



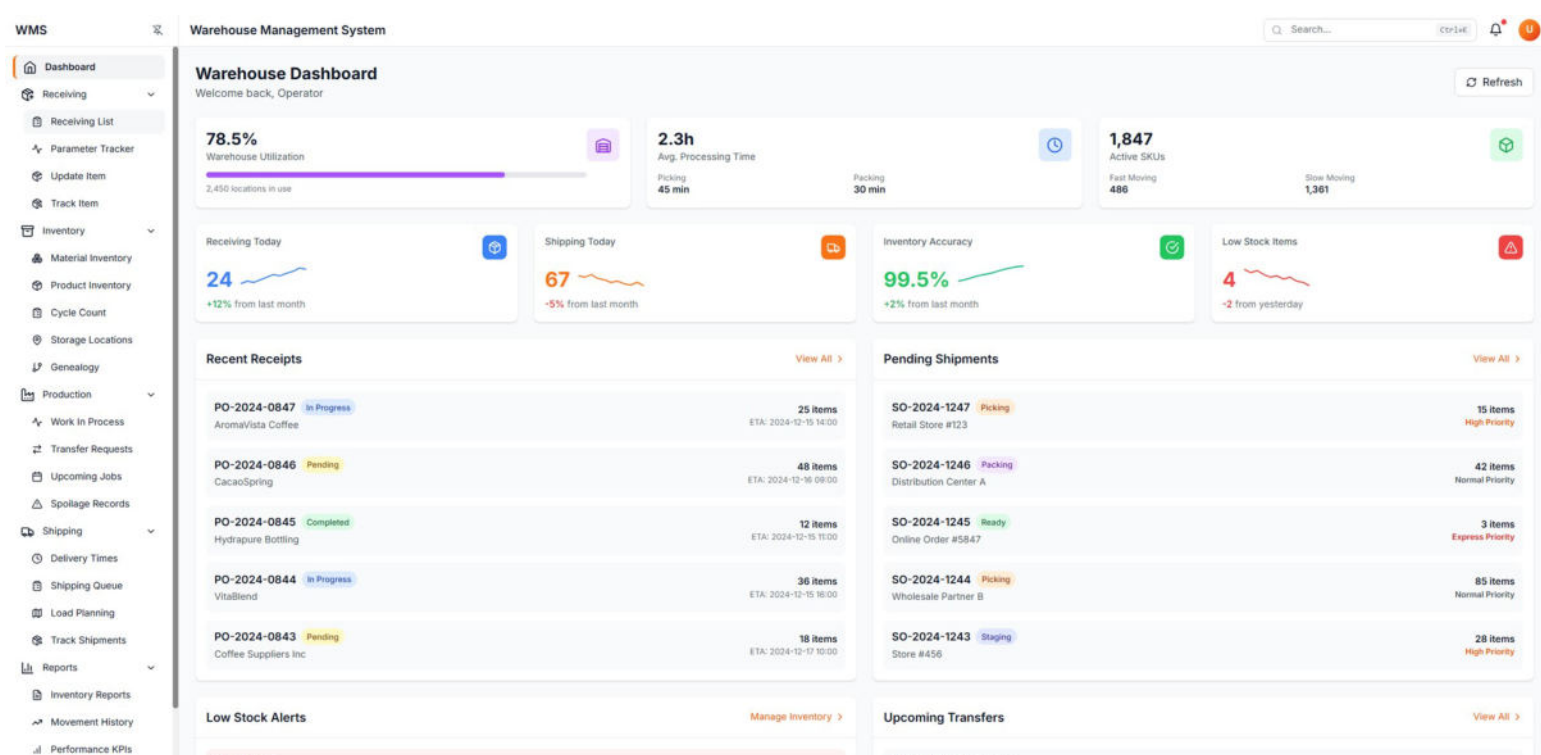
DATASHEET

Warehouse Management

Turning Storage into Strategic Advantage

Warehousing is no longer just about storing goods. It is about driving agility, accuracy, and customer trust. Inefficient warehouse operations create bottlenecks, inflate costs, and jeopardize on-time deliveries. The LOGICAL SYSTEMS Warehouse Management System (WMS) application transforms your warehouse into a high-performance execution hub by connecting inbound, storage, production, and outbound processes in real time.

