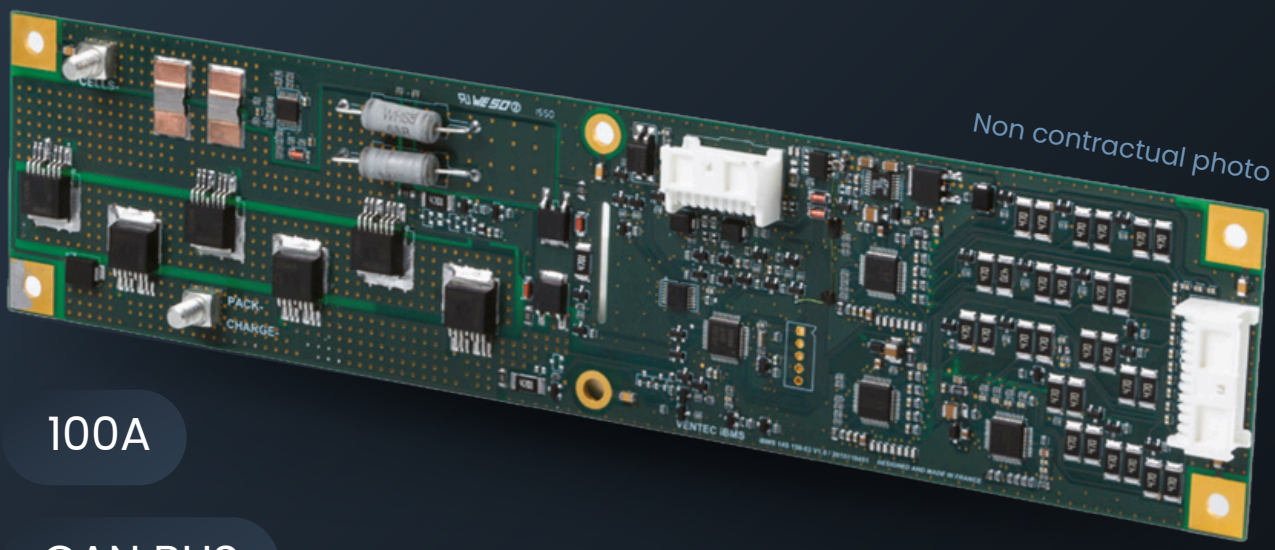
Product Sheet

14S BMS PowerSafe



Non contractual photo

- 100A
- CAN BUS
- Parallelizable
- Powerbox Inside

eMobility

Energy storage

Technical Description

14S CAN

Cells management

- Management of 14 lithium cells in series, compatible with all cell technologies (NMC, LiFe, LiPo…)
- Management of 3 NTC temperature sensor
- Measurements accuracy:
  - Cell voltages: +/- 5 mV
  - Temperatures: +/- 1°C

Protections

- Overdischarge, overcharge, overtemperature protection
- Over-current software protection :
  - several configurable levels during charge and discharge phases
- Short circuit hardware protection (electronic fuse) :
  - Above 110 A for more than 100 µs

Balancing

- Passive balancing with 150 mA of bypass current

Power Box

- Integrated power box with MOSFET technology :
  - 53 A continuous current in discharge
  - 100 A maximum peak current (500 ms) in discharge
  - 53 A continuous current in charge
- Bidirectional current measurement
- Precharge circuit included on the BMS
- Charge and discharge management

Smart functions

- SOC and SOH estimation
- Possibility to connect 2 external LEDs to have a visual HMI
- Wake up using a switch
- Automatic BMS wake up on detection of the charger connection
- Communication by CAN bus 2.0B
- External communication via CAN bus 2.0B
- Auto diagnostic of the BMS
- Black box integrated with defaults history storage and life counters
- Possibility to connect up to 10 packs in parallel
- Hot swap technology

Power supply/consumption

- Supply of the BMS directly on the battery pack
- Very low consumption in deep sleep mode : < 50 µA

Mechanical format

- 280 mm x 65 mm x 17 mm