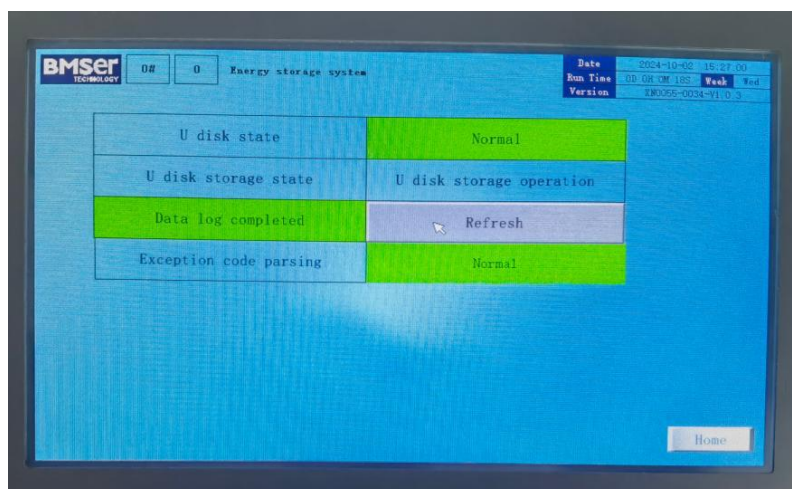
Alarm type	Alarm	Recover	Unit	Alarm type	Alarm	Recover	Unit
CellVolHigh	3650	3520	mV	ChgTempHigh	600	520	0.1℃
CellVolLow	2500	2600	mV	ChgTempLow	-200	-100	0.1℃
TotalVolHigh	5840	5680	0.1V	DsgTempHigh	600	520	0.1℃
TotalVolLow	4000	4200	0.1V	DsgTempLow	-250	-200	0.1℃
ChgOverCurr	1300	1200	0.1A	HVBTempHigh	1000	750	0.1℃
DsgOverCurr	1300	1200	0.1A	TempDiffHigh	200	130	0.1℃
Insulation Low	1000	1200	Ω/V	CellVolDiffHigh	800	300	mV

