极空 JIKONG | Cheng Du Ji Kong Technology Co., Ltd









产品选型手册
PRODUCT SELECTION GUIDE

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ChengDu Jikong Technology Co., LTD



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OFFICIAL CERTIFICATION

PATENT CERTIFICATE SOFTWARE COPYRIGHT EMC ISO9001 CE

COMPANY INTRODUCTION

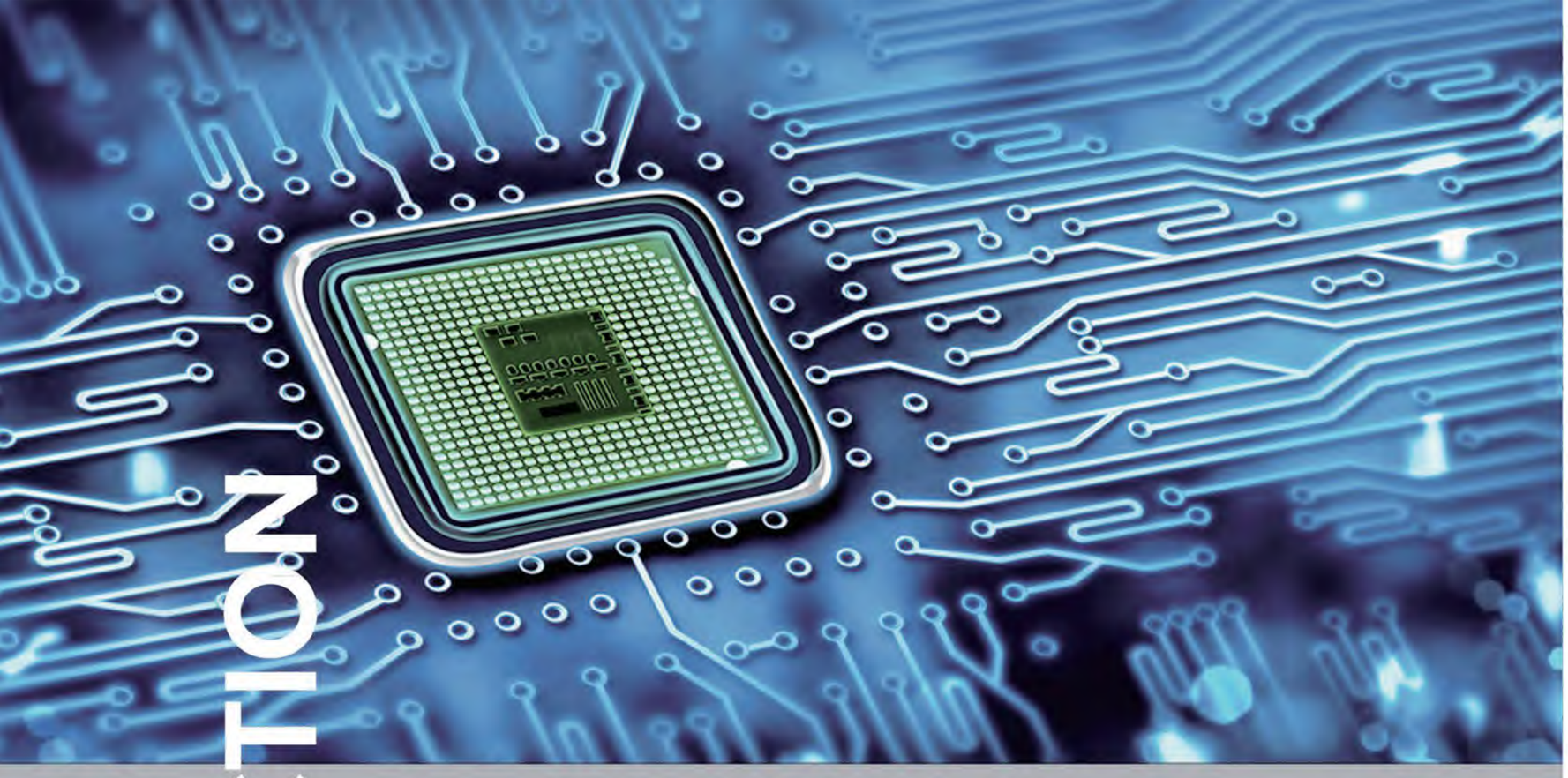
JIKONG TECHNOLOGY-

Focusing on lithium battery management system development

Chengdu Jikong Technology Co., Ltd. is a high-tech enterprise focusing on the research on and development of lithium battery management system (BMS). As a "leader of lithium battery active balancing technology", Chengdu Jikong Technology controls a four core technologies of a world's leading lithium battery management system: active balancing, wireless communication, functional safety, and capacity management. **Jikong** Technology adheres to the business philosophy of "pursuing product perfection, helping the environmental protection cause, and protecting the blue sky" to write a new chapter in the electric vehicle industry and contribute their own strength to the environmental protection cause!

MAIN PRODUCTS-

Lithium battery active balancing BMS
Lithium battery voltage difference balancing instrument



COMPANY INTRODUCTION

BUSINESS PHILOSOPHY >>>

GROW TOGETHER WITH THE STRUGGLERS

We focus on research and development investment R&Dinvestment no less than 10% of sales revenue) to maintain technology leadership, become a leader in domestic electric vehicle battery management solutions, and gradually move to the international market

Value cooperation partners
Willing to work with partners who have a common goal with us
Create the future, achieve a win-win solution

Mastering the world's leadingFour core technologies of power battery management system

- Active balancing
- Wireless transmission
- Functional safety
- Capacity management

CATALOGUE

CONTENTS

① Active balancing BMS series.....03

② PD Series Protection Board 39

③ Active balancing module series 49

④ Voltage difference balancing instrument series...57

⑤ Optional accessories.....59



ENERGY TRANSFER TYPE

ACTIVE BALANCING

Proactively calculate and balance the highest voltage, lowest voltage, and average voltage between the highest and lowest voltage strings

极空 JIKONG | ACTIVE BALANCING
BMS SERIES

MULTIPLE PROTECTION FUNCTION

Gives no chance to any hidden dangers
Makes batteries safer



INTRODUCTION TO LITHIUM BATTERY PROTECTION BOARD

JIKONG lithium battery intelligent protection board is a management system specially designed for large-capacity series lithium battery pack. It features voltage collection, high-current active balancing, overcharge, over-discharge, overcurrent, and over-temperature protection, as well as coulombmeter, Bluetooth communication, and GPS remote functionalities. It is compatible with battery types such as lithium iron phosphate and ternary lithium. The protection board is based on proprietary energy transfer active balancing technology, enabling a continuous balancing current of up to 2 amperes. The high current active equalization technology can ensure the consistency of the battery to the greatest extent, improve the battery range and prolong battery life.

THE PROTECTION board has a mobile APP that supports buth Android and IOS operating systems. The APP can be connected to the protection board through the Bluetooth of a mobile phone to check the working status of the battery, modify the working parameters of the protection board, and control the charge and discharge switches. With its compact design, ease of use, and full functionality, the protection board is ideal for a wide range of applications, including battery packs for small electric vehicles, mobility scooters, shared cars, high-power

MODEL DESIGNATION OF PROTECTIVE BOARD

JK-x BxxA xxS xxP

Company code

P represents parallel connection,
W represents external connection,
No representative of regular models,

Represents balanced current,
D6 represents 0.6

Indicating applicability
Maximum string count

Indicates continuous
charging and discharging current

APPLICATION SCENARIO


TOURIST SIGHTSEEING BUS


ELECTRIC TRICYCLE


ELECTRIC SCOOTER


EMERGENCY UPS


ELECTRIC FORKLIFT TRUCK


PHOTOVOLTAIC ENERGY STORAGE


RV HOME ENERGY STORAGE


ELECTRIC MOTORCYCLE

ELECTRIC TWO WHEELER
(40A)



-PRODUCT CHARACTERISTICS

- Two-way non-destructive active balancing function, improve battery efficiency by 95%
- Compatible with ternary lithium, lithium titanate, manganese acid treatment, iron phosphate treatment
- With over charge, over discharge, over current, short circuit and other protection functions
- Single cell battery collection range of 1V~5V, accuracy of ± 3mV
- Standard configuration of Buletooth communication and optional configuration of GPS, RS485, CAN,Heating function,display screen
- Support tower power change application (optional)
- Dimensions: 116mm*103mm*17.6mm

-APPLICABLE CONDITION

- Operating temperature range : -30-70°C
- Power requirement: 20V-100V
- Power consumption: balanced state 6mA@100V, non-balanced state 5mA@100V

APPLICATION SCENARIO

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MAIN TECHNICAL INDICATORS OF THE PROTECTION BOARD

Technical indicators	Product model JK-		
	BD4A17S-4P	BD4A20S-4P	BD4A24S-4P
Ternary string number	7~17	7~20	7~24
Number of iron lithium strings	8~17	8~20	8~24
Number of titanium acid strings	14~17	14~20	14~24
Working voltage range	20~100V	20~100V	20~100V
Balanced approach	Product model JK-		
Balanced current	0.4A		
Main circuit internal resistance	2.8mΩ	2.8mΩ	2.8mΩ
Continuous discharge current	40A	40A	40A
Maximum discharge current	60A	60A	60A
Overcurrent protection (adjustable)	10~40A	10~40A	10~40A
RS485 communication interface	Support, optional		
CAN communication interface	Support, optional		
Display screen interface	Support (disp. scr or one wire)		
Alarm interface	support		
Battery heating	Support, optional		
Parallel function	Support, parallel module needs to be selected		
Protection function	Overcurrent protection, overvoltage protection, undervoltage protection, over temperature protection, low temperature protection, short circuit protection		
Entry cable	homostomy		
Individual voltage range	1~5V		
Voltage acquisition accuracy	±3mv		
Overcharge protection voltage	1.2~4.4V tunable		
Overcharge release voltage	1.2~4.4V tunable		
Overcurrent release time	2~600S tunable		
Overdischarge protection voltage	1.2~4.4V tunable		
Overdischarge recovery voltage	1.2~4.4V tunable		
Number of Temperature detection devices	1 built-in, 2 external, optional 4 external		
Indian standard	Support, optional		
Coulomb meter	support		
Bluetooth function	Supports Android, Apple, and HarmonyOS		
GPS(optional)	support		