Built on the Inductive Automation® Ignition platform, the WMS app seamlessly integrates with ERP, MES, CMMS, and logistics partners, delivering a single source of truth for materials and finished goods. Unlike fragmented tools that create silos, our solution acts as the digital control tower of material flow that orchestrates every pallet, SKU, and shipment with precision, traceability, and speed. Through intuitive dashboards, mobile-responsive workflows, and advanced analytics, warehouse teams move from firefighting to foresight. Operators can execute scanning, putaway, and picking with guided precision. Supervisors gain real-time control over bottlenecks, labor, and space. Managers track compliance, performance, and costs across facilities.



From a single facility to global distribution networks, the WMS app scales with your business enabling warehousing excellence at enterprise speed turning your bottleneck into your business backbone.

Core Capabilities

Receiving

- Streamlined ASN (Advanced Shipping Notice) verification
- Real-time barcode/QR scanning with error-proofing
- Automated quality & parameter checks (temperature, batch COA)
- Dock-to-stock cycle time tracking

Inventory Management

- Multi-location, multi-zone storage (racks, cold storage, supermarkets)
- Real-time stock visibility with 99%+ accuracy
- Full genealogy for lot, batch, and serial tracking
- Cycle counting with exception-based reconciliation

Production Integration

- Work-in-Process (WIP) tracking aligned with production orders
- Automated staging and transfer requests
- Spoilage and scrap monitoring with cost attribution
- Material demand forecasts linked to production schedules

