Intermec and Ruckus Warehousing and Distribution Solution

Introduction

Modern supply chains must meet ever higher customer service level requirements while also constantly reducing costs. Intermec and Ruckus Wireless combine the leading workflow performance company with simply better wireless connectivity to enable more efficient and high performance warehouse and distribution centers (DCs).

Intermec designs and builds the automated information and data capture (AIDC) industry's most complete lineup of rugged, reliable and versatile equipment. Its bar code scanners, rugged computers and VoCollect data collection systems are deployed globally by leading warehouse, DC, 3GL and other enterprises that rely on accurate and timely data to track, manage and move products.

Linking Intermec's AIDC devices to backend warehouse management and ERP systems requires consistent, reliable wireless connectivity. Because warehouses, DCs and terminals are challenging RF environments with floor to ceiling steel racks and changing inventory levels, they often suffer from RF dead spots or poor signal coverage, leading to lost information, lower workforce morale and performance issues when re-work is required on top of already stressful workloads.
As logistics facilities deploy new technology to further streamline and accelerate their operations, there is a growing need for strong wireless connectivity. In addition to traditional AIDC terminals and mobile computers, facilities are deploying new technologies such as voice prompted data collection and VoIP which require even better wireless performance.

Ruckus’s Wi-Fi infrastructure delivers reliable performance, extended reach and automatic adaptation to changes in the environment. Warehouses, distribution centers, loading docks, marine terminals and other sites with mission-critical mobility requirements and limited IT resources use Ruckus products and technology to build more robust, adaptive and affordable wireless LAN environments.

What is Smart Wi-Fi?

- Patented technology that combines
  - Smart antenna arrays
  - Best path selection algorithms
  - Advanced quality of service engine
  - Smart mesh RF routing
  - Centralized Wi-Fi management
- Adapts to real-time changes in environmental conditions
- Extends signal range (Wi-Fi coverage) 2 to 4 times with fewer APs
- Delivers predictable performance
- Radically simplifies deployment and administration
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The Technology

At the heart of all Ruckus Wireless products is its patented BeamFlex technology, the industry’s most advanced adaptive Wi-Fi antenna implementation. Combining a compact internal antenna array with expert control software, BeamFlex continuously optimizes the connection for each connected client to bypass interference and physical barriers. Highly sensitive antenna elements also deliver the industry’s most powerful Wi-Fi receiving capabilities. This dramatically increases range and performance of the Wi-Fi network while automatically adapting to constantly changing RF environments, providing the most reliable Wi-Fi system available today.

Another key feature is Polarization Diversity – Maximal Ratio Combining (PD-MRC). This leverages Ruckus BeamFlex technology to provide better reception for hard to hear clients and more consistent performance as clients constantly change orientation. For instance, an Intermec scanner may be held upright for some tasks, and laid flat on a table for others. Because they have an array of internal antennae, Ruckus APs are uniquely able to listen better as devices change orientation, ensuring the best connection at all times.

Ruckus access points can be configured and installed in minutes, and automatically perform functions such as creating mesh networks or prioritizing voice and video traffic, making them easier to deploy and maintain, especially since fewer APs are needed. Finally Ruckus offers unified management and remote monitoring for indoor and outdoor APs, and can support a range of deployment models to ensure the best price/performance.

Intermec provides the broadest range of mobile computing and peripheral devices for Warehouses, Distribution Centers and Logistics. Ruckus provides simply better Wi-Fi infrastructure that excels in challenging RF environments and where there is little or no IT support. Together, Ruckus and Intermec enable high performance warehouse applications, hassle-free operations, and the lowest TCO.

For more information, visit us at www.ruckuswireless.com.