



NEWAVE®
Sensor Solutions

In Transit Asset Visibility

For many companies their assets and parts inventories are constantly on the move in service vans, trucks, or other conveyances. These assets and inventories are critical to successful customer outcomes, satisfaction and portability. RFID technologies provide the greatest visibility and total tracking of these assets and inventories leading to higher customer satisfaction and bottom line performance. Many companies are now evaluating and implementing RFID to track their mobile assets.

Primary Drivers

- Increased visibility to mobile assets and parts inventories.
- Better utilization of driver and warehouse personnel.
- Labor savings.
- Increased visibility to intercompany and field transfers of assets and inventory.

How can NeWave help?

NeWave's unique RFID Wave® antenna provides superior data accuracy over traditional patch antennas that radiate a beam in a single direction. The Wave antenna is specifically designed to illuminate a volume of space, like a wide-angle photo lens. Reading RFID tags in a closed metal environment such as a van or truck presents unique challenges. The Wave antenna addresses these challenges in ways no other antenna solution can. By capitalizing on the enclosed van or truck, the NeWave antennas are able to radiate beams throughout the vehicle providing superior read accuracy.

Case Study

Overview

Intermec and its customer Iron Mountain, a document and data management company that provides document, data and precious items management services, tested the NeWave solution. Iron Mountain's services include collecting, transporting, destroying and storing documents and other valuable items. Keeping track of these items as they move from one facility to another or from a customer facility to a truck or van is a difficult and timely process for Iron Mountain. In some cases a "chain of custody" is required to be kept. RFID enables a fool proof and easy way to track and record item movement within the customer's and Iron Mountain's facilities and delivery vans.

Their Problem

One challenge is providing accurate times of pickup and delivery of critical items. Iron Mountain and its RFID partner Intermec found that the type of RFID antenna typically used could not provide very accurate data due to various tag orientations and placement issues. Being able to provide real time inventory viability is not only a feature for Iron Mountain and others in this space it is an additional service they can sell to their clients to increase revenues and profits.

The NeWave Solution

NeWave Sensor Solutions created and patented an antenna specifically with RFID in mind. The NeWave solution addresses the following opportunities for Iron Mountain and others:

- Improved work order flow.
- Tool tracking.
- Inventory management.
- Track field transfers to better keep track of inventory.
- Reduce inaccuracy.
- Real time inventory and more accurate inventory on the truck enable better decisions for the dynamic dispatching process.
- Labor savings and metrics.
- Minimize human intervention.
- Maximize use of "real-time" information.
- Minimize reconciliation, only look at exceptions or trends to help solve the root cause of the problem.
- Driver performance measured against inventory accuracy.
- Technical seamless verification based on the products taken off truck.
- Inventory optimization check, no hoarding or over inventorying safety levels.

- Increased productivity, easier for the tech to do his job and provide updates.
- Equipment options expanded based on inventory visibility and availability.
- Customer satisfaction.
- Reduce truck rolls for service and revisits.
- Exceptions documented and analyzed around the technician installation.
- Elimination of the technician physical inventory / cycle count.
- Shrinkage / loss / theft/ fraud/ abuse.
- Hawthorne Effect improvements in behaviors in response to accurate measurements in place and studied.
- Increase the number of items “tracked to home”.

Conclusion

Intermec is installing the solution in vans to demonstrate the effectiveness of the NeWave solution for its other customers including Department of Defense, logistics companies, hospitals, and many others.

“Intermec has been a leader in the RFID industry for many years. Reader antennas have changed only slightly during this time. Much attention has been paid to increasing solution performance and lowering the total cost of ownership. We find the NeWave Antenna to be a true long overdue breakthrough in RFID antenna technology, which delivers in both these areas. We are proud to recommend NeWave antennas to our partners and end users who wish to create excellent solutions that deliver exceptional read accuracy and reliability”

Rene Martinez PhD, Chief Technologist, Intermec Technologies