

s-BMS v6.16.0 release note

Please note that the PC Diagnostic v6.16.0 software only is compatible with the firmware with similar firmware version numbers because of the new BMS password function.

v6.16 contains changes to the BMCU and PC Software compared with the previous version. **v6.16 firmware should be used exclusively on a system, do not mix other firmware/software versions with v6.16.**

The PC Tool “Diagnostic software” is normally supplied as a node locked PC application. Alternatively, the PC Tool is supplied on a license USB dongle and can only be started with this dongle connected to the computers USB port.

The firmware version numbers for this release is:

Unit:	Firmware version:	Boot loader version:
BMCU	20000.0A.06.c.016	7
SUB	20000.0A.06.c.016	2, 1 or -1
LMU	20000.0A.06.c.016	2, 1 or -1
PC Tool	20000.6.16.0	Not applicable

s-BMS firmware changes in this release:

BMS FOCUS	CORE BENEFIT	TECHNICAL DESCRIPTION
Performance	Password protection against unauthorized access	The BMS includes a protection against unauthorized access to BMS configuration and bootload of firmware. A freely chosen password stored in the BMS must be known by the user of the Diagnostic PC tool before the configuration can be read from or changed in the BMS. Also firmware update/downgrade is blocked by the password protection.
Performance	Maintenance charge	The BMS includes a configurable function for maintenance charge. Previous versions are starting to re-charge a fully charged battery when the first cell gets below the configured “Charger off window”. With the maintenance function are two voltage limits for start and stop of maintenance charge possible to configure. The maintenance charge function takes effect after the battery is fully charged. A new full charge operation is achieved by reentry to charge mode from idle or discharge mode or BMCU power re-cycle.
Performance	Improved post processor functions	The postprocessor function has added new operators like e.g. comparing of two values for improved performance and easier programming of system specific functions.
Performance	Improved I/O functions	Previous versions only had one postprocessor result value for control of one of the three programmable digital I/O’s. This version has up to three digital I/O outputs that can be controlled by postprocessor results. The digital outputs are active when the associated postprocessor results are different from zero.
Bug fix	Auto reset of short circuit error	The function for auto reset of short circuit error and associated time delay for opening of contactors had a bug in v6.15 that could cause opening of contactors. This bug has been fixed.
Bug fix	SOH correctness	The SOH% was wrongly calculated when the “Calculated total capacity” gets above 653Ah for the first 60 seconds after BMCU power on. This bug has been fixed.

On behalf of the R&D and support team at LITHIUM BALANCE