Rugged Tracking for Harsh Conditions: Sterilization-Proof Supply Chain Tracking

The Challenge

Standard Radio-Frequency Identification, or RFID technology uses a wireless, battery-less chip that possesses non-volatile memory. Typical non-volatile memory is not able to survive rugged environments and harsh processes, like extreme temperatures or gamma and eBeam sterilization processes. As a result, life science supply chain, healthcare companies, biopharmaceutical manufacturers, nuclear laboratories and sterile processing industries have not been able to harness RF benefits.

Scope of the Problem

In the USA alone, the gamma sterilization services market size is nearly $2B dollars. That means that simple RFID track and trace and digital visibility of products as they go through their lifecycle and through sterilization processes has never been addressed. Unlike nearly every other industry or market in the world, the gamma and e-beam sterilization market is under-serviced and ripe for digitization.

The Solution

Tego provides the only ultra-high frequency (UHF) RFID sterilization-proof asset tracking and lifecycle solution. The solution is powered by the company’s award-winning Asset Intelligence Platform (AIP). The solution comes complete with Tego Connect Mobile, a mobile device application for field workers, a web-based portal for configuration and centralized viewing, analytics, and full integration into enterprise asset management and ERP.

Our proven sterilization-proof platform solution is ideal for medical manufacturers, biopharmaceutical companies, and life science vendors with rugged environmental condition and process requirements. The solution includes UHF RFID labels or inlays for placement into packaging, or on plastic bottles and vials. The unique durability of our hardware means products can be labeled and digitized during standard manufacturing processes instead of just prior to shipping or after receiving. Complete visibility eliminates additional processing time, travel, and added labor cost.

See the Tego Connect Mobile and TegoHub in action.
Tego Connect Mobile allows workers to view products in workflow, inventory count, and number of sterilization cycles.

Tego Hub provides a centralized database for dashboard viewing, management of rules for field notification, report building and solution configuration.
Benefits
Having information that flows freely from the point of manufacture through the product’s lifecycle and to the point of use provides invaluable insights across the entire supply chain. This information can uncover usage patterns, link outcomes to products and practices, identify waste, and reallocate and reduced working capital. In addition, healthcare industry staffing – from manufacturers’ sales teams to caregivers on a hospital floor – can be reorganized and optimized in response to insights culled from the supply chain.

ROI

Finance
- Reduced write offs from expirations
- Right sized field inventory
- Reduced days sales outstanding
- Improved inventory turns

Operations
- Efficient recall management
- Immediate access to inventory audits
- Vendor managed inventory
- Regulatory compliance
- Optimization of bulk buys
- Visibility throughout supply chain

Strategy
- Improved customer relationships
- Real time re-ordering capability
- Proactive customer care
Tego Platform

Gamma and eBeam sterilization proof asset tracking solution, powered by Tego’s award-winning Asset Intelligence Platform (AIP) complete with mobile device applications and centralized cloud accessibility for your organization.

The solution enables the digitization of products throughout its lifecycle including industrial exposure to gamma and eBeam sterilization.

Platform Advantages

- Quick and inexpensive deployment
- Minimal new infrastructure requirements
- Universally deployable on any type of product, packaging, part or component
- Open and multi-platform, Tego’s mobile device application supports all major mobile and desktop operating systems, including iOS, Android, Windows and OS X
- Tego operates across all RF gateway protocols and handheld readers
- Scalable to any environment and size of operation
- Capable of standalone deployment without complex integrations
- Integration with inventory management systems or EAM modules, through a library of APIs
- Configurable to customer requirements
- Easier sharing of data across systems

→ Find out how your organization can eliminate inefficiencies and save significant costs by leveraging a turnkey solution to transform its supply chain and improve visibility across the organization. **Contact Us Today.**

TEGO

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