Notice of Changes Coming to EN1221S and Derivative Products

May 12, 2025

Products within the family of SKU's utilizing the EN1221S platform are being updated, with inventory flowing through in the following weeks. The changes are made with the purpose of eliminating non-recoverable battery drain in the field and increasing shelf life for product due to drain on the internal battery. **Date codes exhibiting these changes will start at 25092, in YYDDD format.**

In firmware, we're utilizing our ability to test voltages from both the internal battery and the coin cell to determine whether a low-battery device can exit *storage mode*. In the current product iteration, a device that has been put into storage mode (low battery mode in the field) would still "wake up" and transmit an alarm when the button was pressed. This transmission was draining the internal battery to an unrecoverable state over time when the coin cell battery was not replaced. With this new release, the pendant will transmit a one-time *low internal battery message* on STAT0/Bit7 with high priority. Each subsequent message will be transmitted with this latched condition. If the low battery condition persists, the device will shutdown once the internal battery reaches a critical threshold, sending a single device shutdown message with high priority on STAT0/Bit7 and STAT0/Bit2 before entering low-battery mode. By protecting the charge within the internal battery, we ensure the device is recoverable with a "good" (sufficient voltage upon testing) coin cell, which can be placed into the enclosure and powered on with a button press. To our customers and your users, the device will appear dead but be perfectly recoverable with a new battery – this brings the product's function in-line with expectations. In edge-cases where the coin cell replaced has lower voltage than anticipated, for any number of reasons, the device may re-enter storage mode sooner than expected. It is recommended to only use brand new coin cells as you can, Inovonics recommends genuine Panasonic CR2032 batteries for applications utilizing the EN1221S platform.

Inovonics partners and integrators do not need to change any programming in their systems to begin taking advantage of these improvements. At a process level, continuing to replace batteries once the device low internal battery flag is established, will function identically. Devices which have sent the shutdown message can manifest as missing in their applications and recovered by replacing the coin cell.

Furthermore, the power management circuitry in the EN1221S product family is being updated with new hardware that dramatically reduces current draw in storage – or low-battery – mode. This lengthens the amount of time for which the device is recoverable in the field in the above-mentioned conditions, as well as dramatically increasing the shelf-life of the product. The current draw on the battery in this state is halved by the revised circuitry. We will be updating the product labeling to extend the "install primary battery by" date to two years from date of manufacture instead of one.

This is the extent of changes made to the EN1221S product family, and we have extensively validated both these claims, as well as ensuring that functionality is identical unless otherwise mentioned.

Questions? Contact us.

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