✓ PATENT CERTIFICATE  ✓ SOFTWARE COPYRIGHT CERTIFICATE  ✓ ISO9001
✓ CE  ✓ FCC  ✓ ROHS  ✓ EMC



AUTHORITATIVE OFFICIAL CERTIFICATION

TO REASSURE CUSTOMERS

OFFICIAL CERTIFICATION

COMPANY PROFILE

极空 JiKONG

## JKBMS ELECTRONIC TECHNOLOGY CO., LTD.

### FOCUS ON POWER BMS DEVELOPMENT

JKBMS Electronic Technology Co., Ltd. is a research and development enterprise focusing on BMS management system for power batteries. As the "Leader of Active Battery Balance Technology", JKBMS Electronic Technology Co., Ltd. controls the four core technologies of the world's leading power battery management system: Active Balance, Wireless Communication, Functional Safety, Capacity Management. Kelvin Technology upholds the business concept of "Pursue the ultimate products, help the environmental cause, harvest the beautiful sky", composing a new chapter in the electric vehicle industry to contribute its own strength to the environmental cause!

## MAIN PRODUCTS

Smart Active Balance BMS

Smart Active Balancer

Smart Battery capacity repair instrument

# COMPANY INTRODUCTION

Master the four core technologies of the world's leading power battery management system
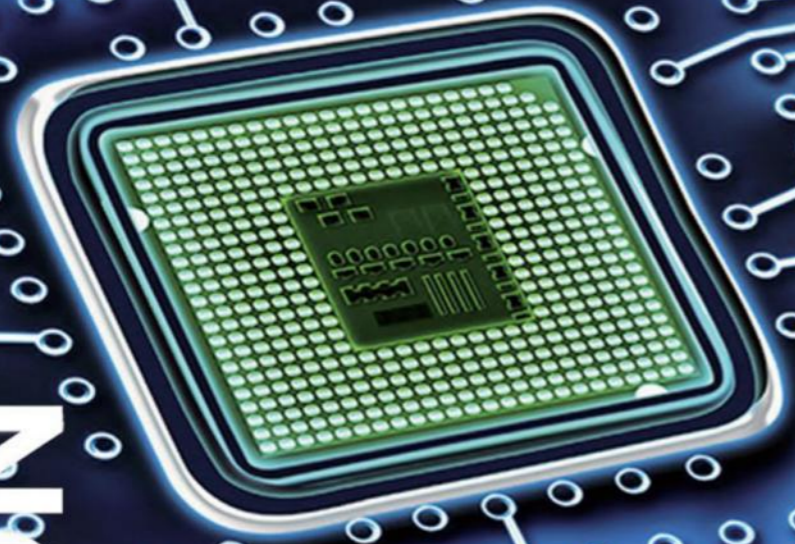
## Business philosophy

## Growing with Strugglers

We focus on R&D investment (R&D input is not less than 10% of sales revenue) to keep ahead of technology, become the leader of battery management programs for domestic electric vehicles, and gradually move to the international market

Jkbms values partners
We are willing to join hands with partners with common goals
Create the future and achieve win-win results!

- Active Balance
- Wireless transmission
- Functional Security
- Capacity Management