MOTORCYCLE PLATE
(60A/80A)



-PRODUCT CHARACTERISTICS

- Two-way non-destructive active balancing function, improve battery efficiency by 95%
- Compatible with ternary lithium, lithium titanate, manganese acid treatment, iron phosphate treatment
- With over charge, over discharge, over current, short circuit and other protection functions
- Single cell battery collection range of 1V~5V, accuracy of ± 3mV
- Standard configuration of Buletooth communication and optional configuration of GPS, RS485, CAN,Heating function,display screen
- Support tower power change application (optional)
- Dimensions: 136mm*103mm*17.6mm

-APPLICABLE CONDITION

- Operating temperature range : -30-70°C
- Power requirement: 20V-100V
- Power consumption: balanced state 65mA@72V, non-balanced state 12mA@72V

APPLICATION SCENARIO







MAIN TECHNICAL INDICATORS OF THE PROTECTION BOARD

Technical indicators	新 Product model JK-			
	BD4A20S-6P	BD4A24S-6P	BD4A20S-8P	BD4A24S-8P
Ternary string number	7~20	7~24	7~20	7~24
Number of iron lithium strings	8~20	8~24	8~20	8~24
Number of titanium acid strings	14~20	14~24	14~20	14~24
Working voltage range	20~100V	20~100V	20~100V	20~100V
Balanced approach	Active equalization			
Balanced current	0.4A			
Main circuit internal resistance	1.53mΩ	1.53mΩ	1.2mΩ	1.2mΩ
Continuous discharge current	60A	60A	80A	80A
Maximum discharge current	120A	120A	150A	150A
Overcurrent protection (adjustable)	10~60A	10~60A	10~80A	10~80A
RS485 communication interface	Support, optional			
CAN communication interface	Support, optional			
Display screen interface	Support (disp. scr or one wire)			
Alarm interface	support			
Battery heating	Support, optional			
Parallel function	Support, parallel module needs to be selected			
Protection function	Overcurrent protection, overvoltage protection, undervoltage protection, over temperature protection, low temperature protection, short circuit protection			
Entry cable	homostomy			
Individual voltage range	1~5V			
Voltage acquisition accuracy	±3mv			
Overcharge protection voltage	1.2~4.4V tunable			
Overcharge release voltage	1.2~4.4V tunable			
Overcurrent release time	2~600S tunable			
Overdischarge protection voltage	1.2~4.4V tunable			
Overdischarge recovery voltage	1.2~4.4V tunable			
Number of Temperature detection devices	1 built-in, 2 external, optional 4 external			
Indian standard	Support, optional			
Coulomb meter	support			
Bluetooth function	Supports Android, Apple, and HarmonyOS			
GPS(optional)	support			

LOW SPEED ELECTRIC CAR VERSION
(100A/120A)



-PRODUCT CHARACTERISTICS

- Two-way non-destructive active balancing function, improve battery efficiency by 95%
- Compatible with for ternary lithium, lithium titanate, manganese acid treatment, iron phosphate treatment
- With over charge, over discharge, over current, short circuit and other protection functions
- Single cell battery collection range of 1V~5V, accuracy of ± 3mV
- Standard configuration of Buletooth communication and optional configuration of GPS, RS485, CAN, Heating function, display screen
- Support tower power change application (optional)
- Dimensions: 162mm*102mm*20.4mm

-APPLICABLE CONDITION

- Operating temperature range : -30-70°C
- Power requirement: 20V-100V
- Power consumption: balanced state 6mA@100V, non-balanced state 5mA@100V

APPLICATION SCENARIO







极空 JIKONG | PD SERIES PROTECTION BOARD

MAIN TECHNICAL INDICATORS OF THE PROTECTION BOARD

Technical indicators	新 Product model JK-			
	BD6A20S-10P	BD6A24S-10P	BD6A20S-12P	BD6A24S-12P
Ternary string number	7~20	7~24	7~20	7~24
Number of iron lithium strings	8~20	8~24	8~20	8~24
Number of titanium acid strings	14~20	14~24	14~20	14~24
Working voltage range	20~100V	20~100V	20~100V	20~100V
Balanced approach	Active equalization			
Balanced current	0.6A			
Main circuit internal resistance	1mΩ	1mΩ	0.9mΩ	0.9mΩ
Continuous discharge current	100A	100A	120A	120A
Maximum discharge current	200A	200A	240A	240A
Overcurrent protection (adjustable)	10~100A	10~100A	10~120A	10~120A
RS485 communication interface	Support, optional			
CAN communication interface	Support, optional			
Display screen interface	Support (disp. scr or one wire)			
Battery heating	Support, optional			
Protection function	Overcurrent protection, overvoltage protection, undervoltage protection, over temperature protection, low temperature protection, short circuit protection			
Entry cable	homostomy			
Individual voltage range	1~5V			
Voltage acquisition accuracy	±3mv			
Overcharge protection voltage	1.2~4.4V tunable			
Overcharge release voltage	1.2~4.4V tunable			
Overcurrent release time	2~600S tunable			
Overdischarge protection voltage	1.2~4.4V tunable			
Overdischarge recovery voltage	1.2~4.4V tunable			
Number of Temperature detection devices	1 built-in, 2 external			
Coulomb meter	support			
Bluetooth function	Supports Android, Apple, and HarmonyOS			
GPS(optional)	support			

LOW SPEED ELECTRIC CAR VERSION
（150A）



-PRODUCT CHARACTERISTICS

- Two-way non-destructive active balancing function, improve battery efficiency by 95%
- Compatible with ternary lithium, lithium titanate, manganese acid treatment, iron phosphate treatment
- With over charge, over discharge, over current, short circuit and other protection functions
- Single cell battery collection range of 1V~5V, accuracy of ± 3mV
- Standard configuration of Buletooth communication and optional configuration of GPS, RS485, CAN,Heating function, display screen
- Support tower power change application (optional)
- Dimensions: 162mm*102mm*20.4mm

-APPLICABLE CONDITION

- Operating temperature range : -30-70°C
- Power requirement: 20V-100V
- Power consumption: balanced state 6mA@100V, non-balanced state 5mA@100V

APPLICATION SCENARIO







MAIN TECHNICAL INDICATORS OF THE PROTECTION BOARD

Technical indicators	新 Product model JK-				
	BD6A20S-15P	BD6A24S-15P	B1A20S-15P	B1A24S-15P	B2A24S-15P
Ternary string number	7~20	7~24	7~20	7~24	7~24
Number of iron lithium strings	8~20	8~24	8~20	8~24	8~24
Number of titanium acid strings	14~20	14~24	14~20	14~24	14~24
Working voltage range	20~100V	20~100V	20~100V	20~100V	20~100V
Balanced approach	Active equalization				
Balanced current	0.6A	0.6A	1A	1A	2A
Main circuit internal resistance	0.65mΩ	0.65mΩ	0.65mΩ	0.65mΩ	0.5mΩ
Continuous discharge current	150A	150A	150A	150A	150A
Maximum discharge current	300A	300A	300A	300A	300A
Overcurrent protection (adjustable)	10~150A	10~150A	10~150A	10~150A	10~150A
RS485 communication interface	Support, optional (RS485 or CAN)				
CAN communication interface	Support, optional (RS485 or CAN)				
Display screen interface	Support (disp. scr or one wire)				
Battery heating	Support, optional				
Protection function	Overcurrent protection, overvoltage protection, undervoltage protection, over temperature protection, low temperature protection, short circuit protection				
Entry cable	homostomy				
Individual voltage range	1~5V				
Voltage acquisition accuracy	±3mv				
Overcharge protection voltage	1.2~4.4V tunable				
Overcharge release voltage	1.2~4.4V tunable				
Overcurrent release time	2~600S tunable				
Overdischarge protection voltage	1.2~4.4V tunable				
Overdischarge recovery voltage	1.2~4.4V tunable				
Number of Temperature detection devices	1 built-in, 2 external				
Coulomb meter	support				
Bluetooth function	Supports Android, Apple, and HarmonyOS				
GPS(optional)	support				

LOW SPEED ELECTRIC CAR VERSION
(200A)



-PRODUCT CHARACTERISTICS

- Bidirectional lossless active balancing function improves battery efficiency by 95%
- Compatible with ternary lithium, lithium titanate, manganese oxide, and iron phosphate
- Equipped with overcharge, overdischarge, overcurrent, short circuit and other protection functions
- Single cell battery collection range of 1V~5V, accuracy of ± 3mV
- Standard configuration of Buletooth communication and optional configuration of GPS, RS485, CAN,Heating function, display screen
- Support tower power change application (optional)
- Dimensions: 162mm * 102mm * 20.4mm

-APPLICABLE CONDITION

- Operating temperature range : -30-70°C
- Power requirement: 20V-100V
- Power consumption: balanced state 6mA@100V, non-balanced state 5mA@100V

