



User Manual

Energy Storage Battery

PowerFly 6.0 Series

HZEB-LCT-5

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Software License

- * It is prohibited to use, in any way, in whole or in part, data from firmware or software developed by our company for commercial purposes.

- * Reverse engineering, hacking, or any other operations that compromise the original programming of the software developed by our company are prohibited.

Disclaimer

Our company shall not be liable for any personal injury, property damage, product damage, or consequential damages arising from or caused by any of the following circumstances.

- * Equipment damage caused by force majeure events such as earthquakes, floods, volcanic eruptions, mudslides, lightning strikes,

fires, wars, armed conflicts, typhoons, hurricanes, tornadoes, extreme weather, and voltage fluctuations;

- * Failure to use the product in accordance with the instructions in this manual;

- * The installation, operation, and storage environment does not comply with relevant international, national, or regional standards;

- * Unqualified personnel shall not be allowed to install, use, repair, dismantle, or otherwise operate the equipment;

- * Using unauthorized spare parts;

- * Unauthorized modification or technical changes to the product or software;

- * You made a mistake in shipping the goods yourself or through a third party;

- * The materials and tools you provided yourself do not meet international, national, or regional standards;

- * Damage caused by your own or a third party's negligence, intentional misconduct, fault, or improper operation.

About The Manual

This manual provides information on the transportation and storage, mechanical installation, electrical connections, start-up and shutdown operations, troubleshooting, and maintenance of battery energy storage systems. Before transporting, storing, installing, operating, using, or/and maintaining the equipment, please read this manual first, strictly follow its contents, and adhere to all safety precautions indicated on the equipment and in this manual. In this manual, "equipment" refers to the products, software, components, spare parts, and/or services related to this manual; "our company"

refers to the manufacturer (producer), seller, or service provider of the equipment; and "you" refers to the entity responsible for transporting, storing, installing, operating, using, and/or maintaining the equipment.

This document applies to the following product models of our company:

HZEB-LCT-5

※Unless otherwise specified, in this manual, the terms "system" and "energy storage system" refer to this particular product model.

How To Use This Manual

Please read this manual carefully before using the product and keep it in an easily accessible place. To provide the best customer experience, the content of this manual may be updated and revised, therefore some errors or slight discrepancies with actual conditions may exist. We will not notify you of any changes in information. Please obtain the latest manual from your sales channels.

1. Safety Precautions



Warning

Please read and follow all safety warnings and instructions carefully. Failure to do so may result in electric shock, fire, serious injury, or even death. Please keep these instructions safe for future reference.

This product is designed as an integrated system and must be operated by trained and qualified personnel, including but not limited to:

- * Technical Support Engineer
- * Installation Engineer
- * Commissioning Engineer
- * Electrical Engineer
- * Maintenance Engineer

Operators should be familiar with the characteristics and safety requirements of lithium batteries. If you are unsure whether you possess the necessary skills to complete this integration, please do not use this product.

1.1 Terms and symbols

Symbol explanation is to ensure user safety and property security while using this product, and to ensure optimal and effective product use, this manual provides users with the following safety information highlighted by the symbols below.

The following symbols may appear in this manual to highlight information; their meanings are as follows:

 Danger	This indicates a dangerous situation. Failure to take action could result in a high-risk situation such as death or serious injury.
 Warning	This indicates a potential for damage or injury. Failure to take precautions could result in a medium-level risk, such as serious personal injury or damage.
 Warning	This indicates a potential for damage or injury. Failure to take precautions may result in minor or moderate injury or loss.
 Notice	This indicates a potential for equipment damage or property loss. Failure to take precautions may result in equipment damage, data loss, performance degradation, or other unforeseen consequences.

1.2 Safety precautions

Read all safety instructions carefully before performing any work and follow them when handling batteries.

Incorrect operation may result in:

- * Injury or death of the operator or third party
- * Damage to system hardware.

Skills of qualified personnel:

- * Training in electrical system installation and commissioning and hazard handling.
- * Understand this manual and other related documents.
- * Know your local regulations and directives.

1.3 Security measures



Notice

1. It is very important and necessary to read the user manual carefully before installing or using the battery . Failure to follow any instructions or warnings in this document may result in electric shock, serious injury or death, or may damage the battery and make it unusable. Damage caused by improper operation is not covered by the product warranty.

2. If the battery is stored for a long time, it needs to be charged every six months, and the charging SOC should not be less than 90%.

3. When the battery is fully discharged, it needs to be recharged within 12 hours.

4. Do not connect the power terminals in reverse.
5. All battery power terminals must be disconnected during maintenance.
6. If there is any abnormality, please contact the supplier within 24 hours.
7. Do not use cleaning agents to clean the battery.
8. Do not expose batteries to flammable or irritating chemicals or vapors.
9. Do not connect the battery directly to the photovoltaic solar circuit.
10. Do not connect the battery directly to the photovoltaic solar circuit.
11. Direct or indirect damages caused by the above reasons are not covered by the warranty.



Warning

Before connecting:

1. After unpacking, please check the product and the packing list first. If the product is damaged or parts are missing, please contact your local retailer.
2. Before installation, be sure to cut off the grid power and ensure that the battery is in the off state,
3. The wiring must be correct, do not mix up the positive and negative poles of the cables, and ensure that there will be no short circuit with external devices.
4. It is strictly forbidden to directly connect the battery and AC power supply.

5. The embedded BMS in the battery is designed for 51.2Vdc, do not connect the batteries in series.
6. The battery must be grounded and the resistance must be less than 0.10 MΩ.
7. Please ensure that the electrical parameters of the battery system are compatible with the relevant equipment.
8. Please keep the battery away from water and fire.



Notice

In use:

1. If the battery system needs to be moved or repaired, the power supply must be disconnected and the battery completely shut down.
2. Do not connect the battery to a different type of battery.
3. Do not connect the battery to a faulty or incompatible inverter.
4. It is strictly forbidden to disassemble the battery.
5. Except for staff or authorized personnel, do not open, repair or disassemble the battery. The company does not assume any consequences or related responsibilities caused by violations of safe operation or violation of design, production and equipment safety standards.
6. It is forbidden to connect in parallel with other models.

Note: This manual cannot cover all possible situations during operation, maintenance, and repair. If you encounter any situations not explained in this manual, please prioritize following local regulations and standards and contact our company promptly.

2. Product Introduction

HZEB-LCT is our company's latest 51.2V low-voltage DC energy storage system product (hereinafter referred to as this product), which can provide reliable power support for residential buildings and is a good partner for environmentally friendly living.

This product needs to be used with a low-voltage inverter and is compatible with mainstream brand inverters on the market.

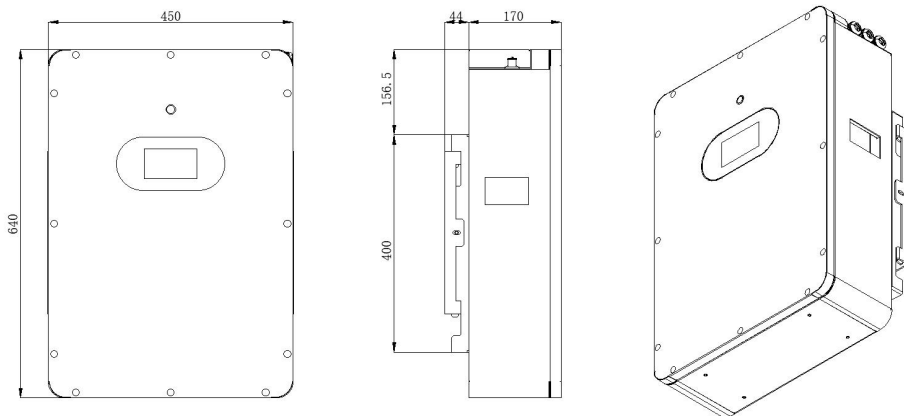
This series of products supports parallel use of up to 15 units.

