Product Bulletin

Li-ion Tamer Gen3 v1.22.0 Firmware Release Notice – Global

December 2024

Overview

Following the release of *Li-ion Tamer Gen3*, Li-ion Tamer will release software / firmware updates and patches. See below for details regarding the latest production firmware release and affected SKUs.

The primary objective of this release is to address issues that had been identified with the CANbus communication between Hubs and Sensors, resulting in an error code 207. It was found that systems with 10 or more sensors connected to a hub can experience issues where either the hub or sensor(s) fail to start up properly, or where they experience intermittent communication issues during operation.

It is recommended, but not necessary, that all Gen3 systems receive this latest firmware as it includes several improvements to the CANbus communication. The most critical systems to update are those that are currently experiencing communication issues or those that have 10+ sensors connected to a hub.

For further details and firmware upgrade instructions refer to the Firmware Update Guide (Doc. No. 3050) For the firmware update files, please contact a Li-ion Tamer representative.

Li-ion Tamer Gen3 Hub Firmware Release

Affected PNs: 261003

Version: v1.22.x (where x = 0 indicates standard production release, and x ≠ 0 indicates different manufacturer-set detection sensitivity settings)

Date: December 16th, 2024

Compatibility: Not backwards compatible with prior sensor firmware version (v1.20.3). Requires an update of sensor firmware when a new hub is installed as a replacement.

Notes:

- Hub latches sensor count value after initial boot sequence. Only unlatches if terminator is removed, chain is broken, or hub is power-cycled.
    - Improves CANbus communication by preventing hubs from attempting to reidentify their sensor count during continuous operation.
- Implemented new method for sensor count identification that has improved immunity to analog noise and EMI.
- Enabled the ability to both upgrade and downgrade hub firmware version.

Li-ion Tamer Gen3 Sensor Firmware Release

Affected PNs: 261001, 261002

Version: v1.22.0

Date: December 16th, 2024

Compatibility: Backwards compatible with prior sensor firmware version (v1.20.3) and hub firmware version (v1.20.8).

Notes:

- Sensors latch their CANbus ID during the initial boot sequence. Only unlatch their CANbus ID if power-cycled.
    - Improves CANbus communication stability by preventing sensors from attempting to reidentify their CANbus IDs during continuous operation.

- LED remains off during initial boot sequence (first few seconds after power on).
    - Improves reliability of CANbus identification process during startup.

- LED brightness reduced for alarm and normal conditions. Alarm LED indication is also changed to a "blip".
    - Reduces power consumption on the sensor chain to improve CANbus communication robustness.

- Implemented new method for CANbus identification that has improved immunity to electrical noise and interference.

- Reduced the threshold of the "+12V power supply voltage low at sensor" error (code 201) to 8.0V.

Contact

Please contact a Li-ion Tamer representative for any other queries in relation to this notice.