APPLICATION SCENARIO







MAIN TECHNICAL INDICATORS OF THE PROTECTION BOARD

Technical indicators	新 Product model JK-			
	B2A20S-20P	B2A24S-20P	BD6A20S-20P	BD6A24S-20P
Ternary string number	7~20	7~24	7~20	7~24
Number of iron lithium strings	8~20	8~24	8~20	8~24
Number of titanium acid strings	14~20	14~24	14~20	14~24
Working voltage range	20~100V	20~100V	20~100V	20~100V
Balanced approach	Active equalization			
Balanced current	2A	2A	0.6A	0.6A
Main circuit internal resistance	0.5mΩ	0.5mΩ	0.5mΩ	0.5mΩ
Continuous discharge current	200A	200A	200A	200A
Maximum discharge current	350A	350A	350A	350A
Overcurrent protection (adjustable)	10~200A	10~200A	10~200A	10~200A
RS485 communication interface	Support, optional (RS485 or CAN)			
CAN communication interface	Support, optional (RS485 or CAN)			
Display screen interface	Support (disp. scr or one wire)			
Battery heating	Support, optional			
Protection function	Overcurrent protection, overvoltage protection, undervoltage protection, over temperature protection, low temperature protection, short circuit protection			
Entry cable	homostomy			
Individual voltage range	1~5V			
Voltage acquisition accuracy	±3mv			
Overcharge protection voltage	1.2~4.4V tunable			
Overcharge release voltage	1.2~4.4V tunable			
Overcurrent release time	2~600S tunable			
Overdischarge protection voltage	1.2~4.4V tunable			
Overdischarge recovery voltage	1.2~4.4V tunable			
Number of Temperature detection devices	1 built-in, 2 external			
Coulomb meter	support			
Bluetooth function	Supports Android, Apple, and HarmonyOS			
GPS(optional)	support			

LOW SPEED ELECTRIC CAR VERSION
(300A)



-PRODUCT CHARACTERISTICS

- Two-way non-destructive active balancing function, improve battery efficiency by 95%
- Compatible with ternary lithium, lithium titanate, manganese acid treatment, iron phosphate treatment
- With over charge, over discharge, over current, short circuit and other protection functions
- Single cell battery collection range of 1V~5V, accuracy of ± 3mV
- Standard configuration of Buletooth communication and optional configuration of GPS, RS485, CAN,Heating function, display screen
- Support tower power change application (optional)
- Dimensions: 208mm*120.7mm*15.6mm

-APPLICABLE CONDITION

- Operating temperature range : -30-70°C
- Power requirement: 20V-100V
- Power consumption: balanced state 11.3mA@100V, non-balanced state 8.4mA@100V

APPLICATION SCENARIO

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MAIN TECHNICAL INDICATORS OF THE PROTECTION BOARD

Technical indicators	Product model JK-
	B2A24S-30P
Ternary string number	7~24
Number of iron lithium strings	8~24
Number of titanium acid strings	14~24
Working voltage range	20-102 V
Balanced approach	Active equalization
Balanced current	2A
Main circuit internal resistance	0.21mΩ
Continuous discharge current	300A
Maximum discharge current	600A
Overcurrent protection (adjustable)	10~300A
RS485 communication interface	Support, optional
CAN communication interface	Support, optional
Display screen interface	Support (disp. scr or one wire)
Alarm interface	support
Battery heating	Support, optional
Parallel function	Support, parallel module needs to be selected
Protection function	Overcurrent protection, overvoltage protection, undervoltage protection, over temperature protection, low temperature protection, short circuit protection
Entry cable	homostomy
Individual voltage range	1~5V
Voltage acquisition accuracy	±3mV
Overcharge protection voltage	1.2~4.4V tunable
Overcharge release voltage	1.2~4.4V tunable
Overcurrent release time	2~600S tunable
Overdischarge protection voltage	1.2~4.4V tunable
Overdischarge recovery voltage	1.2~4.4V tunable
Number of Temperature detection devices	1 built-in, 2 external, optional 4 external
Indian standard	Support, optional
Coulomb meter	support
Bluetooth function	Supports Android, Apple, and HarmonyOS
GPS(optional)	support

PORTABLE ENERGY STORAGE
(40A/60A)



-PRODUCT CHARACTERISTICS

- Two-way non-destructive active balancing function, improve battery efficiency by 95%
- Compatible with ternary lithium, lithium titanate, manganese acid treatment, iron phosphate treatment
- With over charge, over discharge, over current, short circuit and other protection functions
- Single cell battery collection range of 1V~5V, accuracy of ± 3mV
- Standard configuration of Buletooth communication and optional configuration of GPS, RS485, CAN,Heating function, display screen
- Dimensions: 121.5mm*93mm*17.6mm

-APPLICABLE CONDITION

- Operating temperature range : -30-70°C
- Power requirement: 7.5V-36V
- Power consumption: balanced state 26.2mA@36V, non-balanced state 24.1mA@36V

APPLICATION SCENARIO





MAIN TECHNICAL INDICATORS OF THE PROTECTION BOARD

Technical indicators	新 Product model JK-	
	BD4A8S-4P	BD4A8S-6P
Triple string number	3~8	3~8
Number of iron lithium strings	3~8	3~8
Number of titanium acid strings	7~8	7~8
Working voltage range	7.5-36V	7.5-36V
Balanced approach	Active equalization	
Balanced current	0.4A	
Main circuit internal resistance	1.5mΩ	1.1mΩ
Continuous discharge current	40A	60A
Maximum discharge current	80A	120A
Overcurrent protection (adjustable)	10~40A	10~60A
RS485 communication interface	Support, optional	
CAN communication interface	Support, optional	
Display screen interface	Support (disp. scr or one wire)	
Alarm interface	support	
Battery heating	Support, optional	
Parallel function	Support, parallel module needs to be selected	
Protection function	Overcurrent protection, overvoltage protection, undervoltage protection, over temperature protection, low temperature protection, short circuit protection	
Entry cable	homostomy	
Individual voltage range	1~5V	
Voltage acquisition accuracy	±3mv	
Overcharge protection voltage	1.2~4.4V tunable	
Overcharge release voltage	1.2~4.4V tunable	
Overcurrent release time	2~600S tunable	
Overdischarge protection voltage	1.2~4.4V tunable	
Overdischarge recovery voltage	1.2~4.4V tunable	
Number of Temperature detection devices	1 built-in, 2 external, optional 4 external	
Indian standard	Support, optional	
Coulomb meter	support	
Bluetooth function	Supports Android, Apple, and HarmonyOS	
GPS(optional)	support	

RV ENERGY STORAGE DEDICATED
(100A)



-PRODUCT CHARACTERISTICS

- Two-way non-destructive active balancing function, improve battery efficiency by 95%
- Compatible with ternary lithium, lithium titanate, manganese acid treatment, iron phosphate treatment
- With over charge, over discharge, over current, short circuit and other protection functions
- Single cell battery collection range of 1V~5V, accuracy of ± 3mV
- Standard configuration of Buletooth communication and optional configuration of GPS, RS485, CAN,Heating function, display screen
- Support tower power change application (optional)
- Dimensions: 150.9mm*105.26mm*15.6mm

-APPLICABLE CONDITION

- Operating temperature range : -30-70°C
- Power requirement: 7.5V-36V
- Power consumption: balanced state 46.2mA@36V, non-balanced state 42.4mA@36V

APPLICATION SCENARIO







MAIN TECHNICAL INDICATORS OF THE PROTECTION BOARD

Technical indicators	Product model JK- B1A8S-10P
Ternary string number	3 ~ 8
Number of iron lithium strings	3 ~ 8
Number of titanium acid strings	7 ~ 8
Working voltage range	7.5-36V
Balanced approach	Active equalization
Balanced current	1A
Main circuit internal resistance	1.0803mΩ
Continuous discharge current	100A
Maximum discharge current	200A
Overcurrent protection (adjustable)	10~100A
RS485 communication interface	Support, optional
CAN communication interface	Support, optional
Display screen interface	support
Battery heating	Support, optional
Parallel function	Supported, parallel module optional
Alarm interface	support
ACC detection	Support, optional
Protection function	Overcurrent protection, overvoltage protection, undervoltage protection, over temperature protection, low temperature protection, short circuit protection
Entry cable	homostomy
Individual voltage range	1~5V
Voltage acquisition accuracy	±3mv
Overcharge protection voltage	1.2~4.4V tunable
Overcharge release voltage	1.2~4.4V tunable
Overcurrent release time	2~600S tunable
Overdischarge protection voltage	1 built-in, 4 ext tunable
Overdischarge recovery voltage	1.2~4.4V tunable
Number of Temperature detection devices	1 built-in, 2 external, optional 4 external
Coulomb meter	support
Bluetooth function	Supports Android, Apple, and HarmonyOS
GPS(optional)	support

RV ENERGY STORAGE DEDICATED
(200A)



-PRODUCT CHARACTERISTICS

- Two-way non-destructive active balancing function, improve battery efficiency by 95%
- Compatible with ternary lithium, lithium titanate, manganese acid treatment, iron phosphate treatment
- With over charge, over discharge, over current, short circuit and other protection functions
- Single cell battery collection range of 1V~5V, accuracy of ± 3mV
- Standard configuration of Buletooth communication and optional configuration of GPS, RS485, CAN,Heating function, display screen
- Support tower power change application (optional)
- Dimensions: 152.24mm*127.26mm*17.6mm

-APPLICABLE CONDITION

- Operating temperature range : -30-70°C
- Power requirement: 7.5V-36V
- Power consumption: balanced state 46.2mA@36V, non-balanced state 42.4mA@36V