## Catalogue
### TABLE OF CONTENTS

# MULTIPLE FUNCTIONAL PROTECTION

## BEST BMS FOR NATTERY SAFE

**JKBMS**

P-　B-

## ENERGY TRANSFER EQUATION

# Active Balance

Active measurement, maximum voltage,
minimum voltage, average voltage
Balance between the highest and lowest
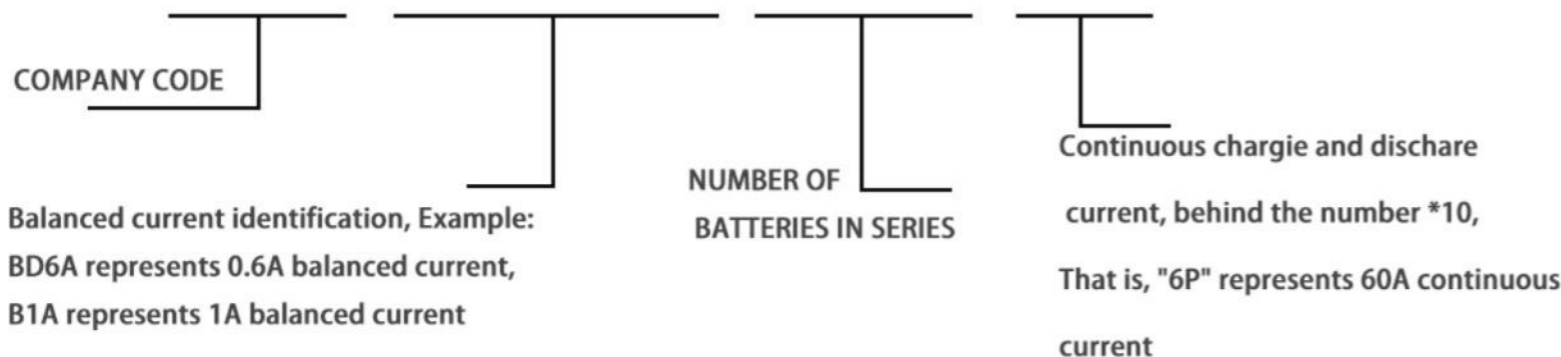voltage strings
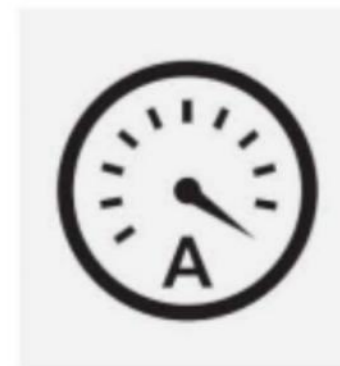
| | | | |
|---|---|---|---|
| OVP | UVP | SCP | OCP |
| NTC | HEATING | SOC | ACTIVE BALANCE |
| BLUETOOTH | RS485/CANBUS | GPS | SOFTWARE SWITCH |

RS485/CAN

OFF

## SAMRT ACTIVE BALANCE BMS

Jkbms is a management system tailored for large capacity series lithium battery pack. It has functions such as voltage collection, active balance of large current, overcharge overcurrent overtemperature protection, coulometer, Bluetooth communication, GPS remote, etc. It is suitable for lithium iron phosphate, lithium ternary and other battery types. The protective panel relies on the energy transfer active equalization technology with independent intellectual property rights to achieve a maximum sustained 2A balanced current. The Intelligent Protection Panel for Extreme Empty Lithium Battery is a management system tailored for large capacity series Lithium Battery Pack. It has the functions of voltage collection, active balance of large current, overcharge and overcurrent overtemperature protection, Coulometer, Bluetooth communication, GPS remote and so on. It is suitable for lithium iron phosphate, lithium ternary and other battery types. The protective panel relies on the energy transfer active equalization technology with independent intellectual property rights to achieve a maximum sustained 2A balanced current.

## BMS MODEL

# JK-BD6A 24S 6P

COMPANY CODE

Balanced current identification, Example:
BD6A represents 0.6A balanced current,
B1A represents 1A balanced current

NUMBER OF
BATTERIES IN SERIES

Continuous chargie and dischare
current, behind the number *10,
That is, "6P" represents 60A continuous
current

## APPLICATION SCENARIOS

TOURIST BUS | ELECTRIC TRICYCLE | ELECTRIC SCOOTER | UPS

ELECTRIC FORKLIFT | SOLAR ENERGY STORAGE | RV ENERGY STORAGE | ELECTRIC MOTORCYCLE

# Electric motorcycle （40A/60A/80A）
## ELECTRIC MOTORCYCLE VERSION

## MAIN TECHNICAL INDICATORS

### PRODUCT FEATURES

● The two-way lossless active balance function improves the battery efficiency by 95%.

● Can be used for lithium ternary(Li-ion), LTO, Lifepo4 ,lithium manganate, lithium cobalt....battery packs

● Protective functions such as over-charging, over-discharge, over-current, short circuit, etc.

● Separate battery collection range 1V~5V, accuracy (+) 5mV

● Standardized Bluetooth communication reserved GPS/RS485/CAN communication interface

