GoKWh

USER MANUAL

LiFePO4 Battery Pack
51.2V 340Ah

Dongguan GoKWh Technology Co., Ltd.
Version - 2025

Important Safety Instructions

Please save these instructions.

DISCLAIMER

The user manual provides important operation and maintenance instructions for the GoKWh 51.2V LiFePO4 Bluetooth & LCD Stack-mounted LiFePO4 Battery Storage Series (hereinafter referred to as the battery or battery pack).

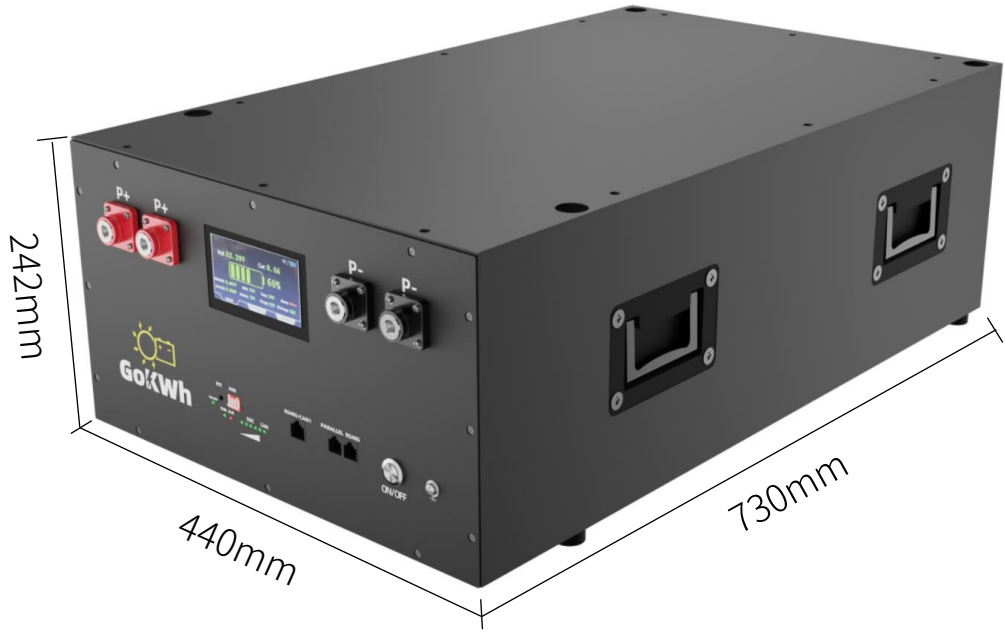
Before use, please read all specifications, usage, storage conditions and warnings on this document and save for future reference. Always follow our instructions for the handling and use of this battery pack. Abuse of battery can cause battery failure, performance degradation or shortened life, overheating, explosion or fire.

Note

- Users should install and use the battery kits in accordance with the requirements of the user manual. If the user uses the battery kits under conditions or equipment beyond the conditions specified in this user manual, GoKWh does not assume any responsibility or liability for direct or indirect personal and property losses.
- The illustrations in the user manual are for demonstration purposes only. Details may vary slightly based on product version and market region
- GoKWh reserves the right to make changes to the user manual without prior notice.
- Please check all the configurations in the package carefully. If any accessories are missing, please contact GoKWh Customer Service Center in time.

1.APPEARANCE AND DIMENSIONS

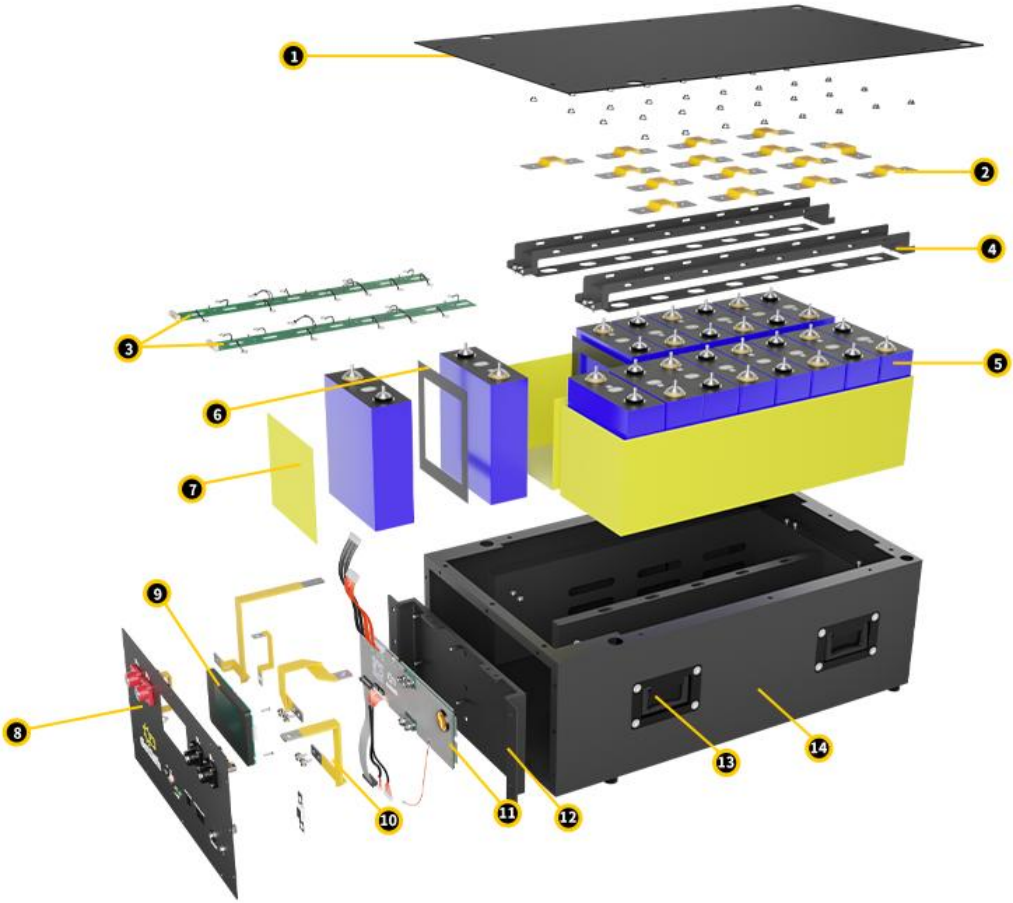
Unpack and check the accessory package to confirm whether the number of accessories is consistent with the list. If there is any missing, please contact GoKWh Customer Service Center in time.



