BMS
Safe
THE BMS COMPANY

MOBY 8-18S BMS PowerSafe

150A

24-76V

CAN BUS

Parallelizable

Powerbox Inside

ISO26262 - ASIL B

Non contractual photo
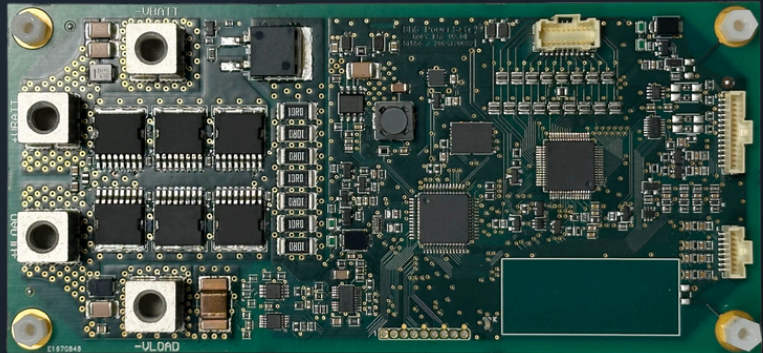
▶ eMobility

▶ Energy storage

ENERGY STORAGE

Technical Description

Cells management

- Adjustable between 8S and 18S batteries
- Measurement accuracy : +/- 2 mV
- Up to 4 cell temperature sensors
- Measurement accuracy : +/- 1°C
- Compatible with NMC and LFP chemistries
- Passive balancing
- Up to 300 mA per cell

Protections

- Tunable by software
  - Overvoltage
  - Undervoltage
  - Overtemperature
  - Under temperature
  - Overcurrent
- Short-circuit
  - Fixed Hardware setting

Communication

- Through CAN bus up to 1 Mbps
- Possibility to update the firmware via CAN bus
- Diagnostic through UDS
- Possibility to add CAN FD support (not standard feature)

Smart functions

- State Of Charge (SOC)
- State Of Health (SOH)
- Maximum allowed current in charge and discharge
- State Of Energy (SOE)
- Remaining range estimation (for vehicles)
- Black box on the BMS for data logging and errors recording
- BMS auto diagnostic to detect and mitigate failures
- Possibility to connect up to 16 batteries in parallel
- Possibility to wake-up the battery via CAN

Future regulations compliant

- Visual and audio warning in case of detection of thermal runaway
- Data logging

Developed following **ISO 26262** process for an **ASIL B** equivalent level

| Overcharge | Over discharge | Overtemperature | Under temperature | Overcurrent |