● size:   110*73*18mm/136*83*17.6mm

### APPLICABLE WORKING CONDITIONS

● Operating temperature range:  -20℃-70℃

● Power requirements:  20V-100V

● power dissipation:
Balance state:  10mA@100V,
Unbalanced state:  6mA@100V

### APPLICATION SCENARIOS

| Product Model | JKBMS BD4A 17S4P | JKBMS BD4A 20S4P | JKBMS BD4A 24S4P | JKBMS BD6A 17S6P | JKBMS BD6A 20S6P | JKBMS BD6A 24S6P | JKBMS BD6A 17S8P | JKBMS BD6A 20S8P | JKBMS BD6A 24S8P |
|---|---|---|---|---|---|---|---|---|---|
| Li-ion Strings | 7S~17S | 7S~20S | 7S~24S | 7S~17S | 7S~20S | 7S~24S | 7S~17S | 7S~20S | 7S~24S |
| Lifepo4 Strings | 8S~17S | 8S~20S | 8S~24S | 8S~17S | 8S~20S | 8S~24S | 8S~17S | 8S~20S | 8S~24S |
| LTO Strings | 12S~17S | 12S~20S | 12S~24S | 12S~17S | 12S~20S | 12S~24S | 12S~17S | 12S~20S | 12S~24S |
| Balance mode | Active Balance | | | | | | | | |
| Active Balanced Current | 0.4A | | | 0.6A | | | 0.6A | | |
| Main circuit internal resistance | 2.8mΩ | | | 1.53mΩ | | | 1.3mΩ | | |
| Continuous discharge current | 40A | | | 60A | | | 80A | | |
| Maximum discharge current | 60A | | | 100A | | | 150A | | |
| Overcurrent protection value (adjustable) | 10-40A | | | 10-60A | | | 10-80A | | |
| Other interfaces (Customized) | RS485 | | | | | | | | |
| Entry cable | Common Port | | | | | | | | |
| Single Voltage Range | 1-5V | | | | | | | | |
| Accuracy of Voltage Acquisition | +5mV | | | | | | | | |
| Overcharge protection voltage | 1.2~4.35V  Adjustable | | | | | | | | |
| Overcharge Release Voltage | 1.2~4.35V  Adjustable | | | | | | | | |
| Overcurrent Release Time | 2~120S Adjustable | | | | | | | | |
| Over-discharge protection voltage | 1.2~4.35V  Adjustable | | | | | | | | |
| Over-discharge recovery voltage | 1.2~4.35V  Adjustable | | | | | | | | |
| Temperature Detection Quantity | Three | | | | | | | | |
| Temperature protection | YES | | | | | | | | |
| Short circuit protection | YES | | | | | | | | |
| Coulometer | YES | | | | | | | | |
| BT Function | Support Android /Apple | | | | | | | | |
| GPS (Optional) | Support GPRS/RS485 interface can only choose one from two | | | | | | | | |

# Electric motorcycle（100A/120A/150A）
ELECTRIC MOTORCYCLE VERSION

## PRODUCT FEATURES

●The two-way lossless active balance function improves the battery efficiency by 95%.

●Can be used for lithium ternary(Li-ion), LTO, Lifepo4 ,lithium manganate, lithium cobalt....battery packs

●Protective functions such as over-charging, over-discharge, over-current, short circuit, etc.

●Separate battery collection range 1V~5V, accuracy (+) 5mV

●Standardized Bluetooth communication reserved GPS/RS485/CAN communication interface

●size: 110*73*18mm/136*83*17.6mm

## APPLICABLE WORKING CONDITIONS

●Operating temperature range: -20℃-70℃

●Power requirements: 20V-100V

●power dissipation:
Balance state: 10mA@100V,
Unbalanced state: 6mA@100V

## APPLICATION SCENARIOS

## MAIN TECHNICAL INDICATORS

| Product Model | JKBMS BD6A 20S10P | JKBMS BD6A 24S10P | JKBMS BD6A 20S12P | JKBMS BD6A 24S12P | JKBMS BD6A 20S15P | JKBMS BD6A 24S15P |
|---|---|---|---|---|---|---|
| Li-ion Strings | 7S~20S | 7S~24S | 7S~20S | 7S~24S | 7S~20S | 7S~24S |
| Lifepo4 Strings | 8S~20S | 8S~24S | 8S~20S | 8S~24S | 8S~20S | 8S~24S |
| LTO Strings | 12S~20S | 12S~24S | 12S~20S | 12S~24S | 12S~20S | 12S~24S |
| Balance mode | Active Balance | | | | | |
| Active Balanced Current | 0.6A | | 0.6A | | 0.6A | |
| Main circuit internal resistance | 1mΩ | | 0.65mΩ | | 0.65mΩ | |
| Continuous discharge current | 100A | | 120A | | 150A | |
| Maximum discharge current | 200A | | 250A | | 300A | |
| Overcurrent protection (adjustable) | 10-100A | | 10-120A | | 10-150A | |
| Other interfaces (Customized) | RS485 | | | | | |
| Entry cable | Common Port | | | | | |
| Single Voltage Range | 1-5V | | | | | |
| Accuracy of Voltage Acquisition | +5mV | | | | | |
| Overcharge protection voltage | 1.2~4.35V Adjustable | | | | | |
| Overcharge Release Voltage | 1.2~4.35V Adjustable | | | | | |
| Overcurrent Release Time | 2~120S Adjustable | | | | | |
| Over-discharge protection voltage | 1.2~4.35V Adjustable | | | | | |
| Over-discharge recovery voltage | 1.2~4.35V Adjustable | | | | | |
| Temperature Detection Quantity | Three | | | | | |
| Temperature protection | YES | | | | | |
| Short circuit protection | YES | | | | | |
| Coulometer | YES | | | | | |
| BT Function | Support Android /Apple | | | | | |
| GPS (Optional) | Support GPRS/RS485 interface can only choose one from two | | | | | |