APPLICATION SCENARIO



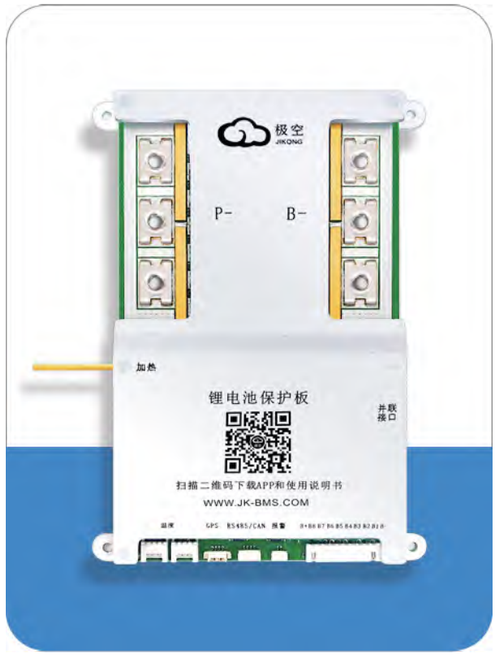




MAIN TECHNICAL INDICATORS OF THE PROTECTION BOARD

Technical indicators	Product model JK-	
	B1A8S-20P	B2A8S-20P
Ternary string number	3~8	3~8
Number of iron lithium strings	3~8	3~8
Number of titanium acid strings	7~8	7~8
Working voltage range	7.5~36V	7.5~36V
Balanced approach	Active equalization	
Balanced current	1A	1A
Main circuit internal resistance	0.35mΩ	0.35mΩ
Continuous discharge current	200A	200A
Maximum discharge current	400A	400A
Overcurrent protection (adjustable)	10~200A	10~200A
RS485 communication interface	Support, optional	
CAN communication interface	Support, optional	
Display screen interface	Support (disp. scr or one wire)	
Alarm interface	support	
Battery heating	Support, optional	
Parallel function	Support, parallel module needs to be selected	
Protection function	Overcurrent protection, overvoltage protection, undervoltage protection, over temperature protection, low temperature protection, short circuit protection	
Entry cable	homostomy	
Individual voltage range	1~5V	
Voltage acquisition accuracy	±3mv	
Overcharge protection voltage	1.2~4.4 tunable	
Overcharge release voltage	1.2~4.4 tunable	
Overcurrent release time	2~600S tunable	
Overdischarge protection voltage	1.2~4.4 tunable	
Overdischarge recovery voltage	1.2~4.4 tunable	
Number of Temperature detection devices	1 built-in, 2 external	
Indian standard	Support, optional	
Coulomb meter	support	
Bluetooth function	Supports Android, Apple, and HarmonyOS	
GPS(optional)	support	

RV ENERGY STORAGE DEDICATED
(300A)



-PRODUCT CHARACTERISTICS

- Two-way non-destructive active balancing function, improve battery efficiency by 95%
- Compatible with ternary lithium, lithium titanate, manganese acid treatment, iron phosphate treatment
- With over charge, over discharge, over current, short circuit and other protection functions
- Single cell battery collection range of 1V~5V, accuracy of ± 3mV
- Standard configuration of Buletooth communication and optional configuration of GPS, RS485, CAN,Heating function, display screen
- Support tower power change application (optional)
- Dimensions: 182.75mm*127.26mm*15.6mm

-APPLICABLE CONDITION

- Operating temperature range : -30-70°C
- Power requirement: 7.5V-36V
- Power consumption: balanced state 16mA@36V, non-balanced state 13mA@36V

APPLICATION SCENARIO







MAIN TECHNICAL INDICATORS OF THE PROTECTION BOARD

Technical indicators	Product model JK-
	B2A8S-30P
Ternary string number	3~8
Number of iron lithium strings	3~8
Number of titanium acid strings	7~8
Working voltage range	7.5-36V
Balanced approach	Active equalization
Balanced current	2A
Main circuit internal resistance	0.3 mΩ
Continuous discharge current	300A
Maximum discharge current	450A
Overcurrent protection (adjustable)	10-300A
RS485 communication interface	Support, optional
CAN communication interface	Support, optional
Display screen interface	Support (disp. scr or one wire)
Alarm interface	support
Battery heating	Support, optional
Parallel function	Support, parallel module needs to be selected
Protection function	Overcurrent protection, overvoltage protection, undervoltage protection, over temperature protection, low temperature protection, short circuit protection
Entry cable	homostomy
Individual voltage range	1~5V
Voltage acquisition accuracy	±3mv
Overcharge protection voltage	1.2~4.4V tunable
Overcharge release voltage	1.2~4.4V tunable
Overcurrent release time	2~600S tunable
Overdischarge protection voltage	1.2~4.4V tunable
Overdischarge recovery voltage	1.2~4.4V tunable
Number of Temperature detection devices	1 built-in, 2 external, optional 4 external
Indian standard	Support, optional
Coulomb meter	support
Bluetooth function	Supports Android, Apple, and HarmonyOS
GPS(optional)	support

SPECIAL FOR STARTING BATTERY
(200A)



-PRODUCT CHARACTERISTICS

- Two-way non-destructive active balancing function, improve battery efficiency by 95%
- Compatible with ternary lithium, lithium titanate, manganese acid treatment, iron phosphate treatment
- With over charge, over discharge, over current, short circuit and other protection functions
- Single cell battery collection range of 1V~5V, accuracy of ± 3mV
- Standard configuration of Buletooth communication and optional configuration of GPS, RS485, CAN,Heating function, display screen
- Support tower power change application (optional)
- Dimensions: 227mm*120mm*23.12mm

-APPLICABLE CONDITION

- Operating temperature range : -30-70°C
- Power requirement: 7.5V-40V
- Power consumption: balanced state 19mA@58V, non-balanced state 16mA@58V

APPLICATION SCENARIO

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MAIN TECHNICAL INDICATORS OF THE PROTECTION BOARD

Technical indicators	Product model JK- QB2A8S-20P
Ternary string number	3-8
Number of iron lithium strings	3-8
Number of titanium acid strings	7-8
Working voltage range	7.5-40V
Balanced approach	Active equalization
Balanced current	2A
Main circuit internal resistance	0.3mΩ
Continuous discharge current	200A
Maximum discharge current	400A
Maximum starting current	3000A
Overcurrent protection (adjustable)	10-200A
RS485 communication interface	Support, optional
CAN communication interface	Support, optional
Display screen interface	Support (disp. scr or one wire)
Alarm interface	support
Battery heating	support
Parallel function	support
Protection function	Overcurrent protection, overvoltage protection, undervoltage protection, over temperature protection, low temperature protection, short circuit protection
Entry cable	homostomy
Individual voltage range	1-5V
Voltage acquisition accuracy	±3mV
Overcharge protection voltage	1.2-4.4V tunable
Overcharge release voltage	1.2-4.4V tunable
Overcurrent release time	2-600S tunable
Overdischarge protection voltage	1.2-4.4V tunable
Overdischarge recovery voltage	1.2-4.4V tunable
Number of Temperature detection devices	1 built-in, 4 external
Coulomb meter	support
Bluetooth function	Supports Android, Apple, and HarmonyOS
GPS(optional)	support

RELAY SCHEME PROTECTION BOARD
(JK-B2A8S-RP)



-PRODUCT CHARACTERISTICS

- Two-way non-destructive active balancing function, improve battery efficiency by 95%
- Compatible with ternary lithium, lithium titanate, manganese acid treatment, iron phosphate treatment
- With over charge, over discharge, over current, short circuit and other protection functions
- Single cell battery collection range of 1V~5V, accuracy of ± 3mV
- Standard configuration of Buletooth communication and optional configuration of GPS, RS485, CAN,Heating function, display screen
- Support tower power change application (optional)
- Dimensions: 152.64mm*84.36mm*15.6mm

-APPLICABLE CONDITION

- Operating temperature range : -30-70°C
- Power requirement: 7.5V-40V
- Power consumption: ≤ 1.36W in equalized state, ≤ 1.2W in non-equalized state

APPLICATION SCENARIO





MAIN TECHNICAL INDICATORS OF THE PROTECTION BOARD

Technical indicators	Product model JK-
	JK-B2A8S-RP
Ternary string number	3 ~ 8
Number of iron lithium strings	3 ~ 8
Number of titanium acid strings	7 ~ 8
Working voltage range	7.5-36V
Balanced approach	Active equalization
Balanced current	2A
Main circuit internal resistance	≤0.66mΩ
Continuous discharge current	500A
Discharge (DSG) control pin	9~36V
Overcurrent protection (adjustable)	10~500A
RS485 communication interface	support
CAN communication interface	support
Display screen interface	support
Battery heating	support
Parallel function	support
Alarm interface	support
ACC detection	support
Protection function	Overcurrent protection, overvoltage protection, undervoltage protection, over temperature protection, low temperature protection, short circuit protection
Entry cable	Separate port
Individual voltage range	1~5V
Voltage acquisition accuracy	±3mv
Overcharge protection voltage	1.2~4.4V tunable
Overcharge release voltage	1.2~4.4V tunable
Overcurrent release time	2~600S tunable
Overdischarge protection voltage	1.2~4.4V tunable
Overdischarge recovery voltage	1.2~4.4V tunable
Number of Temperature detection devices	1 built-in, 2 external
Coulomb meter	support
Bluetooth function	Supports Android, Apple, and HarmonyOS
GPS(optional)	support

RELAY SCHEME PROTECTION BOARD
(JK-B2A25S-RP)



-PRODUCT CHARACTERISTICS

- Suitable for 3-25 series high-capacity lithium cobalt oxide, lithium manganese oxide, ternary lithium, and lithium iron battery packs; Continuous working current can reach 500A (Depends on external relays)
- Applied to small sightseeing vehicles, commuting vehicles, forklifts, shared cars, and heavy-duty vehicles Battery packs for equipment such as energy storage, backup power sources for base stations, and solar power stations
- Dimensions: 188.6mm * 94mm * 23.5mm

