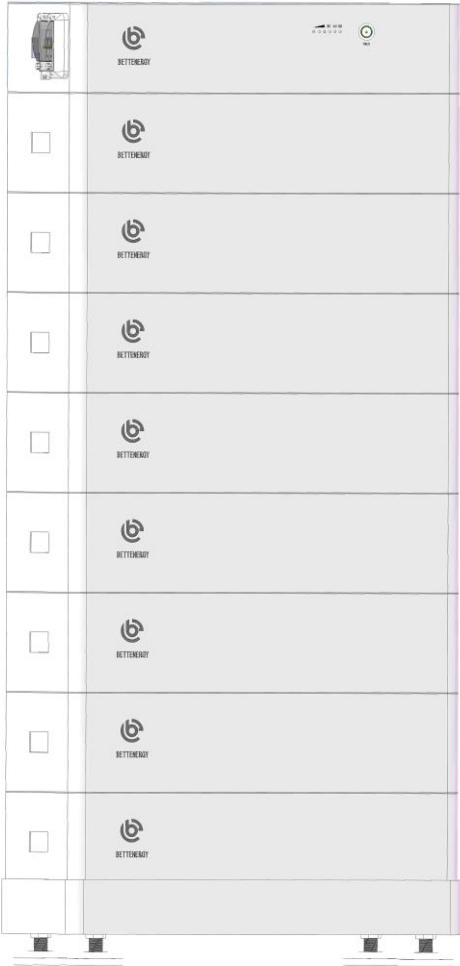




User Manual
Model: ELEBOX-HV



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1 Product information

This manual introduces BETTENERGY ELEBOX-HV battery products. Please read this manual carefully before using the battery. If you have any questions, please contact lightech for advice and assistance.

1.1 Content description

This user manual is applicable to BETTENERGY Elebox-HV.

This user manual contains BETTENERGY Elebox-HV product information, user guide, safety information, installation guide, and detailed information on frequently asked operating questions and follow-up maintenance measures.

1.2 Usage scenarios

BETTENERGY Elebox-HV is an energy storage unit designed for residential or commercial grid applications with short-term backup capability.

Usage Precautions:

The BETTENERGY Elebox-HV is not intended to support life-sustaining medical devices. This product is used only in accordance with the information provided in the attached documents and local applicable standards and regulations. Any other improper use may cause personal injury or property damage. The illustrations in this manual are intended only to help explain the concept of system configuration, including usage guidelines, safety precautions, common operating problems, and subsequent maintenance measures.

Changes and modifications to the product are only permitted under the following conditions, such as the express written permission of SEEKENER. No warranty or claim will be made for unauthorized changes. Lightech shall not be liable for any damage caused by such alteration. Any non-standard use of the product and any use beyond that described in the terms and conditions will be considered a violation.

Attachment documentation is an integral part of this product. Please keep the document in a secure place for future use. The product model label (see section 1.3) must be retained on the product.

1.3 Product label

The label is attached to the product and contains product identification information. For safe use, the user must fully understand the contents of the label.

The label:



2 Security measures

This section contains safety information that must be followed at all times when using or installing batteries. To prevent personal injury or property damage, and to ensure the long-term operation of batteries, read this section carefully and always watch for "warnings" issued by all safety information.



Environmental requirements

1. Do not expose the battery to more than 50°C;
2. Do not place the battery near any heat source;
3. Do not expose the battery to moisture or liquid;
4. Do not expose the battery to corrosive gases or liquids;
5. Do not expose the battery to flammable gases or liquids;
6. Do not expose the battery to direct sunlight for a long time;
7. Do not allow battery power terminals to touch conductive objects, such as wires;
8. Keep the battery in a safe place away from children and animals;

Operation Precautions:

1. Please do not remove the battery;
2. Do not touch the battery string with wet hands;
3. Do not crush, drop, or Pierce the battery;
4. Do not reverse the polarity or connect in series;
5. Do not short-circuit the terminal, and remove all metal jewelry items that may produce a short-circuit before installation and repair;
6. Always dispose the products in accordance with the local safety regulations;
7. Store and use the battery in accordance with the user's manual;
8. Ensure reliable grounding;
9. Disconnecting all batteries to the wires before installation and maintenance;
10. Do not stack batteries outside the protective packaging during storage or handling;
11. Packaged batteries shall not be stacked more than the quantity specified on the

packaging;

12. Continued operation of the damaged battery may lead to dangerous situations, causing serious injuries such as electric shock or combustion;

3 Technical Parameters

| Basic parameters | ELEBOX-5. 1 | ELEBOX-7. 7 | ELEBOX-10. 2 | ELEBOX-12. 8 | ELEBOX-15. 4 | ELEBOX-17. 9 | ELEBOX-20. 5 | ELEBOX-23 | ELEBOX25. 6 |
|-------------------------------------|-----------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Number of battery modules | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| System rated voltage | 102.4V | 153.6V | 204.8V | 256V | 307.2V | 358.4V | 409. 6V | 460.8V | 512V |
| Rated capacity of system | 5.1KW.h | 7.6KW.h | 10.2KW.h | 12.8KW.h | 15.3KW.h | 17.9KW.h | 20.4KW.h | 23KW.h | 25.6KW.H |
| System usable capacity (90%DOD) | 4.59KW.h | 6.84kw.h | 9.18kw.h | 11.52 kw.h | 13.77 kw.h | 16.11kw.h | 18.36 kw.h | 20.7 kw.h | 23.04KW.H |
| Dimensions (W*D*H) | 355/593/587 | 355/593/732 | 355/593/877 | 355/593/1022 | 355/593/1167 | 355/593/1312 | 355/593/1457 | 355/593/1602 | 355/593/1759 |
| Weight (Kg) | 93KG | 127KG | 161KG | 195KG | 229KG | 263KG | 297KG | 331KG | 365KG |
| Protection Class | IP65 | | | | | | | | |
| Cooling mode | Natural cooling | | | | | | | | |
| Rated charging current | 25A | | | | | | | | |
| Maximum continuous charging current | 30A | | | | | | | | |

| | |
|---|---------------------------------------|
| Rated discharge current | 25A |
| Maximum continuous discharge current | 30A |
| Operating Temperature | -10℃ ~ 55℃ |
| Storage temperature | ≤25℃, 12 Months |
| | ≤35℃, 6Months |
| | ≤45℃, 3Months |
| work environment air humidity) | <95%RH (No condensation) |
| Battery operating altitude | <2000m |
| Certification certificate | CE, IEC62619, MSDS, ROHS, UN38.3 |
| service life | 6000 @ 80% DOD / 25℃ / 0.5C / 60% EOL |

Batter Module Parameters

| | |
|------------------------|-----------------|
| Rated voltage | 51.2V |
| Rated storage capacity | 50AH |
| Weight(kg) | 34KG |
| Dimensions (W*H*D) | 593*146.5*355mm |
| Protection level | IP65 |

Be careful:

1. Operating current adjust according to the cell voltage and the battery temperature.
2. Different string battery modules of elebox-2560 (2 ~ 10 battery modules) will change parameters.

4 Technology Items

| NO. | Noun | Annotation |
|-----|------------------------|--|
| 1 | Discharge | Battery output power |
| 2 | Recharge | To put electricity into battery by charger |
| 3 | Full charge | SOC is 100% when the battery is fully charged |
| 4 | Standby | Ready for charging or discharge |
| 5 | Shutdown | Disconnect the battery output |
| 6 | SOC | State of charge (Available capacity) |
| 7 | Battery voltage | Voltage between the battery module P + / P- |
| 8 | Single string voltage | Voltage of single battery |
| 9 | Battery module voltage | Voltage between battery modules bat + / Bat - |
| 10 | Alarm lamp | Indicates that the battery is in an abnormal status |
| 11 | Protection | The battery stops charging and discharging |
| 12 | fault | The battery or BMS is damaged and needs to be replaced |
| 13 | Over release | Insufficient battery charge and requires timely charging |

5 Product Overview

5.1 Product profile



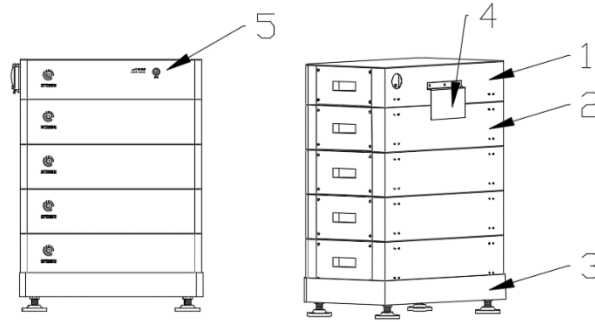
The BETTENERGY ELEBOX-HV high voltage lithium battery energy storage system, consisting of 2-10 battery modules (51.2V/50AH) and a BCU (Battery Control Unit) in series, with an operating voltage range of 96V-600V, is used for household / commercial energy storage applications, working with a high voltage inverter for energy storage purposes.