# Electric motorcycle（150A/200A）
ELECTRIC MOTORCYCLE VERSION

## PRODUCT FEATURES

●The two-way lossless active balance function improves the battery efficiency by 95%.

●Can be used for lithium ternary(Li-ion), LTO, Lifepo4 ,lithium manganate, lithium cobalt....battery packs

●Protective functions such as over-charging, over-discharge, over-current, short circuit, etc.

●Separate battery collection range 1V~5V, accuracy (+) 5mV

●Standardized Bluetooth communication reserved GPS/RS485/CAN communication interface

●size: 110*73*18mm/136*83*17.6mm

## APPLICABLE WORKING CONDITIONS

●Operating temperature range: -20℃-70℃

●Power requirements: 20V-100V

●power dissipation:
Balance state: 10mA@100V,
Unbalanced state: 6mA@100V

## APPLICATION SCENARIOS

## MAIN TECHNICAL INDICATORS

| Product Model | JKBMS B1A 20S15P | JKBMS B1A 24S15P | JKBMS B2A 20S15P | JKBMS B2A 24S15P | JKBMS B2A 20S20P | JKBMS B2A 24S20P |
|---|---|---|---|---|---|---|
| Li-ion Strings | 7S~20S | 7S~24S | 7S~20S | 7S~24S | 7S~20S | 7S~24S |
| Lifepo4 Strings | 8S~20S | 8S~24S | 8S~20S | 8S~24S | 8S~20S | 8S~24S |
| LTO Strings | 12S~20S | 12S~24S | 12S~20S | 12S~24S | 12S~20S | 12S~24S |
| Balance mode | Active Balance | | | | | |
| Active Balanced Current | 1A | | 2A | | 2A | |
| Main circuit internal resistance | 0.65mΩ | | 0.65mΩ | | 0.47mΩ | |
| Continuous discharge current | 150A | | 150A | | 200A | |
| Maximum discharge current | 300A | | 300A | | 350A | |
| Overcurrent protection (adjustable) | 10-150A | | 10-150A | | 10-200A | |
| Other interfaces (Customized) | RS485 | | | | | |
| Entry cable | Common Port | | | | | |
| Single Voltage Range | 1-5V | | | | | |
| Accuracy of Voltage Acquisition | +5mV | | | | | |
| Overcharge protection voltage | 1.2~4.35V Adjustable | | | | | |
| Overcharge Release Voltage | 1.2~4.35V Adjustable | | | | | |
| Overcurrent Release Time | 2~120S Adjustable | | | | | |
| Over-discharge protection voltage | 1.2~4.35V Adjustable | | | | | |
| Over-discharge recovery voltage | 1.2~4.35V Adjustable | | | | | |
| Temperature Detection Quantity | Three | | | | | |
| Temperature protection | YES | | | | | |
| Short circuit protection | YES | | | | | |
| Coulometer | YES | | | | | |
| BT Function | Support Android /Apple | | | | | |
| GPS (Optional) | Support GPRS/RS485 interface can only choose one from two | | | | | |

# Electric motorcycle（40A/100A/200A）
ELECTRIC MOTORCYCLE VERSION



## PRODUCT FEATURES

●The two-way lossless active balance function improves the battery efficiency by 95%.

●Can be used for lithium ternary(Li-ion), LTO, Lifepo4 ,lithium manganate, lithium cobalt....battery packs

●Protective functions such as over-charging, over-discharge, over-current, short circuit, etc.

