

INTRODUCTION

This publication provides a historical summary of the changes made to the application firmware of the following accessory modules:

- AEM-2020 Analog Expansion Module
- CEM-2020/CEM-2020H Contact Expansion Module
- LSM-2020 Load Share Module
- VRM-2020 Voltage Regulation Module

Revision history information for BESTCOMSP^{Plus}® software is provided in the *BESTCOMSP^{Plus} Software Revision History* document.

This information is provided for confidential use with the mutual understanding that it will not be used in any manner detrimental to the interests of Basler Electric.

AEM-2020

The revision history for the AEM-2020 application firmware is provided as follows. Revisions are presented in reverse chronological order.

Revision History

Firmware Version, Date	Changes
2.00.08, Jul 2023	<ul style="list-style-type: none">• Initial release for version 2 hardware.
1.00.08, Dec 2021	<ul style="list-style-type: none">• Changed DGC and DGC I/O module communications to use address specific communications broadcast rather than global broadcast to prevent engine ECU error codes.
1.00.06, Oct 2016	<ul style="list-style-type: none">• Reduced CAN bus disturbances during baud rate discovery• Inhibited negative acknowledgements when non-implemented parameters are received with a global address destination.
1.00.05, Mar 2013	<ul style="list-style-type: none">• Corrected non-recoverable state that may occur when control power is lost during initial firmware upload.

CEM-2020

The revision history for the CEM-2020 and CEM-2020H application firmware is provided as follows. Revisions are presented in reverse chronological order.

Revision History

Firmware Version, Date	Changes
2.01.08, Jul 2023	<ul style="list-style-type: none">• Corrected an error causing intermittent communication errors during firmware upload.
2.01.07, Mar 2023	<ul style="list-style-type: none">• Initial release for version 2 hardware.
1.01.07, Dec 2021	<ul style="list-style-type: none">• Changed DGC and DGC I/O module communications to use address specific communications broadcast rather than global broadcast to prevent engine ECU error codes.

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Firmware Version, Date	Changes
1.01.05, Oct 2016	<ul style="list-style-type: none"> Reduced CAN bus disturbances during baud rate discovery. Inhibited negative acknowledgements when non-implemented parameters are received with a global address destination.
1.01.04, Mar 2013	<ul style="list-style-type: none"> Corrected non-recoverable state that may occur when control power is lost during initial firmware upload.

LSM-2020

The revision history for the LSM-2020 application firmware is provided as follows. Revisions are presented in reverse chronological order.

Revision History

CAN/Ethernet Firmware Version, Date	Changes
1.05.02, Dec 2021	<ul style="list-style-type: none"> Changed DGC and DGC I/O module communications to use address specific communications broadcast rather than global broadcast to prevent engine ECU error codes.
1.05.00, Jul 2018	<ul style="list-style-type: none"> Improved Ethernet communications.
1.04.00, Nov 2014	<ul style="list-style-type: none"> Reduced CAN bus disturbances during baud rate discovery. Inhibited negative acknowledgements when non-implemented parameters are received with a global address destination.
1.03.02, May 2014	<ul style="list-style-type: none"> Corrected the potential for resets during high Ethernet traffic while connected with BESTCOMSPi^{us}® via Ethernet. Prevented system manager from starting units when paralleled with mains Updated sequencing to permit conflicting sequencing IDs.
1.03.01, Mar 2013	<ul style="list-style-type: none"> Corrected non-recoverable state that may occur when control power is lost during initial firmware upload. In test mode, corrected display of system table in BESTCOMSPi^{us}®.
1.03.00, Feb 2013	<ul style="list-style-type: none"> Added support for var sharing over Ethernet. Corrected start/stop sequencing timers when there are no additional units to stop or start. Added a setting for selecting the LSM-2020 auxiliary input.

VRM-2020

The revision history for the VRM-2020 application firmware is provided as follows. Revisions are presented in reverse chronological order.

Revision History

Firmware Version, Date	Changes
1.00.00, Oct 2016	<ul style="list-style-type: none"> Initial release