Bettenergy elebox-hv has a built-in BMS (battery management system, including the main BMS in BCU and the slave BMS in battery module), which can manage and monitor battery information, including voltage, current and temperature. In addition, BMS can balance battery charging to prolong service life. BMS has over discharge, over charge, over-current, high / low temperature and other protection functions. The system can automatically manage the charge state, discharge state and balance state.

The BETTENERGY ELEBOX-HV have soft-start circuit inside so it can support inverters without soft-start function.

5.2 Battery System Overview

The BETTENERGY ELEBOX-HV series consists of the ELEBOX-2560 battery module and the ELEBOX-BCU, The BCU (battery control unit) is connected in series.

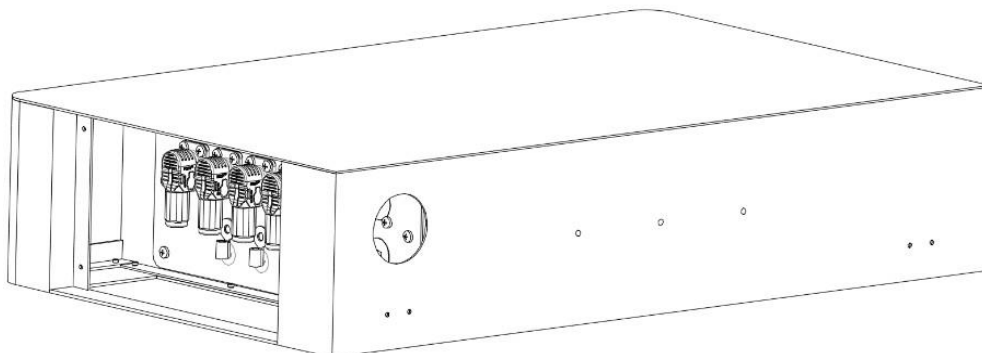


| No. | Description |
|-----|----------------------------------|
| 1 | ELEBOX-BCU(Battery Control Unit) |
| 2 | ELEBOX-2560(Battery Module) |
| 3 | ELEBOX-Base |
| 4 | Anti-roll plate |
| 5 | Start Button |

5.3 ELEBOX-BCU

The BCU includes the master BMS, DC fuse, soft starting circuit, charging circuit, discharge circuit, 12VDC/DC power supply module.

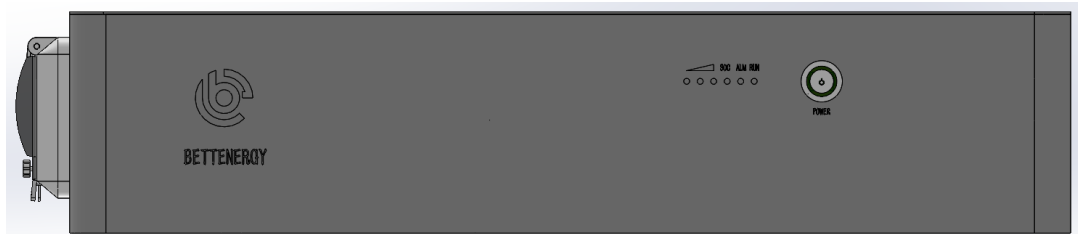
The BMS in the battery module collects the battery voltage and temperature data uploaded to the master via the internal CAN, BMS. BMS controls the charging voltage / current and discharge voltage / current.



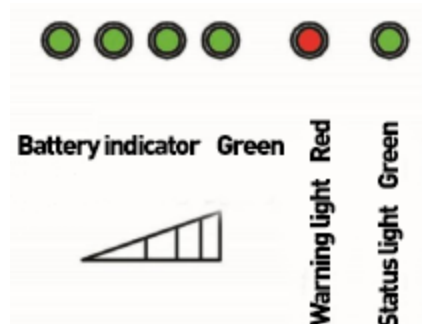
5.3.1 Technical Data

| Name | Technical Parameters |
|-----------------------|-----------------------|
| Nominal Voltage | 96V—600V |
| Nominal Currnt | 25A |
| Max Current | 30A |
| Operating Temperature | -10°C~55°C |
| Humidity | <95%RH |
| Protection Class | IP65 |
| Cooling | Natural cooling |
| Weight (kg) | 15KG |
| Dimension (W*H*D) | 593*131*355mm |
| Communication | CAN/RS485 |
| Certificates | CE-EMC,CE-LVD,ROHS |
| Cycle Life | 6000@80%DOD/25°C/0.5c |

5.3.2 Definition of the LED indicators



LED light board definition








The LED Indicator Instructions

Status lamp: BMS starts to flash after power up, 1 second interval

Alarm lamp: the alarm lamp is on when the equipment problems, no fault or the alarm lamp does not illuminate after the fault disappears. The fault type is: single voltage too high protection, single voltage too low protection. Total pressure too high protection, total pressure too low protection. Charging (discharge) over-current protection. Over-temperature (too-low) protection. The fault will illuminate when one or more protection occurs. Specific fault requires connecting to the computer using the machine for view. (Contact your supplier for the host machine software)Power indicator description:

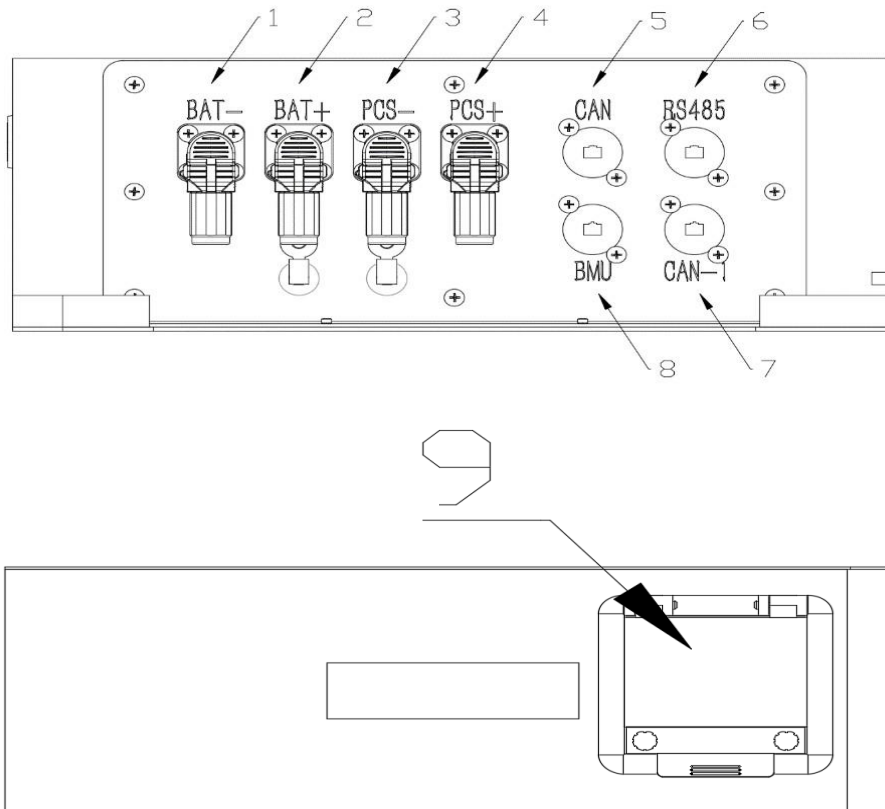
Power indicator changes according to the value of SOC, as shown in the following table.

| Electricity level | LED lamp board status | Description |
|-------------------|---|---|
| SOC <5% |  | SOC <5% all LED Not all bright. |
| 5%≤SOC≤25% |  | 5% ≤ SOC ≤ 25% is the first one All LED s lit, which The rest is not bright. |
| 25%<SOC≤50% |  | 25% < SOC ≤ 50%, No One, the second LED is bright Start up, the rest is not bright. |
| 50%<SOC≤95% |  | 50% < SOC ≤ 95%, first One, the second, |
| SOC>95% |  | SOC> 95%, all The LED is all bright. |

5.3.3 The Power”Button”

1. After presses the start button, release the button, and the button is locked. The SOC LED light starts from left 1 to left 4, and the system approaches the start pre- charging state. When the inverter pre-charging is completed, left 1 to left 4 shows the normal capacity and RUN shows the operating status. RUN: green, long lighting during charging and flash during discharge. ALM: red, long for equipment failure or protection.
2. Close the battery system: press the start button, then release the button, SOC LED will extinguish from 1 to 6 and the battery stops output.