●Separate battery collection range 1V~5V, accuracy (+) 5mV

●Standardized Bluetooth communication reserved GPS/RS485/CAN communication interface

●size:  110*73*18mm/136*83*17.6mm

## APPLICABLE WORKING CONDITIONS

●Operating temperature range: -20℃-70℃

●Power requirements: 20V-100V

●power dissipation:
Balance state: 10mA@100V,
Unbalanced state: 6mA@100V

## 应用场景
APPLICATION SCENARIOS





## ENERGY STORAGE IS SPECIAL

| Product Model | JKBMS-BD4A8S4P | JKBMS-B1A8S10P | JKBMS-B1A8S20P | JKBMS-B2A8S20P |
|---|---|---|---|---|
| Li-ion Strings | 3S~8S | 3S~8S | 3S~8S | 3S~8S |
| Lifepo4 Strings | 4S~8S | 4S~8S | 4S~8S | 4S~8S |
| LTO Strings | 6S~8S | 6S~8S | 6S~8S | 6S~8S |
| Balance mode | Active Balance | | | |
| Active Balanced Current | 0.4A | 1A | 1A | 2A |
| Main circuit internal resistance | 2.8mΩ | 0.65mΩ | 0.47mΩ | 0.47mΩ |
| Continuous discharge current | 40A | 100A | 200A | 200A |
| Maximum discharge current | 60A | 200A | 350A | 350A |
| Overcurrent protection (adjustable) | 10-40A | 10-100A | 10-200A | 10-200A |
| Other interfaces (Customized) | RS485 | | | |
| Entry cable | Common Port | | | |
| Single Voltage Range | 1-5V | | | |
| Accuracy of Voltage Acquisition | +5mV | | | |
| Overcharge protection voltage | 1.2~4.35V  Adjustable | | | |
| Overcharge Release Voltage | 1.2~4.35V Adjustable | | | |
| Overcurrent Release Time | 2~120S Adjustable | | | |
| Over-discharge protection voltage | 1.2~4.35V  Adjustable | | | |
| Over-discharge recovery voltage | 1.2~4.35V  Adjustable | | | |
| Temperature Detection Quantity | Three | | | |
| Temperature protection | YES | | | |
| Short circuit protection | YES | | | |
| Coulometer | YES | | | |
| BT Function | Support Android /Apple | | | |
| GPS (Optional) | Support GPRS/RS485 interface can only choose one from two | | | |

## JK-B2A25S-RP
## （RELAY Scheme）

## PRODUCT FEATURES

●Suitable for 3s~25S of large capacity lithium cobalt, lithium manganate, Li-ion, Lifepo4,LTO battery packs; Continuous operating current up to 600A

●Applicable to small sightseeing cars, walkers, fork-lifts, shared cars, great work Battery packs for rate storage, base station backup power, solar power, etc.

## WORKING CONDITIONS

●Operating Temperature Range: -20 C-70 C
●Power Supply: 30V-100V
●Power consumption: maximum power consumption 1W, power off 0.2mW

## APPLICATION SCENARIOS

## TECHNICAL INDICATORS

| Technical Indicators | Product Model | |
|---|---|---|
| | B2A25S-XP | B2A4S-XP (12V Battery) |
| Li-ion Strings | 5S~25S | 3S-4S |
| Lifepo4 Strings | 6S~25S | 4S |
| LTO Strings | 9S~25S | ——— |
| Charge and discharge control port | 12V(12V Relay) | |
| Active Balanced Current | 2A | |
| Balance mode | Active Balance | |
| Entry cable | RELAY SPLIT PORT | |
| Current Acquisition Interface | SHUNT(500A.75MV) Relay needed to be replaced for larger current | |
| Overcurrent protection (adjustable) | 10A-500A | |
| Other interfaces (Customized) | RS485/CANBUS/GPS/LCD | |
| Single Voltage Range | 1-5V | |
| Accuracy of Voltage Acquisition | +5mV | |
| Overcharge Overdischarge protection voltage | 1.2~4.35V  Adjustable | |
| Overcharge Overdischarge Release Voltage | 1.2~4.35V  Adjustable | |
| Overcurrent Release Time | 2~120S Adjustable | |
| Temperature Detection Quantity | Three | |
| Temperature protection | YES | |
| Coulometer | YES | |
| BT Function | Support Android /Apple | |

# LARGE CURRENT
## （RELAY Scheme）

## Product features

●Suitable for 10s~24s of large capacity lithium cobalt, lithium manganate, Li-ion, Lifepo4,LTO battery packs; Continuous operating current up to 600A

●Applicable to small sightseeing cars, walkers, forklifts, shared cars, great work Battery packs for rate storage, base station backup power, solar power, etc.