-APPLICABLE CONDITION

- Operating temperature range : -30-70°C
- Power requirement: 16V-100V
- Power consumption: Maximum power consumption 1.5W(Excluding relays) shutdown power consumption 20mW

APPLICATION SCENARIO





MAIN TECHNICAL INDICATORS OF THE PROTECTION BOARD

Technical indicators	Product model JK- B2A25S-RP
Ternary string number	7~25
Number of iron lithium strings	8~25
Number of titanium acid strings	14~25
Working voltage range	16~100V
Balanced approach	Active equalization
Balanced current	2A
Charge and discharge control port	12V (with 12V relay)
Continuous discharge current	500A
Maximum discharge current	Dependent on the relay
Overcurrent protection (adjustable)	10~500A
RS485 communication interface	Support, optional
CAN communication interface	support
Display screen interface	Support (disp. scr or one wire)
Entry cable	Relay split port
Individual voltage range	1V~4.5V
Voltage acquisition accuracy	±3mv
Overcharge protection voltage	1.2~4.4V tunable
Overcharge release voltage	1.2~4.4V tunable
Overcurrent release time	2~600S tunable
Overdischarge protection voltage	1.2~4.4V tunable
Overdischarge recovery voltage	1.2~4.4V tunable
Number of Temperature detection devices	1 built-in, 2 external
Balanced opening conditions	When the pressure difference exceeds the trigger value, the balance will be automatically activated. The trigger value can be set, and the factory default is>10mv
temperature protection	support
Coulomb meter	support
Bluetooth function	Supports Android, Apple, and HarmonyOS
GPS(optional)	Support (RS485 or GPS)

RELAY SCHEME PROTECTION BOARD
(JK-B2A32S-RP)



-PRODUCT CHARACTERISTICS

- Suitable for 3-25 series high-capacity lithium cobalt oxide, lithium manganese oxide, ternary lithium, and lithium iron battery packs; Continuous working current can reach 500A (Depends on external relays)
- Applied to small sightseeing vehicles, commuting vehicles, forklifts, shared cars, and heavy-duty vehicles Battery packs for equipment such as energy storage, backup power sources for base stations, and solar power stations
- Dimensions: 234.6mm * 157.5mm * 30.5mm

-APPLICABLE CONDITION

- Operating temperature range : -30-70°C
- Power requirement: 20V-130V
- Power consumption: Maximum power consumption 1.5W(Excluding relays) shutdown power consumption 20mW

APPLICATION SCENARIO

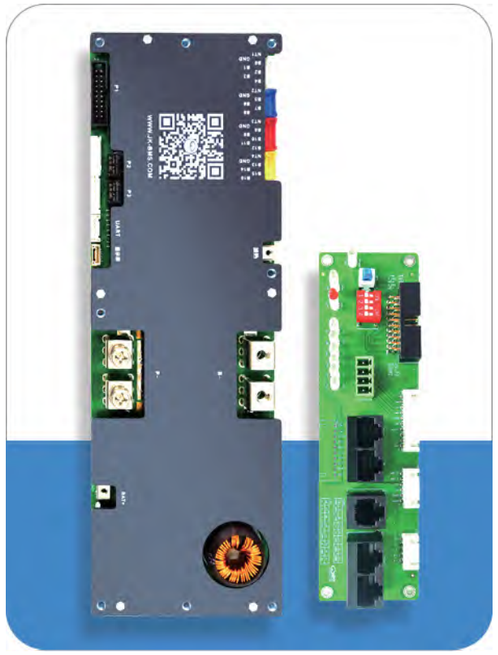




MAIN TECHNICAL INDICATORS OF THE PROTECTION BOARD

Technical indicators	新 Product model JK-
	JK-B2A32S-RP
Ternary string number	7 ~ 32
Number of iron lithium strings	8 ~ 32
Number of titanium acid strings	14 ~ 32
Working voltage range	20~130V
Balanced approach	Active equalization
Balanced current	2A
Continuous discharge current	300A
Maximum discharge current	600A
Overcurrent protection (adjustable)	10~300A
RS485 communication interface	support
CAN communication interface	support
Display screen interface	support
Battery heating	support
Alarm interface	support
Protection function	Overcurrent protection, overvoltage protection, undervoltage protection, over temperature protection, low temperature protection, short circuit protection
Entry cable	homostomy
Individual voltage range	1~5V
Voltage acquisition accuracy	±3mv
Overcharge protection voltage	1.2~4.4V tunable
Overcharge release voltage	1.2~4.4V tunable
Overcurrent release time	2~600S tunable
Overdischarge protection voltage	1.2~4.4V tunable
Overdischarge recovery voltage	1.2~4.4V tunable
Number of Temperature detection devices	1 built-in, 4 external
Coulomb meter	support
Bluetooth function	Supports Android, Apple, and HarmonyOS
GPS(optional)	support

HOME ENERGY STORAGE PROTECTION BOARD
(100A/150A/200A)



-PRODUCT CHARACTERISTICS

- LED status indication
- APP remote operation
- Support PC PC operation
- Over-voltage and over-current protection
- Information screen display
- Support RS485\CAN\RS232 communication
- High precision voltage acquisition
- Battery capacity estimation
- High precision current acquisition
- Accurate time logging
- Isolated power supply circuit
- Short circuit protection
- Active balancing function, improve the battery efficiency by 95%
- 4 way temperature detection protection, 1 way MOS temperature detection protection
- Dimensions: 300mm*100mm*18mm

-APPLICABLE CONDITION

- Operating temperature range : -30-70°C
- Power requirement: 20V-70V
- Power consumption: balanced state 19mA@58V, non-balanced state 16mA@58V

APPLICATION SCENARIO

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MAIN TECHNICAL INDICATORS OF THE PROTECTION BOARD

Technical indicators	新 Product model JK-				
	PB1A16S-10P	PB2A16S-10P	PB1A16S-15P	PB2A16S-15P	PB2A16S-20P
Ternary string number	8~16	8~16	8~16	8~16	8~16
Number of iron lithium strings	7~16	7~16	7~16	7~16	7~16
Number of titanium acid strings	14~16	14~16	14~16	14~16	14~16
Working voltage range	20~70V	20~70V	20~70V	20~70V	20~70V
Balanced approach	主动均衡				
Balanced current	1A	2A	1A	2A	2A
Main circuit internal resistance	1mΩ	1mΩ	0.45mΩ	1mΩ	0.35mΩ
Continuous discharge current	100A	100A	150A	150A	200A
Maximum discharge current	200A	200A	300A	300A	400A
Overcurrent protection (adjustable)	10~100A	10~100A	10~150A	10~150A	10~200A
Other interfaces	Supports RS485 communication interface, CAN communication interface, and heating interface				
Display screen interface	Support (disp. scr or one wire)				
Alarm interface	support				
Battery heating	Support, optional				
Protection function	Overcurrent protection, overvoltage protection, undervoltage protection, over temperature protection, low temperature protection, short circuit protection				
Entry cable	homostomy				
Individual voltage range	1~5V				
Voltage acquisition accuracy	±3mv				
Overcharge protection voltage	1.2~4.4V tunable				
Overcharge release voltage	1.2~4.4V tunable				
Overcurrent release time	2~600S tunable				
Overdischarge protection voltage	1.2~4.4V tunable				
Overdischarge recovery voltage	1.2~4.4V tunable				
Number of Temperature detection devices	1 built-in, 4 external				
Coulomb meter	support				
Bluetooth function	Supports Android, Apple, and HarmonyOS				
Parallel charging current limiting	support				

HOME ENERGY STORAGE PROTECTION BOARD
(300A)



-PRODUCT CHARACTERISTICS

- LED status indication
- APP remote operation
- Support PC PC operation
- Over-voltage and over-current protection
- Information screen display
- Support RS485\CAN\RS232 communication
- High precision voltage acquisition
- Battery capacity estimation
- High precision current acquisition
- Accurate time logging
- Isolated power supply circuit
- Short circuit protection
- Active balancing function, improve the battery efficiency by 95%
- 4 way temperature detection protection, 1 way MOS temperature detection protection
- Dimensions: 300mm*100mm*24mm

-APPLICABLE CONDITION

- Operating temperature range : -30-70°C
- Power requirement: 20V-70V
- Power consumption: balanced state 19mA@58V, non-balanced state 16mA@58V

APPLICATION SCENARIO

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MAIN TECHNICAL INDICATORS OF THE PROTECTION BOARD

Technical indicators	Product model JK- PB2A16S-30P
Ternary string number	8~16
Number of iron lithium strings	7~16
Number of titanium acid strings	14~16
Working voltage range	20~70V
Balanced approach	Active equalization
Balanced current	2A
Main circuit internal resistance	0.25mΩ
Continuous discharge current	300A
Maximum discharge current	600A
Overcurrent protection (adjustable)	10~300A
Other interfaces	Supports RS485 communication interface, CAN communication interface, and heating interface
Display screen interface	Support (disp. scr or one wire)
Alarm interface	support
Battery heating	Support, optional
Protection function	Overcurrent protection, overvoltage protection, undervoltage protection, over temperature protection, low temperature protection, short circuit protection
Entry cable	homostomy
Individual voltage range	1~5V
Voltage acquisition accuracy	±3mv
Overcharge protection voltage	1.2~4.4V tunable
Overcharge release voltage	1.2~4.4V tunable
Overcurrent release time	2~600S tunable
Overdischarge protection voltage	1.2~4.4V tunable
Overdischarge recovery voltage	1.2~4.4V tunable
Number of Temperature detection devices	1 built-in, 4 external
Coulomb meter	support
Bluetooth function	Supports Android, Apple, and HarmonyOS
Parallel charging current limiting	support