2.1 Features

This product has the following features:

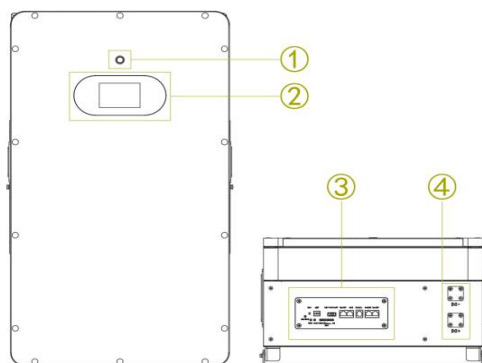
1. High voltage accuracy ($\leq 20\text{mV}$)
2. High current accuracy ($\leq 2\% @ \text{FS}$)
3. Short circuit protection function
4. Adjustable overcurrent protection
5. Parameter adjustable settings
6. LED status indication function
7. Charge equalization function
8. Flexible configuration, multiple batteries can be connected in parallel to expand capacity
9. Self-cooling method is adopted to significantly reduce system noise and reduce the system's own power consumption

2.2 Appearance



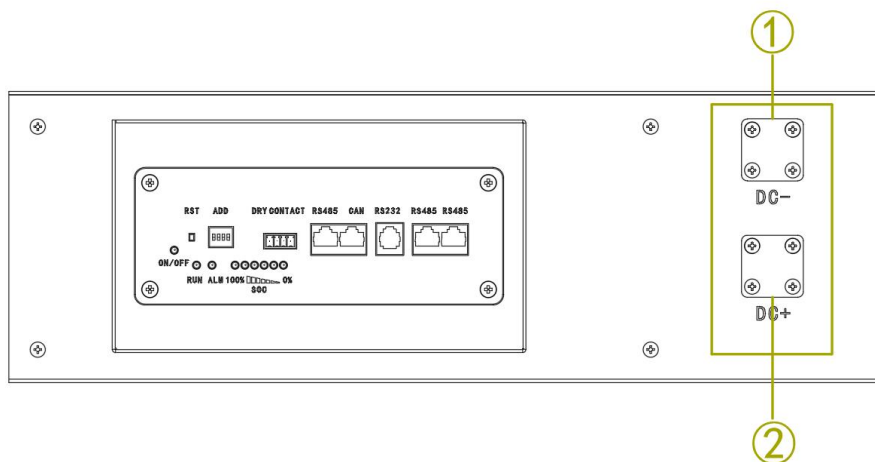
2.3 Appearance description

2.3.1 Control panel definition



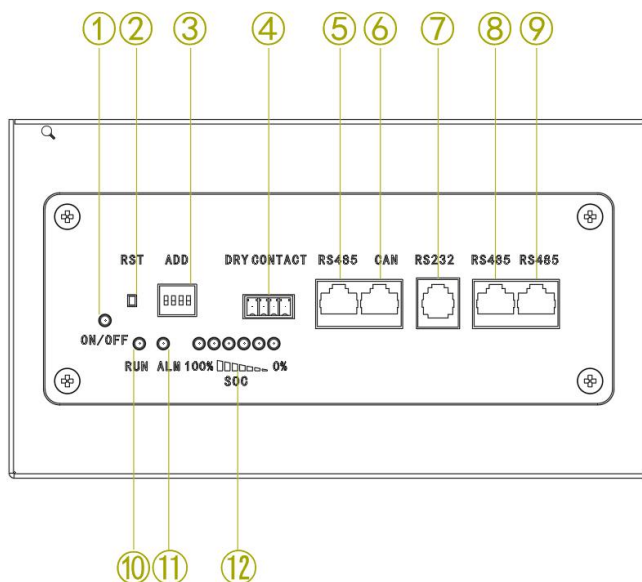
NO.	Part
①	Battery switch
②	Touch screen display
③	Signal communication panel
④	Battery power interface

2.3.2 Battery power interface



No.	Interpretation	Description
1	DC-	Battery wiring negative terminal
2	DC+	Battery connection positive

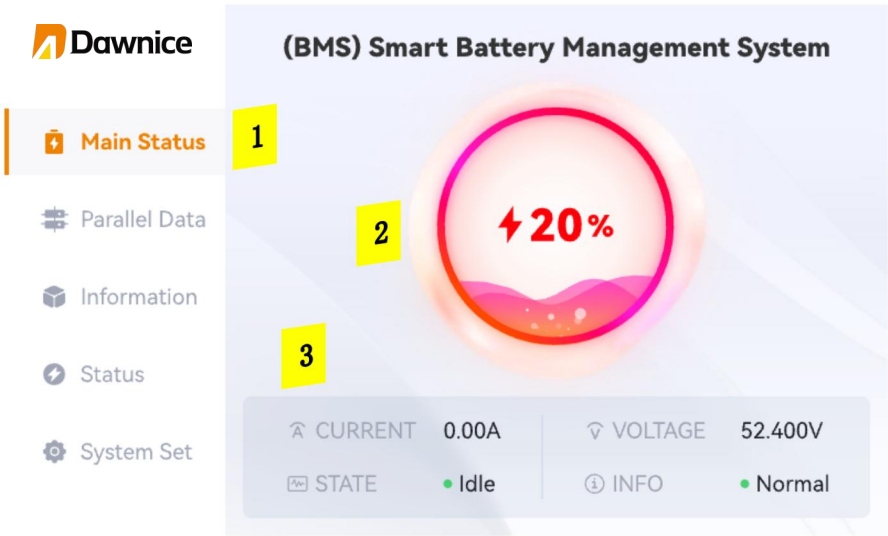
2.3.3 Signal communication panel



Communication Panel Description		
No.	Interpretation	Description
1	ON/OFF	Battery switch indicator
2	RST	Reset button
3	ADD	Dip switch
4	Dry Contact	Dry contact
5	RS485	Inverter RS485 communication port
6	CAN	Inverter CAN communication port
7	RS232	Host computer communication port
8	RS485	Battery parallel input port
9	RS485	Battery parallel output port
10	RUN	Battery running indicator
11	ALM	Battery warning indicator
12	SOC	Battery power indicator light

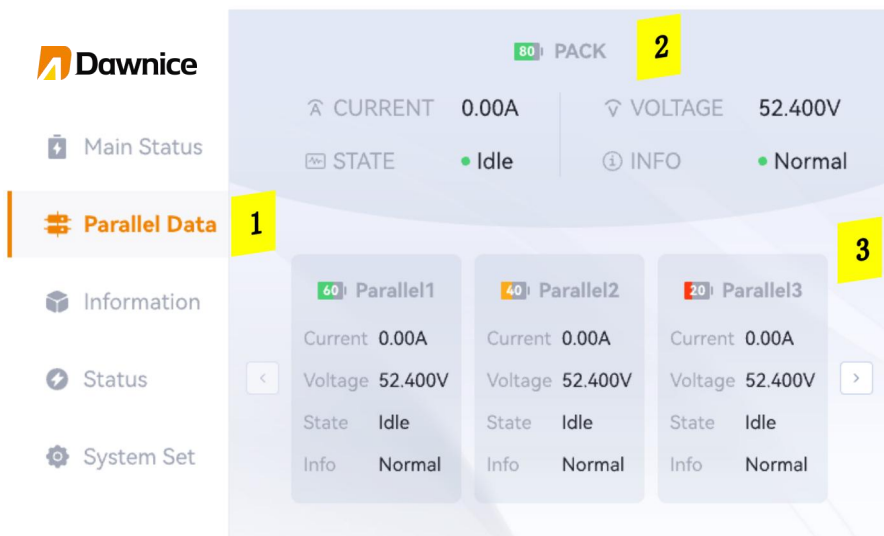
2.4 Screen interface description

2.4.1 Home page main interface



Screen Interface Description		
No.	Interpretation	Description
1	Main Status	Main status interface
2	Battery Power Display	Real-time SOC display
3	Battery Information Display	Displays current/voltage/status/information

2.4.2 Battery parallel interface



Screen Interface Description

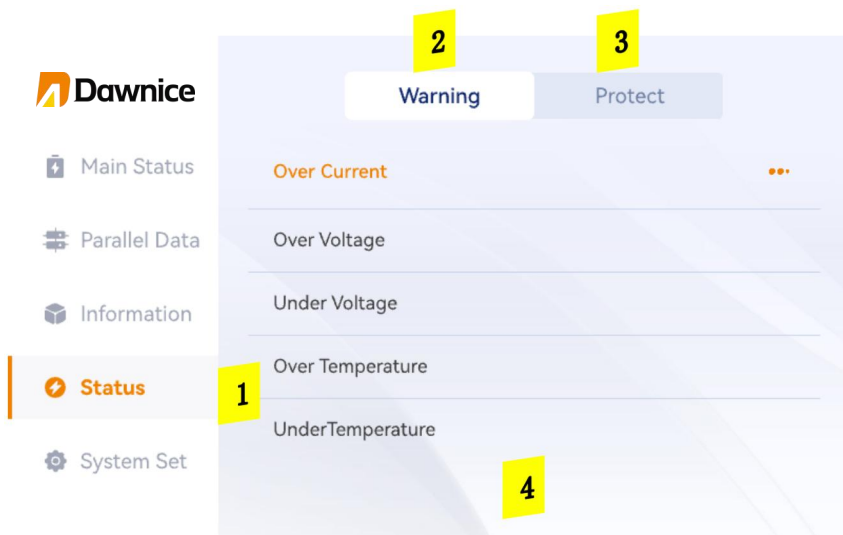
No.	Interpretation	Description
1	Parallel Interface	Parallel data interface
2	Master Data Display	Displays current/voltage/status/information
3	Slave Data Display	Displays the current/voltage/status/information of each slave device.