●Reserved charge/discharge switch control interface (12V), reserved shunt (500A, 75mv)

## working conditions

●Operating Temperature Range: -20 C-70 C

●Power Supply: 30V-100V

●Power consumption: maximum power consumption 1W, power off 0.2mW

# APPLICATION SCENARIOS

# TECHNICAL INDICATORS

| Technical Indicators | Product Model | | | |
|---|---|---|---|---|
| | B2A25S-XP | B5A25S-XP | B5A4S-XP (12V Battery) | B5A8S-XP (24V Battery) |
| Li-ion Strings | 11S~25S | | 4S(customization) | 7S(customization) |
| Lifepo4 Strings | 12S~25S | | 4S(customization) | 8S(customization) |
| LTO Strings | 20S~25S | | --------- | --------- |
| Charge and discharge control port | 12V(12V Relay) | | | 24V(24V Relay) |
| Active Balanced Current | 2A | 5A | | |
| Balance mode | Active Balance | | | |
| Entry cable | RELAY SPLIT PORT | | | |
| Current Acquisition Interface | SHUNT(500A.75MV) Relay needed to be replaced for larger current | | | |
| Overcurrent protection (adjustable) | 10A-500A | | | |
| Other interfaces (Customized) | RS485/CANBUS/GPS/LCD | | | |
| Single Voltage Range | 1-5V | | | |
| Accuracy of Voltage Acquisition | +5mV | | | |
| Overcharge Overdischarge protection voltage | 1.2~4.35V Adjustable | | | |
| Overcharge Overdischarge Release Voltage | 1.2~4.35V Adjustable | | | |
| Overcurrent Release Time | 2~120S Adjustable | | | |
| Temperature Detection Quantity | Three | | | |
| Temperature protection | YES | | | |
| Coulometer | YES | | | |
| BT Function | Support Android /Apple | | | |