ELECTRIC MOTORCYCLE VERSION
(100A/150A)



-PRODUCT CHARACTERISTICS

- Two-way non-destructive active balancing function, improve battery efficiency by 95%
- Compatible with ternary lithium, lithium titanate, manganese acid treatment, iron phosphate treatment
- With over charge, over discharge, over current, short circuit and other protection functions
- Single cell battery collection range of 1V~5V, accuracy of ± 3mV
- Standard configuration of Buletooth communication and optional configuration of GPS, RS485, CAN,Heating function, display screen
- Support tower power change application (optional)
- Dimensions: 251.3mm*101.5mm*15.6mm

-APPLICABLE CONDITION

- Operating temperature range : -30-70°C
- Power requirement: 20V-100V
- Power consumption: balanced state 62mA@72V, non-balanced state 8mA@72V

APPLICATION SCENARIO







MAIN TECHNICAL INDICATORS OF THE PROTECTION BOARD

Technical indicators	Product model JK-	
	BD6A32S-10P	BD6A32S-15P
Ternary string number	7 ~ 32	7 ~ 32
Number of iron lithium strings	8 ~ 32	8 ~ 32
Number of titanium acid strings	14 ~ 32	14 ~ 32
Working voltage range	20~130V	20~130V
Balanced approach	Active equalization	
Balanced current	0.6A (Software-selectable 1A)	0.6A (Software-selectable 1A)
Main circuit internal resistance	1.532mΩ	0.895mΩ
Continuous discharge current	100A	150A
Maximum discharge current	200A	300A
Overcurrent protection (adjustable)	10~100A	10~150A
RS485 communication interface	Support, optional	
CAN communication interface	Support, optional	
Display screen interface	support	
Battery heating	Support, optional	
Parallel function	Supported (parallel module optional)	
Alarm interface	Support, optional	
ACC detection	Support, optional	
Protection function	Overcurrent protection, overvoltage protection, undervoltage protection, over temperature protection, low temperature protection, short circuit protection	
Entry cable	homostomy	
Individual voltage range	1~5V	
Voltage acquisition accuracy	±3mv	
Overcharge protection voltage	1.2~4.4V tunable	
Overcharge release voltage	1.2~4.4V tunable	
Overcurrent release time	2~600S tunable	
Overdischarge protection voltage	1.2~4.4V tunable	
Overdischarge recovery voltage	1.2~4.4V tunable	
Number of Temperature detection devices	1 built-in, 2 external, optional 4 external	
Coulomb meter	support	
Bluetooth function	Supports Android, Apple, and HarmonyOS	
GPS(optional)	support	

ELECTRIC MOTORCYCLE VERSION
(40A/60A)



-PRODUCT CHARACTERISTICS

- Two-way non-destructive active balancing function, improve battery efficiency by 95%
- Compatible with ternary lithium, lithium titanate, manganese acid treatment, iron phosphate treatment
- With over charge, over discharge, over current, short circuit and other protection functions
- Single cell battery collection range of 1V~5V, accuracy of ± 3mV
- Standard configuration of Buletooth communication and optional configuration of RS485, CAN,Heating function, display screen
- Support tower power change application (optional)
- Dimensions: 116.8mm*94.8mm*14.6mm

-APPLICABLE CONDITION

- Operating temperature range : -30-70°C
- Power requirement: 20V-100V
- Power consumption: balanced state 62mA@72V, non-balanced state 8mA@72V

APPLICATION SCENARIO







MAIN TECHNICAL INDICATORS OF THE PROTECTION BOARD

Technical indicators	Product model JK-	
	BD6A24S-4PD	BD6A24S-6PD
Ternary string number	7~24	7~24
Number of iron lithium strings	8~24	8~24
Number of titanium acid strings	14~24	14~24
Working voltage range	20~100V	20~100V
Balanced approach	Active equalization	
Balanced current	0.6A	0.6A
Main circuit internal resistance	1.6mΩ	1.2mΩ
Continuous discharge current	40A	60A
Maximum discharge current	80A	120A
Overcurrent protection (adjustable)	10~40A	10~60A
RS485 communication interface	Support, optional	
CAN communication interface	Support, optional	
One-wire communication	Support, optional	
Display screen interface	support	
Battery heating	Support, optional	
Parallel function	Supported (parallel module optional)	
Alarm interface	Support, optional	
ACC detection	Support, optional	
Protection function	Overcurrent protection, overvoltage protection, undervoltage protection, over temperature protection, low temperature protection, short circuit protection	
Entry cable	homostomy	
Individual voltage range	1~5V	
Voltage acquisition accuracy	±3mv	
Overcharge protection voltage	1.2~4.4V tunable	
Overcharge release voltage	1.2~4.4V tunable	
Overcurrent release time	2~600S tunable	
Overdischarge protection voltage	1.2~4.4V tunable	
Overdischarge recovery voltage	1.2~4.4V tunable	
Number of Temperature detection devices	1 built-in, 2 external, optional 4 external	
Coulomb meter	support	
Bluetooth function	Supports Android, Apple, and HarmonyOS	
GPS(optional)	support	

LOW SPEED ELECTRIC CAR VERSION
(80A/100A/120A)



-PRODUCT CHARACTERISTICS

- Two-way non-destructive active balancing function, improve battery efficiency by 95%
- Compatible with ternary lithium, lithium titanate, manganese acid treatment, iron phosphate treatment
- With over charge, over discharge, over current, short circuit and other protection functions
- Single cell battery collection range of 1V~5V, accuracy of ± 3mV
- Standard configuration of Buletooth communication and optional configuration of GPS, RS485, CAN,Heating function, display screen
- Support tower power change application (optional)
- Dimensions: 136mm*103mm*13.6mm

-APPLICABLE CONDITION

- Operating temperature range : -30-70°C
- Power requirement: 20V-100V
- Power consumption: balanced state 62mA@72V, non-balanced state 8mA@72V

APPLICATION SCENARIO







MAIN TECHNICAL INDICATORS OF THE PROTECTION BOARD

Technical indicators	新 Product model JK-		
	BD6A24S-8PD	BD6A24S-10PD	BD6A24S-12PD
Ternary string number	7 ~ 24	7 ~ 24	7 ~ 24
Number of iron lithium strings	8 ~ 24	8 ~ 24	8 ~ 24
Number of titanium acid strings	14 ~ 24	14 ~ 24	14 ~ 24
Working voltage range	20~100V	20~100V	20~100V
Balanced approach	主动均衡		
Balanced current	0.6A	0.6A	0.6A
Main circuit internal resistance	0.9mΩ	0.74mΩ	0.66mΩ
Continuous discharge current	80A	100A	120A
Maximum discharge current	150A	200A	240A
Overcurrent protection (adjustable)	10~80A	10~100A	10~120A
RS485 communication interface	Support, optional		
CAN communication interface	Support, optional		
One-wire communication	Support, optional		
Display screen interface	support		
Battery heating	Support, optional		
Parallel function	Supported (parallel module optional)		
Alarm interface	Support, optional		
ACC detection	Support, optional		
Protection function	Overcurrent protection, overvoltage protection, undervoltage protection, over temperature protection, low temperature protection, short circuit protection		
Entry cable	homostomy		
Individual voltage range	1~5V		
Voltage acquisition accuracy	±3mv		
Overcharge protection voltage	1.2~4.4V tunable		
Overcharge release voltage	1.2~4.4V tunable		
Overcurrent release time	2~600S tunable		
Overdischarge protection voltage	1.2~4.4V tunable		
Overdischarge recovery voltage	1.2~4.4V tunable		
Number of Temperature detection devices	1 built-in, 2 external		
Coulomb meter	support		
Bluetooth function	Supports Android, Apple, and HarmonyOS		
GPS(optional)	support		

LOW SPEED ELECTRIC CAR VERSION
(150A)



-PRODUCT CHARACTERISTICS

- Two-way non-destructive active balancing function, improve battery efficiency by 95%
- Compatible with ternary lithium, lithium titanate, manganese acid treatment, iron phosphate treatment
- With over charge, over discharge, over current, short circuit and other protection functions
- Single cell battery collection range of 1V~5V, accuracy of ± 3mV
- Standard configuration of Buletooth communication and optional configuration of GPS, RS485, CAN,Heating function, display screen
- Support tower power change application (optional)
- Dimensions: 160mm*83mm*13.6mm

-APPLICABLE CONDITION

- Operating temperature range : -30-70°C
- Power requirement: 20V-100V
- Power consumption: balanced state 62mA@72V, non-balanced state 8mA@72V

APPLICATION SCENARIO







MAIN TECHNICAL INDICATORS OF THE PROTECTION BOARD

Technical indicators	新 Product model JK-BD6A24S-15PD
Ternary string number	7 ~ 24
Number of iron lithium strings	8 ~ 24
Number of titanium acid strings	14 ~ 24
Working voltage range	20~100V
Balanced approach	主动均衡
Balanced current	0.6A
Main circuit internal resistance	0.36mΩ
Continuous discharge current	150A
Maximum discharge current	300A
Overcurrent protection (adjustable)	10~150A
RS485 communication interface	Support, optional
CAN communication interface	Support, optional
One-wire communication	Support, optional
Display screen interface	support
Battery heating	Support, optional
Parallel function	Supported (parallel module optional)
Alarm interface	Support, optional
ACC detection	Support, optional
Protection function	Overcurrent protection, overvoltage protection, undervoltage protection, over temperature protection, low temperature protection, short circuit protection
Entry cable	homostomy
Individual voltage range	1~5V
Voltage acquisition accuracy	±3mv
Overcharge protection voltage	1.2~4.4V tunable
Overcharge release voltage	1.2~4.4V tunable
Overcurrent release time	2~600S tunable
Overdischarge protection voltage	1.2~4.4V tunable
Overdischarge recovery voltage	1.2~4.4V tunable
Number of Temperature detection devices	1 built-in, 2 external
Coulomb meter	support
Bluetooth function	Supports Android, Apple, and HarmonyOS
GPS(optional)	support

