RFID News Roundup

Topics/Verticals: RFID Channel

AeroScout announces Wi-Fi RFID tag that withstands surgical-equipment sterilization processes; CSL unveils ultra-thin RFID antenna development kit for shelving applications; Ascendent ID announces RFID-based automated load-tracking solution; Trimble embedded RFID readers power Gerry Weber's inventory-management system; Orange plans European-wide launch of NFC-enabled SIM cards, handsets.

Dec. 23, 2010—The following are news announcements made during the past week.

AeroScout Announces Wi-Fi RFID Tag That Withstands Surgical-Equipment Sterilization Processes

AeroScout, a provider of Wi-Fi based real-time location systems (RTLS), has announced a Wi-Fi RFID tag for tracking surgical equipment through its entire lifecycle—from sterilization to the operating room. The AeroScout Autoclave tag is designed to withstand rigorous sterilization processes, the company reports, including ultrasonic cleaning, high-pressure liquid sterilization and steam autoclaving. According to AeroScout, the combination of these new tags with AeroScout's health-care RTLS solution is aimed at helping hospitals improve staff efficiency, automate inventory management and optimize operating-room workflow. The new tag is designed for attachment to surgical instrument trays and other equipment, so that they may be automatically tracked while progressing through the numerous stages of preparation for surgical procedures, and then through the perioperative process. After every use, surgical equipment requires thorough sterilization, often including an autoclave. The AeroScout Autoclave Tag handles temperatures of 135 degrees Celsius (275 degrees Fahrenheit) and changes in pressure experienced during cleaning and sterilization, ranging from negative pressure (a vacuum) to 35 pounds per square inch. In addition, the tag is designed to deliver a battery life of two years, and to withstand the harsh conditions of hundreds of sterilization cycles.

CSL Unveils Ultra-Thin RFID Antenna Development Kit for Shelving Applications

Convergence Systems Ltd. (CSL), an RFID provider in Hong Kong, has introduced its CS790 Ultra-Thin RFID Antenna Development Kit, designed for use in building RFID applications requiring highly controllable read zones, such as those for shelving applications in stores. The kit consists of a 16-port RFID reader and a CS-790 UHF Shelf Antenna, a 6-millimeter-thick ultrahigh-frequency (UHF) monostatic antenna, specifically designed for use in display cases and cabinets, on desktops and shelves, with conveyors, or on floors, ceilings and walls. The antenna is composed of a durable plastic material, and its length can be cut to fit whatever dimensions are required, providing the ability to easily retrofit antennas into existing environments. The thin antenna has a fixed width of 250 millimeters (9.8 inches), and is available in 3 standard lengths: 360 millimeters (14 inches), 700 millimeters (27.6 inches) and 990 millimeters (39 inches). Custom lengths can be ordered in as little as 10 units. The antenna comes with a metal backing, for use on non-metal surfaces, or with a plastic backing, for use on metal surfaces. The antennas are based on an evanescent radio wave pattern—which, according to CSL, means they can provide a very controllable read field in this low profile. To obtain the full benefits of this antenna, CSL launched the new CS468, a 16-port reader with an antenna switch capable of reading up to 300 tags per second per port. An Ultra-thin Development Kit, which includes a single shelf antenna measuring 360 millimeters by 250 millimeters (14.2 inches by 9.8 inches) and the CS468

reader, is available starting at $1,695. If a customer wants a larger shelf antenna, a kit with an antenna measuring 700 millimeters (27.6 inches) in length would cost an additional $100, while a kit containing an antenna with a length of 990 millimeters (39 inches) would raise the price by an additional $200.

Ascendent ID Announces RFID-based Automated Load-Tracking Solution

Ascendent ID, a provider of long-range RFID equipment and software, has announced the release of its load-tracking system designed to automate and secure previously labor-intensive and error-prone transactions. To leverage the solution, trucks carrying products to be tracked can be outfitted with Ascendent ID's long-range, rewritable RFID tags. Ascendent ID's readers can be installed at loading areas, and at a truck scale or site exit. As a truck is loaded, product information is automatically written to the memory of an Ascendent ID RFID tag by a standalone reader. When the tagged truck approaches the scale or exit reader, the interrogator identifies the unique identification number stored on the tag, and reads the memory containing the loaded product information. This data is sent to the customer's system, eliminating the time and errors associated with paper tickets and key-entry. The solution leverages the company's DuraTag 4910, a proprietary 2.4 GHz active tag featuring a rugged enclosure, long read ranges of up to 70 feet in typical application installations, and an expected battery life of 8 to 10 years. The tag has two metal-reinforced mounting grommets for secure attachment to trucks, trailers, shipping containers, rail cars, dumpsters, crates and other objects. Also included in the solution are Ascendent ID's RFID readers, available in 6 Zone or 3 Zone versions. The readers provide discrete control and adjustable range for each zone. For example, if the desired result is for Zone 1 tags to be read from 30 feet away and Zone 2 tags to be read from only 15 feet way, the installer can simply adjust each zone's output power to achieve the desired result. A single Ascendent ID reader can be configured for bi-directional truck-scale automation or control of multiple gates, simplifying and reducing the cost of installation. The company's readers can also support relay control of lights and sounds for transaction confirmation and the triggering of gates for independent, standalone operation. According to Doug Crane, Ascendent ID's president, each solution can be customized to meet the customer's specific needs. The solution can be tuned to accommodate the tracking of different material types, for instance, and can be integrated with other systems, such as truck scales. The system can be expanded to provide increased site security for vehicle access into a plant, yard or facility, and is compatible with Wiegand and RS232 formats. Add-on modules, such as GPS location, can provide dynamic load-origin specifics for tracking by field, mine, bin, yard or customer. Integration is straightforward, and the system can be customized to work with virtually any third-party software. Pricing is dependent upon configuration, Crane says, but an installation can start at less than $10,000.