2.4.3 Battery details interface



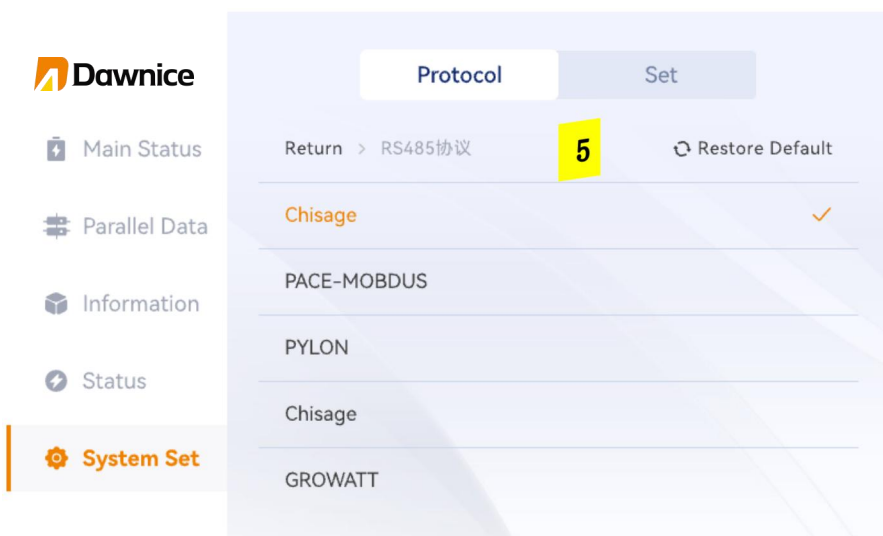
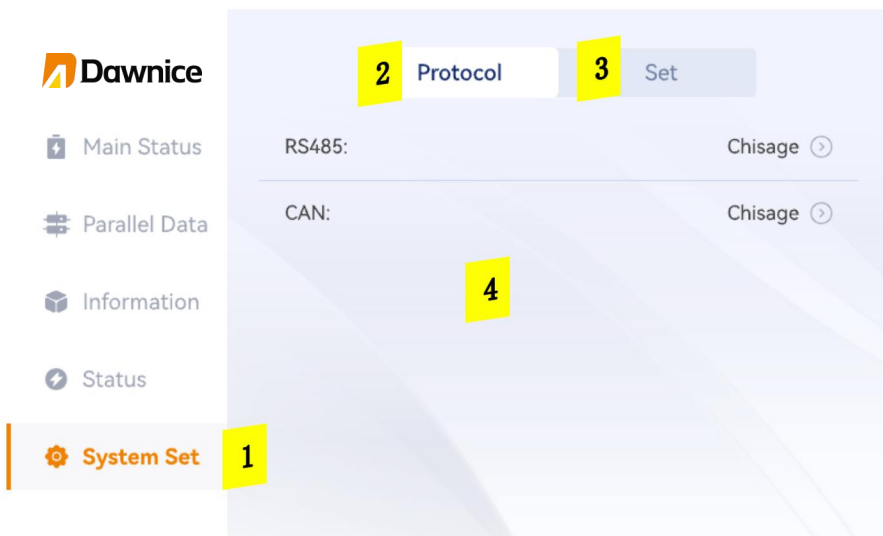
Screen Interface Description		
No.	Interpretation	Description
1	Information Interface	Battery information data interface
2	Basic Information	Basic information interface
3	Cell Temperature	Temperature data of each cell
4	Cell voltage	Cell voltage data
5	Specific Information Content	Basic interface: Current/Voltage/SOC/Remaining power/Full charge capacity
		Cell temperature interface: individual cell temperature / MOS temperature / ambient temperature
		Cell voltage interface: Voltage of each cell

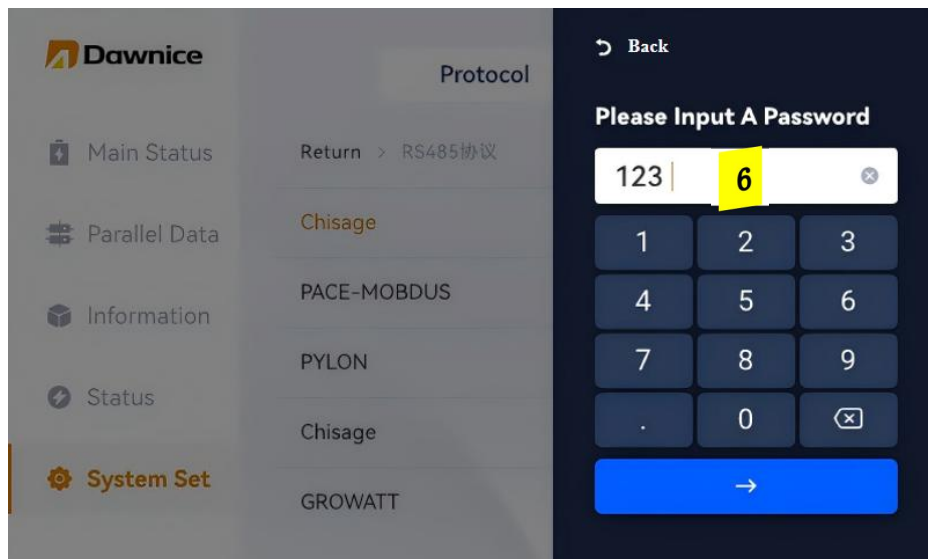
2.4.4 Battery BMS status interface



Screen Interface Description		
No.	Interpretation	Description
1	Status Interface	Battery status interface
2	Alarm Information	Alarm information interfaces
3	Protect Information	Each protection information interface
4	Specific Information Content	Alarm information interface: Overvoltage/Undervoltage/Short circuit/Overcurrent/Overtemperature protection
		Protection information interface: Overvoltage/Undervoltage/Overcurrent

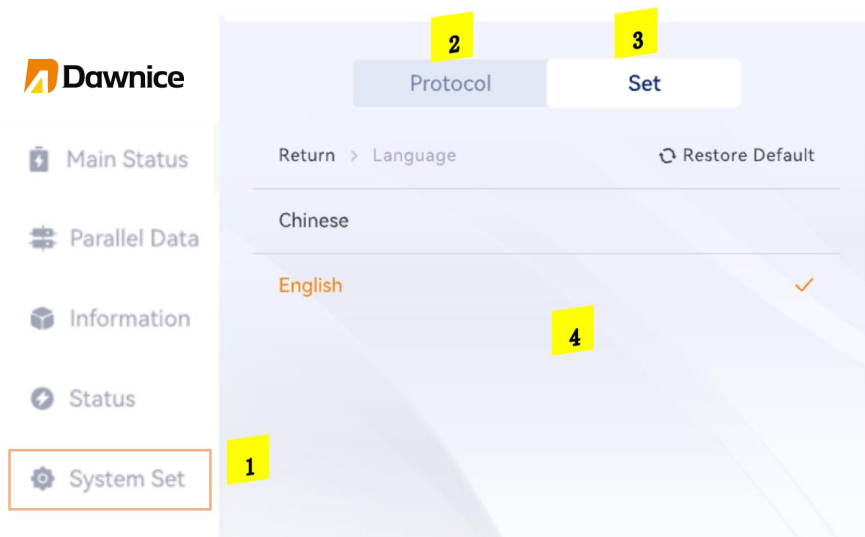
2.4.5 System settings interface





Screen Interface Description		
No.	Interpretation	Description
1	System Settings	System settings interface
2	Protocol Selection	Protocol selection interface
3	System Selection	System selection interface
4	Specific Information Content	RS485 Protocol Selection Interface
		CAN protocol selection interface
5	Protocol Selection	Enter RS485/CAN protocol selection
6	Enter Password and Confirm.	Protocol selection enter password to confirm

2.4.6 Language settings interface



Screen Interface Description		
No.	Interpretation	Description
1	System Settings	System settings interface
2	Protocol Selection	Protocol selection interface
3	System Selection	System selection interface
4	Specific Information Content	Chinese selection
		English selection

3. Storage and Packaging

3.1 Inspection before signing

Before signing for the product, please check the following carefully:

1. Check the outer packaging for damage, such as deformation, holes, cracks, or other signs that may cause damage to the device inside the box. If there is any damage, do not open the package and contact your dealer.
2. Check if the device model is correct, if not, do not open the package and contact your dealer.
3. Check whether the delivered parts are of the correct type and quantity and whether they are damaged. If they are damaged, please contact your dealer.