(48V 340Ah)

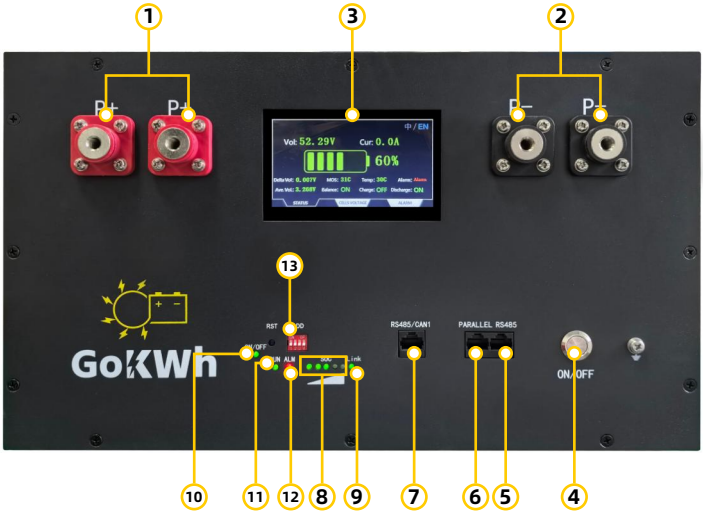
2.STRUCTURE AND INTERFACE

2.1.Battery Box



①	Box Cover	⑧	Front Panel
②	Short Busbar	⑨	Touch-controlled LCD Display
③	PCBA Collection Board	⑩	Long Busbar
④	Fixed bracket	⑪	GoKWh 48V 100A/ 200A BMS
⑤	3.2V LiFePO4 Cells	⑫	Inner Panel
⑥	EVA Foam Tape	⑬	Box Handle
⑦	Insulation Epoxy Plate	⑭	Battery Box

2.2.Front Panel



①	Positive Terminal	⑧	Battery Indicator Light
②	Negative Terminal	⑨	Link Light
③	Touch-controlled LCD Display	⑩	ON/OFF Indicator Light
④	Battery System Switch	⑪	RUN Light
⑤	RS485 Interface	⑫	ALM Light
⑥	Parallel Interface	⑬	Dip Switch
⑦	RS485/ CAN Interface	⑭	Reset Button

3.TECHNIAL SPECIFICATION

Model	GW48340PSBD

BATTERY

Cell Type	Prismatic Lithium Iron Phosphate (LiFePO4)
Nominal Voltage	51.2V
Rated Capacity	340Ah
Nominal Energy	17.4kWh
Internal Resistance	⩽80 mΩ
BMS	200A
Communication	Bluetooth/ RS485/ CAN
Active Balancing Current	2A
Rated Charge Current	100A
Max. Charge Current	200A
Rated Discharge Current	100A
Max. Discharge Current	200A
Peak Discharge Current	400A ⩽ 3s
Discharge Cut- off Voltage	40V
Cycle Life	⩾8000 at 80% DOD
Max. Expansion	15P (In Parallel)
Dimensions (L*W*H)	28.7*17.3*9.5 in (730*440*242mm)
Weight	255lb (115.8kg)
Display	Touch LCD Screen
Protection Class	IP20
Warranty	5-Year

CHARGE

Charge Method	CV/CC
Charge Voltage	58.4V
Recommend Charge Current	⩽100A

TEMPERATURE

Charge	＜55°C/＜131°F
Discharge	＜55°C/＜131°F
Storage	25°C/ 77°F

4.BMS

4.1.BMS Parameters

Default Parameters

BMS Model	16S200A
Balancing Initial Voltage	3V
Max. Balancing Current	2A
Unit Overcharge Voltage	3.6V
Unit Overcharge Protection Recovery	3.54V
Unit Undervoltage Protection	2.6V
Unit Undervoltage Protection Recovery	2.65V
Automatic Shutdown Voltage	2.5V
SOC-0% Voltage	2.6V
SOC-100% Voltage	3.5V
Trigger Balancing Differential Pressure	0.01V
Charging Overcurrent Protection Delay	3s
Charge Overcurrent Protection Release Time	60s
Discharge Overcurrent Protection Delay	300s
Discharge Overcurrent Protection Release Time	60s
Short-circuit Protection Delay	1500us
Short-circuit Protection Release Time	60s
Charging Over-temp Protection	70°C
Charge Over-temp Restore	60°C
Discharge Over-temp Protection	70°C
Discharge Over-temp Restore	60°C
Charging Low-temp Protection	-20°C
Charge Low-temperature Restore	-10°C
MOS Over-temp Protection	100°C
MOS Over-temp Protection Restore	80°C
Device address	0
Discharge Precharge Time	0s

4.2.LED Status Indicators

Model	Normal/Warning/ Protection	ON/ OFF	RUN	ALM	SOC Indicators LED					Link
		🟢	🟢	🔴	🟢	🟢	🟢	🟢	🟢	🟢
Power Off	Normal	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
Balancing	Normal	ON	Flicker	OFF	Battery based display					OFF
Charging	Normal	ON	Flicker	OFF	Battery based display					OFF
	Overcurrent	ON	Flicker	Flicker						
	Over Temp	ON	Flicker	Flicker						
	Overvoltage	ON	Flicker	Flicker						
	Charge Fail	ON	Flicker	Flicker						
Discharging	Normal	ON	Flicker	OFF	Battery based display					OFF
	Overcurrent	ON	Flicker	Flicker						
	Over Temp	ON	Flicker	Flicker						
	Overvoltage	ON	Flicker	Flicker						
	Charge Fail	ON	Flicker	Flicker						
Other Warnings	Unmodified Password	ON	Flicker	Flicker	Battery based display					OFF
	Short Circuit	ON	Flicker	Flicker						
	Abnormal Temp	ON	Flicker	Flicker						

Note.