LOW SPEED ELECTRIC CAR VERSION
(150A/200A)



-PRODUCT CHARACTERISTICS

- Two-way non-destructive active balancing function, improve battery efficiency by 95%
- Compatible with ternary lithium, lithium titanate, manganese acid treatment, iron phosphate treatment
- With over charge, over discharge, over current, short circuit and other protection functions
- Single cell battery collection range of 1V~5V, accuracy of ± 3mV
- Standard configuration of Buletooth communication and optional configuration of GPS, RS485, CAN,Heating function, display screen
- Support tower power change application (optional)
- Dimensions: 190mm * 128mm * 40.1mm

-APPLICABLE CONDITION

- Operating temperature range : -30-70°C
- Power requirement: 20V-100V
- Power consumption: balanced state 8mA@72V, non-balanced state 7mA@72V

APPLICATION SCENARIO

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MAIN TECHNICAL INDICATORS OF THE PROTECTION BOARD

Technical indicators	Product model JK-		
	WBD6A20S-15P	WBD6A24S-15P	WBD6A24S-20P
Ternary string number	7~20	7~24	7~24
Number of iron lithium strings	8~20	8~24	8~24
Number of titanium acid strings	14~20	14~24	14~24
Working voltage range	20~100V	20~100V	20~100V
Balanced approach	Active equalization		
Balanced current	0.6A	0.6A	0.6A
Main circuit internal resistance	0.65mΩ	0.65mΩ	0.5mΩ
Continuous discharge current	150A	150A	200A
Maximum discharge current	300A	300A	350A
Overcurrent protection (adjustable)	10~150A	10~150A	10~200A
RS485 communication interface	Support, optional (RS485 or CAN)		
CAN communication interface	Support, optional (RS485 or CAN)		
Display screen interface	Support (disp. scr or one wire)		
Battery heating	Support, optional		
Protection function	Overcurrent protection, overvoltage protection, undervoltage protection, over temperature protection, low temperature protection, short circuit protection		
Entry cable	homostomy		
Individual voltage range	1~5V		
Voltage acquisition accuracy	±3mv		
Overcharge protection voltage	1.2~4.4V tunable		
Overcharge release voltage	1.2~4.4V tunable		
Overcurrent release time	2~600S tunable		
Overdischarge protection voltage	1.2~4.4V tunable		
Overdischarge recovery voltage	1.2~4.4V tunable		
Number of Temperature detection devices	1 built-in, 2 external		
Coulomb meter	support		
Bluetooth function	Supports Android, Apple, and HarmonyOS		
GPS(optional)	Support (RS485 or CAN)		

LITHIUM BATTERY

active balancing module

ENERGY TRANSFER FROM PEAK CUTTING TO VALLEY FILLING

- **Bluetooth** — Bluetooth communication
- **Serial communication** — Customize CAN/RS485
- **Active balancing** — 0.1~2A balance adjustable
- **Misconnection protection** — Wiring error does not work

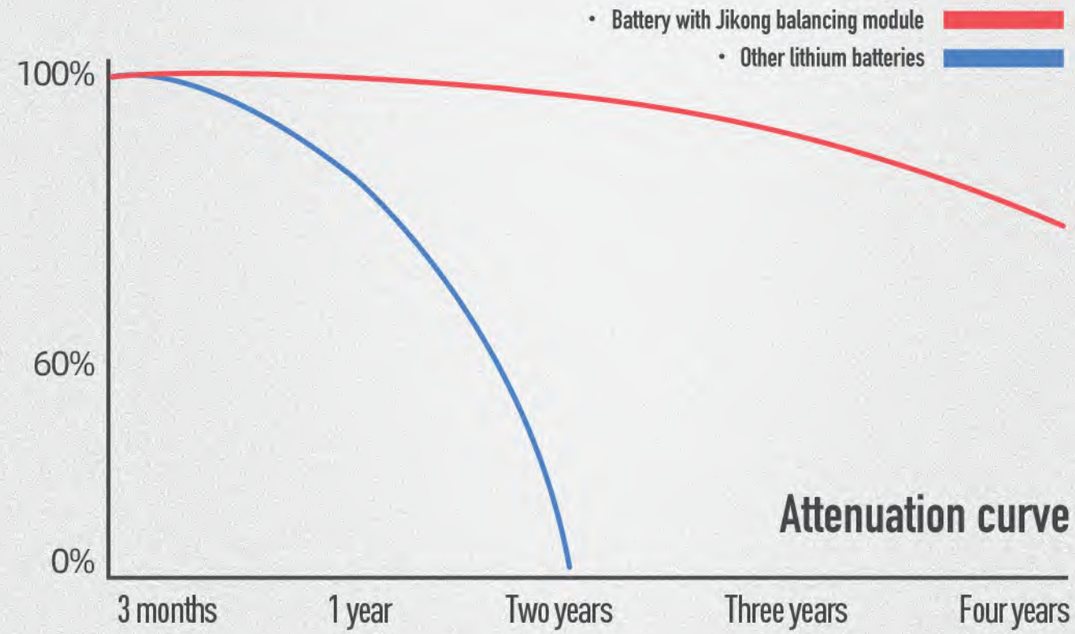


极空 JIKONG | ACTIVE BALANCE MODULE SERIES

Active balance board can help you solve the problem!

THE BATTERY PACK IS EQUIPED WITH AN ACTIVE BALANCING MODULE

Automatic detection and repair of battery
differential pressure throughout the day extends battery life



ACTIVE BALANCING MODULE





-PRODUCT CHARACTERISTICS

- Reserve RS485 or CAN communication bus for supporting data readout by the host computer
- Non-consumptive energy transfer active balancing technology
- Automatic balancing is triggered when the voltage difference exceeds the threshold (default >4mV, adjustable)
- Features reverse polarity protection, supports balancing cascades for battery packs with 24 cells or more, and has a cell voltage measurement range of 1V to 5V with an accuracy of ±3mV
- Standard configuration of Bluetooth communication which is compatible with Android, iOS, and HarmonyOS for real-time cell status monitoring
- Dimensions: 136mm*85.5mm*20.5mm / 157.6 mm * 99 mm * 18.5 mm /176.6 mm * 127.3 mm * 23.5 mm

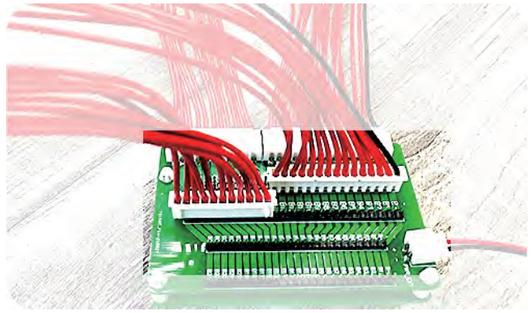
-APPLICABLE CONDITION

- Operating temperature range : -30-70°C
- Power consumption: B2A8S: Balanced state 30mA@40V ; Non-equilibrium state 27.5mA@40V
B2A16S/24S, 08B2A24S, 11B2A24S, B4A24S: Balanced 10mA@100V ; Disequilibrium 9mA@100V

APPLICATION SCENARIO



Case 1: Old battery home equalizer is implementedDynamic equilibrium changes to active equilibrium



Case 2: Battery balancing repair with an adapter board

MAIN TECHNICAL INDICATORS OF THE BALANCING MODULE

Product model	JK-B2A8S	JK-B2A16S	DZ08B2A24S	DZ11B2A24S	JK-B4A24S
Active current balancing	0.1~2A	0.1~2A	0.1~2A	0.1~2A	4A
Adapt to the number of battery strings	2~8	2~16	2~24	2~24	2~24
Balanced cascading	nonsupport	nonsupport	Batteries with 24 or more strings can theoretically have unlimited polarity		
Communication serial port	nonsupport	nonsupport	CAN	RS485	Supports RS485/CAN Need to be equipped (A Binary Choice)
Working voltage range	10~36V	24~70V	20~100V		9~100V
Power supply mode	Battery powered, externally powered				
Balanced approach	Active equilibrium				
Balanced opening conditions	When the pressure difference exceeds the trigger value (default>4mV, adjustable), it will automatically start balancing				
Individual opening conditions	1~5V				
Applicable battery types	Support ternary lithium batteries, lithium iron batteries, and lithium titanate batteries				
Communication function	Bluetooth communication function				

LITHIUM BATTERY ACTIVE BALANCING MODULE DESCRIPTION

The active balancing module is a balancing management system specially designed for large capacity series connected battery packs. It uses supercapacitors to facilitate active energy transfer, with a maximum balancing current of 15A that is not dependent on the voltage difference across the battery pack.

This module features Bluetooth connectivity and comes with a companion mobile app. Users can connect the module via Bluetooth to monitor individual cell voltages, check balancing status, and adjust settings. Compact and easy to install, this module is ideal for use in battery packs for small sightseeing vehicles, mobility scooters, shared cars, high-power energy storage systems, backup power supplies for base stations, and solar power stations. It is also suitable for battery balancing and repair.