3.2 Accessories inspection

Before installing the product , please check the following accessories in detail:

No.	Accessories	Appearance	Interpretation	Quantity
1	Battery		Provide power	1
2	Power Line		Red & Black power lines	2

3	Communication Line		RJ45 communication lines	1
4	Fixed Plate		Fixed mounting plate	1
5	Wall Mount Bracket		Fixed bracket	2
6	Support Feet		Support/Mobile battery	4
7	User Manual	 User Manual Energy Storage Battery Powerfly 6.0 Series HZEB-LCT-5	Product user manual	1

3.3 Required tools

The following tools are needed to install the battery:

No.	Accessories	Appearance	Interpretation
1	Hammer		Unboxing
2	Utility Knife		Unboxing
3	Screwdriver		Fixed battery assembly
4	Handheld Electric Drill		Fixed battery assembly
5	Insulated Torque Wrench		Install cables and busbars
6	Insulated Torque Wrench		Install cables and busbars
7	multimeter		Measure battery voltage



Notice:

Use properly insulated tools to prevent electric shock or short circuits. If insulated tools are not available, cover all exposed metal surfaces with electrical tape and remove all tools (except for the tips).

3.4 Safety devices

The following safety equipment is recommended when handling battery packs:

No.	Accessories	Appearance	Interpretation
1	Insulating Gloves		Prevent electric shock
2	Safety Shoes		Prevent injury from falling
3	Helmet		Protect head
4	Reflective Vest		Improve visibility

5	Dust Mask		Prevent dust
6	Goggles		Protect your eyes

3.5 Equipment storage

If the equipment is not put into use immediately, please store it according to the following requirements:

1. Make sure the outer packaging box is not removed and the desiccant inside the box is not lost.
2. It is recommended to install the equipment within 3 days after removing the packaging box. If the equipment is not installed, it needs to be repacked in the original packaging box for storage.
3. Keep away from flammable, explosive, corrosive and other environmental items during storage.
4. Make sure to store in a cool place away from direct sunlight.
5. Storage SOC range: 30%-60%, charge and discharge cycle every 3 months
6. Storage temperature range:
 - * When the temperature is $-20^{\circ}\text{C} \leq \text{temperature} < 10^{\circ}\text{C}$, the storage time shall not exceed 1 month.
 - * When the temperature is $10^{\circ}\text{C} \leq \text{temperature} \leq 35^{\circ}\text{C}$, the storage time shall not exceed 1 year.
 - * When the temperature is $35^{\circ}\text{C} < \text{temperature} \leq 55^{\circ}\text{C}$, the storage time shall not exceed 1 month.

7. Storage humidity range requirement: 0~90%RH without condensation. If moisture condensation is found on the battery interface, the battery system cannot be installed.

4. System Installation

4.1 Installation requirements

Installation environment requirements:

1. The equipment must not be installed in flammable, explosive, corrosive environments.
2. The installation location must be away from water pipes, cables, etc. in the wall to avoid danger when drilling.
3. The installation environment needs to be protected from sunlight, rain, snow, etc. It is recommended to install it in a sheltered location. If necessary, a sunshade can be built.
4. The installation space must meet the equipment ventilation and heat dissipation requirements and operating space requirements.
5. The equipment protection level meets the requirements for indoor and outdoor installation, and the temperature and humidity of the installation environment must be within the appropriate range.
6. The equipment should be installed at a height that is convenient for operation and maintenance, ensuring that the equipment indicator lights and all labels are easy to see and the wiring terminals are easy to operate.
7. The equipment installation altitude is lower than the maximum operating altitude of 2000m.

8. Keep away from strong magnetic field environment to avoid electromagnetic interference. If there is a radio station or wireless communication equipment below 30MHz near the installation location, please ensure that the distance between the battery and the wireless electromagnetic interference equipment is greater than 30m.



Warning!

Cleaning is essential; dust and metal shavings must be removed and the environment kept clean before installing and starting the system. Without a dustproof enclosure, the system cannot be installed in dusty areas.



Warning!

Temperature; if the ambient temperature is outside the operating range, the battery pack will stop working as a self-protection mechanism. Frequent exposure to harsh temperatures may reduce battery performance and battery pack lifespan.



Warning!

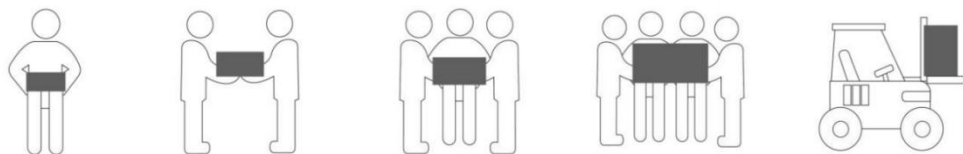
Fire suppression system; for safety reasons, it is best to have a fire suppression system. Fire protection systems require regular inspection to maintain proper function. For usage and maintenance requirements, please follow local fire equipment guidelines.



Warning!

Handling heavy objects: Please handle with care to avoid injury. Choose an appropriate handling method and limit the weight of the object to be handled according to the product's weight. Refer to the

following diagram:

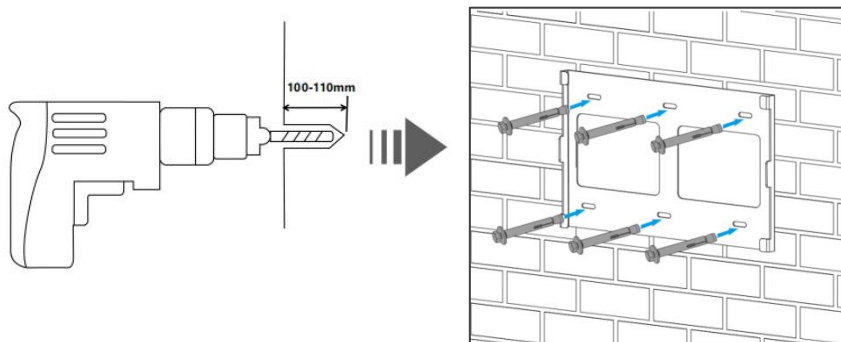


Weight	Transportation Method	Number of Recommendations
> 18 kg	Manual handling	1 person
18~32 kg	Manual handling	2 person
32~55 kg	Manual handling	3 person
55~68 kg	Manual handling	4 person
> 68 kg	Mobile machinery	Forklift

4.2 Wall-mounted installation

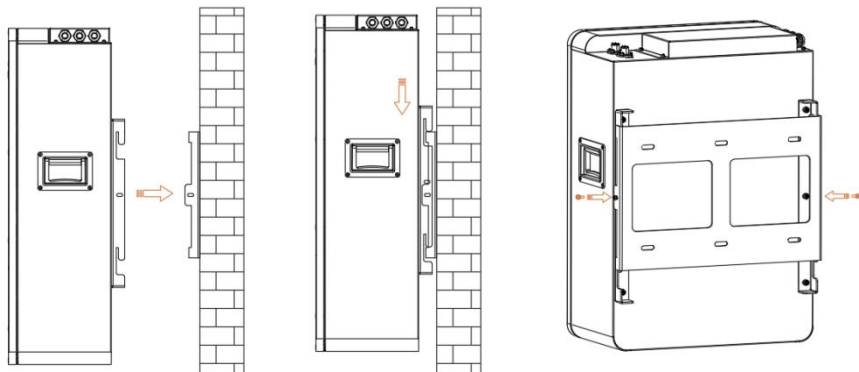
Step 1: Make the wall-mounted plate close to the wall. Ensure the wall's bearing capacity and placement firmness , use a marker to mark the punching position (the arrow indicates the hole position) , and remove the wall-mounted plate.

