

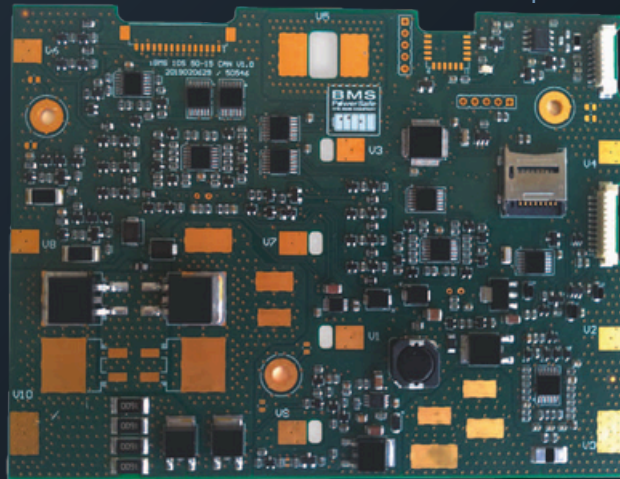
10S CAN BMS PowerSafe

30A

CAN BUS

Powerbox Inside

Non contractual photo



➤ eMobility



Technical Description

10S CAN

Cells management

- Management of 10 lithium cells in series, compatible with all cell technologies (NMC, LiFe, LiPo...)
- Management of 1 NTC temperature sensor
- Measurements accuracy:
 - Cell voltages: ± 40 mV
 - Temperatures: $\pm 1^\circ\text{C}$

* Factory setting

Protections

- Overdischarge, overcharge, overtemperature protection
- Over-current software protection :
 - several configurable levels during charge and discharge phases
- Short circuit hardware protection (electronic fuse) :
 - Above 40 A for more than 100 μs

Balancing

- Passive balancing with 35mA of bypass current

Power Box

- Integrated power box with MOSFET technology :
 - 15 A continuous current in discharge
 - 30 A maximum peak current in discharge
 - 17 A continuous current in charge
- Bidirectional current measurement with $\pm 5\%$ of accuracy
- Precharge circuit included on the BMS

Smart functions

- SOC and SOH estimation
- Management of a switch to wake up the battery
- Automatic detection of the charger connection with wake up of the BMS
- Advanced self-diagnostic of the board
- Communication by CAN bus 2.0B
- Advanced supervision software
- Black box integrated with defaults history storage, life counters and timestamp
- BLE : Bluetooth Low Energy / RFID (optional)
- Data saving on SD Card

Power supply/consumption

- Supply of the BMS directly on the battery pack
- Very low consumption in sleep mode : $< 60 \mu\text{A}$

Mechanical format

- 133 mm x 101 mm x 7 mm