

n-BMS release notes



New in this release:

- ✓ GPIO access and control via CAN and/or Custom Data Processing
- ✓ Configuration identifying via CRC and user ID
- ✓ CANopen support for the i-CAN channel
- ✓ BMS set time and data function
- ✓ Trial function for dynamic OCV-SOC determination
- ✓ Pre-charge abort function
- ✓ Bugfix of error reported for mismatching number of connected CMU's

BMS Creator:

- ✓ Access to additional BMS data
- ✓ Converting function for older configuration files

n-BMS version 2.4.0

ABOUT THIS RELEASE

The n-BMS v2.4.0 release includes changes for the MCU firmware and associated Creator PC support tool.

FIRMWARE FEATURES

New GPIO access and control is added. Now it is possible to read GPIO state and store it in a configured BMS ID data location. GPIO outputs can be configured to activate output from received CAN data or internal BMS ID data like e.g. Custom data Processing results.

The BMS configuration CRC value together with a freely chosen ID number is accessible via the PC Creator tool to identify correct configuration in the BMS.

CANopen support via the BMS i-CAN connection:

- ✓ SDO access to all BMS data
- ✓ 40 TPDO's and 10 RPDO's, all dynamical programmable
- ✓ TIME support for setting of BMS time and date.
- ✓ EMCY support for error reporting
- ✓ CANopen node ID is configurable and also possible to set via GPIO inputs

The BMS time and data is set-able to match real time and date via CANopen TIME function. The BMS use e.g. time and date stamps for error logging.

Trial function for dynamic OCV-SOC added. The function makes it possible to do SOC calculations based on OCV values during battery operation with current floating in or out of the battery.

Bugfix of *ERROR_SYS_NUM_CMU_MISMATCH* that in the previous version required re-cycle of BMS power before resetting of the error in case of two or more connected CUM boards.

Pre-charge abort function stops the contactor closing sequence and open all contactors when request for load or charge active mode stops.

The PC Creator includes a new function in the live view section where BMS data can be watched.

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