The following is the installation diagram:



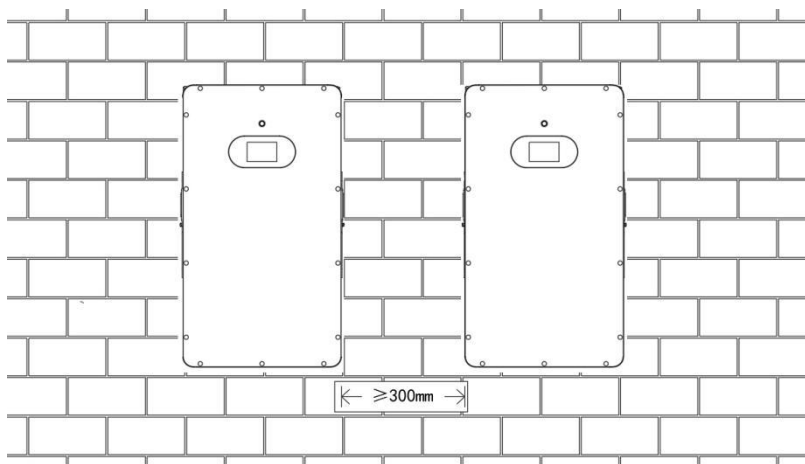
Step 2: Use an impact drill to drill holes in the wall (the hole spacing and depth depend on the expansion bolts).

Step 3: Tighten the expansion bolts, torque requirement: $10\text{N} \cdot \text{m}$.



Step 4: Install the battery to the back panel.

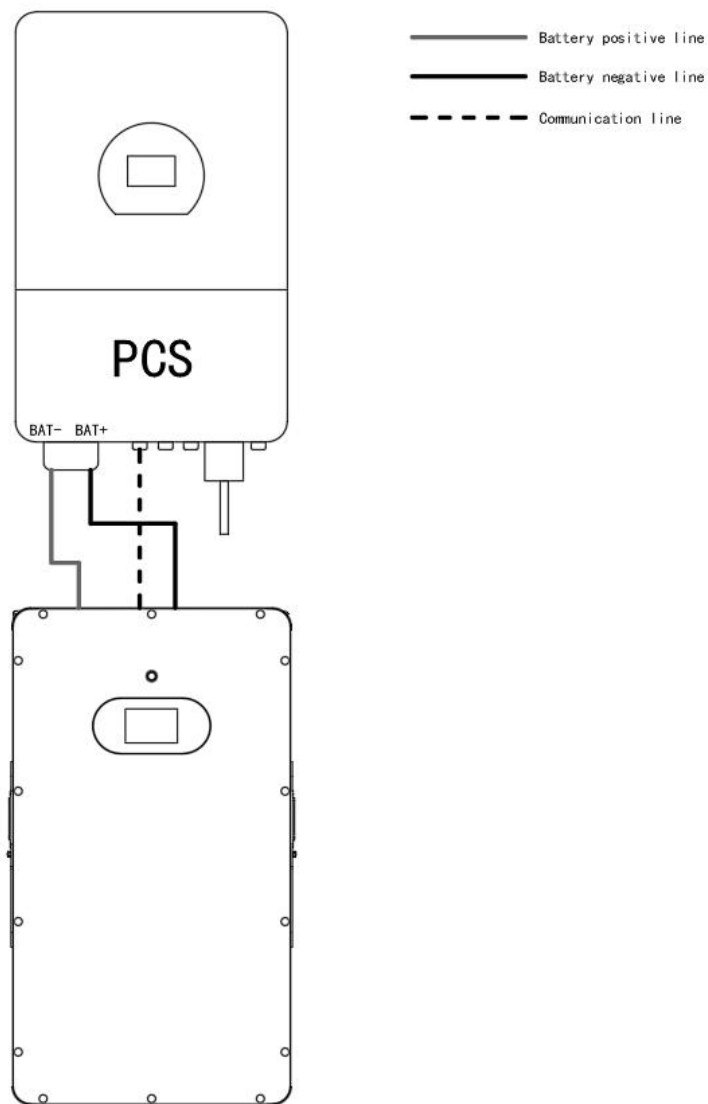
Step 5: Install and tighten the screws between the battery and the mounting plate.

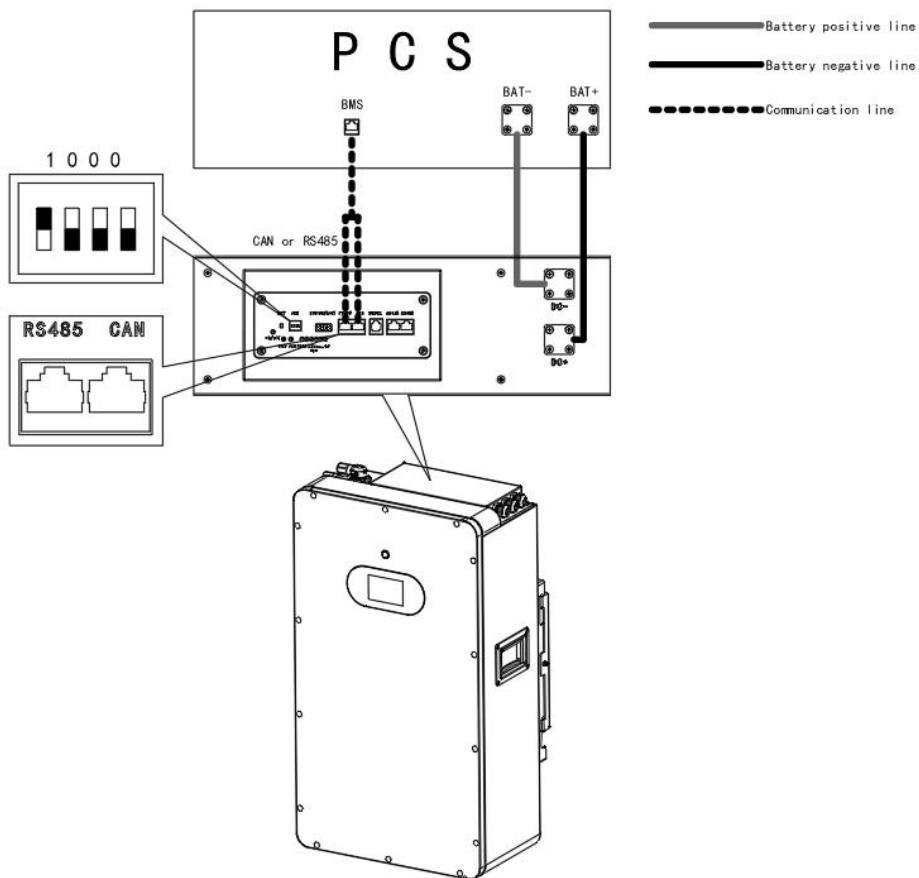


Note: The installation distance between batteries should be greater than or equal to 300mm.

