

## 3S 4A 11.1V 18650 Polymer Lithium ion BMS



LWS was a factory who established in 2013, had 10 years of professional 3S 4A 11.1V 18650 Polymer Lithium ion BMS manufacturing experiences in Shenzhen. We are certified as a High-Tech enterprise and passed ISO9001. As a professional high quality 3S 4A 11.1V 18650 Polymer Lithium ion BMS manufacture, you can rest assured to buy we will offer you the best after-sale service and timely delivery.

### Product Introduction

Our main products 3S 4A 11.1V 18650 Polymer Lithium ion BMS are from li-ion battery protection board BMS, polymer lithium-ion battery protection board BMS, lifepo4 battery BMS, from 1S 2S digital product battery PCM, to 3S-24S (3S 4S 5S 6S 7S 8S 9S 10S 11S 12S 13S 14S 15S 16S 17S 18S 19S 20S 21S 22S 23S 24S) power battery pack management system BMS.

### Product Parameter (Specification)

LWS PCM Specifications For 11.1V (3S) Li-ion Battery Pack			
Model: LWS-3S4A-540 (3S)			
No.	Test item		Criterion
1	Voltage	Charging voltage	DC:8.4V CC/CV
		Single balanced voltage	
2	Current	Balance current for single cell	
		Current consumption	$\leq 50 \mu A$
		Maximal continuous charging current	4A
		Maximal continuous Discharging current	4A
3	Over charge Protection (single cell)	Overcharge detection voltage	$4.25V \pm 0.025V$
		Over charge detection delay time	0.5—1.5S
		Over charge release voltage for single cell	$4.15V \pm 0.05V$
4	Over discharge protection (single cell)	Over discharge detection voltage for single cell	$2.70 \pm 0.08V$
		Over discharge detection delay time	10mS—150mS
		Over discharge release voltage for	$3.0 \pm 0.1V$

		single cell	
5	Over current protection	Over current detection voltage	200±25mv
		Charge Over current detection	13±3A
		Detection delay time	5mS—15mS
		Release condition	Cut load
6	Short protection	Detection condition	Exterior short circuit
		Detection delay time	200-500us
		Release condition	Cut load
7	Resistance	Protection circuitry (MOSFET)	≤100mΩ
8	Temperature	Operating Temperature Range	-20~+60℃
		Storage Temperature Range	-20~+85℃

## Product Feature and Application

- (1) High-precision voltage detection function for each cell
- (2) Overcurrent detection function
- (3) The battery can be charged and discharged by the MOS
- (4) Low current consumption.

Our 3S 4A 11.1V 18650 Polymer Lithium ion BMS is suitable for the following products: Toy's battery pack, power tool, 3S battery pack, LED light backup power, 12V electronic products, Solar Street light battery pack, and other products.

## Product Details

LWS 1S 3.7V 2A lithium ion BMS PCM 18650 Battery Protection Board PCB1S 5A 3.7V 18650 Lithium ion Battery BMS protects 1 lithium battery from overcharging, over-discharging, over-current, and short-circuit. 2S 5A PCM for 7.4V Lithium ion Battery Packs Battery BMS is suitable for 2 series 1A-5A Li-ion and LiFePO4 battery packs. 3S 4A 11.1V 18650 Polymer Lithium ion BMS connected in series from overcharging, over-discharging, overcurrent, and short-circuit.

This board is not designed for high powered tools such as portable drills and alike. This BMS protects 2 lithium batteries cells connected in series from overcharging, over-discharging, over current, and short-circuit. This board is not designed for high powered tools such as portable drills and alike.

## Notes

- 1) Wire connection strictly according to the drawing, do not intentionally short circuit.
- 2) Before charged, need to connect the cables first
- 3) When four 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.

