# **Product Bulletin**



# Li-ion Tamer Gen3 v1.23.0 Firmware Release Notice – Global

February 2025

# **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 expand the prior firmware modifications made during version v1.22.0 to the PoE version of the hub. Those changes are also noted below.

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, 261004

Version: v1.23.x (where x = 0 indicates standard production release, and  $x \ne 0$  indicates different manufacturer-set detection sensitivity settings)

Date: February 24th, 2025

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. Is backwards compatible with sensor firmware version v1.22.0.

Notes:

#### New Modifications in v1.23.x:

- Error 203 (sensor reboot) error code remains active while sensors are in their warm-up state. Clears when the sensor resumes normal operation, indicating they are ready to detect gas.
- Sensor count identification offset value is modified for further enhanced detection of sensor quantity.

#### Prior Changes Implemented in v1.22.x:

- 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: v1.23.0

Date: February 24th, 2025

Compatibility: Backwards compatible with prior sensor firmware versions and hub firmware versions.

Notes:

#### New Modifications in v1.23.0:

• LED anomaly that occurred when sensors are indicating their position on the chain is corrected. Prior behavior had the LEDs alternate between displaying the sensor position and the green blip (normal state).

## Prior Changes Implemented in v1.22.0:

- 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.