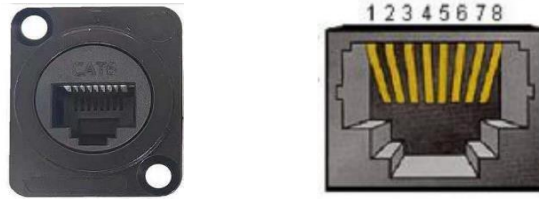
5.3.4 Definition of the port



| No | Items | No | Items |
|----|---------------------------------------|----|---|
| 1 | Total negative battery in series | 5 | Connect the inverter CAN communication port |
| 2 | Battery positive in series | 6 | Connect the upper bit computer communication port |
| 3 | Total negative battery output | 7 | Reserved communication port |
| 4 | Battery output is total positive pole | 8 | Connect the battery module communication |
| 9 | Output circuit breaker | | |

5.3.4.1 The CAN Port

The CAN communication terminal (RJ45 port) follows the CAN communication protocol and please connect to the inverter.



| Interface | Definition Description | |
|--|------------------------|------------------|
| CAN Communication port Definition | PIN 1 | The NC(is empty) |
| | PIN 2 | The NC(is empty) |
| | PIN 3 | The NC(is empty) |
| | PIN 4 | CAN-H |
| | PIN 5 | CAN-L |
| | PIN 6 | The NC(is empty) |
| | PIN 7 | The NC(is empty) |
| | PIN 8 | The NC(is empty) |

1. BMS controls the charging current / charge voltage or discharge current / discharge stop voltage of the inverter, via CAN communication, based on the battery voltage and battery temperature.
2. If the battery capacity is less than 8%, the BMS controls the PCS to force the charge via CAN communication to avoid damage to the battery due to deep discharge.
3. If SOC is below 97% for a consecutive month, BMS controls the inverter via CAN communication, filling the battery complete to correct the SOC error.

5.3.4.2 The RS485 Port

The RS485 communication terminal (RJ45 port) follows the RS485 protocol for the commissioning port by the manufacturer or professional engineer. (It can also be made as a BMS communication port for some inverters)



| Interface | Definition Description | |
|--|------------------------|------------------|
| RS485 Communication port definition | PIN 1 | The NC(is empty) |
| | PIN 2 | The NC(is empty) |
| | PIN 3 | The NC(is empty) |
| | PIN 4 | 485A |
| | PIN 5 | 485B |
| | PIN 6 | The NC(is empty) |
| | PIN 7 | The NC(is empty) |
| | PIN 8 | The NC(is empty) |

5.3.4.3 The CAN-1 Port

The CAN-1 communication terminal (RJ45 port) follows the CAN communication protocol, in the standby state.



| Interface | Definition Description | |
|--|------------------------|------------------|
| CAN-1 Communication Port Definition | PIN 1 | The NC(isempty) |
| | PIN 2 | The NC(is empty) |
| | PIN 3 | The NC(is empty) |
| | PIN 4 | CAN-H |
| | PIN 5 | CAN-L |
| | PIN 6 | The NC(isempty) |
| | PIN 7 | The NC(isempty) |
| | PIN 8 | The NC(is empty) |

5.3.4.4 The BMU Communication Port

The BMUcommunication terminal (RJ45 port) follows the CAN communication protocol and connects the BCU to the internal CAN

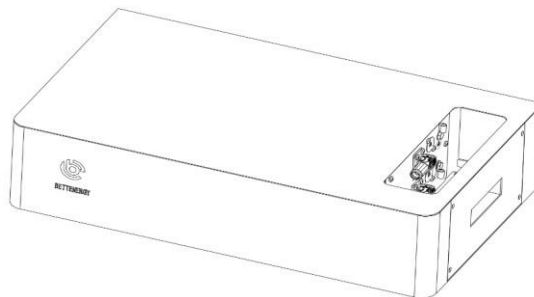
communication of each battery module. And each battery module BMS provides the DC12V operating power supply.



| Interface | Definition Description | |
|--|------------------------|---------------|
| BMU Communication port definition | PIN 1 | OUT DC12V+ |
| | PIN 2 | OUT DC12V+ |
| | PIN 3 | The NC(empty) |
| | PIN 4 | CAN-H |
| | PIN 5 | CAN-L |
| | PIN 6 | The NC(empty) |
| | PIN 7 | OUT DC12V- |
| | PIN 8 | OUT DC12V- |

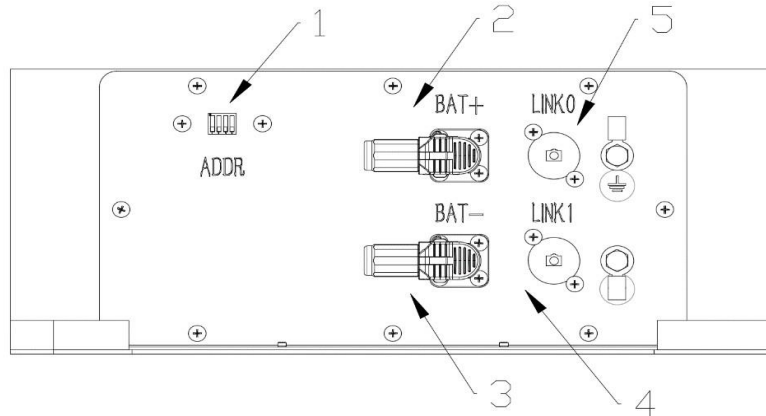
5.4 ELEBOX-2560 battery module

The battery module includes the 51.2V/50AH battery cell and the subordinate BMS. The slave BMS collects and transfers the battery voltage and temperature of the battery cell in real time and the BCU to the main BMS via internal communication.



| Name | Technical Parameters |
|--------------------------|------------------------------------|
| Nominal Voltage | 51.2V |
| Nominal capacity | 50Ah |
| Nominal energy (100%DOD) | 2560W.h |
| Usable Energy (90%DOD) | 2304W.h |
| DOD | < 90% |
| Nominal Charging Current | 25A |
| Maximum Charging current | 30A |
| Rated Discharge Current | 25A |
| Maximum DischargeCurrent | 30A |
| Operating Temperature | -10°C~55°C |
| Environmental Humidity | <95%rh |
| Protection level | IP65 |
| Cooling | Natural |
| Weight (kg) | 34KG |
| Dimensions (W*H*D) | 593*146.5*355mm |
| Communication Interface | CAN |
| Certificates | CE,IEC62619,MSDS,ROHS,UN38.3 |
| Cycle Life | 60000% DOD / 25°C / 0.5C / 60% EOL |

5.4.2 Definition of the Port



| No | Items | Description |
|----|-------|----------------------------------|
| 1 | ADDR | Battery Module Address dial Code |
| 2 | BAT+ | Battery module. B+ |
| 3 | BAT- | Battery module B- |
| 4 | LINK0 | Communication port input |
| 5 | LINK1 | Communication port output |

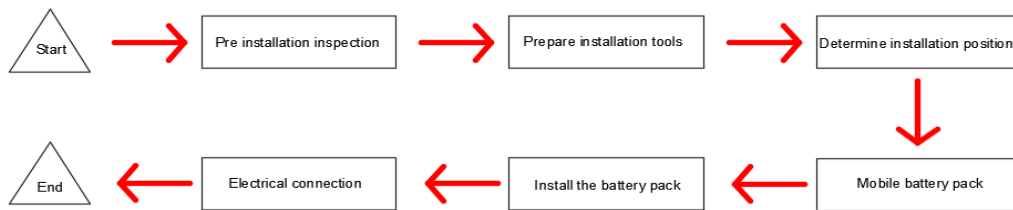
5.4.2.1 Schematic diagram of the dial-up switch

The dial switch is used to set the BMS address of each battery, The code value of the on position is 1, The code value dialed to 1234 is 0, The address of the battery is 0 ~ 15.

