

n-BMS release notes



New in this release:

- ✓ Support for the 1810 CMU board.
- ✓ Support for advanced balancing using PWM.
- ✓ Leakage Monitoring control – on/off.
- ✓ Open wire detection does not result in over-/under-voltage errors.
- ✓ Support for external CAN current sensor with 10 ms broadcast time interval.

BMS Creator:

- ✓ Include the new firmware for boot loading.
- ✓ In case of open wire, the voltage is displayed as “INVALID”.

n-BMS version 2.5.6 and BMS Creator 2.5.6.0

ABOUT THIS RELEASE

The n-BMS v2.5.6 release includes changes for the MCU application firmware and the supporting Creator PC tool.

FIRMWARE FEATURES

This release includes fixes for various reported bugs and new features.

The 1810 CMU (CMU version 21 & 22) is now fully supported as well as the advanced PWM balancing algorithm.

- New config. value: Maximum balancing PWM duty cycle
- New config. value: CAN request balancing pwm duty cycle ID Map ID

The leakage monitoring introduced in 2.5.2 can now be enabled and disabled with a CAN frame.

- New config. value: CAN request disable leak ID Map ID

An external CAN current sensor broadcasting every 10 ms is now supported. The samples are stored and every 100 ms an average is calculated.

When detecting an open wire, the n-BMS no longer generates an over- or under-voltage error. In the Creator the voltage is displayed as “INVALID”.

- New error code: 2060 – Open wire detected

This error code must be setup to open the contactor.

Known issue:

The fully charged condition can occur at a voltage level equal to the configured “Cell voltage target” minus the configured “Charge complete deadband V”. With e.g. a deadband of 300mV and a target voltage of 3.6V can the charge complete occur when all cells are at 3.3V.

Workaround: Set the “Charge complete deadband V” as small as possible. Approx. 100mV is recommended. Also secure that balancing is activated to get cell voltages inside the charge complete deadband
The issue is expected to be fixed at the next release 2.5.7.

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