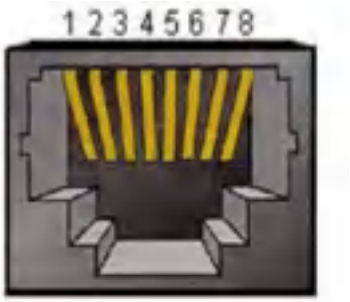
When the device address is set to 0, the last LED indicator Link light blinks. If the value is set to other values, the slave is off and blinks after the communication between the slave and the host is successful.

4.3.SOC Indicators

Status		Charging					Discharging				
Soc LED		L5	L4	L3	L2	L1	L5	L4	L3	L2	L1
SOC (%)	0~20%	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	ON
	20~40%	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF	ON	ON
	40~60%	OFF	OFF	ON	ON	ON	OFF	OFF	ON	ON	ON
	60~80%	OFF	ON	ON	ON	ON	OFF	ON	ON	ON	ON
	80~100%	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON

4.4.RS4851 & RS4852 Interfaces

Communication with host computer：



RS485-Adopts 8P8C Vertical RJ45 Socket	
RJ45 Pin	Description
1/8	RS485-B
2/7	RS485-A
3/4/5/6	GND

4.5.Communication

4.5.1.CAN Communication

There is a CAN1 interface on the front panel, and default CAN communication baud rate is 250k.

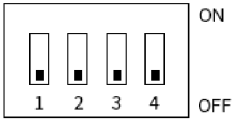
4.5.2.RS485 Communication

The front panel has two RS485 communication interfaces for detecting battery pack information. Default baud rate is 115200. The communication address can be set via DIP switch with address range 0~15 to poll data from all battery packs.

4.6.Dip Switch Setting

When multiple battery packs are used in parallel, the address of each battery pack needs to be set through the DIP switch to distinguish different battery packs, and the hardware address of each battery pack is unique.

The hardware address can be set in turn through the dial switch on the board, with 1, 2, 3, 4, dials. Refer to the following table for the definition of switches.



0	DIP Switch Positions			
	1	2	3	4
0	OFF	OFF	OFF	OFF
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

4.7. Upper Computer Connection

4.7.1. Connect With Computer

The battery communication address is configured using a 4-bit dip switch, which sets the address range from 0 to 15 in binary mode. Users can easily configure the communication address through these 4-bit dip switches, but only addresses 1 to 15 can be used for host computer communication.

For detailed configuration methods, please refer to 4.6. "Dip switch setting"

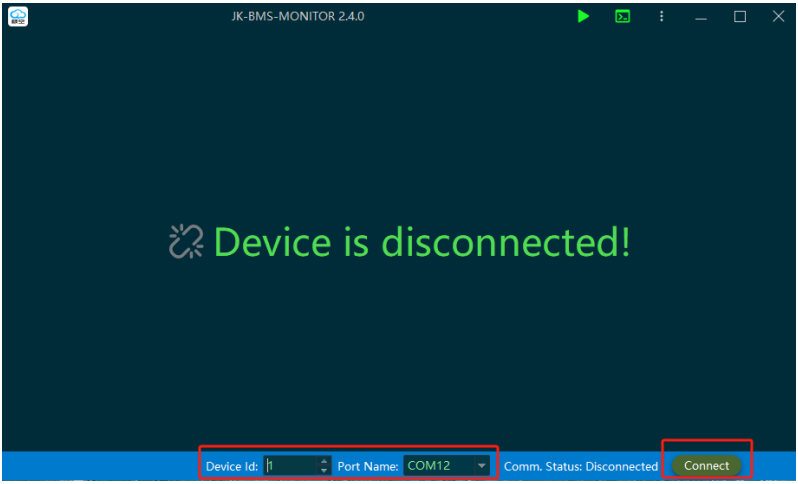
Step 1. Turn dial 1 to the "ON" state

Step 2. Use a USB cable to connect to the Parallels interface, and the USB port to the computer.

Step 3. After the computer recognizes it, check whether the battery is working properly in the "Device Manager" of the computer, and record the serial port number, such as COM7

*The serial port number of each computer may be different, please refer to the one detected by the computer system.

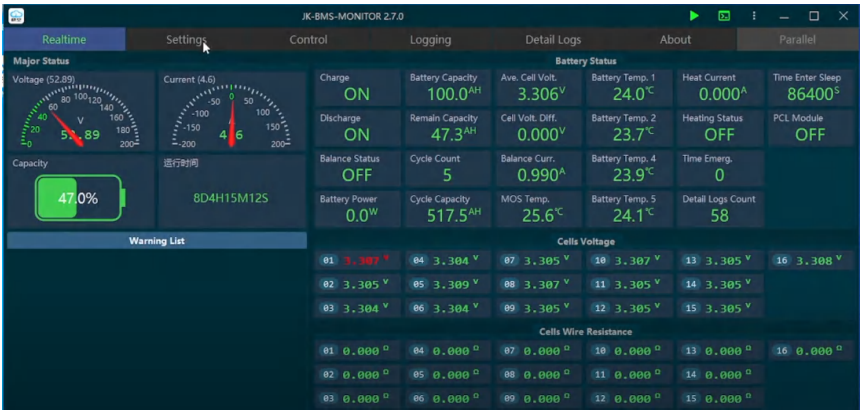
Step 4. Open the upper computer software, fill in the device address and serial port number for the above operation steps in the lower right corner, and click connect.



4.7.2. Upper Computer Sofewave Guide

Real Time Status Page

In this page, you can view the battery voltage, charging current, abnormal warning, battery status, equalization line group and other information of the battery.



