

Battery Management System

ELINTA MOTORS BMS-V1.5

2019-01-03

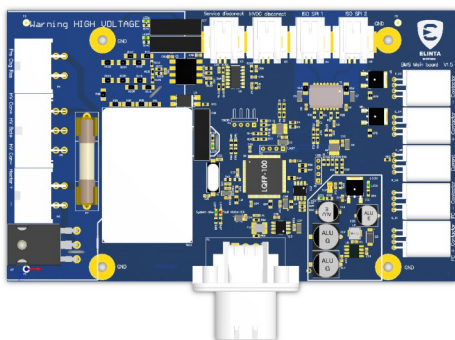


Robust automotive battery management system with integrated ECE R-100 compatible leakage measurement and CCS fast charging control.

Controlled by STM32 microcontroller and LTC6811 multi-cell battery monitors. Battery management system is based on central module and daughter boards for cell modules configuration.

- Electric/Hybrid vehicles
- Power Banks
- Industrial UPS
- Heavy Machinery
- Up to 800 V
- Up to 1000 A

Key Features



Master Unit

Master Unit
172 x 104 x 40 mm

- Typical working voltage: 12 V to 24 V
- Minimum voltage: 8 V
- Normal operation current: <600 mA
- Peak current: 5 A
- Standby current: <20 mA

- Up to 216 cells in series (800 V).
- 12 Cells per module.
- Dual range current sensor.
- CAN-USB user interface with wide parameter configuration.
- Cell voltage measurement 1.0 V to 5.0 V.
- Balancing current 160 mA.
- 500 Ohm/V leakage protection.

Cell Module

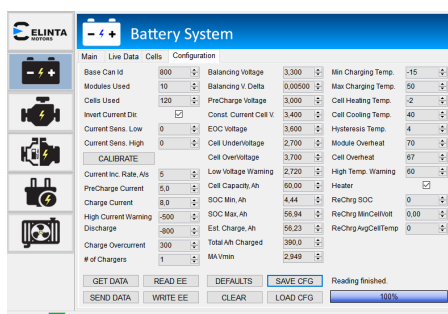
- Cell module standby current: < 5 μ A
- < 0.025 % Voltage measurement error
- Dual temperature sensors – 50 C to +150 C
- iso-SPI Daisy Chain communication.
- 160 mA passive balancing.

Protection Features

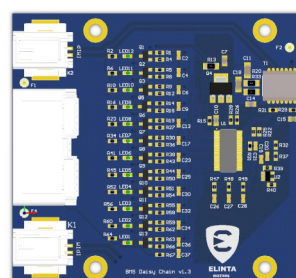
- Over/Under-voltage
- Over/Under temperature
- Overcurrent / Short circuit
- Battery box insulation fault
- HVIL detection
- Humidity detection

Other Features

- Dual power contactor control
- Pre-charge control
- Thermal management
- CCS Fast charge control
- CAN-bus charger control
- Smart diagnostics and logging.



CAN- USB Diagnostics
Windows App



Cell Module
87 x 80 x 15 mm