JKBMS Electronic Technology Co., Ltd

# JK Active Balancer

## 0 Loss Mode Equalization
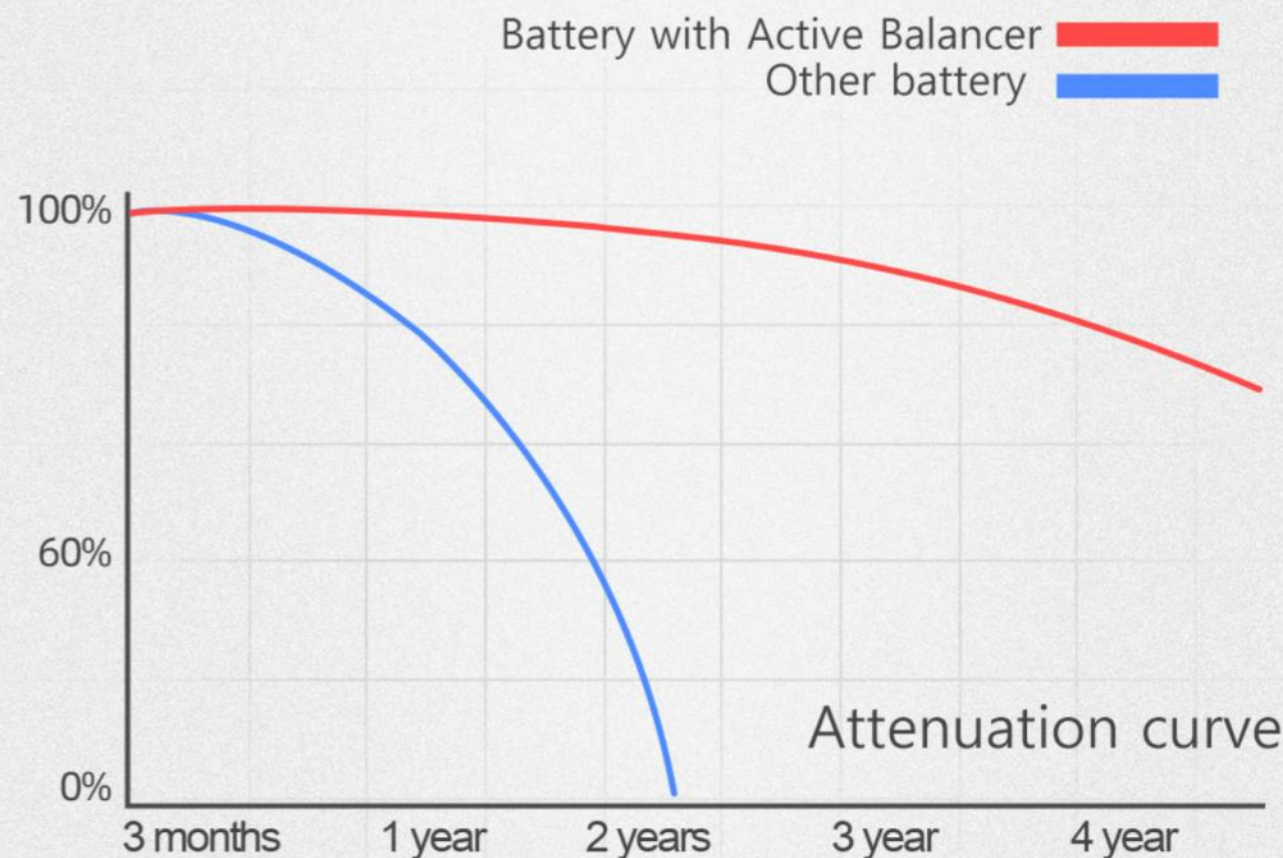
**Energy Transfer Active Equalization Board**

| BT | UART | 2A | ERR PRO |
|---|---|---|---|
| BLUETOOTH | RS485 CANBUS | 0.1A-2A Balance Current | Error Connection Protection |

ACTIVE BALANCE * BEST FOR YOUR BATERY

# HOW TO PROTECT YOUR BATTERY BETTER?

FULL-TIME AUTOMATIC DETECTION AND REPAIR OF BATTERY DIFFERENTIAL PRESSURE, EFFECTIVELY EXTENDING BATTERY LIFE

— Battery with Active Balancer
— Other battery

100%

60%

0%

3 months    1 year    2 years    3 year    4 year

Attenuation curve

## BRIEF INTRODUCTION TO ACTIVE EQUILIBRIUM

The active balancer is a balancing management system tailored for large capacity series battery packs. The balancer uses the supercapacitor as the medium to achieve active energy transfer equalization. The maximum balance current of the balancer is 2A, and the balance current does not depend on the voltage difference of the battery pack.

The active balancer has Bluetooth communication function and is supported by mobile APP software. You can connect the balancervia Bluetooth on your mobile phone to view the battery voltage, balance status, modify parameters, and so on. The balancer is small and easy to install. It can be widely used in the battery PACK of small sightseeing cars, walkers, shared cars, high-power storage, base station backup power, solar power stations and other products. It can also be used in battery balanced maintenance, repair and other occasions.

## MODEL ESTABLISHMENT

# JK-DZ08 B1A 24S

COMPANY CODE

MAXIMUM NUMBER OF EQUALIZABLE BATTERY STRINGS

COMMUNICATION PORT CODE: BLUETOOTH COMMUNICATION: NO RS485 COMMUNICATION: DZ11 CAN COMMUNICATION: DZ08

EQUALIZING CURRENT IDENTIFICATION, USING A COMBINATION OF LETTERS AND NUMBERS; FOR EXAMPLE, B1A REPRESENTS 1A EQUALIZING CURRENT, B10A REPRESENTS 10A EQUALIZING CURRENT

## APPLICABLE PEOPLE

**LITHIUM BATTERY USERS**

◆ The battery is powered off when used

◆ Always feeling that the battery is not fully charged

◆ Battery life after a period of use Not as good as before

**REPAIR PERSONNEL**

◆Maintenance requires disassembling,sorting, and reassembling the entire set of batteries, which is too cumbersome and time-consuming
◆ Disassembling the electrical core for capacitance separation requires more expensive and time-consuming equipment
◆ Using commercially available balance charging and repair Didn't use it a few times, and it didn't work anymore

**BATTERY PACK FACTORY**

◆ Too many after-sales batteries, traditional maintenance Method time can't afford to wait
◆ Too many after-sales batteries, and the labor cost of traditional maintenance methods is too high
◆Traditional maintenance methods, repair accuracy Not high, poor customer

# ACTIVE BALANCER    ( STANDARD EDITION )

## PRODUCT FEATURES

- NON ENERGY CONSUMPTION ENERGY TRANSFER ACTIVE BALANCING TECHNOLOGY.
- AUTOMATIC EQUALIZATION WHEN THE PRESSURE DIFFERENCE EXCEEDS THE TRIGGER VALUE (DEFAULT>4MV, SETTABLE)
- WITH ANTI BACKCONNECT PROTECTION FUNCTION, BATTERIES ABOVE 24S CAN SUPPORT BALANCED CASCADE SINGLE BATTERY ACQUISITION RANGE: 1V~5V, ACCURACY: ± 5MV
- STANDARD BLUETOOTH COMMUNICATION, SUPPORTING REAL-TIME VIEWING OF BATTERY STATUS BY ANDROID AND IOS OUTLINE DIMENSION: 153MM * 136MM * 17.6MM