Settings & Control

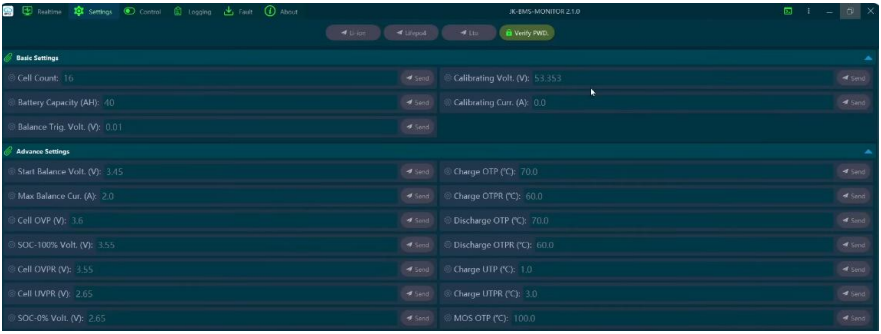
If you need to modify the working parameters of the BMS, you must first click the "Modify PWD." button and enter the parameter setting password to verify the parameter setting authority.

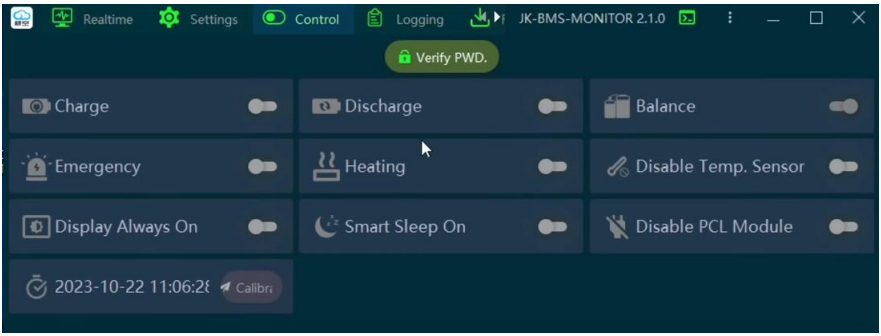
*If you need to modify the working parameters of the BMS, you must first click the "Authorization Settings" button and enter the parameter setting password to verify the parameter setting permission.

*The parameter setting password and modification permissions are not open to the public. If necessary, please consult your customer service staff, who will provide an accurate modification plan based on your actual usage.

*Incorrectly setting parameters may cause battery damage, burnout, etc. Please modify it with caution.

In the settings and contorl, you can modify the battery related working parameters

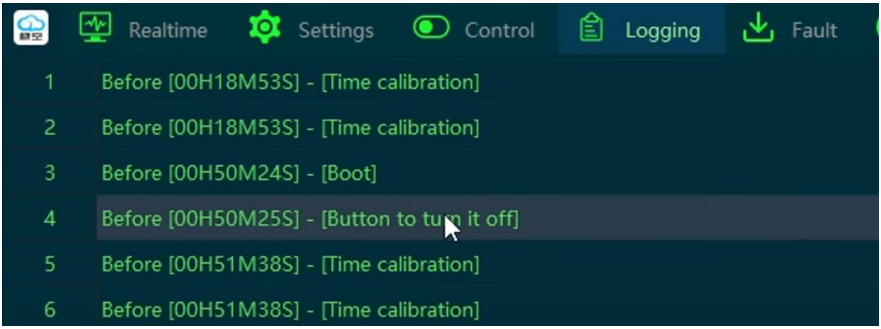




Logging & Fault

In Logging and Fault page, the"Update Log" and “Fault Download” button can update the internal logs and fault logs of the BMS to the upper computer for display.

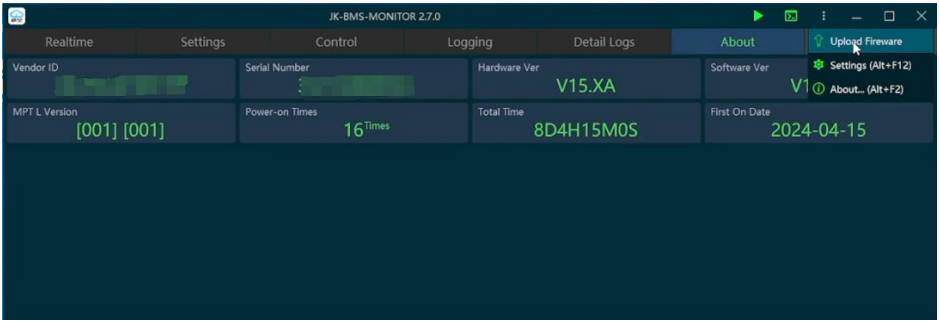
The Export Log button can export all curren tlogs to the specified folder on the computer in the format of xlsx, which can be viewed using software such as Excel.



About

In About Page, display basic product information such as model, hardware version, software version, and power ontime.

If need to upgrade the firmware, click the three-dot icon in the upper right corner, click "Upgrade Firmware", select the corresponding firmware and it will be upgraded normally. The end of the progress bar indicates that the upgrade is complete.



5.TOUCH LCD DISPLAY

The Touch LCD display is connected to the smart BMS built into the battery pack to view the real-time status of the battery pack and BMS.

5.1.Status

A.中/EN: Switching between Chinese and English systems

B.Volt: Displays the total voltage of the current battery. The total voltage is the sum of all single cell voltages.

C.Cur: Displays the total current of the battery in real time.

D.Remaining power: Indicates the current percentage of battery power remaining.

E.Voltage difference: Indicates the difference between the highest cell voltage and the lowest cell voltage of the entire battery pack currently, unit: V.

F.MOS: Real-time display of the current temperature of the BMS power MOS, unit: °C.

G.Temp: Real-time display of battery pack temperature, unit: °C.

H.Alam: Alarm reminder, when the battery pack fails, it will display "ALAM", when the battery is normal, it will display "Normal"

I . Ave Vol: Indicates the current average voltage of the battery cells, unit: V.

J.Balance: Indicates the current BMS balancing switch state.

- When it displays "On", the BMS automatically balances after the balancing trigger condition is met;
- When it displays "Off", it means that the balancing is turned off and the BMS will not balance the battery.

