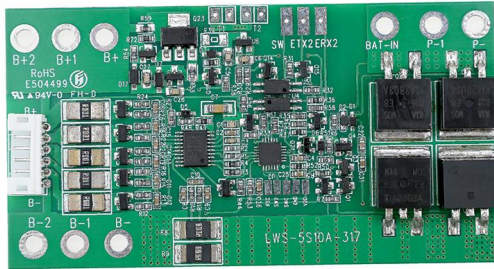


3S 4S 5S 10A 21V Lithium ion Battery Pack BMS



LWS® has 10+ Years of experience in 7S 8S 15A Lithium ion Battery Protection Board For Battery Pack BMS. Authenticated by ISO9001, help us to provide more professional services. Highly responsibility engineering team can do the precision analysis and determination. Our 3S 4S 5S 10A 21V Lithium ion Battery Pack BMS can realize NO MOQ because of our flexible inventory policy.

Product Introduction

LWS® battery protection board 3S 4S 5S 10A 21V Lithium ion Battery Pack BMS to prevent the battery packs from overcharge, over discharge, over current, over temperature, short circuit; The following is the introduction of 3S 4S 5S 10A 21V Lithium ion Battery Pack BMS, hoping to help you better understand. Welcome new and old customers to continue to cooperate with us to create a better future!

Product Parameter (Specification)

Shenzhen Li-ion Battery Bodyguard Technology Co.,LTD			
PCM Specifications For 18.5V (5S) Li-ion Battery Packs			
Item	parameter	5S	
Single voltage acquisition parameters	Number of strings collected	±10mV	25℃
	Single voltage acquisition error	3680mV	
Single battery overcharge protection value	Single battery over voltage protection value	2S	
	Single battery under voltage protection delay value	3660mV	
	Single battery under voltage protection	2200mV	

	recovery value		
Single battery under voltage protection	Single battery over voltage protection recovery value	2S	
	Single battery under voltage protection delay value	2500mV	
	Single battery under voltage protection recovery value	Intelligent passive Balance	
Balance functions	System balance working principle	3200mV	
	Single voltage balance start threshold	35mA	
	Balance current	30mV	Cell voltage
	Single voltage differential balance start threshold	15mV	
	Single voltage differential balance off threshold	2	
Temperature sampling and protection functions	Temperature detection points	$\pm 3^{\circ}\text{C}$	
	Temperature acquisition error	70°C	
	Battery discharge high temperature protection value	5S	
	Battery discharge temperature protection value delay value	55°C	
	Battery discharge high temperature protection recovery value	-20°C	
	Battery discharge low temperature protection value	5S	
	Battery discharge low temperature protection	-0°C	

	value delay value		
	Battery discharge low temperature protection recovery value	60°C	
	Battery charge high temperature protection value	5S	
	Battery charge high temperature protection value delay value	50°C	
	Battery charge high temperature protection recovery value	-1°C	
	Battery charge low temperature protection value	5S	
	Battery charge low temperature protection value delay value	5°C	
	Battery charge low temperature protection recovery value	±5%	25°C
Battery pack charge and discharge current sampling and protection functions	Current sampling accuracy	≤0.55mΩ	
	Sampling resistance value	12A	Level one over current protection
	Battery charge over current protection value 1	2S	
	Battery charge over current protection delay value 1	20S	
	Battery charge over current protection recovery delay value 1	40A	Level one over current protection
	Battery discharge over current protection value 1	2S	
	Battery discharge over	20S	

	current protection delay value 1		
	Battery discharge over current protection recovery delay value 1		
	Battery charge over current protection value 2		
	Battery charge over current protection delay value 2		
	Battery charge over current protection recovery delay value 2	65A	second level over current protection
	Battery discharge over current protection value 2	320mS	
	Battery discharge over current protection delay value 2	5S	
	Battery discharge over current protection recovery delay value 2	130A	According to the actual settings
	Battery short circuit protection value 1	100-500uS	According to the actual settings
	Battery short circuit protection delay value 1	after disconnecting circuit 5S	
	Battery pack short circuit protection recovery delay value 1		
	Battery short circuit protection value 2		
	Battery short circuit protection delay value 2		
	Battery short circuit protection recovery delay value 2		
	Battery pack anti-charge		

	protection		
Battery total voltage acquisition and protection functions	Battery pack total voltage acquisition accuracy	±0.5%	
	Battery pack load voltage acquisition accuracy	±0.5%	
	Battery pack over voltage protection	18400mV	
	Battery pack over voltage protection delay value	30S	
	Battery pack over voltage protection recovery value	18000mV	
	Battery pack under voltage protection	11000mV	
	Battery pack under voltage protection delay value	5S	
	Battery pack under voltage protection recovery value	12500mV	
Battery SOC	SOC theory estimation accuracy	±10%	
	SOC is too low alarm value	10%	
Power supply parameters	System power operating range	10-18.5V	
	Maximum charge voltage	18.5V	
	Running state power consumption	<15mA	
	Sleep static power consumption	350UA	
Communication	, RS232	Support	
0V precharge function	0V precharge function	not support	
Single set of working conditions	maximum continuous discharge current	10A	
	maximum continuous	10A	

	Charge current		
	Recommended for battery capacity	According to the software design	20Ah
Appearance	1) No component damage 2) All solder are good 3) PCM doesn't warp 4) Meet the shipping appearance standar		

Product Feature and Application

LWS® battery protection board 3S 4S 5S 10A 21V Lithium ion Battery Pack BMS is used for (5S lion) high-capacity battery pack.

Product Details

3S 4S 5S 10A 21V Lithium ion Battery Pack BMS

- Support 5S LIIION Battery Pack
- Separate monitoring of each string of cells
- 3 groups of temperature monitoring
- Over voltage protection (single cell, battery pack), under voltage protection (single cell, battery pack)
- Over current protection (charge, discharge), level short circuit protection, anti-charge protection
- Temperature protection (high temperature, low temperature)

Notes

1) Wire connection strictly according to the drawing, do not intentionally short circuit. 1) Wire connection strictly according to the drawing, do not intentionally short circuit.

2) Before charged, need to connect the cables first

3) When ten groups of batteries are connected in series, ensure that the voltage of each group of batteries voltage is the same. If not, fill each group of batteries separately before connecting them in series. In discharge tests, the group of cells with the fastest voltage drop is the differential cell.