Shipping & Distribution

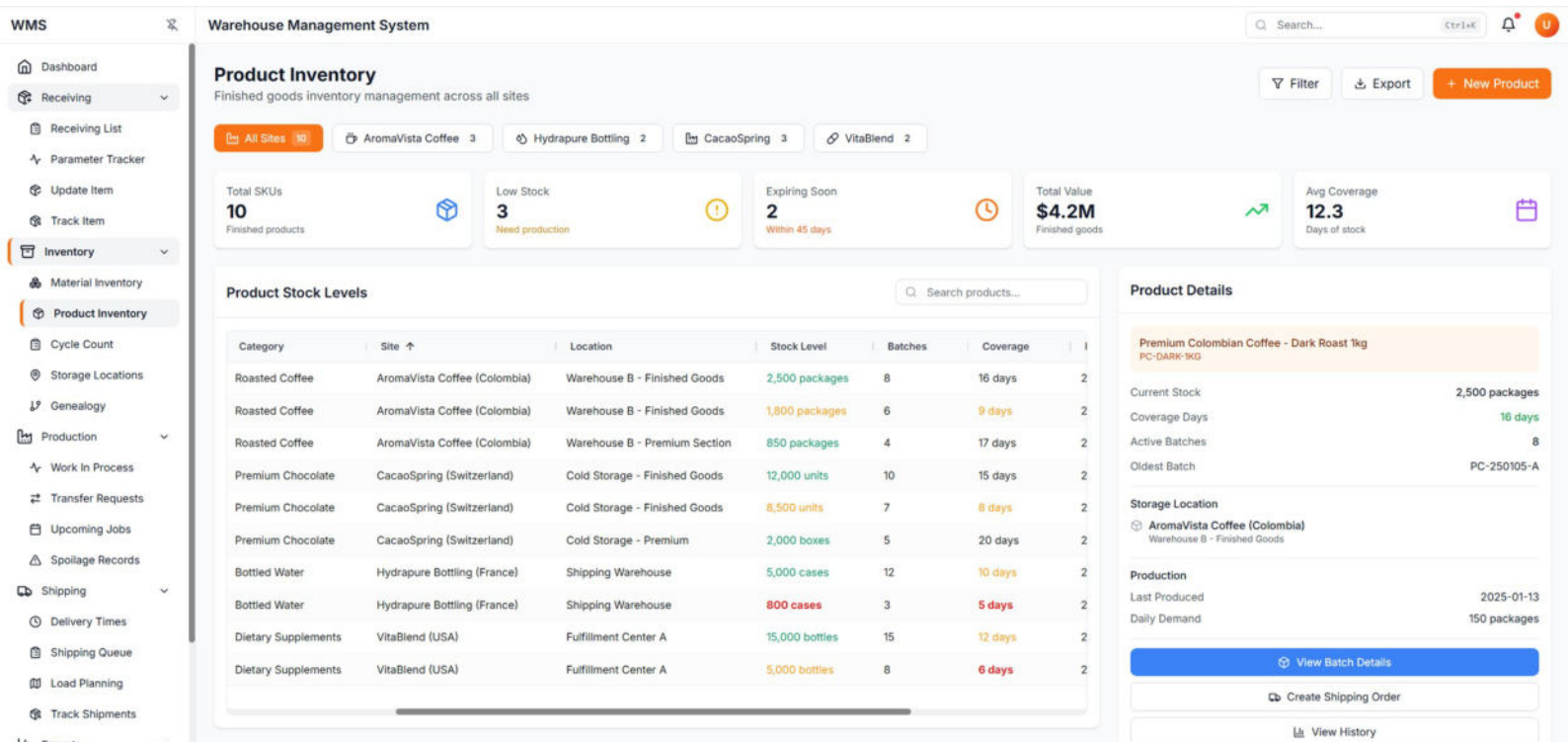
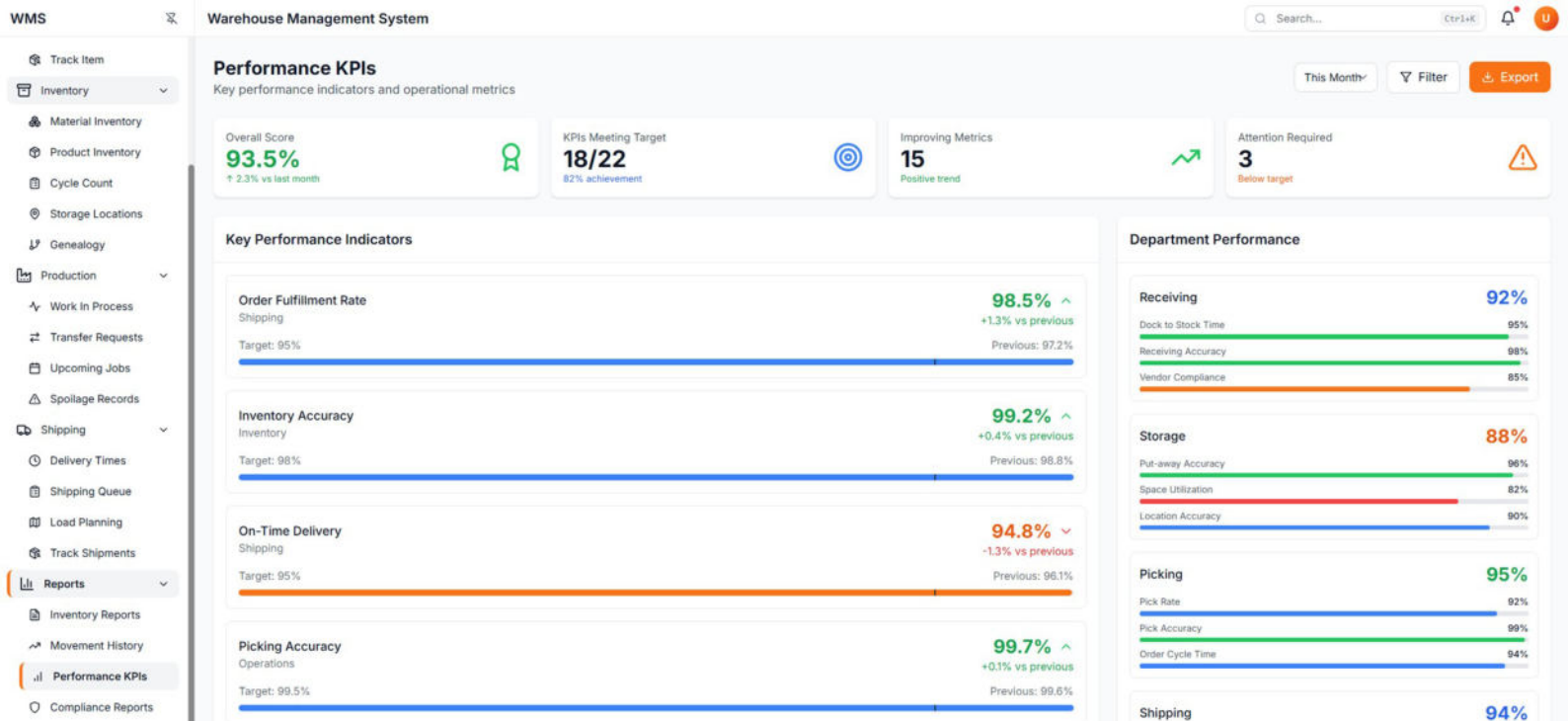
- Dynamic order picking (wave, zone, batch)
- Truck load planning & route optimization
- Carrier integration with real-time shipment visibility
- OTIF (On-Time In-Full) performance analytics

