New Energy Vehicle Manufacturer Boosts Logistics Efficiency and Precision with ONERugged V10J Vehicle PC

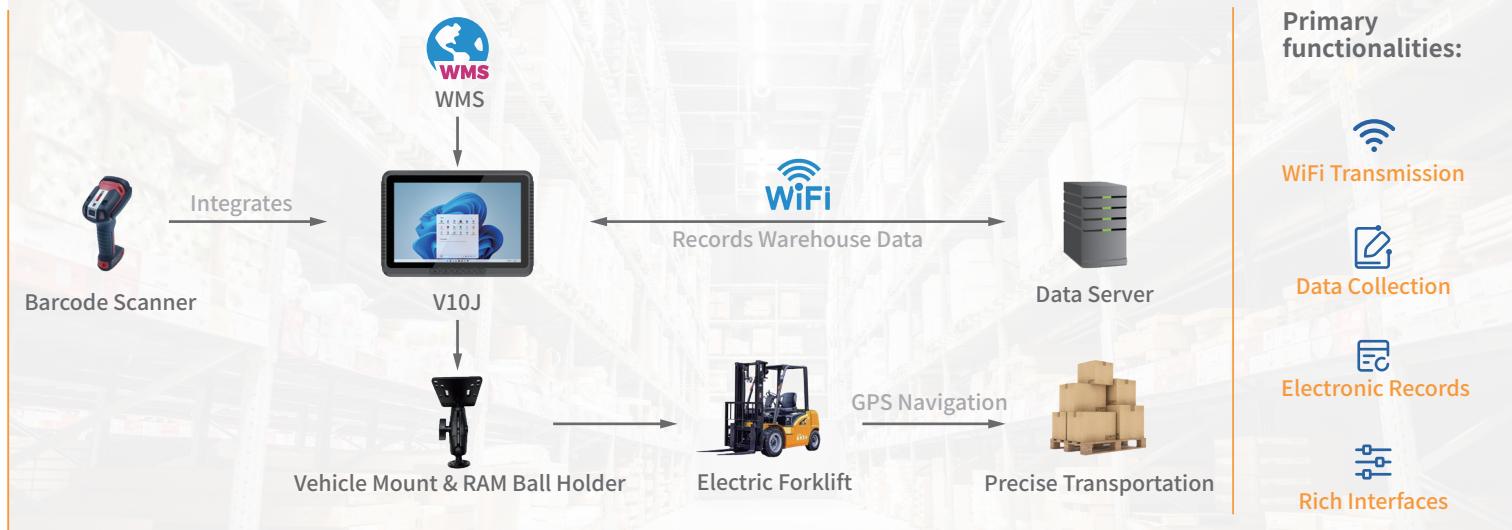| **30%**	**40%**	**25%**	**20%**
Increase in Efficiency	Increase in Accuracy	Increase in Safety	Reduction in Device Costs

Summary

As a leading new energy vehicle manufacturer in China, the client integrated the ONERugged V10J vehicle PC, industrial barcode scanners, and fingerprint devices into their new factory's logistics system. This digital solution improved warehouse and forklift management, boosting efficiency and accuracy. The result was a solid foundation for smooth operations in the automotive assembly process, with key improvements in logistics performance.

Client Overview

The client is a leading NEV manufacturer in China, dedicated to developing and producing high-performance electric vehicles. Their production system integrates efficiency and intelligence, covering the entire operational chain from R&D to manufacturing. To meet growing production demands, the client is rapidly expanding with new factories designed to operate with enhanced intelligence and efficiency.

Workflow

WMS

Barcode Scanner — Integrates → V10J — Records Warehouse Data (WiFi) → Data Server

Vehicle Mount & RAM Ball Holder → Electric Forklift — GPS Navigation → Precise Transportation

Primary functionalities:

WiFi Transmission

Data Collection

Electronic Records

Rich Interfaces

Challenge

The client faced inefficiencies in warehouse management and transportation. Manual task allocation and paper records led to delays and errors, disrupting workflow and logistics efficiency. Forklifts and tow trucks lacked real-time navigation and task tracking, increasing risks of time wastage and operational mistakes.

Additionally, the lack of data tracking made inventory management inaccurate and limited supply chain transparency. Consumer-grade devices failed in high-intensity environments, leading to frequent breakdowns and rising maintenance costs. The client needed a reliable, smart solution to address these challenges and streamline their logistics system.

Solution

The ONERugged V10J vehicle PC, with its rugged design and high functionality, was the perfect solution for the client's warehouse and forklift operations. Combined with industrial barcode scanners and fingerprint devices, the V10J formed a comprehensive smart logistics management system, enhancing both efficiency and safety.

Mounted on forklifts, the V10J integrates wirelessly with the warehouse management and ERP systems, ensuring real-time data synchronization and accurate task management. Operators can access task instructions and track goods status instantly. The built-in GPS tracks storage locations and plans optimal routes, reducing time and errors.

By pairing the V10J with barcode scanners, operators can quickly and accurately scan goods during loading and unloading, updating inventory data automatically for improved accuracy. Fingerprint authentication ensures only authorized personnel operate forklifts, while the real-time alert system detects and alerts on any operational anomalies, enhancing safety.

This solution significantly improved logistics efficiency, accuracy, and safety, providing strong support for the client's production processes.

Benefits

Enhanced Operational Efficiency

The V10J's integration with the warehouse management system enables operators to receive task instructions and optimal route plans in real time. This significantly reduces task completion time, streamlines goods handling, and injects new momentum into logistics operations.

End-to-End Visibility

Combining the V10J with industrial barcode scanners ensures real-time goods tracking. Information is automatically synchronized during transportation and storage, enhancing inventory transparency. Operators and managers can monitor goods dynamics instantly, reducing delays and blind spots.

Accurate and Traceable Management

Every operation step is logged and uploaded in real time, greatly improving inventory data accuracy and update speed. This traceability enables inventory optimization and minimizes issues like re-counting or misplaced goods.

Reliable Device Performance

With IP65-rated waterproof and dustproof

capabilities, the V10J is designed to withstand challenging warehouse conditions. Its wide-temperature and voltage range compatibility ensures reliable operation across various environments. Lower device failure rates translate to reduced maintenance costs and minimal logistics disruptions, guaranteeing continuous and reliable performance.

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The introduction of the ONERugged V10J vehicle PC optimized our warehouse management and forklift operations. Logistics management is now smarter, with real-time data visibility significantly boosting efficiency and accuracy. This has provided strong support for our automotive assembly processes.

— Client' s Logistics Manager
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