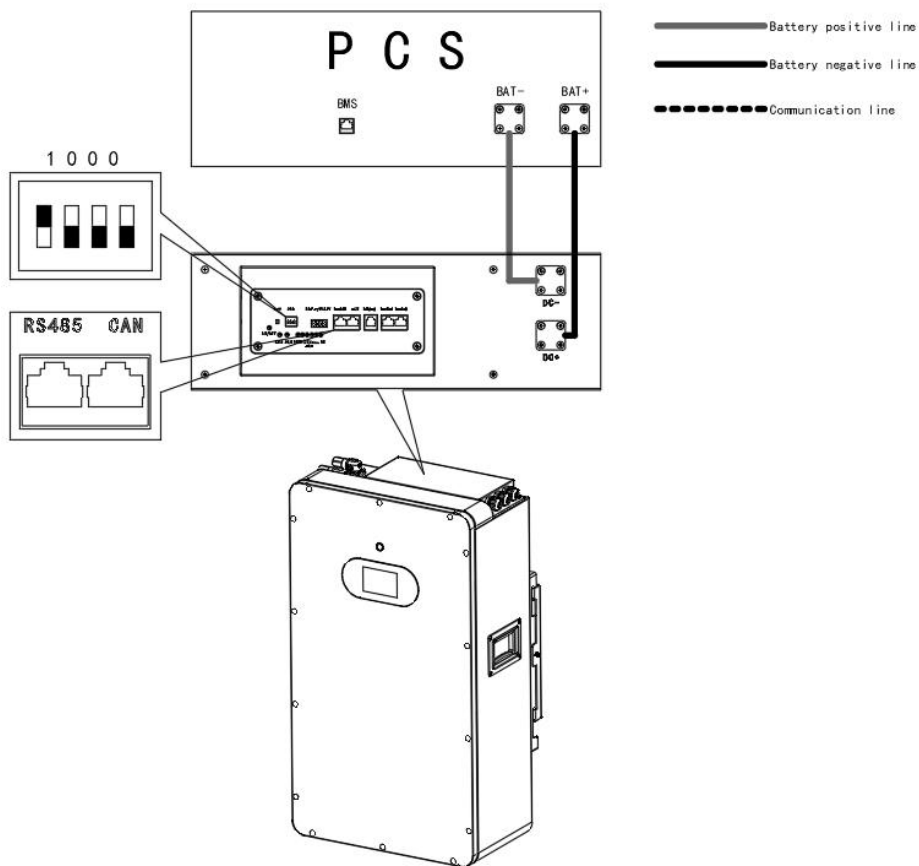
4.3 Single system wiring

4.3.1 Single unit wiring overview





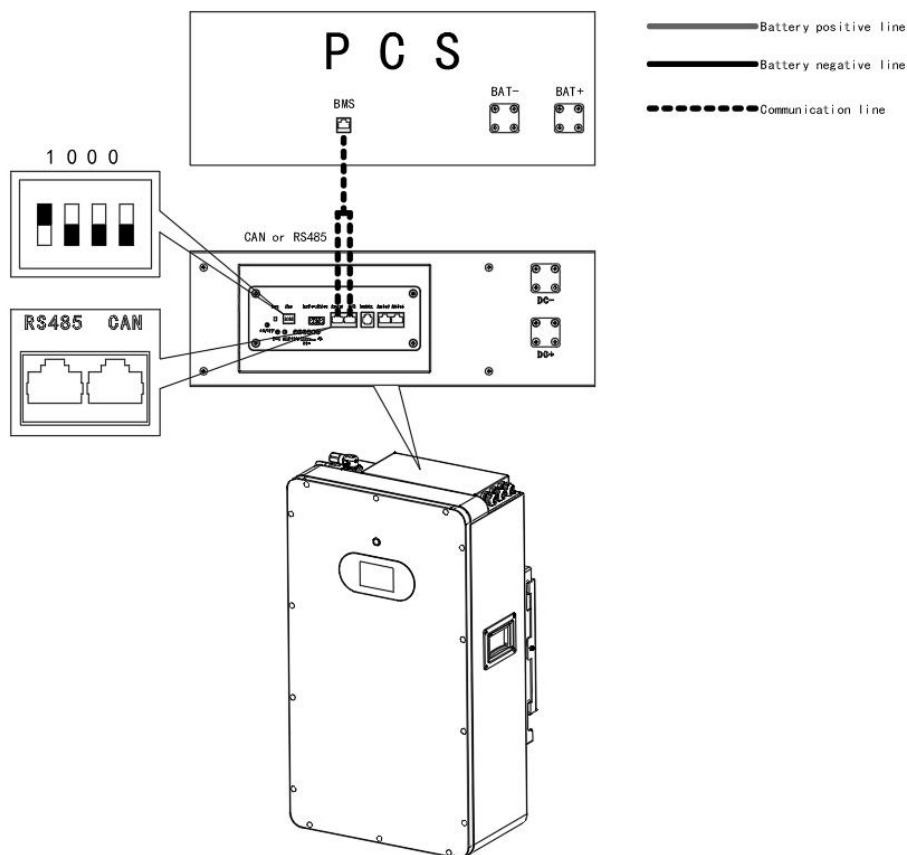
4.3.2 Power line connection



Step 1: Connect the battery DC+ to the inverter DC+/BAT+

Step 2: Connect the battery DC- to the inverter DC-/BAT-

4.3.3 Communication line connection

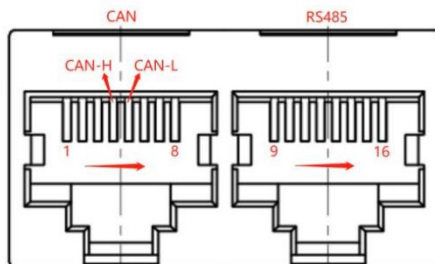
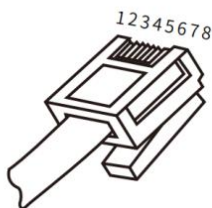
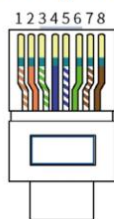


Step 1: Insert one end of the RJ45 communication cable into the battery host inverter communication interface (CAN or RS485)

Step 2: Plug the other end of the RJ45 communication cable into the inverter battery communication interface (BMS or CAN or RS485)

Communication interface definition:

RJ45 Registered Jack

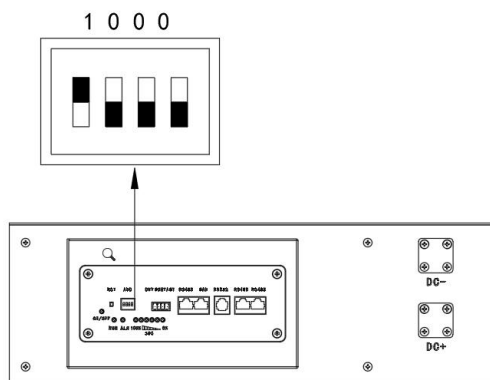


CAN -- Using 8P8C vertical RJ45 socket		RS485 --Using 8P8C vertical RJ45 socket	
RJ45 Pinout	Definition	RJ45 Pinout	Definition
1、 3、 6、 7、 8	NC	9、 16	RS485-B1
4	CAN-H	10、 15	RS485-A1
5	CAN-L	11、 14	GND
2	GND	12、 13	NC

4.3.4 Address dial

When using a single battery, the battery address (ADD) needs to be set to 1 via the DIP switch.

As shown in the following figure:



4.4 Multiple system wiring



Notice: When multiple units are connected in parallel, the host (No. 1 battery) needs to communicate with the inverter.



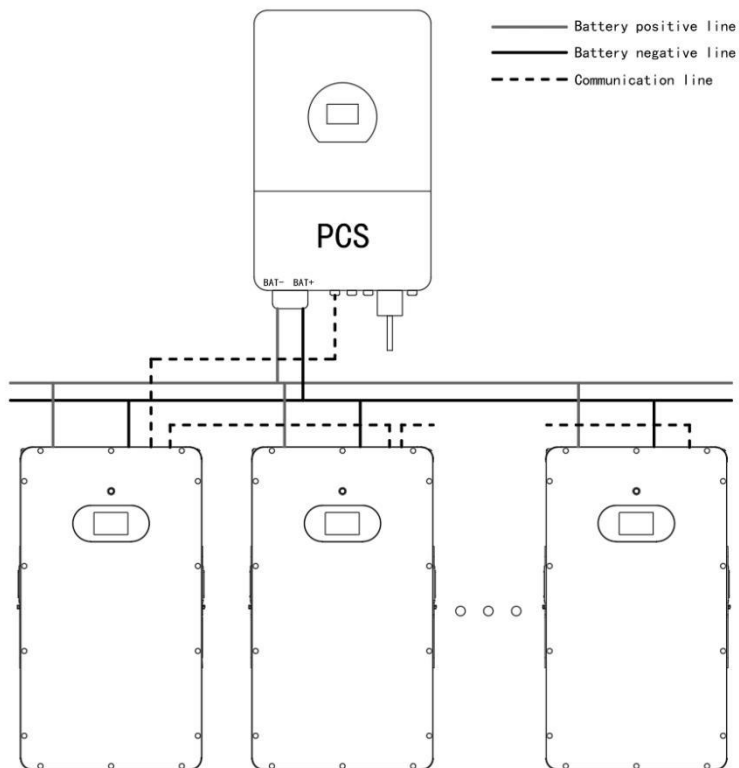
Warning!

Pay attention to distinguishing the positive and negative terminals of the cables. Avoid misusing the communication lines between the PCS and batteries, or between batteries.