Mobile & IoT Capabilities

- Native handheld & tablet interface with offline sync
- RFID, barcode, and QR-enabled execution
- Digital proof-of-delivery with signatures & photos
- IoT sensor monitoring for compliance zones (temperature, humidity)

The screenshot displays the Warehouse Management System (WMS) interface, which is organized into several key sections:

- Receiving List:** This section provides a summary of incoming inventory and deliveries. It includes a dashboard with metrics for Pending Orders (12), In Progress (3), Completed Today (8), and On Hold (2). Below this, there is a table of Incoming Orders with columns for Order ID, Material, Lot Number, Supplier, Quantity, Expected date, Status, Location, Site, and Actions. A 'Recently Accepted Orders' section is also visible.
- Inventory Reports:** This section offers comprehensive inventory analysis and insights. It features a Summary Report with a total inventory value of \$1,234,567.89, a Valuation Report showing 4,521 total items, and an Aging Report with 98.5% inventory accuracy. It also includes a Storage Utilization chart and a Performance Metrics section.
- Production Orders:** This section manages production scheduling across all sites. It displays a list of Scheduled Production Orders with details such as Order ID, Material, Quantity, and Status. A 'Material Requirements' section is also present.
- Transfer Requests:** This section manages material transfers between sites and warehouses. It includes a dashboard with metrics for Pending Approval (8), Approved (12), In Transit (5), and Completed Today (7). A table of Transfer Requests is shown, detailing Request ID, Type, From Site, From Location, To Site, and To Location.



Seamless Integration & Intelligence

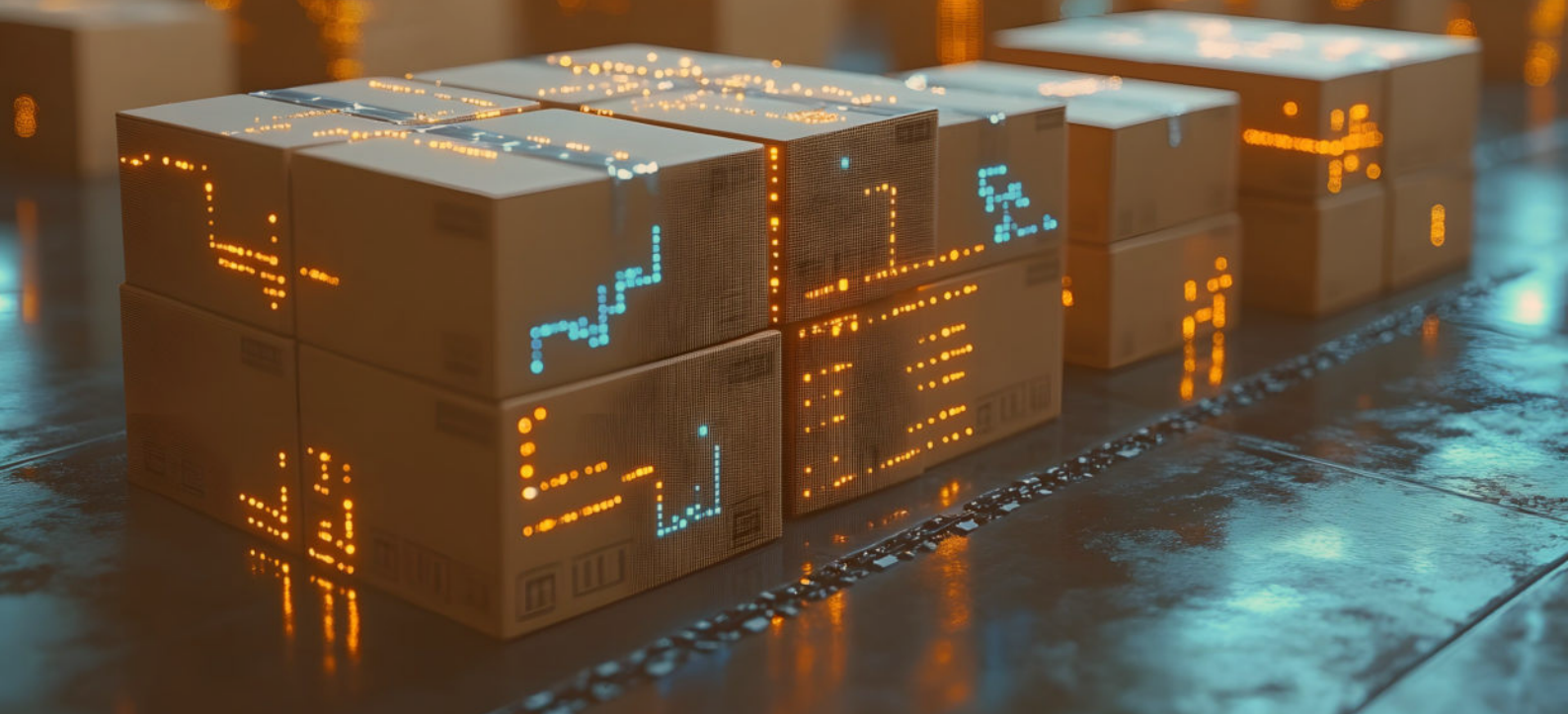
Nerve Center of the Digital Supply Chain

