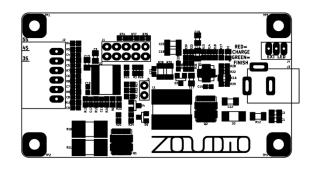## ZOUDIO BMS345 module

- Supports 3, 4 and 5 cells lithium-ion packs
- Under/overvoltage protection
- Overcurrent/short-circuit protection
- Cell balancing
- MPPT charging circuit can be powered by a regular power supply or a solar panel
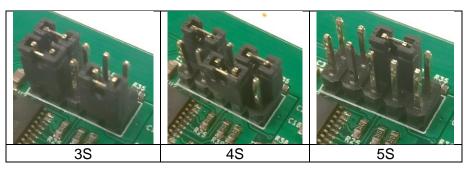
Package contents

- 1x ZOUDIO BMS345 module
- 1x 5.5x2.1mm female DC connector
- 8x M3 ring terminals
- 1x JST-XH 6P cable
- 1x JST-XH 6P connector
- 1x JST-XH 5P connector
- 1x JST-XH 4P connector
- 1x heat shrink

Configuration

- Never change configuration while the module is powered
- Use the jumper to set the configuration of your battery

| 3S | 4S | 5S |

Connection

Look at the backside of the PCB for instructions:

-Connect the top cell of your pack to BATT+ and the bottom cell to BATT-

-With 4S packs, do not connect CELL5. With 3S packs, do not connect CELL4 and CELL5

- For spot-welded packs, the wire can be soldered to the tabs.
- For Vruzend packs, the ring terminals can be soldered to the wires. The unused wires of the 6P cable can be cut off or left unconnected.
- For RC lipo packs, the appropriate JST connector should be used. Power connectors can be cut off to solder the wire directly to the board, but it is recommended to use female to bare wire and bare wire to male adapters.

It is recommended for all applications to use the provided heat-shrink over the PCB to avoid accidental shorts.

Specifications:

- Overvoltage: 4.2V ±10mV, delay 1S
- Undervoltage: 2.9V ±18mV, delay 1S
- Cell balancing   4mA per cell
- Maximum continuous discharge: 10A
- Overcurrent protection: 15A, delay 180mS
- Short-circuit protection: 30A, delay 1mS
- Recovery after fault event: Attach charger
- Open cell/wire detection: 4.5S delay
- Power consumption: 8µA typical
- Charging current: 1A
- Charging voltage: 4.05V per cell
- MPPT voltage: 17.5V
- Operating temperature: -40 to 85 °C
- Dimensions (WxHxD):   71x38x15mm

	Supported charger input		
	19V PSU	24V PSU	Solar panel
3S	✔	✔	✔
4S	✔	✔	✔
5S	✖	✔	✖

Disclaimers

- Incorrect use of this product will void your warranty
- For questions about the product contact ZOUDIO

Contact

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Revisions

Date	Revision	Change
16-07-19	1	Document release