

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



Tego's sterilization proof asset tracking solution is proven to withstand:

- Gamma sterilization
- eBeam sterilization
- Ethylene oxide sterilization
- Cold storage (-80C)

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 the benefit of radio-frequency.

Scope of the Problem

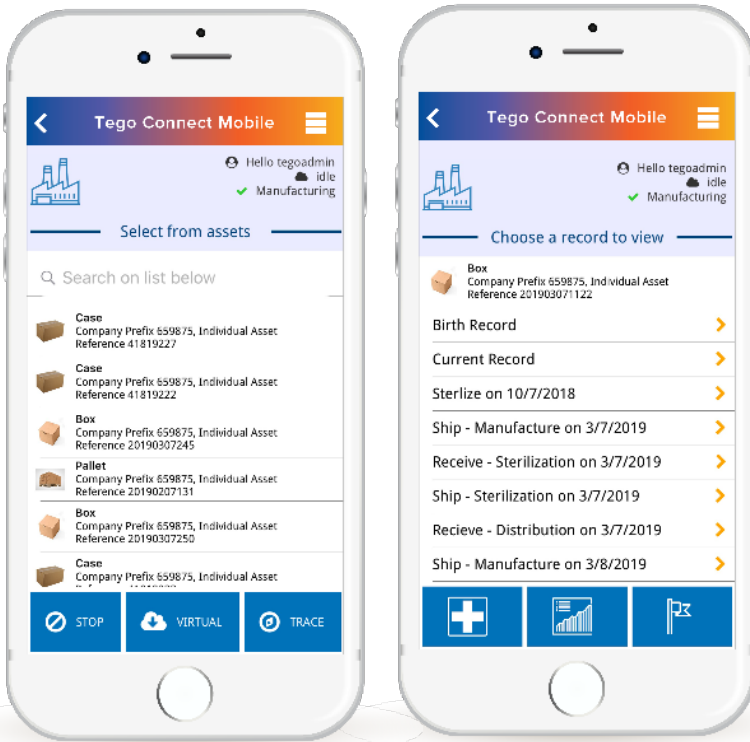
In the USA alone, the gamma sterilization services market size is nearly \$2B dollars. That means that simple RFID track and trace and digital visibility of products as they go through their lifecycle and through sterilization processes have never been addressed. Unlike nearly every other industry or 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.

