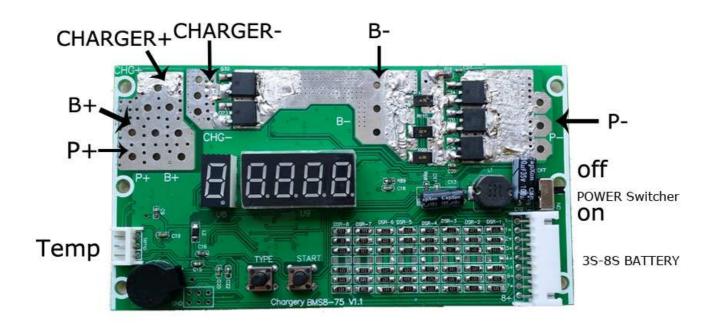


BMS8-75

Battery Management System For 3S~8S LiPo & LiFePO4



Thanks for your purchasing the intelligent BMS

Read the ENTIRE instruction manual to become familiar with the features/functions of the device before operating.

Feel free to send an email to <u>jasonwang3a@163.com</u> or call at 86 755 2643 6165 should you have any questions and suggestions.

プリネ Jason Wang



Features

BMS8-75 is a high efficiency wide input voltage BMS, the device can detect and monitor 3S to 8S LiPo and LiFePO4 cells voltage and charge or discharge current, battery temperature in a smaller size. The following are some new features:

- Detect and display pack voltage, difference of cell voltage and temperature, each cell voltage by microprocessor, 100% calibration before delivery make sure the high accuracy.
- Over Voltage protection during charge, BMS8-75 will cut off charge and sound warning by beeper
- Under Voltage protection during discharge, BMS8-75 will cut off discharge and sound warning by beeper
- Over temperature protection during charge or discharge, BMS8-75 will cut off charge or discharge and sound warning by beeper
- Over current and short circuit protection,
 - Cut off discharge when 75A to 300A discharge current for different continuous time. It means the device or Vehicle don't lose power under 300A, such as the e-Scooter can be powered at 100A for 1 second at least, and cut off, then resume automatically.
 - 300A or more when short circuit, cut off discharge automatically and resume 10 seconds later.
 - Dual protection by program and hardware, more reliable.
- Low Quiescent current design, BMS8-75 draw current from all cells to keep the cell voltage balanced and minimize the power consumption in stand-by.
- AL alloy case
- Approved by CE
- 12 months warranty

Application

- E-Bike, E-Scooter
- Device and machine powered by battery

Specification:

- Battery Types: LiPo and LiFe cells
- Cells Count: 3S 8S
- Maximal Voltage on P+ and P-: 34V
- Maximal Voltage on B+ and B-: max. 34V
- Charge Current: up to 50A
- Discharge current: **0~75A** continue, **300A** burst
- Current drain for balancing: 300mA/cell.
- Balance accuracy: <10mV</p>
- Over Charge Protection Voltage: 4.20V/cell (LiPo), 3.75V/cell(LiFe)

www.chargery.com page 2 total 6

Balanced



Over Charge Release Voltage: 4.15V/cell (LiPo), 3.45V/cell(LiFe)

Over Discharge Protection Voltage: 3.0V/cell (LiPo), 2.0V/cell(LiFe)

Over Discharge Release Voltage: 3.3V/cell (LiPo), 2.30V/cell(LiFe)

Over temperature Protection: 85°C , 50°C resume automatically

Voltage display resolution: 0.001V

■ Voltage Detection precision: 0.005V

Compact size: 126 x 67 x 15mm

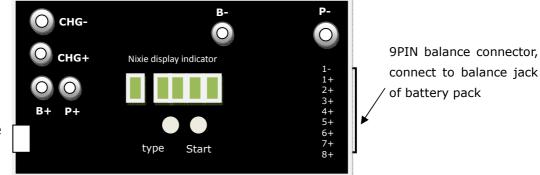
Weight:100g

Operation

1. Connect the battery pack positive and negative to the B+ and B- port on the BMS8-75

2. Connect BMS8-75 to battery balance wire by adapter board

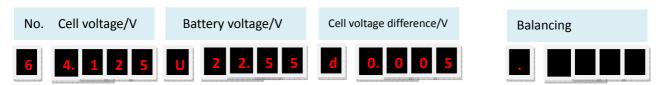
- 3. Connect the Charger positive and negative to the **CHG+** and **CHG-** and MOTOR to the **P+** and **P-** port on the BMS8-75
- 4. Mount the temperature sensor on the middle of battery pack where the temperature is the highest
- 5. Press TYPE button confirm battery type.
- 6. Press START button power on the BMS8-75
- 7. 2 seconds later, the device display pack voltage, difference of cell voltage and each cell voltage, all data will be displayed in turn and cycle, press START button turn on or turn off the display.