K.Charge: Indicates the charging status of the battery pack.

- If the battery is charging, it is "On".
- If it is not charging, it is "OFF”

L.Discharge: Indicates the discharge status of the battery pack.

- If the battery is discharging, it is "On".
- If it is not discharging, it is "OFF"

5.2.Cells Voltage

Real-time display of the voltage status of each cell in the battery pack.

5.3.Alam

The built-in BMS of the battery will perform real-time detection on the battery pack, and when an alarm or fault occurs, an alarm will be issued in real time.

In the alarm area, you can see the cause of the fault, the time when the fault occurred, and other information.

6.BLUETOOTH & APP

The BMS is equipped with Bluetooth function, which allows users to monitor the battery status in real time through the mobile phone app.

The Bluetooth APP can achieve the following functions:

- Support Chinese and English switching
- Display basic data of the battery
- One-click switching in the App to view and set different types of parameter options for ternary lithium batteries and LFP batteries
- Selectable communication protocol with the inverter
- Setting equalization pressure difference parameters
- Support single and parallel operation

6.1.Bluetooth App Download

Method 1. Open the phone camera and scan the image below or the QR code on BMS. After scanning the code, you will be redirected to a new page, select the app store of the corresponding system on your phone and download it.

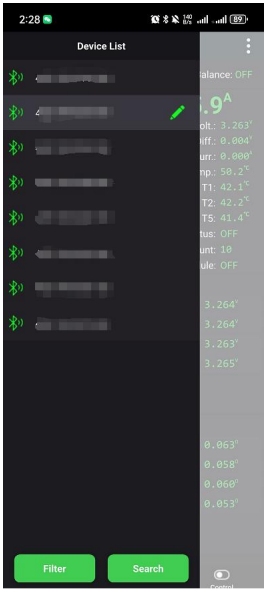
6.2.GoKWh App Guide

6.2.1.Pair and connect the app to the battery

Before connecting the device, please ensure that your phone's Bluetooth is turned on.

a.Open the App after downloading.

b.Click the icon in the upper left corner to scan the device. After the scan is completed, click the name of the device to be connected.



When connecting for the first time, the APP will prompt for a password. The default password of the device is "1234"

After connecting, the APP will automatically record the password, and you don't need to enter it again the next time you connect.

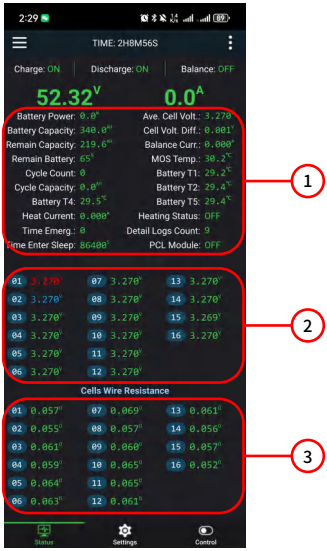
c.After successful matching, the app will automatically jump to the page showing the battery data.

6.2.2.Modify password and name

Click on the icon on the right side of the device list to modify the battery name and password.

6.2.3.Status viewing and data description

Battery real-time status display:



The real-time status page is divided into 3 areas:

① Battery basic data

② Cell voltage area

③ Balance line resistance area

①Battery basic data, the parameters are explained as follows:

A.Running time: Indicates the total running time since the BMS was first powered on

B.Charging: Indicates the current switch status of the BMS charging MOS

- When it displays "On", it means that the current protection board charging MOS is turned on and the battery is allowed to charge
- When it displays "Off", it means that the current protection board charging MOS is turned off and the battery is not allowed to charge

C.Discharging: Indicates the current switch status of the BMS discharge MOS

- When it displays "on", it means that the BMS discharge MOS is on and the battery is allowed to discharge
- When it displays "off", it means that the BMS discharge MOS is off and the battery is not allowed to discharge.

D.Balance: Indicates the current BMS balance switch status.

- When it is displayed as "on", the protection board automatically balances after the balance trigger condition is met;
- When it is displayed as "off", it means that the balance is off and the protection board will not balance the battery.

E.Voltage: Displays the total voltage of the current battery. The total voltage is the sum of all single cell voltages.

F.Current: Displays the total current of the battery in real time. When the battery is charging, the current is positive, and when the battery is discharging, the current is negative.

G.Power: Indicates the total power currently output or input by the battery. Its value is the product of the current battery voltage and the absolute value of the battery current.

H.Remaining power: Indicates the current percentage of battery power remaining.

I.Battery capacity: Indicates the actual battery capacity calculated by the current BMS through high-precision SOC, in units of AH. (This value is updated only after the battery has undergone a complete discharge and charge cycle)

J.Remaining capacity: Indicates the current remaining capacity of the battery, unit: AH.

K.Cycle capacity: Indicates the cumulative discharge capacity of the battery, unit: AH.

L.Cycle times: The number of cycles indicates the number of times the battery is fully charged, in units of: times.

M.Average voltage: Indicates the current average voltage of the battery cells, unit: V

N.Voltage difference: Indicates the difference between the highest cell voltage and the lowest cell voltage of the entire battery pack currently, unit: V.

O.Balance current: When the protection board turns on the balance function and reaches the balance condition, the balance current display area displays the balance current in real time, unit: A.

- When balance is in progress, the real-time state of the single cell voltage display area, blue represents the discharged battery, and red represents the charged battery. Negative balance current indicates that the battery is discharging, and the blue color flashes at this time. Positive balance current indicates that the battery is charging, and the red color flashes at this time.
- BMS adopts active balance technology. The principle of balance is to take power from the high-voltage battery cell, store it in the protection board, and then release it to the low-voltage battery cell.

P.MOS temperature: Real-time display of the current temperature of the BMS power MOS, unit: °C.

Q.Battery temperature 1: If the temperature sensor 1 is not installed, "NA" is displayed. If the temperature sensor is installed, the temperature of the temperature sensor 1 is displayed in real time in °C.

R.Battery temperature 2: If the temperature sensor 2 is not installed, "NA" is displayed. If the temperature sensor is installed, the temperature of the temperature sensor 2 is displayed in real time in °C.