## APPLICABLE WORKING CONDITIONS

- OPERATING TEMPERATURE RANGE: - 20 ℃ - 70 ℃
- POWER REQUIREMENTS: 40V-100V, BATTERY PACK SELF POWERED OR EXTERNAL POWER SUPPLY
- POWER CONSUMPTION: BALANCED STATE 10MA@100V , UNBALANCED STATE 6MA@100V

## APPLICATION SCENARIOS



Lifepo4 BATTERY



Li-ion BATTERY



LTO BATTERY

## TECHNICAL INDICATORS

| Product Model | B2A4S | B1A16S | B2A16S | B1A24S | B2A24S | DZ08-B1A24S | DZ11-B1A24S | DZ08-B2A24S | DZ11-B2A4S |
|---|---|---|---|---|---|---|---|---|---|
| Active Balance Current | 0.1A-2A ADJ | 0.1A~1A ADJ | 0.1-2A ADJ | 0.1A-1A ADJ | 0.1A~2A ADJ | 0.1A~1A ADJ | | 0.1A~2A ADJ | |
| Adapt Battery Strings | 4S | 2S~16S | | 2S~24S | | | | | |
| Balance Cascading | NOT SUPPORT | | | More than 24 battery packs can theoretically be cascaded indefinitely | | | | | |
| communication interface | NOT SUPPORT | | | | | CANBUS | RS485 | CANBUS | RS485 |
| Power Range | 20V-100V | | | | | | | | |
| Power Supply | Battery pack self-powered or external powered | | | | | | | | |
| Balance mode | Non-energy consumption Energy Transfer Active Balance Technology | | | | | | | | |
| Balance Opening Conditions | Pressure difference exceeds trigger value (default > 4mv, set) Auto Start Balance | | | | | | | | |
| Single Voltage Collection | Acquisition range 1V~5V, Accuracy +5mv | | | | | | | | |
| Adapt Battery type | li-ion , Lifepo4 Battery by default LTO battery needs Customization | | | | | | | | |
| Communication function | Bluetooth Support Android/IOS | | | | | | | | |
| Work Temp | -30℃~90℃ | | | | | | | | |
| Self-consuming power | Balance state: 10mA@100V , Unbalance state: 6mA@ 100V | | | | | | | | |
| Size | 157.6mm*99mm*18.5mm | | | | | | | | |

## Long-lasting battery pack Can cause problems

Duration reduction

Decrease in lifetime

Not fully charged

Battery power off

## JK Smart Active Balancer
## Lithium Battery Differential Pressure Repair Instrument
## All troubles solved together

## 5A Smart Active Balancer



## 10A Smart Active Balancer



## Main Technical Indicators

◆ Supports 4S-24S battery packs.

◆ Real-time active energy transfer balancing, when the balance is reached, the pressure difference between single batteries is less than 5 mV;.

◆ The voltage range of the monomer is 1V~5V, and the precision is +5mV.

◆ Supports all battery types such as li-ion, lead acid, Lifepo4,supercapacitor, etc.

◆ The balanced current is set independently in the range of 0.8A to 5A, independent of the cell pressure difference.

◆ Supports balanced cascade for more than 24 battery packs, which can theoretically be cascaded indefinitely.

◆ Bluetooth communication, with mobile APP, support Android and IOS, real-time view of the status of the battery.

◆ Balanced line resistance detection, early detection of wiring errors.

◆ Operating temperature range: -20 C to 70 C.

◆ Power requirements: 12V~100V, self-powered by batteries.

◆ Power consumption: balanced state 10mA@100V ;Unbalanced state 6mA@100V .

## Main Technical Indicators

◆ Supports 12S-24S battery packs.

◆ Real-time active energy transfer balancing, when the balance is reached, the pressure difference between single batteries is less than 5 mV;.

◆ The voltage range of the monomer is 1V~5V, and the precision is +5mV.

◆ Supports all battery types such as li-ion, lead acid, Lifepo4,supercapacitor, etc.

◆ The balanced current is set independently in the range of 0.8A to 10A, independent of the cell pressure difference.

◆ Supports balanced cascade for more than 24 battery packs, which can theoretically be cascaded indefinitely.

◆ Bluetooth communication, with mobile APP, support Android and IOS, real-time view of the status of the battery.

◆ Balanced line resistance detection, early detection of wiring errors.

◆ Operating temperature range: -20 C to 70 C.

◆ Power requirements: 40V~100V, self-powered by batteries.

◆ Power consumption: balanced state 10mA@100V ;Unbalanced state 6mA@100V .

2.5inch
Power Board

4.5inch
LCD

RS485 Module

Switch

4G GPS Module
Portable

4G GPS Module
Built-in

Adapter
PH2.54~PH2.0