Temperature sensor

Chargery BMS8-75 can balance any 3S to 8S LiPo and LiFe battery pack while charging or discharging.

3 cycle display later, the device will turn off the display automatically to save the battery energy, press START resume display.



During balancing, when any cell voltage under 3.0V (LiPo) or 2.0V (LiFe), BMS8-75 will alarm and stop balancing.

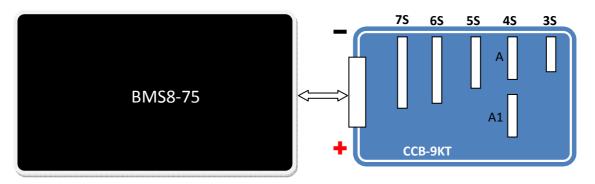
When the battery resumed the balanced status, the beeper will sound for 10times, and display as right.

After balanced, BMS8-75 will continue to detect and keep the battery balanced.

www.chargery.com page 3 total 6

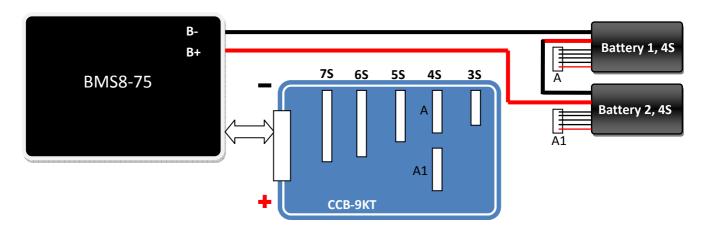


Adapter board connection diagram



NOTES:

- If only one battery pack in your system, please connect the battery to one of the socket 7S, 6S, 5S, 4S, 3S or 2S. 8S battery can plug into the BMS8-75 directly.
- For two 4S battery packs, please connect the battery1 to socket A first, and then plug the battery2 to socket A1. It is as the following diagram.
- Each SOCKET has the positive and negative, please make sure the battery polarity is accordance with the socket.



During the charge, the BMS8-75 detect and balance each cell.

The charging current varied depending on the charger.

During the charging process, when any cell voltage under 3.0V (LiPo) or 2.0V (LiFe), BMS8-75 will alarm and keep charging. When any cell voltage over 4.20V (LiPo) or 3.75V (LiFe), the unit will alarm and cut-off charging, the balancing will go on.

www.chargery.com page 4 total 6



Environment Requirements

■ Ambient Temperature : $-10-45^{\circ}$ C ■ Ambient Humidity : 5%-95%■ Storage Temp. : -20° C-- 70° C ■ Storage Humidity : 30%-90%

Packaging Information

BMS8-75 base unit: 1pcsTemperature sensor: 1pcs

Manual:1pcs

Optional accessory

Adapter wire :CEH-9, 1pcsAdapter board:CCB-9KT, 1pcs





Error Information

When the following error events trigged, the beeper will sound for 10 seconds and error information will be displayed.

Display and alarm	Description	Solution	
Buzzer beeps for 10 times and	Balance process is done		
the dot OFF			
Fun and because suickly	Discharge current over 100A	Disconnect the BMS8-75, and	
Err and beeps quickly	or Short circuit	check with connection.	

Warnings

- Lithium polymer batteries can be a fire hazard if charged or discharged improperly.
- Never Charge/Discharge Lithium Batteries unattended
- Keep Lithium batteries, Charger, and BMS8-75 AWAY FROM CHILDREN and PETS!
- Never attempt to connect an impact-damaged (crashed) battery pack



www.chargery.com page 5 total 6



Packs which are chronically far out of balance may be damaged and should be discarded

Warranty and Service

Chargery Power Co., Ltd. as manufacture of BMS, charger and power supply warrants BMS8-75 to be free of defects in material and workmanship. This warranty is effective for 12 months from date of purchase. If within the warranty period the customer is not satisfied with the products performance resulting from a manufacturing defect, the accessory will be replaced or repaired. This warranty does not cover the damage due to wear, misuse, incompetent handling or using of incorrect accessories.

Related parts

MODEL	DESCRIPTION	COMMENTS	
BMS8-150	BMS for 3-8S lipo/LiFe cells.	80A charge, 150A discharge continuous, and 600A	
		burst	
BMS8	BMS for 3-8S lipo/LiFe cells.	25A charge, 25A discharge continuous, and 100A burst	
Service of the servic		Anso Company of the C	



Chargery Power Co., LTD.

Tel: 86 (0)755 2643 6165, fax: 86 (0) 755 2641 2865

Email: jasonwang3a@163.com Homepage: www.chargery.com







page 6 total 6 www.chargery.com