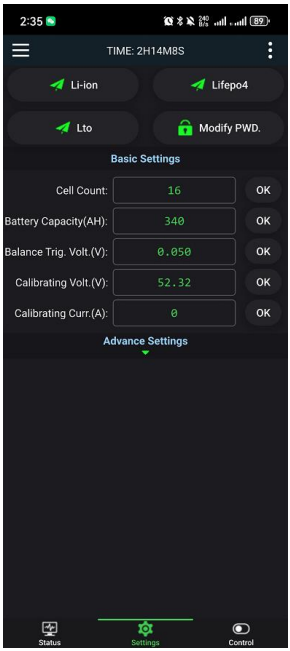
②Cell voltage area

Real-time display of the voltage data of each cell in the battery pack, where red represents the cell with the lowest voltage and blue represents the cell with the highest voltage.

③Balance line resistance area

The balance line resistance is the balance line resistance obtained by the protection board self-test. This value is only a rough calculation to prevent wrong wiring or poor contact. When the balance line resistance exceeds a certain value, it will be displayed in yellow and the balance cannot be turned on.

6.2.4.Settings



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*Incorrectly setting parameters may cause battery damage, burnout, etc. Please modify it with caution.

In the settings, you can make the following settings or operations on the battery pack:

Basic Settings

A.Li-ion: Click this button to modify all the working parameters of BMS to ternary battery parameters.

B.Lifepo4: Click this button to modify all the working parameters of the BMS to lithium iron battery parameters.

C.Lto: Click this button to modify all BMS operating parameters to lithium titanate battery parameters.

D.D.Cell Count: Indicates the number of cells in the current battery. Please set this value accurately before use, otherwise the protection board will not work properly.

E.Battery capacity: This value is the design capacity of the battery.

F.F.Balance Trig. Volt: When the equalization switch is turned on, when the maximum voltage difference of the battery pack exceeds this value and the current single cell voltage exceeds the equalization start voltage, the equalization starts, and the equalization ends when the voltage difference is lower than this value or the single cell voltage is lower than the equalization start voltage.

For example, if the equalization trigger voltage difference is set to 0.01V, the equalization starts when the battery pack voltage difference is greater than 0.01V, and ends when it is lower than 0.01V.
It is recommended to set the equalization trigger voltage difference to 0.005V for batteries above 50AH and 0.01V for batteries below 50AH.

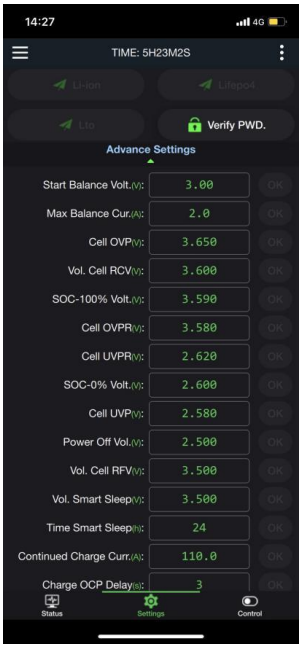
G.Calibrating Volt: The voltage calibration function can be used to calibrate the accuracy of the BMS voltage collection.

When it is found that the total voltage collected by the BMS and the total voltage of the battery are in error, the voltage calibration function can be used to calibrate the BMS. The calibration method is to fill in the current measured total battery voltage, and then click the "Set" button behind the voltage calibration to complete the calibration.

H.Calibrating Curr: can be used to calibrate the accuracy of BMS current collection.

When the total current collected by the BMS is found to be different from the actual current of the battery, the current calibration function can be used to calibrate the protection board. The calibration method is to fill in the current measured total battery current, and then click the "Set" button behind the current calibration to complete the calibration.

Advance Settings



A.Start Balance Volt: Used to control the voltage stage of equalization. Equalization will be triggered only when the single cell voltage exceeds this value and the maximum voltage difference of the battery pack exceeds the equalization trigger voltage difference.

B.Max Balance Cur: Indicates the continuous current of high voltage battery discharge and low voltage battery charge during energy transfer. Maximum balancing current indicates the maximum current during energy transfer. The maximum balancing current should not exceed 0.1C.

C.Cell OVP & Vol. Cell RCV: Refers to the saturation voltage of the battery cell. As long as the voltage of any single cell in the battery pack exceeds this value, a "single cell overcharge alarm" is generated, and the BMS turns off the charging MOS. At this time, the battery cannot be charged but can only be discharged. After the alarm is generated, only when the voltage value of all single cells is lower than the value of "single cell overcharge recovery", the BMS will release the "single cell overcharge alarm" and turn on the charging switch at the same time.

D.SOC-100% Volt: Refers to the voltage of a single battery cell when the battery is at 100% charge.

E.Cell OVPR & Cell UVPR: Refers to the cut-off voltage of the battery cell. As long as the voltage of any cell in the battery pack is lower than this value, the "Cell Low-voltage Alarm" will be generated. At the same time, the BMS will turned off to discharge MOS, at this time, the battery can not discharge, but can only charge. When the alarm occurs, only after the voltage of all the cells exceeds the value of "Cell Voltage Recovery" the BMS releases the "Cell Low-voltage Alarm" and turns on the discharge MOS at the same time.

F.SOC-0% Volt: Refers to the voltage of a single battery cell when the battery level is at 0%.

G.Cell UVP: Refers to the saturation voltage of the cell. As long as the voltage of any single cell in the battery pack exceeds this value, a "single overcharge alarm" will be generated. At the same time, the BMS will turn off the MOS for charging. At this time, the battery cannot be charged and can only be discharged. After the alarm is generated, only when the voltage value of all cell is lower than the value of "Cell OVPR", the BMS will release the "cell overcharge alarm" and open the charging MOS at the same time.

H.Power Off Vol: Indicates the lowest working voltage of the BMS. When the highest voltage of the cell in the battery pack is lower than this value, the BMS is closed. The value must be lower than "unit low-voltage protection".

