

4S LiFePO4 BMS 12V 60A Balanced PCM



As a professional high quality 4S LiFePO4 BMS 12V 60A Balanced PCM manufacture, you can rest assured to buy 4S LiFePO4 BMS 12V 60A Balanced PCM and we will offer you the best after-sale service and timely delivery. LWS is a high-tech enterprise integrating the research and development, production, sales and client service of multi-series and power type lithium battery protection boards. Since established, we have successfully developed and produced more than 1000 types of professional hardware PCM/BMS for 1-35S battery pack, and software BMS including SMBUS, I2C, RS485, RS232 & Bluetooth. All of our products has passed CE, RoHS testing.

Product Introduction

4S LiFePO4 BMS 12V 60A Balanced PCM is mainly composed of hardware electronic components, and it protects the charging and discharging of the lithium battery pack. When the pack is fully charged, the PCM can ensure that the voltage difference between the single cells is less than the set value in order to achieve balanced voltages between the different cells. At the same time, 4S LiFePO4 BMS 12V 60A Balanced PCM will detect the over-voltage, under-voltage, over-current, short-circuit, and over-temperature status of every single cell in the battery pack to ultimately protect and extend the battery's life.

Product Parameter (Specification)

PCM Specifications For 12.8V (4S) LiFePO4 Battery Packs			
No.	Test item		Criterion
1	Voltage	Charging voltage	DC:14.8V 3.6/Cell
		Single balanced voltage	$3.6 \pm 0.025V$
2	Current	Balance current for single cell	$36 \pm 5mA$
		Current consumption	$\leq 50 \mu A$
		Maximal continuous charging current	60A
		Maximal continuous Discharging current	60A
3	Over charge Protection	Overcharge detection voltage	$3.9 \pm 0.025V$

	(single cell)	Over charge detection delay time	0.5S—2S
		Over charge release voltage for single cell	$3.8 \pm 0.025V$
4	Over discharge protection (single cell)	Over discharge detection voltage for single cell	$2.0 \pm 0.05V$
		Over discharge detection delay time	10mS—200mS
		Over discharge release voltage for single cell	$2.5 \pm 0.05V$
5	Over current protection	Over current detection voltage	0.2V
		Charge Over current detection	$140 \pm 30A$
		Detection delay time	5ms—20ms
		Release condition	Cut load, Automatic recovery
6	Short protection	Detection condition	Exterior short circuit
		Detection delay time	200—500us
		Release condition	Cut load, Automatic recovery
7	Resistance	Protection circuitry (MOSFET)	$\leq 20m\Omega$
8	Temperature	Operating Temperature Range	$-40 \sim +65^{\circ}C$
		Storage Temperature Range	$-40 \sim +125^{\circ}C$

Product Feature and Application

Our 4S For Motorcycle Starting Batteries 12V 30A Balanced LiFePO4 BMS PCM is widely used in motorcycles, farming machines, tractors, automobiles, trucks, ships, diesel generators, forklifts, bulldozers and other construction machinery to start machine ignition, instead of conventional lead-acid batteries, higher temperature range adaptability and capacity retention rate.

Product Details

This 4S For Motorcycle Starting Batteries 12V 30A Balanced LiFePO4 BMS PCM is specific for protects 3S-4S starter batteries from overcharging, over-discharging, over temperature, and short-circuit. passive balance to balancing each cell's voltage and current.

Dust and moisture proof to better protect the PCM and make life longer.

The inside of the product adopts RoHS environmental protection and 94V0 fireproof insulation protection materials, and the internal heat dissipation design is safe and reliable.

12.8V battery pack rated voltage, 14.4V battery pack full charge voltage, maximum continue current 30A.

Peak current is 200A for 6-10Seconds

Notes

- 1) Wire connection strictly according to the drawing, do not intentionally short circuit.
- 2) First connect the B- of the BMS to the total negative pole of the battery pack
- 3) The cable starts from the thin black one connecting B-, the second red wire connects the positive pole of the first string of batteries, and the next string is connected in turn to positive pole of the battery, B-, B1, B2, B3, B4; then insert the cable into the BMS;
(Please weld the wires in order and avoid pseudo solder joints.)
- 4) Connect Charger C-/Load P- with BMS C-/P- (Use larger size wires)
- 5) Connect Positive Pole: Charger C+/Load P+ with Battery Pack B+ (Use larger size wires) .