Warning
Alarm
Critical
Back

5.6 Alarm

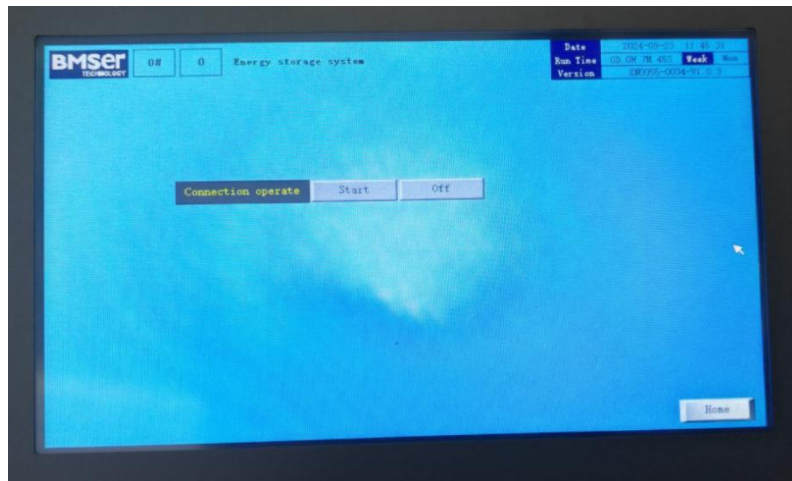


5.7 Data Log (The display requires a USB flash drive)



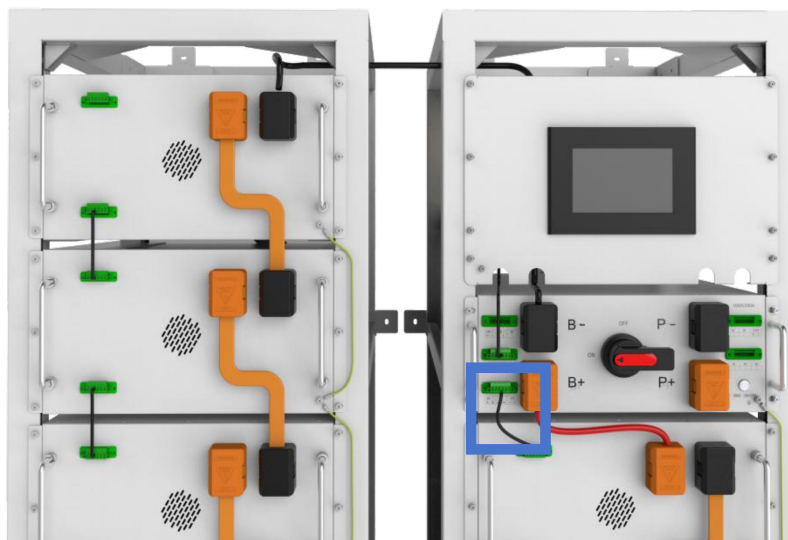
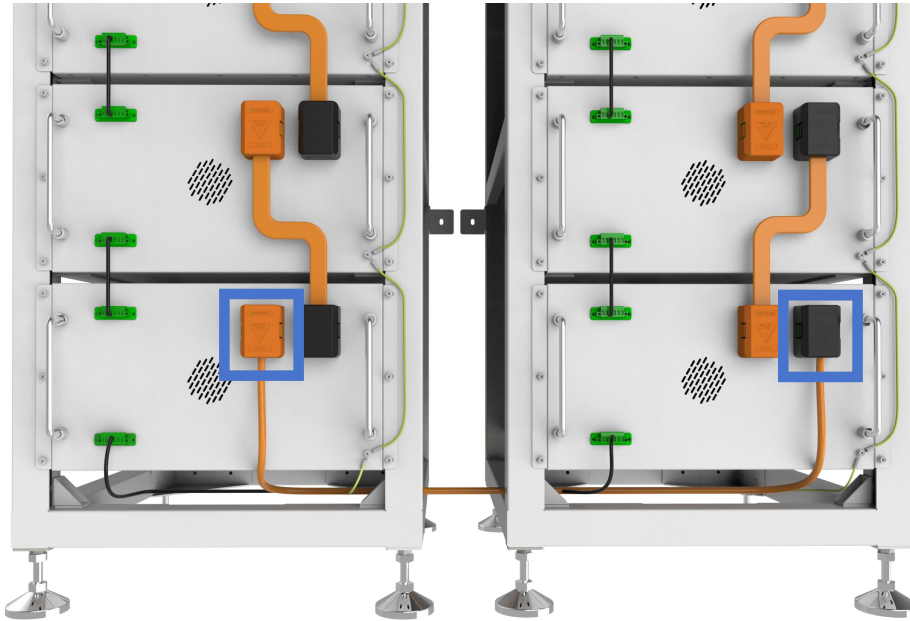
5.8 Connection

This function is not required for single cluster battery



6 Battery Module Storage

- ① To ensure the battery service life, the storage temperature shall be kept between 0°C~35°C.
- ② The battery shall be cycled at least once every 6 months.
- ③ To minimize self-discharge in a long storage period, disconnect the battery connection (1/2) of the high-voltage control box of the DC connecting cable. This will interrupt the use of the 12 V power supply installed in the high-voltage control box and prevent the battery from self-discharging.



7 Maintenance



Warning! Improper decommissioning may cause damage to the equipment and/or battery inverter.

Before maintenance, ensure that OHR-206 is decommissioned according to relevant provisions.



Note: All maintenance work shall comply with local applicable regulations and standards.

The USB-CAN port of OHR has the functions of upgrading firmware and recording battery data, which can be used as an auxiliary tool.

To ensure safe operation, all plug connections must be checked. If necessary, relevant operators shall press them back into place at least once a year.

The following inspection or maintenance must be carried out once a year:

- General visual inspection
- Check all tightened electrical connections. Check the tightening torque according to the values in the following table. Loose connections must be retightened to the specified torque.

Connection mode	Tightening torque
high-voltage BMS box grounding	4.5Nm
Fixing the lug of the high-voltage BMS box	1.2Nm
Fixing the lug of the battery module	1.2Nm

- Using the monitoring software, check whether the SoC, SoH, battery voltage and temperature of the battery module are abnormal.
- Shut down and restart OHR-206 once a year.

Note: If the system is installed in a polluted environment, maintenance and cleaning must be carried out at short intervals.

Note: Clean the battery rack with a dry-cleaning cloth. Ensure that no moisture comes into contact with the battery connections. Do not use solvents.



Attention:

1. Do not dispose of batteries and rechargeable batteries as domestic waste!

You are legally obliged to return used batteries and rechargeable batteries.

2. Waste batteries may contain pollutants that can damage the environment or your health if improperly stored or handled.

3. Batteries also contain iron, lithium and other important raw materials, which can be recycled.

Do not dispose of batteries as household waste!



Legal Statement

The information contained in the document is the property of V-TAC Europe Ltd.

All information shall not be published in whole or in part without the written permission of V-TAC Europe Ltd.