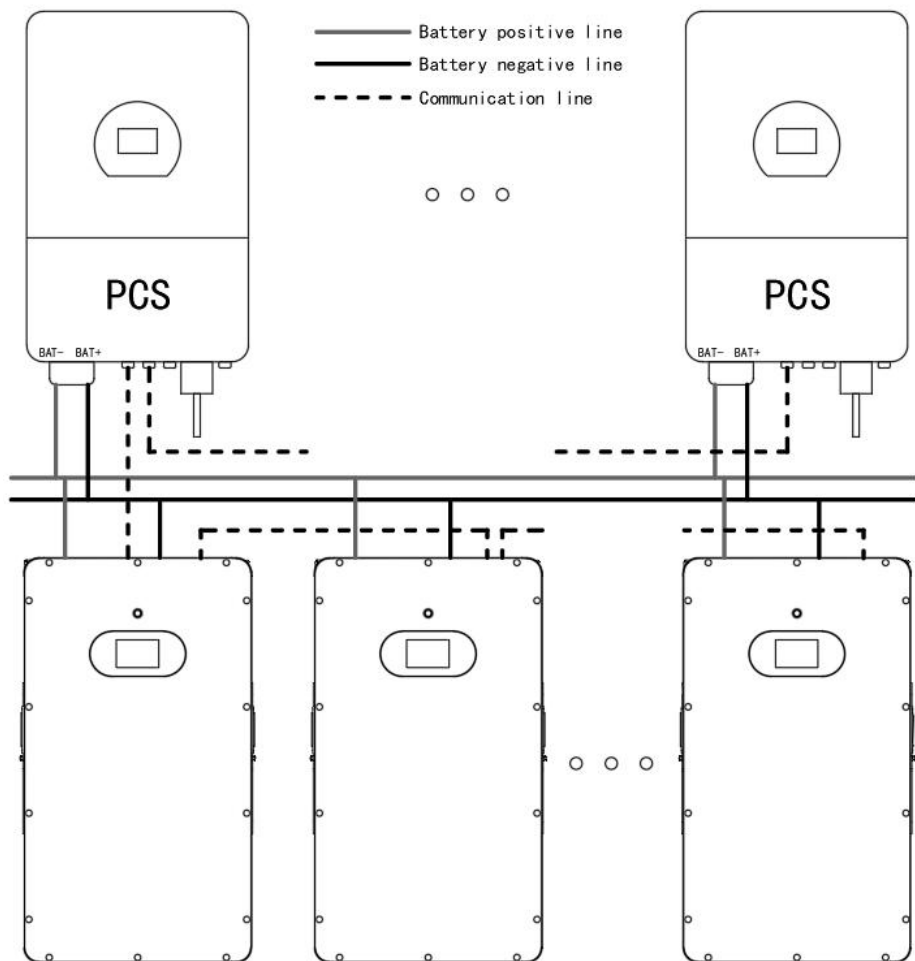
Avoid cross-connecting batteries as much as possible.

4.4.1 Overview of multiple wiring

Single inverter



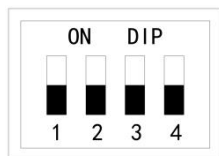
Multiple inverters





4.4.4 Address dial

When multiple batteries are used in parallel, the addresses (ADD) of each battery must be different and correctly sequenced to ensure normal use of the system. The DIP switch setting definition should refer to the following table.



ADD	DIP switch position			
	#1	#2	#3	#4
1	ON	OFF	OFF	OFF
2	OFF	ON	OFF	OFF
3	ON	ON	OFF	OFF
4	OFF	OFF	ON	OFF
5	ON	OFF	ON	OFF
6	OFF	ON	ON	OFF
7	ON	ON	ON	OFF
8	OFF	OFF	OFF	ON
9	ON	OFF	OFF	ON
10	OFF	ON	OFF	ON
11	ON	ON	OFF	ON
12	OFF	OFF	ON	ON
13	ON	OFF	ON	ON
14	OFF	ON	ON	ON
15	ON	ON	ON	ON

5. System Operation

5.1 Check before power on

When the battery system is powered on, be sure to check the following to prevent system damage.

1. The inverter is installed firmly, the installation location is convenient for operation and maintenance, the installation space is convenient for ventilation and heat dissipation, and the installation environment is clean and tidy.
2. The power line and communication line are connected correctly and firmly.
3. The cable bundling complies with the routing requirements, is reasonably distributed, and is not damaged.

5.2 Battery power-up



Notice: The circuit breakers between the inverter and the battery and between batteries must be installed in accordance with local laws and regulations.

Step 1 Close the battery circuit breaker. (Optional)

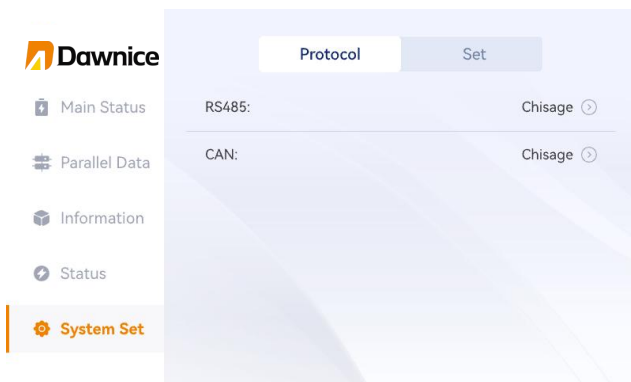
Step 2 Press the battery switch button

Step 3 Close the circuit breaker between the battery and the inverter. (Optional)

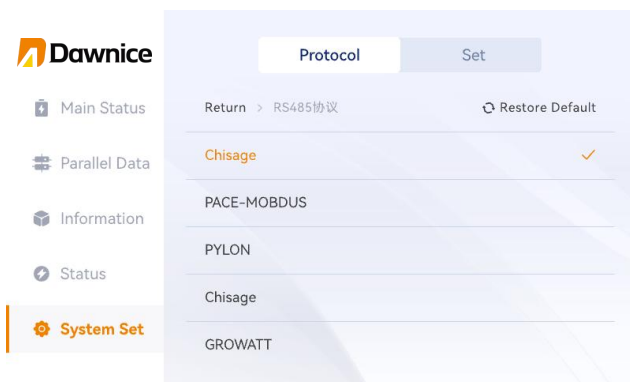
Step 4 Power on the inverter used in the system. For detailed operations, refer to the user manual of the corresponding inverter model

Step 5 Close the load air switch

5.3 Battery protocol selection

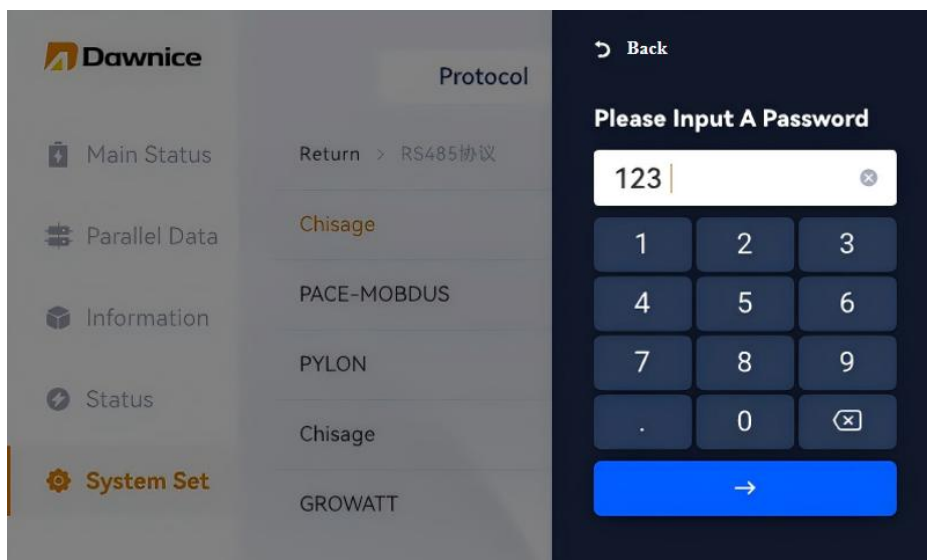


Click PROTOCOL on the page to enter the communication protocol selection page.



Click on CAN or RS485 to enter the CAN or RS485 communication protocol selection.

Click any protocol (left and right keys can be used to view other protocols), enter the modification confirmation page, and enter the password: 123456.



Jump to this page

Set default: Set to default value ; Cancel: Cancel the setting protocol ; OK: Confirm the setting protocol.