The WMS app is designed to work as the orchestrator of supply chain data, synchronizing seamlessly with your digital infrastructure:

- ERP Synchronization – Aligns purchase orders, invoices, and stock valuations in real time.
- MES Integration – Automates material staging, consumption, and finished goods booking.
- SCADA & Historian Connection – Monitors environmental compliance (temperature, humidity).
- Quality Systems – Links inspection status directly to release workflows.
- Electronic Forms & SPC – Digitizes receiving, inspection, and shipping paperwork with full audit trails.

Analytics & Reporting

- KPIs: Inventory turns, dock-to-stock time, order picking efficiency, OTIF delivery.
- Compliance: FDA, GMP, ISO 9001, and industry standards.
- Cost Transparency: Track storage, handling, and distribution costs by product, site, or channel.



Key Features and Benefits

Features

- Automatic real-time calculations and updates from storage, retrieval and transfer equipment data
- Unlimited SKUs, sites, and users with centralized reporting
- Multi-warehouse, multi-zone, multi-currency support
- Advanced strategies (FIFO, FEFO, ABC optimization)
- Mobile-first execution (RFID, barcode, QR scanning)
- RESTful APIs for ERP, logistics, and partner systems
- Predictive demand planning & replenishment alerts
- IoT sensor integration for condition monitoring
- Role-based security with Active Directory support

Benefits

- 10% OEE improvement = 10% more production from existing assets
- 99%+ inventory accuracy across sites
- 25–40% faster inbound & outbound processing
- 20–30% higher workforce productivity through guided workflows
- 15–25% lower storage and handling costs via space optimization
- 10–20% increase in OTIF delivery performance
- Audit-ready compliance with full traceability and e-signatures
- Executive visibility from supplier dock to customer doorstep

Technical Requirements

System Requirements

Ignition® (8.1.+) Core Modules, Quad-core processor, 16 GB RAM, 10 GB free disk space

Supported Operating Systems

Windows Server 2019/2022/2025, Windows 10/11, macOS (X, 10.16+), Linux (Ubuntu, CentOS, RHEL)

Supported Protocols

MQTT, OPC UA / OPC DA, REST API (JSON Payloads)
Kafka (via connector), Snowflake (via pipeline, data bridge)

Supported Databases

Microsoft SQL Server, Oracle, MySQL, MariaDB, PostgreSQL, any database with JDBC driver

Supported Browsers

Chrome, Firefox, Safari, Microsoft Edge

LOGICAL SYSTEMS WMS

Warehouse Intelligence for
the Next Industrial Era.

Every Item, Every Movement,
Every Second, Controlled.