The dial-up address table is as follows:

| Dial-up code location | | | | Add ress | Dial-up code location | | | | Add ress | Dial-up code location | | | | Add ress | Dial-up code location | | | | Add ress |
|-----------------------|---|---|---|-------------|-----------------------|---|---|---|-------------|-----------------------|---|---|---|-------------|-----------------------|---|---|---|-------------|
| 1 | 2 | 3 | 4 | | 1 | 2 | 3 | 4 | | 1 | 2 | 3 | 4 | | 1 | 2 | 3 | 4 | |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 4 | 0 | 0 | 0 | 1 | 8 | 0 | 0 | 1 | 1 | 12 |
| 1 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 5 | 1 | 0 | 0 | 1 | 9 | 1 | 0 | 1 | 1 | 13 |
| 0 | 1 | 0 | 0 | 2 | 0 | 1 | 1 | 0 | 6 | 0 | 1 | 0 | 1 | 10 | 0 | 1 | 1 | 1 | 14 |
| 1 | 1 | 0 | 0 | 3 | 1 | 1 | 1 | 0 | 7 | 1 | 1 | 0 | 1 | 11 | 1 | 1 | 1 | 1 | 15 |

6 Installation Guide



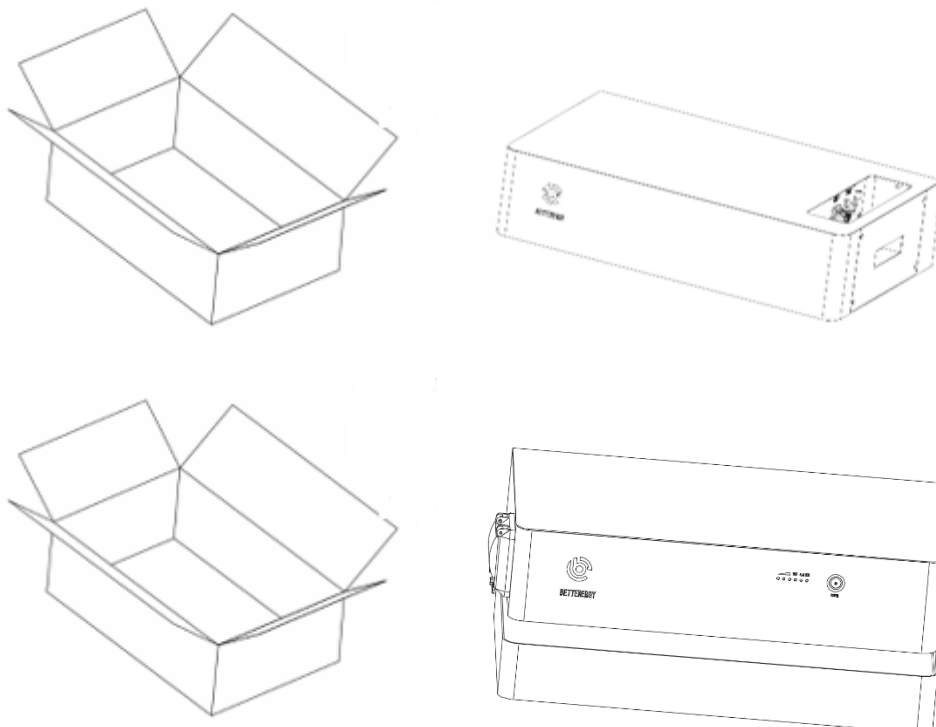
6.1 Inspection before the installation




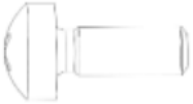





6.1.1 Check the outer packaging




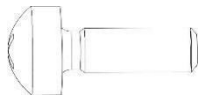
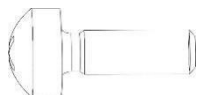

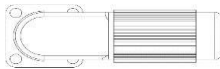
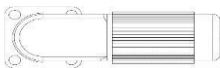




Packaging materials and components may be damaged during transportation. Check the outer packaging material before installing the battery. Check the packaging material surface for damage, such as holes and cracks. If any damage is found, do not unpacking the battery and contact the dealer as soon as possible. It is recommended that you remove the packaging material within 24 hours before installing the battery.

6.1.2 Check Deliverables













After unpacking the package, check that the deliverables are intact and complete. If any damage or missing parts is found, please contact the dealer. The following table shows the components and mechanical parts to be delivered.



| Battery Module Packing list | | | |
|-----------------------------|---|----------|-------------------------------------|
| No. | Pictures | Quantity | Product Description |
| 1 |  | 1 | Battery Module |
| 2 |  | 1 | Wire |
| 3 |  | 2 | Battery positioning connector piece |
| 4 |  | 8 | M4*10 cross-disc head screws |
| 5 |  | 1 | Communication network cable |
| 6 |  | 1 | Two-color grounding wire |
| 7 |  | 1 | Certificate |
| 8 |  | 1 | Test report |
| 9 |  | 1 | Quality guarantee |

| BCU Master module packing list | | | |
|---------------------------------------|---|------------------------|------------------------------|
| No ial | All of the pictures | Prodet quantity | Product Description |
| 1 |  | 1 | The BCU host module |
| 2 |  | 2 | Wire wire |
| 3 |  | 1 | Hanging board |
| 4 |  | 3 | M5*10 cross-disc head screws |
| 5 |  | 4 | M4*10 cross-disc head screws |
| 6 |  | 4 | Expansion screw M8*60 |
| 7 |  | 1 | Orange quick connector |
| 8 |  | 1 | Black quick connector |
| 9 |  | 2 | Communication network cable |
| 10 |  | 1 | Two-color grounding wire |
| 11 |  | 1 | Certificate of conformity |
| 12 |  | 1 | Inspection report |

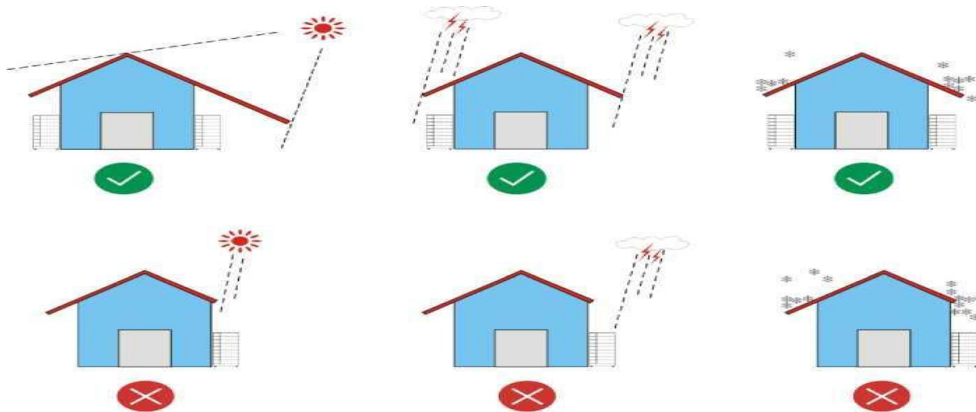
6.2 Tools

| Type | Tools | | |
|--------------|---|--|---|
| Installation | Knife | Hammer drill | Socket wrench |
| |  |  |  |
| | Rubber mallet | Cross Screwdriver | Marker |
| |  |  |  |
| | Inclinometer | Measuring tape | |
| |  |  | |
| Protective | ESD gloves | Safety goggles | Anti-dust respirator |
| |  |  |  |
| | Safety shoes | | |
| |  | | |

6.3 Installation Requirements

6.3.1 Installation environment requirements

1. Install the battery indoors or under eaves wet from rain.
2. Place the battery in a safe position away from children and animals.
3. Do not place the battery near any heat source, and avoid generating sparks.
4. Do not expose the battery to moist air or liquid.
5. Do not expose the battery to direct sunlight.
6. Do not expose the battery to corrosive gas or liquids.
7. Do not expose the battery to a combustible gas or liquid.