5.4 Indicator status



Indicator Light Explanation:

Status	Event	ON / OFF	RUN	ALM	Battery indicator LED						Explanation
Power off	Sleep	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	All turn off
Standby State	Normal	OFF	Flash1	OFF	Refer to table						/
	Alarm	OFF	Flash1	Flash3							/
Charging	Normal	OFF	ON	OFF							/

	Alarm	OFF	ON	Flash3							Overcharge warning ALM does not flash
	OV protect	OFF	ON	OFF	ON	ON	ON	ON	ON	ON	/
	Temperature, Overcurrent	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	/
Discharging	Normal	OFF	Flash3	OFF	Refer to table						
	Alarm	OFF	Flash3	Flash3							
	UV protect	OFF	Flash2	OFF	OFF	OFF	OFF	OFF	OFF	OFF	/
	Overcurrent, temperature	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	/
Invalid	Individual circuit failure, temperature failure, AFE sampling failure, discharge/charge MOS failure	ON	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	Stop charging and discharging

Explanation of power indicator light:

State		Charging						Discharging					
LED		L6	L5	L4	L3	L2	L1	L6	L5	L4	L3	L2	L1
SOC (%)	0%–16.6%	OFF	OFF	OFF	OFF	OFF	Flash2	OFF	OFF	OFF	OFF	OFF	ON
	16.6%–33.2%	OFF	OFF	OFF	OFF	Flash2	ON	OFF	OFF	OFF	OFF	ON	ON
	33.2%–49.8%	OFF	OFF	OFF	Flash2	ON	ON	OFF	OFF	OFF	ON	ON	ON

	49.8%– 66.4%	OFF	OFF	Flash2	ON	ON	ON	OFF	OFF	ON	ON	ON	ON
	66.4%– 83.0%	OFF	Flash2	ON	ON	ON	ON	OFF	ON	ON	ON	ON	ON
	83.0%– 100%	Flash2	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON
RUN●		ON						Flash3					

5.5 Battery power down

To shut down the battery system follow these steps in this order:

Step 1: Press the button switch

Step 2: Confirm that the indicator light is off

Step 3: Disconnect the power circuit breaker (Optional)

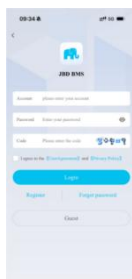
5.6 Mobile APP usage

5.6.1 Bluetooth configuration method

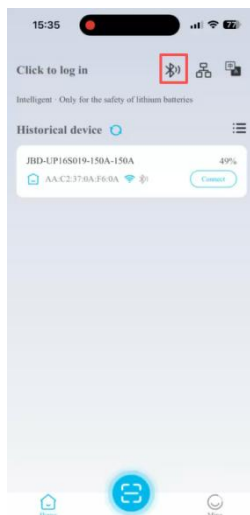
Step1: Search for JBD BMS on your mobile phone and download the app



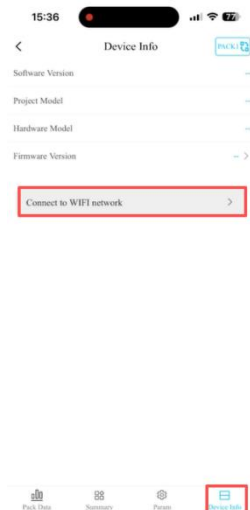
Step 2: Register an account



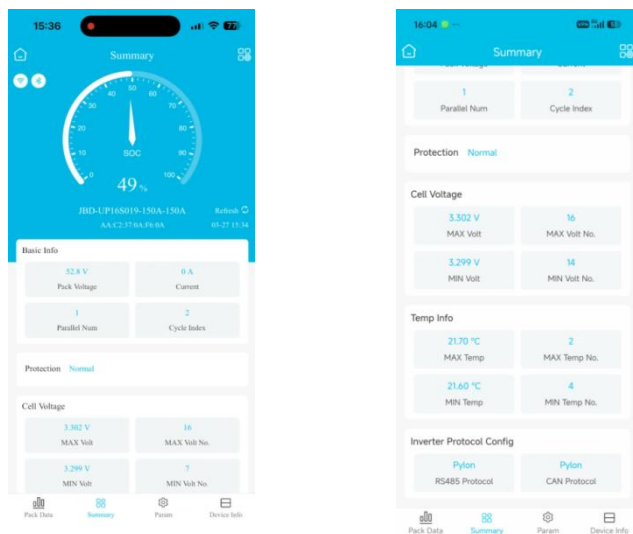
Step 3:Bluetooth search



5.6.2 WiFi configuration method



5.6.3 Data view



6. Inspection, cleaning, and maintenance

6.1 Inspection

Inspect the wiring and contacts for looseness, damage, cracks, deformation, leakage, or any other type of damage. If the battery is found to be damaged, it must be replaced. Do not attempt to use or charge a damaged battery. Do not touch the liquid inside a cracked battery. Regularly check the battery's state of charge. Lithium iron phosphate batteries will slowly self-discharge when not in use or stored.

Consider replacing the battery if you observe any of the following:

- Battery runtime is less than 70% of its original runtime.
- Battery charging time has significantly increased.

6.2 Cleaning

If necessary, clean the battery with a soft, dry cloth. Never use liquids, solvents, or abrasives to clean the battery.

6.3 Maintain



Warning:

If you find any problems that may affect the battery or the battery and energy storage inverter system, please contact after-sales personnel. Unauthorized disassembly is prohibited ; any damage caused by unauthorized disassembly shall be borne by the dismantling party.



Warning:

If you find that the copper wire inside the conductive wire is exposed, do not touch it. There is a danger of high voltage. Please contact after-sales personnel. Do not disassemble it without permission.



Warning:

If any other emergency occurs, please contact after-sales personnel immediately, and the operation should be performed by professionals under the guidance of after-sales personnel.

Maintenance Items	Maintenance Cycle
If the battery is not put into use, it shall be fully charged and then discharged to 30%–60%.	Once every 3 months
Check whether the wall mount bracket is installed loose. If so, please tighten the corresponding position.	Once every 6 months
Check whether the case is damaged. If so, please repair the paint or	Once every 6 months

contact for after-sales service.	
Check whether any exposed cable is worn. If so, please replace the corresponding cable or contact for after-sales service.	Once every 6 months
Check whether any debris piled up around the battery. If any, please clean it to avoid heat dissipation of the battery from being affected.	Once every 6 months
Check whether any water or pests enter into the battery to avoid the battery from being invaded for a long period of time.	Once every 6 months

7. Appendix

7.1 Specifications

Model	HZEB-LCT-5
Name	Wall-mounted Energy Storage Battery
Main Specifications	
Battery Type	LiFePO ₄
Capacity(Ah)	100
Scalability	Up to 15 units in parallel
Nominal Voltage(V)	51.2
Voltage Range(V)	44.8~57.6
Nominal Energy(kWh)	5.12
Usable Energy(kWh@90%DOD) ^[1]	4.61
Charge/Discharge Current(A) ^[2]	100
Other Specifications	
Dimension(W*D*H)	450*170*640mm
Weight(kg)	56
Display Method	HMI Display
IP Rating	IP54
Operating Temperature Range(°C)	Charge: 0~55°C/Discharge: -20~55°C

Recommended Operating Temperature	15~35°C
Storage Temperature	0~35°C
Relative Humidity	90%
Altitude(m)	≤2000
Cycle Life ^[3]	≥5000 Cycles (25°C, 0.5C/0.5C,90%DOD,80%EOL)
Installation Method	Wall/Ground Mounted
Communication Interface	CAN;RS485;RS232
Warranty Period ^[4]	5+5 years
Cumulative Discharge Energy	8.2MWh
Certification	MSDS,UN38.3

[1]DC available energy: Test environment 25°C, 0.5C charge and discharge, 90% DOD; due to different system configuration parameters, the system available energy may vary.

[2]Charge and discharge current: The current is affected by temperature and SOC.

[3]Cycle life: A standard for battery cell life; cells that meet this standard are used.

[4]Warranty period: Applicable conditions are subject to the warranty agreement.

7.2 Product identification card

 Energy Storage Battery Pack	
Model: HZEB-LCT-5	Cell Type: lithium-ion battery(LiFePo4)
Rated voltage: DC51.2V	Voltage range: 44.8V-57.6V
Energy: 5.12kW·h	Capacity: 100Ah
Recharging current: <100A	Discharge current: <100A
Working humidity: 0~90% (non-condensing)	
Working temperature: -10℃~+55℃	
Protection Level: IP54	Date of manufacture: 2026.XX.XX
Add.: No. 111 <u>Yishang Avenue</u> , <u>Yuanzhou District</u> , <u>Yichun City</u> , Jiangxi, China	
Manufacturer: Jiangxi Hertz New Energy Technology Co.,Ltd	
Supplier: <u>Yichun Dawnice Manufacturer and Trade Co.,Ltd</u>	
  UN38.3 	
Made in China	

Tag Explanation

 Used batteries should not be thrown in the trash; they need to be recycled by professionals or organizations.

 Do not place near open flames or burn.

 Do not place in a humid environment.

 MSDS Material inspection and certification mark

UN38.3 Dangerous goods transport certification mark

 CE safety certification mark



Yichun Dawnice Manufacture and Trade Co., Ltd.

Add :No. 111 Yishang Avenue, Yuanzhou District, Yichun City, Jiangxi, China

After-sales email: aftersale@dawnnice.com

Postcode: 336000

※ The product information and parameters are subject to change without prior notice.