I.Vol. Cell RFV: Desired FLOAT voltage. If the battery is data-connected to the inverter, the inverter will take this voltage as its FLOAT charging voltage limit. This function must be activated in the BMS on the "Control" - "Charging float mode" tab.

J.Vol. Smart Sleep: If this voltage is reached and at the same time the output or input current is 0A, the countdown for the transition to the energy-saving BMS shutdown mode - Sleep mode will begin. To activate this function, it must be activated on the "Control" - "Smart Sleep On" tab. If charging or discharging occurs during the countdown, the countdown will be interrupted.

K.Time Smart Sleep: Setting the transition time to intelligent sleep mode in hours.

L.Continued Discharge Curr: According to the parameters of the inverter and the possible charge currents of the cells used.

M.Charge OCP Delay：The amount of time the BMS will accept a charging overcurrent before disconnecting.

N.Charge OCPR Time: The time after which the OCP protection is reset and the accumulator is activated again

O.Continued Discharge Curr: Set the maximum discharge current up to 200A according to the parameters of the inverter and the possible discharge currents of the cells used.

P.Discharge OCP Delay：The delay during which the BMS accepts the discharge current above the set limit.

R.Charge OTP & Charge OTPR: During the charging process, when the battery temperature exceeds the value of "Charge OTP", the BMS will generate a "charging over temperature protection alarm", and the BMS will turn off charging MOS. After the alarm is generated, when the temperature is lower than "Charge OTPR", the "charging over temperature protection alarm" will be released, and restart the charging MOS.

S.Discharge OTP & Discharge OTPR: Disharge OTP & Discharge OTPR: During the discharging process, when the battery temperature exceeds the value of "Diacharge OTP", the BMS will generate a "discharging over temperature protection alarm", and the BMS will turn off discharging MOS. After the alarm is generated, when the temperature is lower than "Discharge OTPR", the "discharging over temperature protection alarm" will be released, and restart the discharging MOS.

T.Charge UTPR & Charge UTP: During the charging process, when the battery temperature is lower than the value of "Charge UTP", the BMS will generate a "low temperature protection for charging alarm" , and
the BMS will turn off the MOS for charging. After the alarm is generated, when the temperature is higher than "charge UTPR", the protection board will release the warning of "low temperature protection of charging alarm" and restart the MOS of charging.

U.MOS OTP & MOS OTPR: When the MOS temperature exceeds the value of "MOS OTP", the BMS will generate "MOS over temperature alarm" and close the charge discharge MOS at the same time.

The battery cannot be charged or discharged. After the alarm is generated and the MOS temperature is lower than the value of "MOS OTPR", the BMS will release the "MOS over temperature alarm" and restart the charge and discharge MOS (the MOS over temperature protection value is 100 ℃, the MOS over temperature recovery value is 80 ℃, these two values are factory default values and cannot be modified).

V.SCP Dalay: Short-circuit protection delay, Unit: μs.

W.SCPR Time: When the short-circuit protection occurs, the short-circuit protection will be released after the set time of "SCPR Time".

X.Device Addr：Communication address of the device, which is assigned according to the DIP Switch setting on the auxiliary panel.

Y.Data Stored Period: Setting the time frame for which the status data is stored in the log file in the BMS. To activate this function, it must be activated on the "Control" - "Timed Stored Data" tab. The log data file is then available in the application under the menu (three dots) - "System Log".

Z.RCV Time: Setting the time period (in hours) for which the voltage "Vol. Cell. RCV" from reaching it on the first cell while charging.

AA. RFV Time: RFV Time: Setting the time period (in hours) for which the “Vol Cell. RFV" RCV time lapse. It is the so-called FLOAT voltage of the cell, when it is still fully charged, but its voltage is maintained at an optimal and gentle value.

AB. User Private Data: Any user data can be entered here, for example battery name, manufacturer, SN, etc.

AC. User Data 2: Any user data can be entered here, for example battery name, manufacturer, SN, etc

AD. UART1 Protocol No.: Selection of the communication protocol for the RS-485 bus according to the connected inverter and according to the protocol.

AE. UART2 Protocol No.: Communication protocol for the RS-485 bus for internal communication between parallel connected BMS. This internal protocol cannot be changed.

AF. CAN Protocol NO.: Selection of the communication protocol for the CAN BUS according to the connected inverter and according to the protocol it supports.

AG. LCD Buzzer Trigger: Setting the condition to automatically turn on the display if it is connected, for example in case of some low SOC type alarm, etc.

AH. LCD Buzzer Trigger Val: The LCD Buzzer Trigger set condition value, for example at SOC condition, the minimum % SOC value is set when the display should be activated.

AI. LCD Buzzer Release Val: The value to terminate the set LCD Buzzer Trigger condition.

AJ. DRY 1 Trigger: Setting the condition in which the dry contact relay 1 is closed, for example, starting the generator, when the battery voltage drops, etc. The contact connector is brought out on the auxiliary board.

AK. DRY 1 Trigger Val: The value of the set DRY 1 Trigger condition, for example, at the SOC condition, the minimum % SOC value is set when the contact should close.

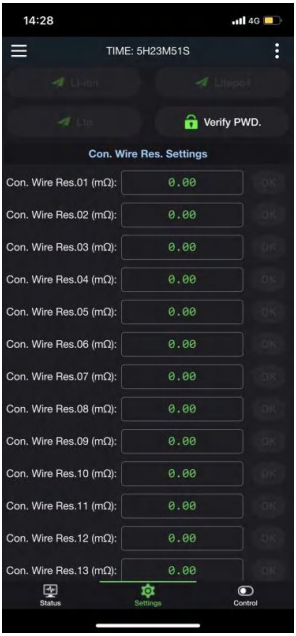
AL. DRY 1 Release Val: The value for ending the set DRY 1 Trigger condition.

AM. DRY 2 Trigger: Setting the condition in which the dry contact relay 2 closes, for example, starting the generator, when the battery voltage drops, etc. The contact connector is brought out on the auxiliary board.

