Integration of RFID Smart Labels for Third Party Logistics

Industry
Consumer Goods
Industrial Goods

Products
Duratran Thermal Transfer and Duratherm
Direct Thermal INtegrated RFID Labels and Tags
TMX1000 series ribbons
TMX2000 series ribbons
PM43 RFID Enabled Printer
PC43t RFID Enabled Printer
Rigid Tags
IT65
IT67
IP30
IF4

Regions
North America, LATAM, EMEA

Typical Applications
Supply Chain Management
Receiving/Cross Docking
Warehousing/Sortation/Distribution
Transportation & Logistics

Customer Benefits
• Improved accuracy in shipping, receiving, inventory control
• Reduction in processing time and inefficient work activities
• Reduced labor requirements
• Assured compliance with government and industry standards
• On-demand generation of high quality RFID labels increase error free shipments and provide traceability
• Optimized hardware performance with integrated Intermec printer, reader, and RFID Smart Labels or rigid tags for a total solution
• Stocked carton & pallet Smart Label sizes available for quick shipment

Industry Need
Effective warehouse management involves the control and monitoring of movement of materials including receiving, storage, picking, staging, and shipping. The increased use of outsourcing these activities has given rise to the rapid growth of third party logistics or 3PL. 3PL providers typically specialize in integrating warehousing and operation services that can be scaled and customized to a customer’s requirements. The use of 3PL has become a cost effective way for many businesses to reduce supply chain costs and increase customer satisfaction. With any logistics process, opportunities for human error exist resulting in misplaced or mis-directed inventory. However, with 3PL providers handling inventory for a multitude of customers, high levels of accuracy and efficiency as well as visibility within the operation have become critical requirements.

Intermec Solution
Intermec’s Smart Labels offer powerful RFID technology packaged in the most reliable, durable labels in the industry to meet the business and operating demands in the 3PL environment. The use of RFID Smart labels enables visibility and monitoring of cartons and pallets at process points as they move through the warehouse. Operators do not need to scan individual bar codes thus eliminating the opportunity for human error which can create problems with misplaced, mis-identified, and mis-shipped product and result not only in customer dissatisfaction but also in many cases expensive charge-backs. This improved accuracy in shipping, receiving, and inventory control also results in a reduction in processing time and inefficient work activities. The capability of scanning pre-applied RFID labels upon receipt with an Intermec IP30 or generating Smart Labels at the point of activity on-site with one of Intermec’s industrial RFID printers enables real-time coordination throughout the supply chain linking the customer to the product and to the location within the chain. With the ability to offer a variety of both inlays and printable label and tag materials, Intermec Media engineers are able to develop flexible RFID Smart Label solutions that will meet the requirements in various 3PL environments to insure optimum performance. For fleet and yard management, trailer tagging, or the tagging of other metal items for long term use Intermec offers rugged, durable rigid tags.

The key to any successful implementation of an RFID system is working with a provider that has the knowledge and expertise to offer clear guidance in creating a solution that is sustainable and extensible to improve business processes and to deliver future benefits. Intermec is a leader in RFID technology and standards development with extensive experience in helping manufacturers, distributors, logistic providers, and other businesses implement complete RFID solutions for mission critical applications.
Media Product Recommendation
Integrated RFID Duratran Thermal Transfer or Duratherm Direct Thermal labels **Profile**

Ribbon Recommendation
TMX1000 series wax
TMX2000 series mid-range

Printer Recommendation
PC23/43 Desktop Printers **Profile**

**Intuitive** – Easiest to install & use
- Multi-language LCD or universal icon user interface
- Step-by-step installation wizard

**Flexible** – Fits your business today & tomorrow
- Scalable connectivity & accessories
- Choice of placement options – wall or cart mountable

**Smart** – Keeps you informed & productive
- Diagnostics through color display or icons
- User installed upgrades & accessories
- Remote management

PM43 RFID Enabled Mid Range Printer **Profile**
- **Ready** – Fastest to deploy. Seamlessly fits any environment.
  - Large color multi-lingual tamper proof touch-screen or icon user interface
  - No touch configuration capabilities
  - Only CCX & WiFi
- **Reliable** – Maximize uptime. Built from 40 years of printing innovations. 3rd generation platform.
  - Precision Print for consistent bar code printing with pin point accuracy
  - Multilingual Web page loaded on every printer ensures easy device monitoring
  - Strong metal structure with metal door that can be locked for media protection
- **Perform** – Increase productivity and process efficiencies.
  - Fastest throughput in its class
  - Powerful programmable capability with ability to directly connect peripherals
  - Most connectivity options in the market

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<table>
<thead>
<tr>
<th>Material</th>
<th>Durability</th>
<th>Temp. Range</th>
<th>Industrial Printers</th>
<th>Desktop Printers</th>
<th>Industrial Printers</th>
<th>Desktop Printers</th>
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<tbody>
<tr>
<td>Duratran II Paper</td>
<td>Good; moderate abrasion, heat, and sunlight resistance</td>
<td>25F minimum application, -40 to 185F operating temperature</td>
<td>4x2&quot; (LR00154, PM4i); 4x6&quot; (LR00146, PM4i); 4x2&quot; (LR00254, PM43); 4x6&quot; (LR00255, PM43)</td>
<td>4x2&quot; (LR00258, PC43i); 4x6&quot; (LR00259, PC43i)</td>
<td>TMX1000 Series: 4.1x18,000&quot; (11234118); TMX2200 Series: 4.1x18,000&quot; (12234118)</td>
<td>TMX1000 Series: 4.1x10,800&quot; 11234012 (1.0” core); 4.3xx3,588&quot; 11044304 (1/2” core) TMX2200 Series: 4.1x10,800&quot; 12234102 (1.0” core); 4.3xx3,588&quot; 12044304 (1/2” core)</td>
</tr>
<tr>
<td>INdelible HP</td>
<td>Best; superior abrasion, moisture, and chemical resistance</td>
<td>50F minimum application, -40 to 185F operating temperature</td>
<td>4x2&quot; (LR00245, PM4i; custom)</td>
<td>custom</td>
<td>TMX3000 series: 4.1x18,000&quot; (13634118, C5i)</td>
<td></td>
</tr>
</tbody>
</table>
RFID Rigid Tag Recommendation
IT65 Large Rigid Tag Profile
IT65 Small Rigid Tag Profile
IT67 Enterprise Lateral Transmitting (LT) Tag Profile

Reader Recommendation
IP30 Reader Profile
IF4 Reader Profile

Services
RFIDeploy® Services ensure solution optimization Portfolio

The Intermec Advantage
Intermec RFID printers, Smart Labels, and readers are optimized to deliver superior performance when used together. Our rigorous testing and co-engineering ensures consistently high print quality, proven label and tag performance in demanding real-world environments, and maximum print head service life for reduced downtime.

Intermec printers and media are complemented by our complete line of integrated solutions and services, including rugged mobile computers, RFID systems and RFID Deploy services, and advanced scanning technology. Intermec products and services are used by customers worldwide to improve the productivity, quality and responsiveness of their business operations.

Printhead Replacement Program
Intermec will provide no cost replacement printheads, as failures occur due to normal wear and tear, to those customers who use Intermec Media Products exclusively with their Intermec direct thermal and thermal transfer fixed printers. For full details, click here.

For more information
Contact Intermec for more information about RFID solutions tailored to your industry needs.