Trimble Embedded RFID Readers Power Gerry Weber's Inventory-Management System

Trimble, a provider of solutions for such location and tracking applications as surveying, construction, agriculture, fleet and asset management, public safety and mapping, has announced that its ThingMagic M5e and M5e-Compact RFID reader modules are being used as part of an inventory-management system deployed by Gerry Weber International. The fashion company, based in Germany, has been integrating EPC Gen 2 RFID tags into the care labels of the 25 million garments it produces annually—an initiative that got underway in 2009 (see Gerry Weber Sews In RFID's Benefits). Gerry Webber also employs RFID technology at 150 retail stores throughout Europe to monitor incoming

goods and inventory processes, and to function as an electronic article surveillance (EAS) system. Trimble's embedded RFID readers are being utilized in several components of Gerry Weber's RFID initiative, including handheld scanners used for inventory, point-of-sale (POS) devices and EAS gate antennas. During the receiving process at its retail locations, Gerry Weber's staff members scan the RFID tags with a Nordic ID PL3000 ultrahigh-frequency (UHF) RFID Cross Dipole handheld with an embedded M5e-Compact embedded RFID reader. The use of RFID is saving store employees a significant amount of time, Trimble reports, because they do not have to manually count items or scan individual bar codes when orders arrive. The Nordic ID mobile computers are also being utilized for retail floor inventory processes, the company says, and RFID-enabled POS and EAS systems designed by RAKO Security-Label GmbH have also been deployed by Gerry Weber to automate purchasing and electronic theft-protection processes. These systems, which are integrated together, include ThingMagic M5e embedded RFID readers, to automate the acquisition of sales information at the point of purchase and provide protection against potential shoplifters by detecting items leaving the store. In addition to automating the collection of purchase data, the system issues an alert upon detecting any items leaving the store that have no record of being scanned at the point of sale—thus indicating a potential theft.

Orange Plans European-wide Launch of NFC-enabled SIM Cards, Handsets

France Telecom-Orange has announced that it will deploy a new generation of subscriber identity module (SIM) cards and mobile handsets aimed at facilitating the development of mobile contactless services based on Near Field Communication (NFC) RFID technology. The new NFC-enabled SIM cards will be introduced for post-paid offers (which essentially means phones purchased with mobile services contracts) from Orange's French operations starting in 2011, and will be extended across Europe at a later date. Orange indicates it is also working with manufacturers to ensure that more than half of all new smart-phone models that it buys will be compatible with contactless services when combined with the new SIM card. Orange has also announced its intention to equip at least 500,000 of its customers in France with compatible handsets by the end of next year. "The smart phone revolution has changed the way people organize their daily lives. People today are constantly connected and constantly on the move. We are seizing the opportunity this creates to make everyday transactions simple," said Stephane Richard, France Telecom-Orange's CEO, in a prepared statement. "Our commitment to contactless services will benefit customers, giving them a seamless, convenient and secure way to validate transport or make payments. To make it a reality for our customers, Orange is working with other operators, banks, retailers, transport and service providers to create an eco-system which will stimulate the development of services adapted to everyone's needs." The European-wide launch follows a commercial pilot that has been running in Nice, France, since May 2010, which has already attracted close to 3,000 customers (see Cityzi Seeks to Spur Adoption of NFC RFID Technology). In that pilot, the NFC RFID initiative known as Cityzi, Nice residents can use mobile phones to function as bus and light-rail tickets, and can also employ NFC-enabled cards or phones to gain loyalty points when shopping at participating stores. The Cityzi service will be launched commercially across France; the "Player One Cityzi" handset will be sold across that country starting in January 2011, and further handset models will follow beginning in the spring. Orange aims to equip at least 500,000 of its French customers with compatible devices by the end of next year.

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