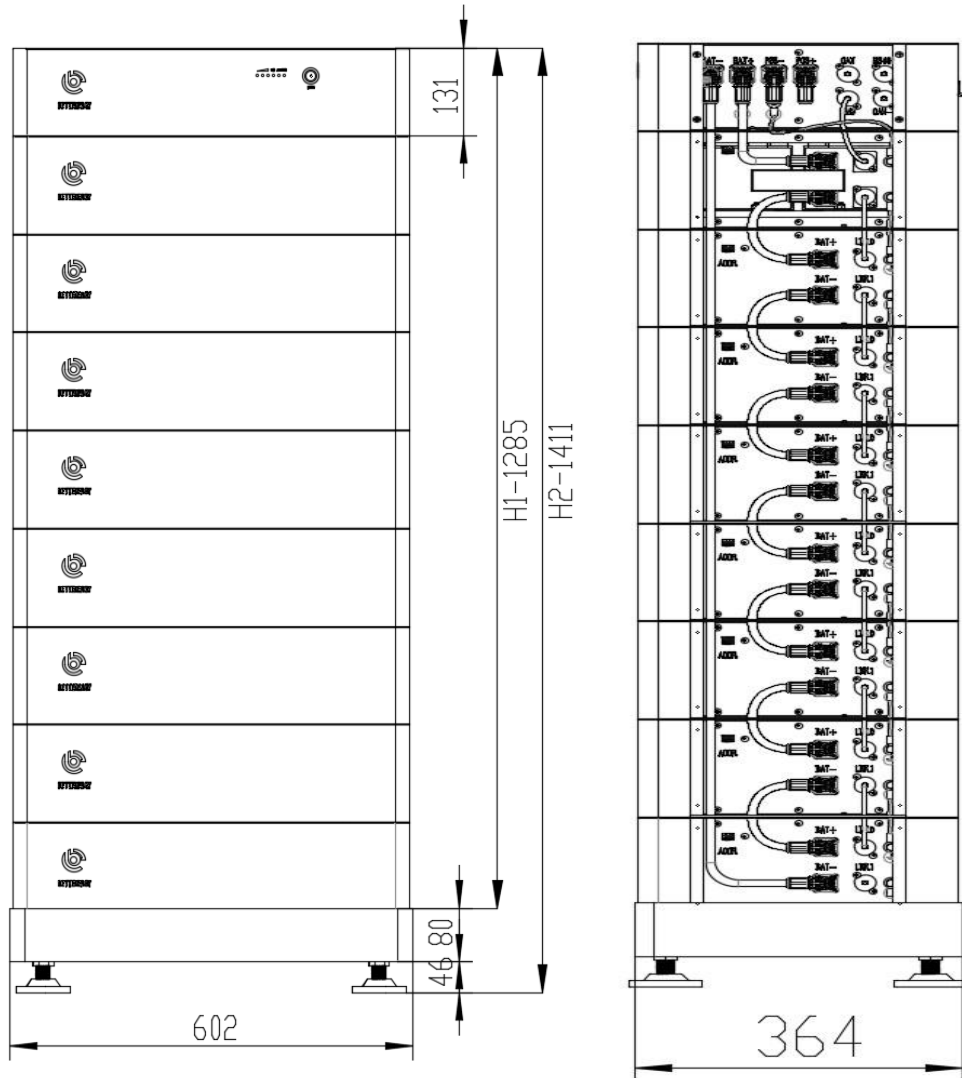
6.3.2 Installation Carrier Requirements

1. The mounting carrier shall be fire resistant. Do not install batteries on flammable buildings.
2. The mounting carrier surface shall meet the requirements of bearing gravity.



6.4 Installation and use instructions

6.4.1 Overall Dimension

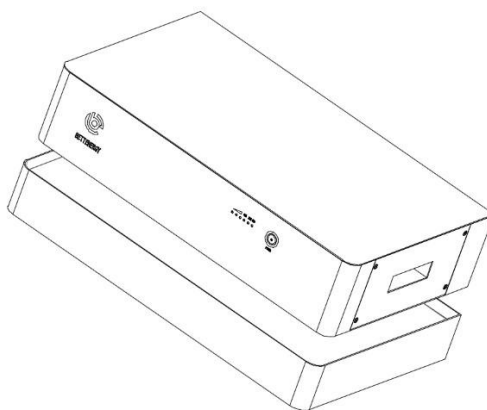


| Battery pack | H1 (mm) | H2 (mm) | Weight (Kg) |
|--------------|---------|---------|-------------|
| 2 | 406 | 532 | 93KG |
| 3 | 552 | 678 | 127KG |
| 4 | 699 | 825 | 161KG |
| 5 | 845 | 971 | 195KG |
| 6 | 992 | 1118 | 229KG |
| 7 | 1138 | 1264 | 263KG |
| 8 | 1285 | 1411 | 297KG |
| 9 | 1431 | 1557 | 331KG |
| 10 | 1578 | 1704 | 365KG |

6.4.2 Installation Step

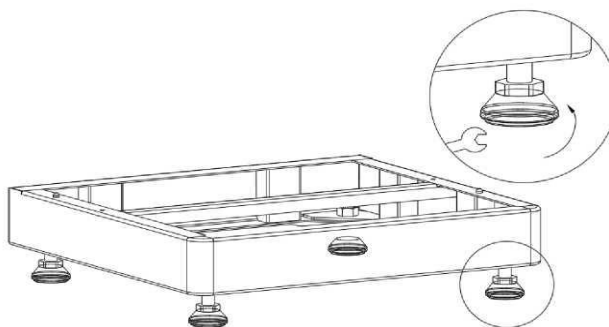
Step 1

Unscrew and separate the ELEBOX-BCU and the base

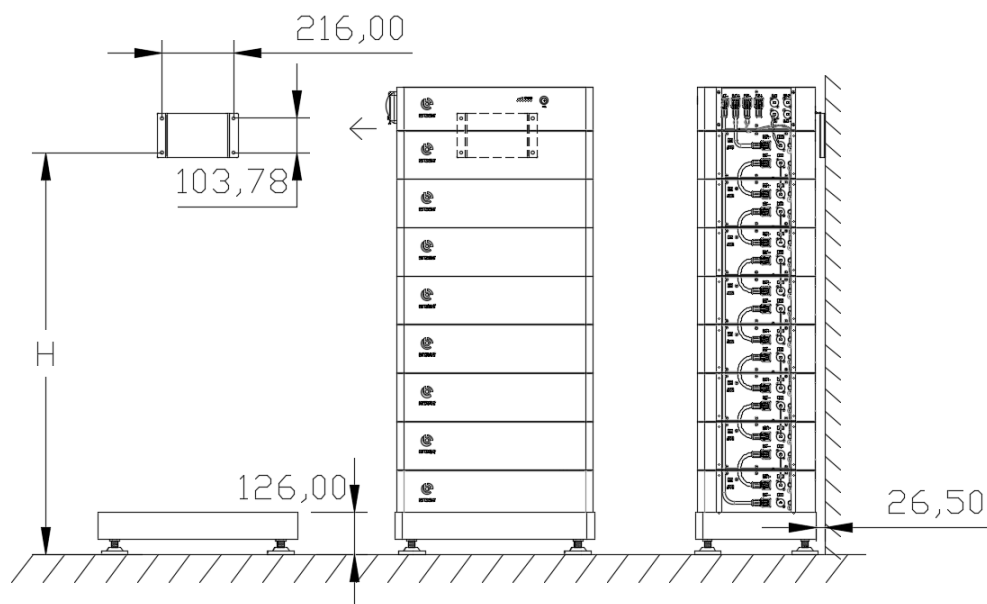


Step 2

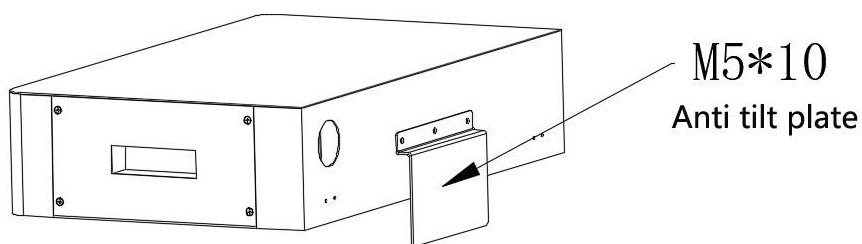
Adjust the level of the base using a Level Ruler.

