

Empowering Your Business with

Smart Tool Systems



POWERING CONNECTIONS



Connected Tools for Precision & Productivity

- ✓ **Integrated Smart Tool Management and Tracking:** Deployment of IoT-enabled smart tool systems for real-time tracking, inventory management, and utilization monitoring of high-value tools and equipment within workshops, construction sites, and industrial facilities, leveraging RFID, Bluetooth Low Energy (BLE), and GPS technologies.
- ✓ **Real-time Inventory and Utilization Monitoring:** Provision of cloud based platforms and mobile applications for continuous monitoring of tool location, usage patterns, calibration status, and maintenance history, enabling automated inventory checks and optimized tool allocation.
- ✓ **Predictive Maintenance for Tool Longevity:** Integration of sensor data and machine learning algorithms to analyze tool performance, detect anomalies, and predict potential failures, facilitating proactive maintenance scheduling, extending tool lifespan, and minimizing unexpected downtime.
- ✓ **Enhanced Operational Efficiency and Safety:** Implementation of geofencing, unauthorized movement alerts, and digital checklists to improve tool accountability, reduce loss/theft, streamline workflows, and ensure tools are used safely and correctly, enhancing overall operational efficiency and worker safety.

Technical Specifications

Features

- ✓ System Type
- ✓ Tracking Technology
- ✓ Monitoring Parameters
- ✓ Alerts & Notifications
- ✓ Integration
- ✓ User Interface
- ✓ Hardware
- ✓ Communication Protocol
- ✓ Data Storage
- ✓ Deployment
- ✓ Compliance

Specifications

- ✓ IoT-enabled Smart Tool Management System
- ✓ RFID (HF/UHF Passive/Active), Bluetooth Low Energy (BLE 5.0+), GPS (L1/L5 Dual-Band), Wi-Fi Triangulation, LoRaWAN
- ✓ Real-time Location (Indoor/Outdoor), Usage Hours, Last Known User, Calibration Due Date, Maintenance History, Battery Status
- ✓ Geofencing (Entry/Exit), Unauthorized Movement, Tool Overdue, Calibration Reminder, Impact Detection, Temperature Excursion
- ✓ RESTful API for ERP (SAP, Oracle), CMMS (Maximo), WMS, SCADA Systems
- ✓ Web-based Dashboard (Customizable Widgets), Mobile Application (iOS/Android) with Offline Mode
- ✓ Compact Tool Tags (IP67/IP68 rated) BLE Gateways, RFID Readers (Fixed/Handheld), GPS Trackers, Charging Stations
- ✓ MQTT, HTTP/HTTPS, TCP/IP
- ✓ Cloud-based (AWS, Azure) with secure encryption (AES-256)
- ✓ Scalable from single workshop to multi-site enterprise
- ✓ ISO 18000 (RFID), Bluetooth SIG Standards

Why Choose Us?

- 01.** **Optimized Tool Utilization and Accountability:** Our Smart Tool Systems provide unparalleled real-time visibility into every tool's location, status, and usage, eliminating manual searches, reducing idle time, and ensuring optimal utilization and accountability across your operations.
- 02.** **Proactive Maintenance and Extended Lifespan:** Leveraging predictive analytics, our systems anticipate potential tool failures, enabling proactive maintenance that extends the lifespan of your valuable assets, minimizes repair costs, and prevents costly operational disruptions.
- 03.** **Enhanced Safety and Loss Prevention:** With integrated geofencing and instant alerts for unauthorized movement, our solutions create a secure environment, significantly reducing tool loss and theft while promoting safer work practices through digital checklists and usage monitoring.

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