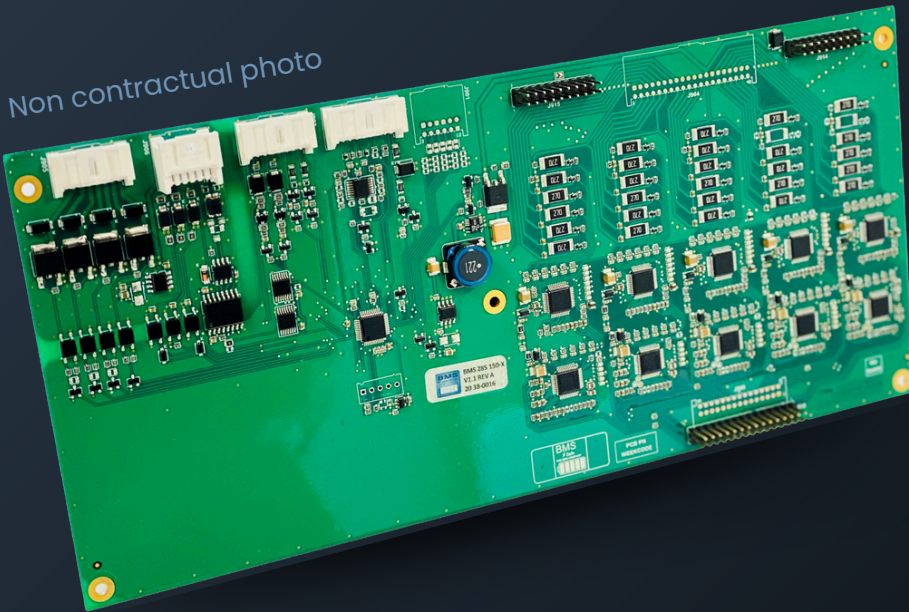


Product Sheet



19-30S BMS PowerSafe



750A

CAN BUS

EN61508

Parallelizable

SIL2 compliant

External Powerbox

➤ Automotive

➤ Energy storage



Cells management

- Management of 19 to 30 lithium cells in series* compatible with all cell technologies (NMC, LiFe, LiPo,...)
- Management of up to 15 NTC temperature sensors :
 - 10 digital measurements used by the software
 - 5 analogue measurements used by the hardware redundancy
- Measurements accuracy :
 - Cell voltages: +/- 5 mV
 - 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 (equivalent to 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
Requires contactors and hall effect current sensor
- Charge and discharge management
- Power box management up to 750 A :
 - Command of up to 4 external 12V electromechanical 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
- Black box integrated with defaults history storage and life counters
- Possibility to connect several packs in parallel using an external EMS (small additional board)

** 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

- Actual format : 270 mm x 125 mm x 12 mm
(possible in 210 mm x 125 mm x 12 mm)