EQUALIZER MODEL PROGRAMMING MODE

JK-DZ08 B1A 24S

Company code

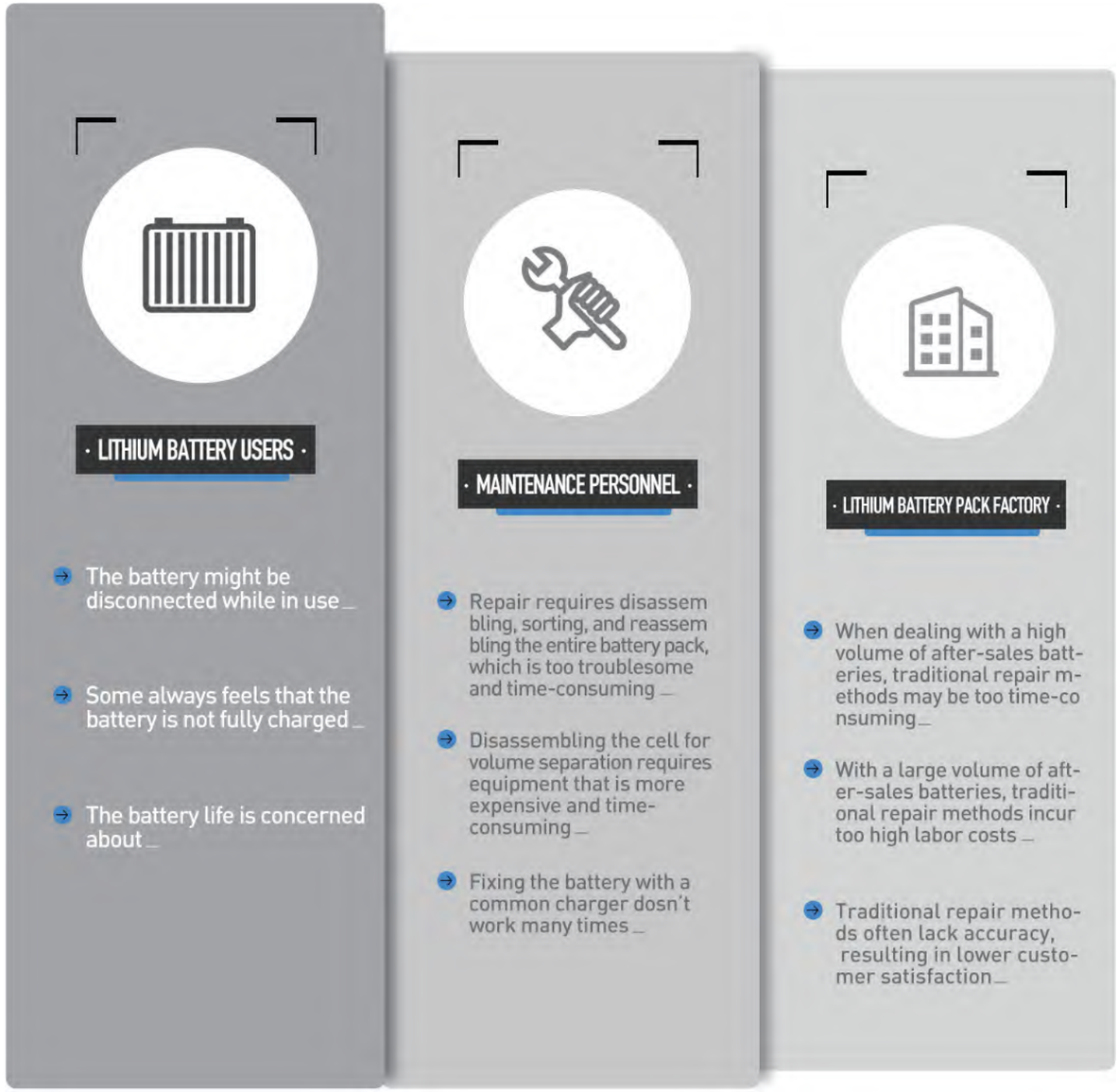
RS485 communication: DZ11
CAN communication: DZ08

Balanced current identification is combined of letters and numbers; For example, B1A indicates the 1A balanced current, and B10A indicates the 10A balanced current

Maximum number of equalized battery strings

极空 JIKONG | ACTIVE BALANCE MODULE SERIES

APPLICABLE POPULATION



ACTIVE BALANCING MODULE



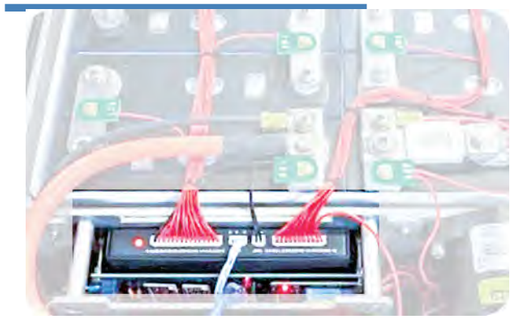
-PRODUCT CHARACTERISTICS

- Non-energy-consuming, energy-transfer type active balancing technology
- The greater the voltage difference, the higher the balancing current
- Reverse connection protection function
- Cell voltage measurement range: 5V ~ 17V, accuracy: ±0.1V
- Dimensions: 74.5mm × 29.2mm × 83.5mm

-APPLICABLE CONDITION

- Operating temperature range : -30-70°C

APPLICATION SCENARIO



Case 1: Old battery home equalizer is implementedDynamic equilibrium changes to active equilibrium



Case 2: Battery balance repair with adapter board

MAIN TECHNICAL INDICATORS OF THE BALANCING MODULE

Technical indicators	Product model JK- MK-B5A16V2C
Active current balancing	0 ~ 5A
Adapt to the number of battery strings	2S NMC, 3S NMC, 12V lead-acid, 4S LFP, 4S NMC
Balanced cascading	support
Communication serial port	No
Working voltage range	5 ~ 17V
Power supply mode	Battery powered
Balanced approach	Active equilibrium
Balanced opening conditions	Balancing current increases proportionally with the voltage differential.
Applicable battery types	Support ternary lithium batteries, lithium iron batteries, and lithium titanate batteries

A BATTERY PACK THAT HAS BEEN USED FOR TOO LONG

BRINGING VARIOUS PROBLEMS



Endurance reduced



Short battery life



Insufficient battery charge



Battery outage

Select "JI KONG" Voltage difference balancing instrument

<<SOLVE ALL YOUR PROBLEMS TOGETHER>>



01: 15A24S Voltage difference balancing instrument



02: 5A24S Voltage difference balancing instrument



5A24S VOLTAGE DIFFERENCE BALANCING INSTRUMENT



MAIN TECHNICAL INDEX

◆ Supports 2 to 24 series battery packs.
◆ Real-time active energy transfer balancing, achieving a cell voltage difference of ≤ 5mV after balancing.
◆ Single voltage range: 1V to 5V, with an accuracy of ±3mV.
◆ Compatible with all battery types including lithium-ion, LiFePO4, lead-acid, and supercapacitors.
◆ The Balancing current is set independently within the range of 0.8A to 5A, not dependent on the cell voltage difference.
◆ Supports balanced cascade, suitable for battery packs with more than 24 series cells; theoretically, it can be cascaded infinitely.
◆ Bluetooth communication with a mobile app for real-time cell status monitoring on Android and iOS.
◆ Includes balancing wire resistance detection to identify wiring errors in advance.
◆ Operating temperature range: -30°C to 70°C.
◆ 5A power supply requirements: 9V to 100V; if the battery pack is below 9V, an external auxiliary power source is needed.
◆ Power consumption: 10mA@100V in balancing state, 9mA@100V in non-balancing state.

15A24S VOLTAGE DIFFERENCE BALANCING INSTRUMENT



MAIN TECHNICAL INDEX

◆ Supports 2 to 24 series battery packs.
◆ Real-time active energy transfer balancing, achieving a cell voltage difference of ≤ 5mV after balancing.
◆ Single voltage range: 1V to 5V, with an accuracy of ±3mV.
◆ Compatible with all battery types including lithium-ion, LiFePO4, lead-acid, and supercapacitors.
◆ The Balancing current is set independently within the range of 0.8A to 15A, not dependent on the cell voltage difference.
◆ Supports balanced cascade, suitable for battery packs with more than 24 series cells; theoretically, it can be cascaded infinitely.
◆ Bluetooth communication with a mobile app for real-time cell status monitoring on Android and iOS.
◆ Includes balancing wire resistance detection to identify wiring errors in advance.
◆ Operating temperature range: -30°C to 70°C.
◆ 15A power supply requirements: 9V to 100V; if the battery pack is below 9V, an external auxiliary power source is needed.
◆ Power consumption: 15mA@100V in balancing state, 14mA@100V in non-balancing state.



LCD-7.0-TTL-P



LCD-4.3-TTL-P



LCD-2.0-LY



LCD-4.3-RS485



3.2 inch LCD screen



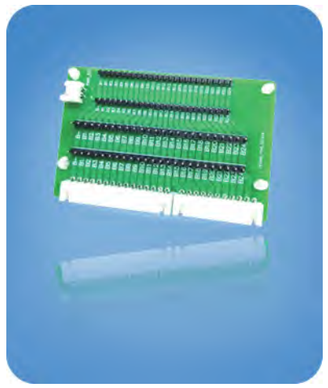
LCD-2.0-RS485



LCD-12864-TTL



Monitor 3m extension cable



Adapter plate



P-LINK-CR



LED-5-RS485



LED-EXT5-RS485



ES Communication Panel Kit



Wi-Fi Module



Supercapacitor Module



Activate the illuminated button



5A Parallel module



RS485 conversion module



USB-TTL communication box



G102-4G Square



GPS module 4G handle



Alarm apparatus



USB-RS485-RJ45



15A Balancer Cable



5A Balancer Cable



Balancing wire