**Step 3**

When the battery module exceeds 4 (including 4), the anti-dumping component shall be installed. Position the holes according to the number of modules (2-10) and drill with 8mm drill.

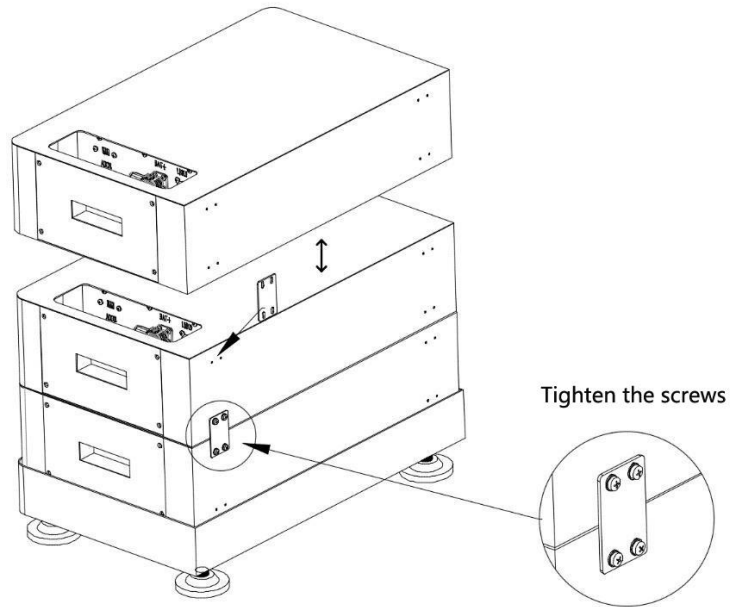


| Battery | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---------|-----|-------|-----|-------|-----|--------|------|--------|------|
| H (mm) | 334 | 480.5 | 627 | 773.5 | 920 | 1066.5 | 1213 | 1359.5 | 1506 |



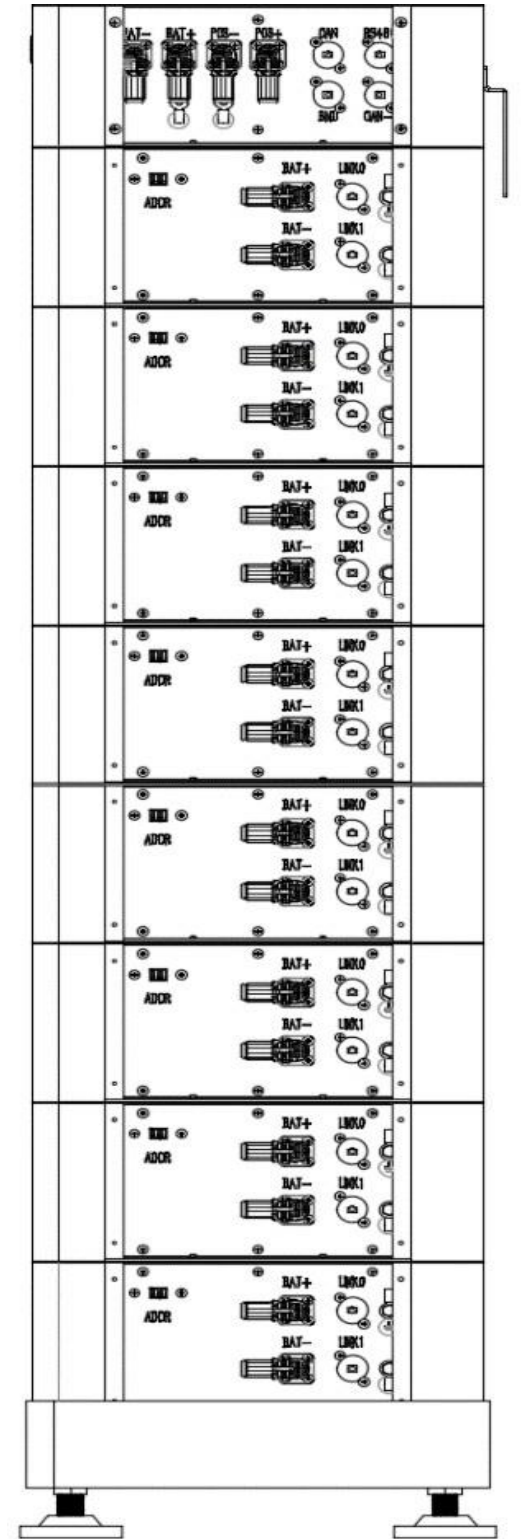
Step 4

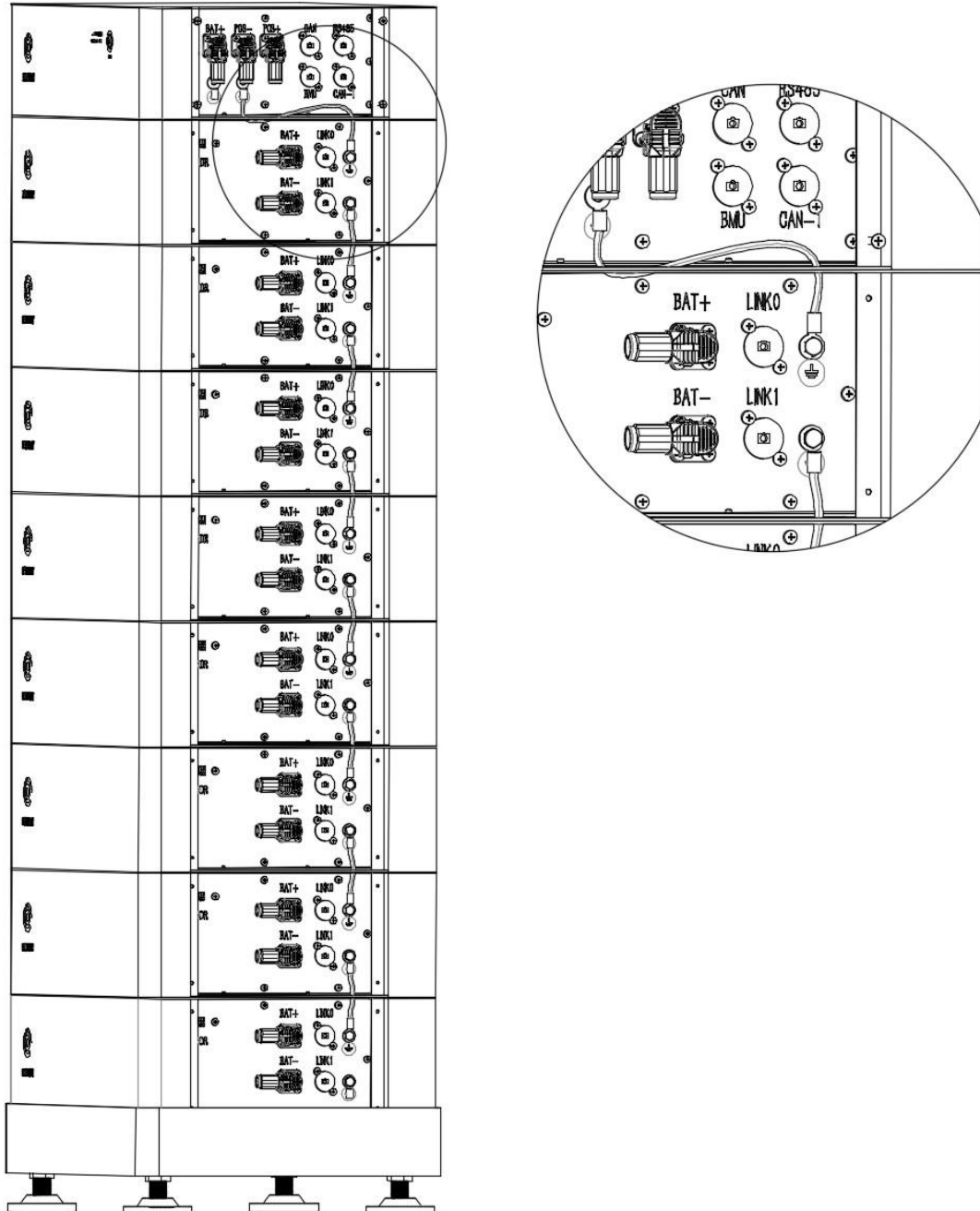
Install the battery: Before installing the next battery, tighten the screws to lock the battery module, install the battery module individually until the last battery module is installed, finally install the host module, and check the reliability of the screws.

