



# PAGEMARK

## TRACK AND TRACE

### Secure Authentication & Real-Time Tracking

## KEY BENEFITS OF PAGEMARK TRACK AND TRACE

- 1. Superior Inventory Management:** Track products through the entire supply chain and into the retail channel.
- 2. Reduce Fraud:** Deter counterfeiting and track diversion by embedding sensitive product information such as serial numbers and active ingredients in the Pelta™ covert data layer.
- 3. Product Authentication:** Includes a product validation solution at the consumer level.
- 4. Flexible Data Export:** Data export feature compatible with pedigree or other regulatory systems.
- 5. Geo Tracking Capability:** Utilizes geo-tracking for diversion notification and fraud alerts to brand owners or government agencies.
- 6. End User Response Pages:** Interactive web pages customized for user and/or product response needs.
- 7. Product Management:** Assists in managing product recall programs by providing more accurate tracking of ingredients and/or country of origin.

### What is Pagemark Track and Trace?

The Pagemark Track and Trace (T&T) system utilizes cloud-based architecture and is scalable to fit the requirement of any size organization. The system was developed to leverage Pelta™ codes and provides a secure yet flexible solution for tracking products throughout the supply chain, to the final end user. Pelta codes add a secure and encrypted layer of data not readable by the general public and complement popular 2D barcode systems including QR, Data Matrix ECC200 and others. Pagemark T&T helps to deter product diversion and counterfeiting while reducing inventory costs.

### How does it work?

- Pagemark T&T system consists of 3 major parts:
  - a. Pelta™ Code Creation Software:** Pelta codes append to most popular 2D barcoding systems for fast and easy implementation.
  - b. Cloud-Based System:** Inclusive of database (dB) with a browser-based user interface. The architecture is extremely flexible and scalable to any sized operation. Globally accessible via any internet browser.
  - c. Pelta 2D Barcode Readers:** Applications for production and post-production. Pelta 2D codes are readable by most popular production scanners or smart phones running iVerifyIT™ apps.

### Inventory Related Benefits

- Cloud-based system provides a secure and robust repository for product data and point-to-point tracking of products or documents globally.
- Provides product based transparency via an extranet utilizing a product based response page.

- Provides a secondary system to view production based milestones with diversion tracking through-out the supply chain.
- Reduces overall inventory management expenses by providing additional business intelligence.
- Reduces associated product recall costs.

### Consumer Benefits:

Pagemark T&T is a powerful deterrent to counterfeiting and fraud by tracking products through the manufacturing process to the end consumer. The solution provides consumers with web-based response pages, accessible by scanning the Pelta™ code with most smart phones. The response pages provide transparency relating to the origin and history of food and pharmaceuticals products as specified by the brand owner. Pagemark has developed a portfolio of mobile applications for smart phones to authenticate products and provide real-time access to the response pages. Brand owners can also set up fraud alerts and other notifications utilizing geo-tracking and usage monitoring.

### Other Benefits:

- Fast and easy implementation of Pelta™ codes into existing production workflows.
- Manage returns and warranty costs by product authentication and server-based tracking.
- Access additional business intelligence via standard and custom reports with export functionality.
- Custom dashboard for brand owners or government agencies.
- Utilize existing printing and validation equipment with minor modifications

## KEY BENEFITS OF PAGEMARK TRACK AND TRACE

Features	Features Description
Pelta™ barcode generation software	Application supports the creation of Quick Response (QR) and Data Matrix ECC200 barcodes with a second encrypted data layer
Serialization Support (optional)	Pagemark T&T supports a variety of 3rd party serialization-provider solutions
Product and Packaging Hierarchy Tree	GUI interface creates, deletes and replicates product and packaging hierarchy trees
Security Settings by User, Location, or Group	Control and management for system-users to access, view, change, delete, modify the Pagemark T&T system
Location, Facilities, and Scanners Setup	Control and management over production locations, lines, and monitoring systems
Product Milestones, Supply Chain, and Target Release Date Setup and Tracking	Control and management of supply chains for specific product lines or products
Cloud-based Architecture (Alternative Hosting Options are Available)	Cloud-based architecture built to optimize system scalability and dynamic growth
Consumer Response Webpage	Pagemark T&T hosted webpage to post unique product information for Consumers (example – Fraud Alert Notification)
Product Response Webpage	Pagemark T&T webpage to post product or product line information for Consumers
Export to CSV or XLS formats	Data export function from Pagemark Track &Trace
iVerifyIT™ reader application for iOS and Android (Windows® version optional)	Mobile app used to authenticate a document or product and provide intelligent input to the Pagemark T&T system
iVerifyIT™ reader application for iOS and Android (Windows version optional)	Alert and Notification support for messages sent to process or brand owners via standard and custom reporting, email messaging or SMS Text
Alerts and tracking notifications: <ul style="list-style-type: none"> <li>• Counterfeiting alert</li> <li>• Milestone missed notification</li> <li>• Supply chain variance alert</li> <li>• Release date notification</li> <li>• Geo-tracking alerts</li> </ul>	System provides useful standard reports, customized reports can be generated based on selecting available data fields
Standard and Custom Reporting	Application Programming Interfaces (APIs) available for easy integration into 3rd party applications
Integration to Other Databases and CRM Systems	Custom development, installation, setup, and maintenance are available via the Professional Services team
Installation and Maintenance Options (including Pelta™ custom integration into existing coding systems and scanning systems)	Custom development, installation, setup, and maintenance are available via the Professional Services team

### Trademark Information:

Pelta™ is a registered trademark of Pagemark Technology, Inc.  
iVerifyIT™ is a registered trademark of Pagemark Technology, Inc.  
Windows is a trademark identifying Microsoft operating system software

