

8-18S BMS PowerSafe

750A

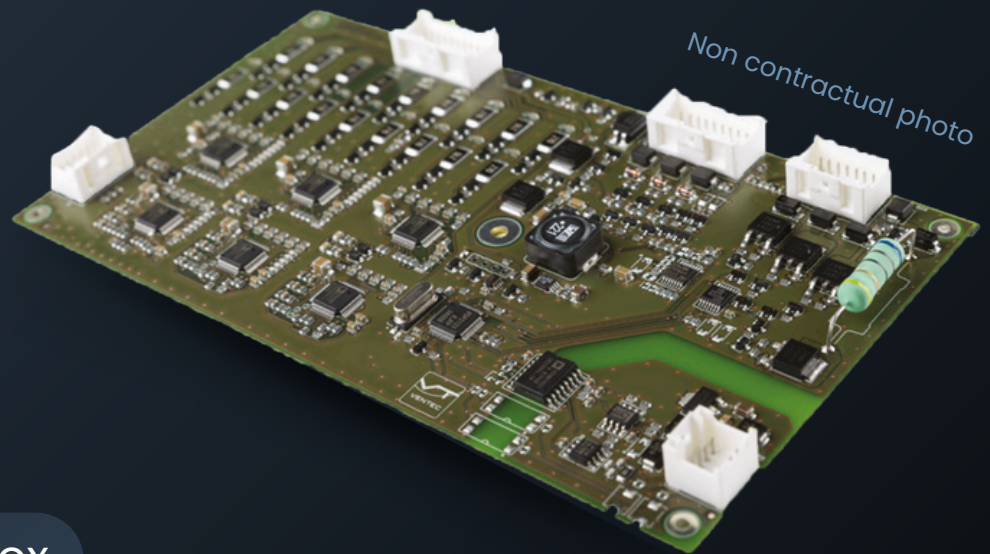
CAN BUS

EN61508

Parallelizable

SIL2 compliant

External Powerbox



➤ eMobility

➤ Automotive



Cells management

- Possibility to connect in series several BMS in order to manage a battery pack with a voltage up to 1000 Volts
- Management of 8 to 18 lithium cells in series* compatible with all cell technologies (NMC, LiFe, LiPo,...), +/- 5 mV of accuracy.
- Management of 6 NTC temperature sensors :
 - 3 digital measurements used by the software
 - 3 analogic measures used by the hardware redundancy

* Factory setting

Protections

- Hardware redundancy for voltage and temperature measurements in order to reach a high level of safety (SIL2 of EN61508 standard)
- Overcharge and undercharge, tunable by software
- Overtemperature and undertemperature, tunable by software
- Overcurrent : 2 levels in discharge, 1 level in discharge tunable by software
- Short circuit hardware protection (resettable electronic fuse)

Balancing

- Passive balancing with a 150 mA bypass current per cell (on the BMS)

Power Box

- Bidirectional measurement of the battery current with a hall effect sensor
- Charge and discharge management
- Power box management up to 750 A :
 - Command of an external electromechanical contactor
 - Command of a precharge circuit (included on the board)
 - Possibility to control two additionnal contactors

Smart functions

- SOC and SOH calculation
- Advanced self-diagnostic of the board
- Communication by CAN bus 2.0B (opto-isolated)
 - Motor controller management by CAN bus
 - Charger management by CAN bus
- Advanced supervision software

** Requires an external 12V power supply

Power supply/consumption

- Supply of the BMS directly on the battery pack
- Low consumption in standby mode: < 500 μ A

Mechanical format

- 100 mm x 180 mm x 12 mm
- Can be potted to be used in harsh environment