AN. DRY 2 Trigger Val: The value of the set DRY 2 Trigger condition, for example, at the SOC condition, the minimum % SOC value is set when the contact should close.

AO. DRY 2 Release Val: The value for ending the set DRY 2 Trigger condition.

Con. Wire Res. Settings

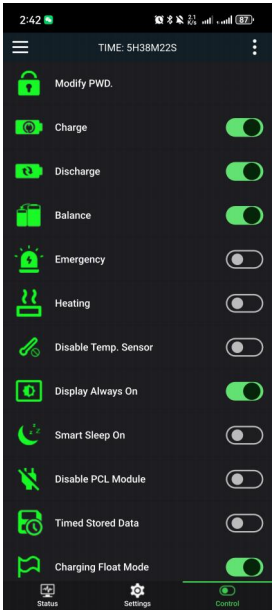


Manual adjustment of the resistance of individual balance wires. There is usually no need to change anything.

Note

- Please refer to the manual for any parameter modification. Inappropriate parameters may cause the BMS to not work properly or even burn the BMS.
- After any parameter modification, you need to click the "OK" button behind the parameter to complete the parameter distribution.
- After the BMS successfully receives the parameter, it will make a "beep" sound.

6.2.5. BMS Control



Through BMS control, the protection board can be charged, discharged, balanced, switched on and off, and emergency switched on.

A.Charging: Used to control the BMS charging switch to open or close.

B.Discharge:Used to control the discharge switch of the BMS to open or turn off.

C.Balance: Used to control the BMS balance function on or off.

D.Emergency: Can turn on the charging and discharge, allowing users to use the battery for the emergency switch.
After the emergency switch is turned on, it is automatically turned off for 30 minutes. After the user is turned off by itself.

After turning on the emergency switch, the battery loses any protection function. Do not open this switch

E.Heating:Under the condition that the protection board supports heating, when the heating conditions are met, it can only be turned on when the charger is detected or the heating switch is turned on.

F.Disable Temp. Sensor: Turn on the temperature sensor shielding switch, and the protection board ignores temperature-related alarms
This function is often used when the temperature sensor is damaged for some reason.

G.G.Display Always ON: Permanent activation of the connected LCD display. If it is off, the display will turn off after 20s..

7.BATTERY TRANSPORTATION

- When transporting the battery, please ensure that the battery power is around 50%.
- During transportation, please use insulating and shockproof materials to pack the battery to avoid collision and extrusion during transportation, which may cause damage to the battery.
- Please handle with care during transportation and loading to avoid dropping or bumping the battery.

8.BATTERY STORAGE

- When storing the battery, keep the battery charge above 70%.
- The battery is to be stored in a condition that the temperature of 23±2℃ and the humidity 0f 45%- 75%.
- The battery should be stored in a ventilated and dry environment to avoid contact with corrosive substances.
- Keep away from high temperature and open flame environment.
- During storage, it is recommended to charge the battery every 180 days and fully charge the battery.

9.WARNING

- DO NOT immerse the battery in water or allow it to get wet.
- DO NOT use or store the battery near sources of heat such as a fire or heater.
- DO NOT reverse the positive (+) and negative (-) terminals.
- DO NOT connect the battery directly to wall outlets or car cigarette-lighter sockets without proper charging equipment.
- DO NOT allow exposed ends of cables connected to opposite terminals to touch.
- DO NOT put the battery into a fire or apply direct heat.
- DO NOT use the battery if the battery casing has been pierced, broken, cracked, or otherwise visibly damaged.

- DO NOT throw the battery or heavily strike the battery in any way.
- Never solder anything directly to the battery terminals.
- DO NOT mix batteries of different capacities, types, and brands.
- Stop using the battery if it has an odor, is abnormally hot, deformed, has its cover discolored, or has any other abnormalities.
- When the battery is in use or charging, the above conditions may occur. Please disconnect the charger immediately and stop using it
- Before discarding the battery, please fully discharge the battery.

Note.
The electrolyte in the battery is harmful to human skin and eyes. If the electrolyte leaking from the battery contacts your eyes, please do not rub it, rinse it with clean water immediately, and go to the hospital for treatment. If not handled properly, the electrolyte may damage your eyes.

10.WARRANTY & AFTER-SALES SERVICE

- All GoKWh 51.2V LiFePO4 Bluetooth & LCD Battery Storage Series come with a 5-year manufacturer's warranty from the date of purchase.
- This warranty covers the following GoKWh 51.2V LiFePO4 Bluetooth & LCD Stack-mounted Battery Storage Series models:

a.GoKWh 51.2V 100Ah LiFePO4 Bluetooth & LCD Stack-mounted Battery Storage
b.GoKWh 51.2V 200Ah LiFePO4 Bluetooth & LCD Stack-mounted Battery Storage
c.GoKWh 51.2V 280Ah LiFePO4 Bluetooth & LCD Stack-mounted Battery Storage
d.GoKWh 51.2V 340Ah LiFePO4 Bluetooth & LCD Stack-mounted Battery Storage

Warranty applies only to the original owner and is not transferable.

- Warranty applies only to the original owner and is not transferable.
- We will require proof of purchase and usage before processing any warranty claim or return.

a.If GoKWh provides technical support and battery repair services for non-manufacturer defects, the customer will be responsible for the corresponding shipping costs.
b.If the product is confirmed to have a manufacturer defect, GoKWh will bear the shipping costs of replacing the battery.

- Warranty service will not be provided if the battery fails due to the following conditions or reasons:

a.Improper battery maintenance, incorrect charging, reverse polarity, improper use, improper installation

b.Damage to the battery caused by use in an overheated environment, fire, freezing, accidental entry into any body of water (lakes, streams, ponds or oceans)

c.Failure to maintain proper battery charge or use beyond the rated charge/discharge cycle

d.Battery damage caused by unauthorized tampering or repair

e.Force majeure or external causes, misuse, accident, negligence

f.The buyer intentionally conceals or fails to cooperate in providing purchase or use information

FCC STATEMENT :

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and

(2) This device must accept any interference received, including interference that may cause undesired operation.

Warning:

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.