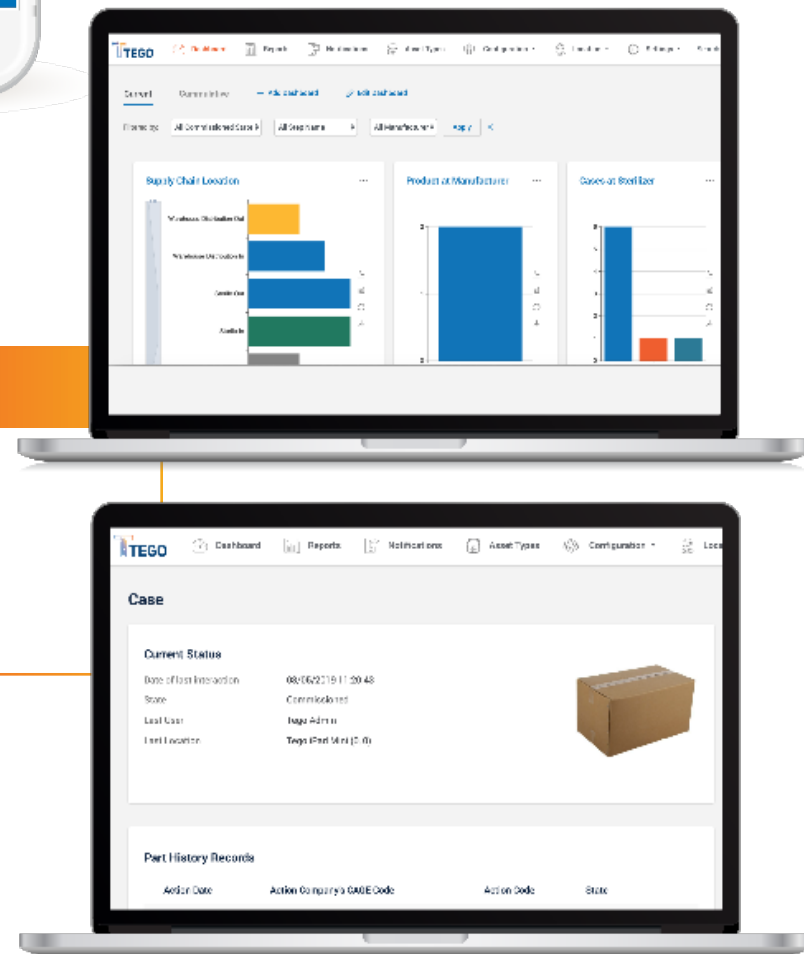


Tego Connect Mobile

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

Tego Hub

Tego Hub provides a centralized data base 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



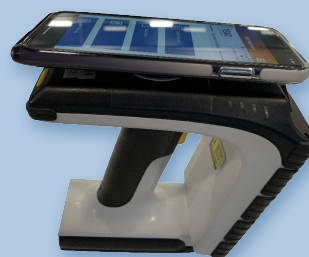
Operations

- 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

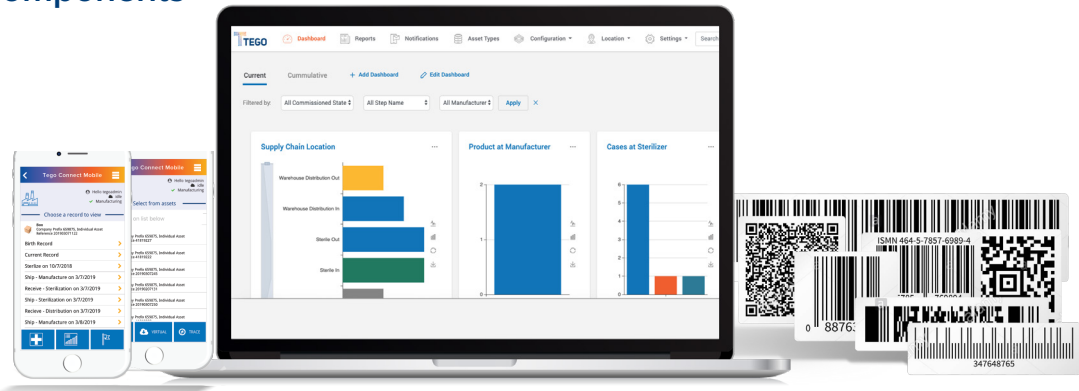


Tego Connect Mobile on
TSL model



Tego Connect Mobile on
Zebra model

Solution Components



TegoHub™

- A configurable, scalable, platform with industry specific templates for rapid deployment and a cross-platform library.
- Supports all major mobile and desktop operating systems including iOS, Android, Windows, and OS X.
- APIs allow simple plug and play integration with IoT, EAM and ERP systems.

TegoConnect™ Mobile and Auto

- Easily and securely manage critical data directly on the asset through TegoConnect, a mobile or fixed device application to deliver supply chain intelligence, business analytics, workflow/process management at the edge.
- TegoConnect supports – iOS, Android, Windows and OS X – and integrates with TegoHub and enterprise applications.

Tego Tags [TegoChip™ inside] or other Auto-ID Inputs

- Suitable for disconnected, rugged, and/or field assets, with the ability to support diverse multimedia file types such as images, documentation, spreadsheets, and other types of files or unstructured data.
- First of its kind that is Gamma/E-Beam sterilization-proof and is rated for 30+ year data retention and durability through extreme temperatures, vibration and shock.
- Blockchain on a chip – first verifiable edge ledger on a chip.

→ [Get in touch](#) to find out what Tego can do for your company.