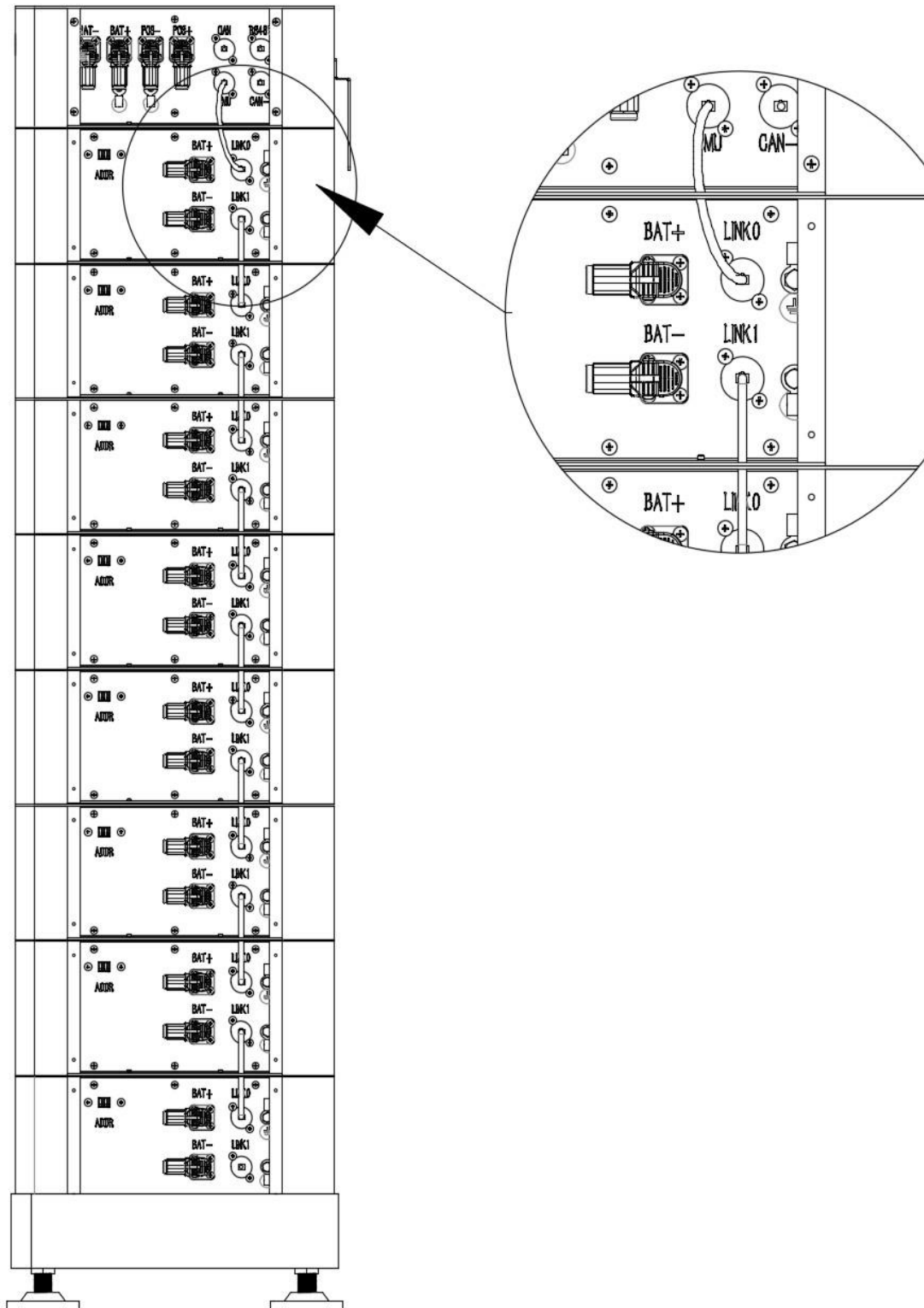


Step 5

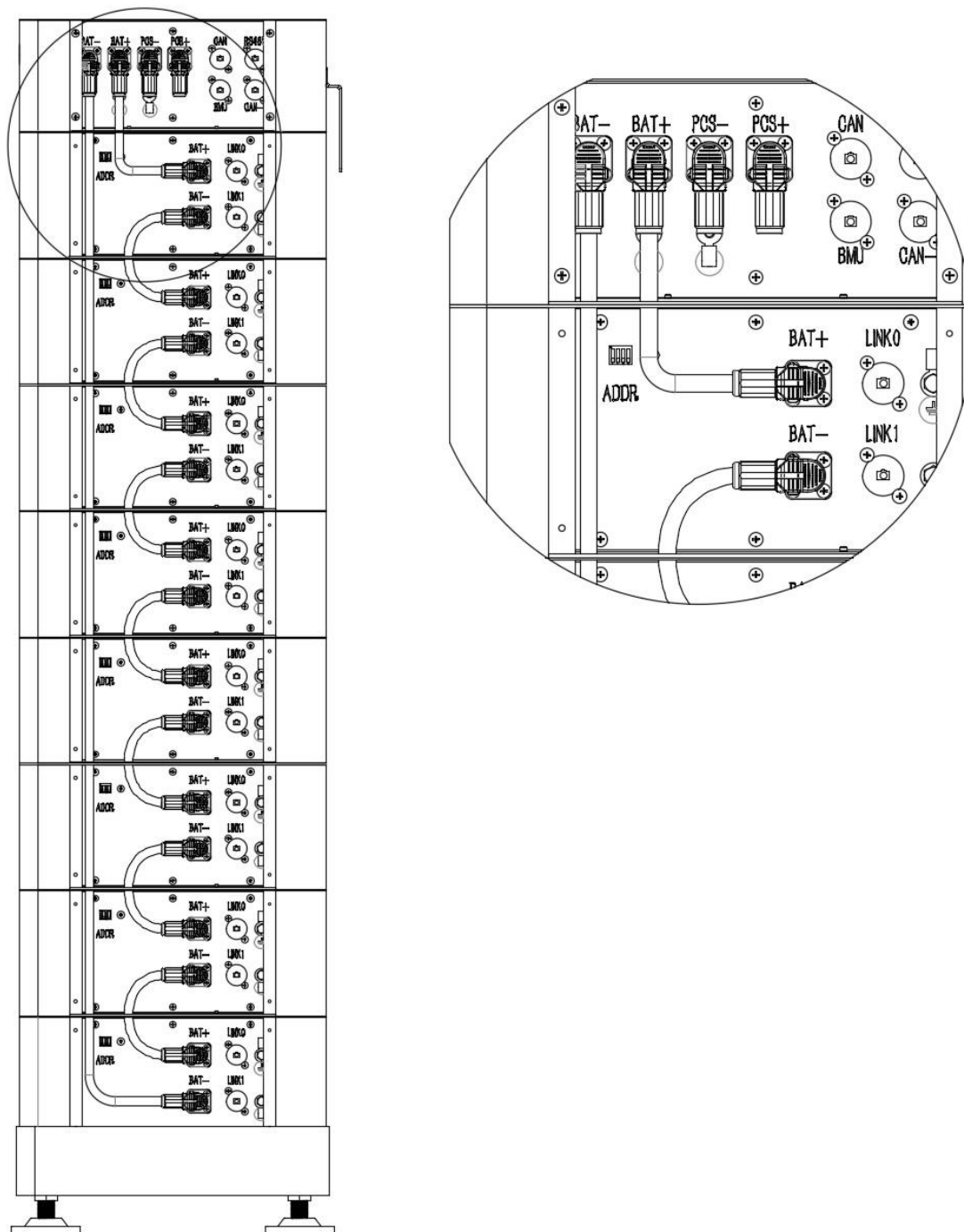
Remove the side retaining plates for all battery modules and BCU modules as shown below.



