

# n-BMS release notes

## n-BMS version 2.3.1



### New in this release:

- ✓ Isolation monitoring and leak detection between battery and chassis ground.
- ✓ Auto-off for saving battery power.
- ✓ CAN activation of cell voltage balancing.
- ✓ Configurable time for contactor feedback status signal.
- ✓ Optimised number of CAN messages used in case of error reporting.
- ✓ Support of new CMU variant

### BMS Creator:

- ✓ Converting function for older configuration files.
- ✓ Live view of BMS selectable data.

## ABOUT THIS RELEASE

The n-BMS v2.3.1 release includes changes for the MCU firmware and associated Creator PC support tool.

## FIRMWARE FEATURES

A configurable isolation level is monitored, and error reported in case of a too low isolation resistance is measured between the high voltage battery and the MCU GND power in.

The configurable Auto-off prevent unnecessary battery draining where the BMS power is turned off in case of low current consumption, low cell voltage, missing charge current and/or reaching a full charged battery state.

Settings for support of balancing activation via CAN.

Added configurable timers for slower contactor monitoring feedback signals.

The use of CAN messages is optimized in order to reduce the number of used CAN messages for error reporting.

The CMU hardware variant with reduced number of temperature sensor inputs is supported.

The PC Creator supporting tool includes function for converting older configuration files from previous version to the newest v2.3 configuration file type.

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

## RELEASE CONTENTS

1. File 'SETUP BMS Creator 2.3.1.exe' (BMS firmware embedded)
2. Manual n-BMS v2.3.1

**On behalf of the Lithium Balance Support and R&D team**

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