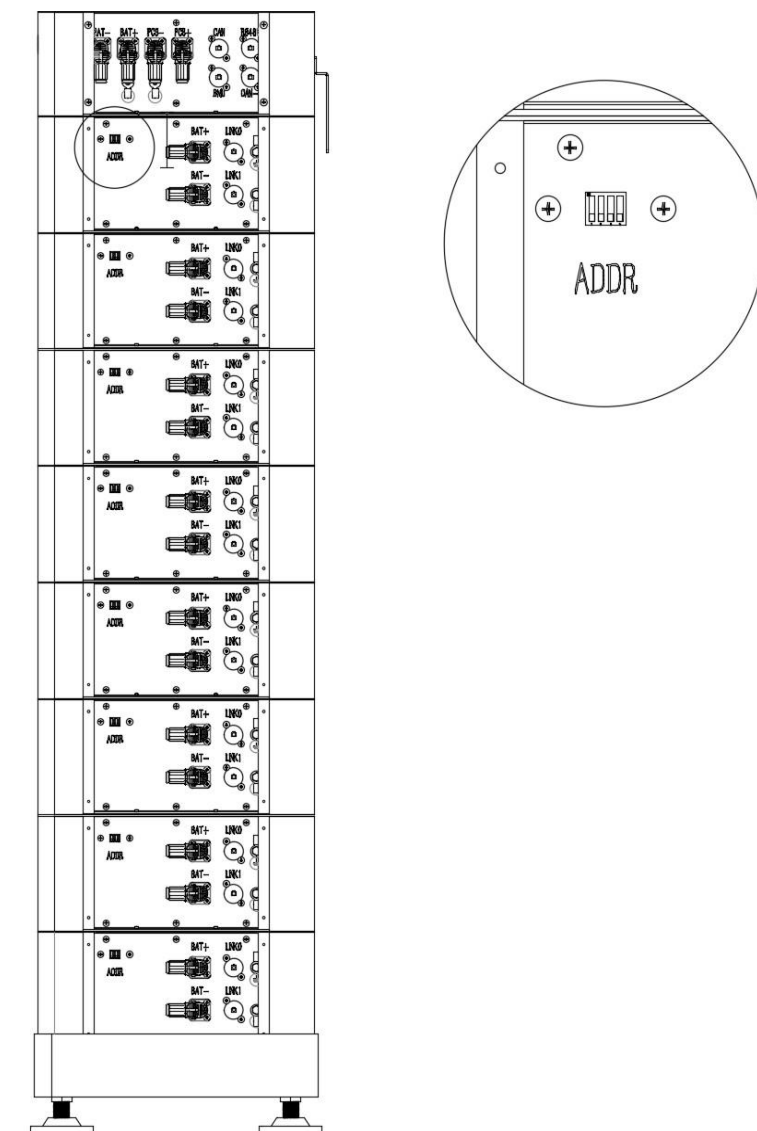
Step6:**Connection of all cables****Connection of grounding wire:**

Communication internal battery module :

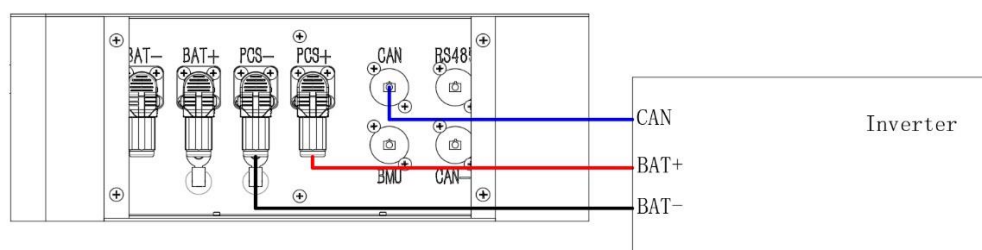
Connect the power wires between the modules:



Specialnote: this must be connected correctly, if the wrong connection will produce serious damage or personnel injury, harm the safety of life and property.

Step 7**Battery module address dial code**

Refer to 5.4.2.1: The dialing rule is to set the cell module address (from top to bottom)

Step 8**Connect to the inverter.**

7 Cleaning and Maintenance

7.1 Cleaning

Caution:

Power off the system before cleaning.

It is recommended to clean the ELEBOX-HV. regularly If the housing is dirty, remove dust using a soft, dry brush or remover. Do not clean the enclosure with a solvent or a corrosive liquid.

7.1.1 Recharging requirements during normal storage

The battery shall be stored in an environment with a temperature range of between -10 °C + 45 °C, and maintained regularly according to the table below, to 0.5C (25A) current until 40%SOC. after long storage.

| Storage Environment Temperature | Relative Humidity of the Storage Environment | Storage Time | SO C |
|---------------------------------|--|-----------------|-----------------|
| Below -10 °C | / | No use | / |
| -10 ~ 25 °C | 5% ~ 70% | ≤ for 12 months | 30% ≤ SOC ≤ 60% |
| 25 ~ 35 °C | 5% ~ 70% | ≤ for 6 months | 30% ≤ SOC ≤ 60% |
| 35 ~ 45 °C | 5% ~ 70% | ≤ for 3 months | 30% ≤ SOC ≤ 60% |
| Above 45 °C | / | No use | / |

7.1.2 Requirements when recharging an over-discharge battery

Please charge the over-discharged battery (90%DOD) within the specified time, follow the following table, or the battery module will be damaged by excessive discharge.

8 Common Issues and Solutions

The customer should not replace or change accessories. If the ALM long red is in red this means an error occurs. When you find a battery fault, please contact our after-sales service department within 48 hours.

8.1 Common issues and solutions

The user can monitor the operation status, warning and alarm information through the inverter LCD.

1、The battery is deeply discharged and needs to be charged first. If the power supply voltage of the external charger is 98V or above and the battery still cannot be turned on, please contact seekener company.

2、The battery can be turned on, but cannot be charged or discharged. If the red light is on, it indicates that the system is abnormal. Please check the following values:

Temperature: Above 55 ° C or below - 10 ° C, the battery cannot be charged

Solution: The mobile battery is within the normal operating temperature range between - 0 ° C and 55 ° C.

Temperature: The battery cannot discharge above 55 ° C or below - 10 ° C

Solution: Move the battery to the normal operating temperature range between - 10 ° C and 55 ° C.

Electric current: If the current is greater than 50A, the battery protection device will open.

Solution: If the operating current is too large, check whether the load power is too large.

Hig hpressure: If the battery voltage is too high (depending on the number of battery modules), the battery charging protection will turn on.

Solution: If the battery is fully charged, please discharge for a period of time. If

the charging voltage is too high, please change the setting on the charging side.

Low pressure: If the battery voltage is too low (depending on the number of battery modules), the battery discharge protection device will open.

Solution: Charge the battery until the red light goes out.

In addition to the above five points, if you still can't find the fault, please turn off the battery and contact seekener company

8.2 Emergency

Please cut off the power supply and turn off the battery in case of emergency.

(1) The battery is wet: If the battery pack is damp or immersed in water, do not try to disassemble the battery pack, please contact seekener company or authorized dealer for technical support.

(2) Fire: Do not try to extinguish the fire with water! Only use dry powder fire extinguishers; If possible, place the battery pack in a safe area.

(3) Leaked battery: If the battery pack leaks the electrolyte, avoid contact with the leaking liquid or gas. If someone is exposed to the leaking material, do the following immediately:


- 1) Inhaled gas: People shall evacuate the contaminated area and seek medical treatment.
- 2) Contact: Wash eyes with water for 15 minutes and seek medical treatment.
- 3) Contact skin: Wash the infected site with soap and water and seek medical treatment.


(4) Battery damage: Damaged battery is dangerous and must be treated with very carefully. They are not continued to use and may pose a danger to a person or property. If the battery pack is damaged, contact Light Corporation for handling.

8.3 Handling of the battery system

1. The system treatment must comply with the locally applicable disposal regulations of electronic waste and second-hand batteries
2. Do not treat the battery system along with household waste
3. Avoid exposing the battery to high heat or direct sunlight
4. Avoid exposing the battery to high humidity or corrosive environments.
5. Do not expose the battery to a combustible gas or liqui



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