

# RFID News Roundup

EPCglobal certifies SAP repository as EPCIS compliant; Ambient Systems unveils active RFID system for real-time monitoring; RF Technologies announces financing plan for customers; M/A-COM Technology Solutions intros RFID portals that detect tag direction; Lyngsoe Systems achieves EPCglobal software certification mark; Wavetrend teams with fleet management service provider; MysticMD wins research grant for RFID antenna.

Dec. 25, 2008—The following are news announcements made during the past week.

## **EPCglobal Certifies SAP Repository as EPCIS Compliant**

Enterprise applications vendor SAP announced that its SAP Object Event Repository (OER)—a centralized system of record for SAP's applications that supports auto-ID-based business processes and the tracking of serialized items—has been certified and is fully compliant with EPCglobal's Electronic Product Code Information Services (EPCIS) standard. EPCIS is designed to help companies securely exchange RFID and related product data in real time with their business partners, and the protocol serves as the communication mechanism between applications and data repositories from which a company can effectively exchange and query data within its own RFID processes and those of its partners. The EPCIS standard automates the exchange of RFID data as well, because it allows for machine-to-machine communications. The EPCglobal EPCIS compliance and certification means the SAP OER can be used by companies to securely share data with trading partners who are also using EPCIS-compliant solutions, according to SAP. The EPCIS standard was ratified in April 2007 and conformance testing began in September 2007. To be certified as EPCIS-compliant, a solution must pass a series of tests that target a set of interfaces defined in the EPCIS standard. These tests include HTTP Capture Application, HTTP Capture Server, Query Control over HTTP, Query Callback to HTTP and HTTPS destinations. Testing was conducted on EPCglobal's behalf by an independent company, MET Laboratories.

## **M/A-COM Technology Solutions Intros RFID Portals That Detect Tag Direction**

M/A-COM Technology Solutions, a provider of microwave and RF design solutions and products, has announced floor-mounted RFID portals that can determine the direction of travel of passive UHF RFID-tagged items. The direction of travel (DOT) RFID portals are designed to help companies know which way their tagged goods are moving; for example, whether a pallet is moving into or out of a warehouse, or when cases are moving from the back of store rooms onto store floors. The portal system has a galvanized steel frame and uses Impinj's Speedway EPC Gen 2 readers and M/A-COM's directional antennas. The integrated antennas have specialized, dual narrow-beam patterns, with the main beams electrically focused to either side, to help calculate the tag's direction. M/A-COM also developed software for the antennas that help calculate direction. The new portal is available in North America, operating at 902-928 MHz, and will be available in Europe, operating at 865-868 MHz, in the first quarter of 2009.

## **Ambient Systems Unveils Active RFID System for Real-time Monitoring**

Ambient Systems, a Dutch maker of active RFID technologies based on wireless mesh networks, has introduced a mesh network solution that lets companies track individual items in real time, monitor their conditions using integrated sensors, and locate items as they are moved—all with one type of tag. The Ambient Product Series 3000 is designed for a broad range of applications in distribution, transport and

industry, such as safeguarding the condition of perishable goods during transport, locating assets such as infusion pumps in hospitals, or protecting and monitoring valuable assets in remote warehouses, according to Ambient. The solution, based on the IEEE 802.15.4 standard and operating at 2.4 GHz, includes tags called SmartPoints that communicate with each other over a mesh network and determine their own location using Ambient's patented self-localization and self-calibration algorithms. The SmartPoints can also identify relevant business events based on user-defined rules. For example, a tag can send out an alert when a temperature threshold is exceeded, the company says. Each SmartPoint has a built-in battery that can last three to five years.

### **RF Technologies Announces Financing Plan for Customers**

Taking current economic conditions into account, RF Technologies, a provider of RFID-enabled security systems to protect and monitor infants, children and emergency-room patients in hospitals, has announced a new financing program. Called the Safe Place Usage Program, the financing plan lets hospitals purchase RF Technologies' Safe Place solution, or upgrade an existing one, without any capital outlay. Instead, customers can pay a fixed price monthly for a three-year contract. The monthly price is based on 80 percent of the hospital's forecasted usage for the upcoming three years, and the monthly cost would increase only if the hospital exceeds its minimum commitment volumes by more than 5 percent. The Safe Place Usage Program comes with the same level of system capability, support and service as actually purchasing a Safe Place Security System, according to RF Technologies. It includes customization of the system to meet the needs of the hospital, as well as installation, training, a service agreement, and automatic supply replenishment of transmitters and banding material for making the tags wearable. At the end of the three years, the hospital has no obligation to RF Technologies or its financial partner, and can return the system or extend the program. Safe Place features dual-frequency transmitters—active RFID tags that periodically emit signals at 262 kHz and 318 MHz. Doorway readers pick up the tags' 262 kHz transmissions, while others deployed elsewhere within a facility receive their 318 MHz signals.

### **Lyngsoe Systems Achieves EPCglobal Software Certification Mark**

Software maker and systems integrator Lyngsoe Systems announced its Expandable Data Exchange and Communication System (EDECS) RFID middleware has been awarded EPCglobal's software certification mark. Lyngsoe System's middleware can manage multiple passive, active and semi-active RFID readers and antennas, as well as data collection through handheld terminals reading RFID and bar codes. The EPCglobal mark, which is a stylized form of the EPCglobal logo and includes an 18-digit Global Service Relation Number (GSRN) that is globally unique to that specific software product, indicates Lyngsoe Systems' middleware has passed a series of conformance tests conducted by an independent company, MET Laboratories, and that the software will work in predictable ways, as defined by EPCglobal standards, within the overall architecture of the EPC Network.

### **Wavetrend Teams With Fleet Management Service Provider**

Wavetrend, announced it is partnering with Trakker, a Pakistani vehicle-tracking and fleet-management service provider serving more than 100,000 customers in Pakistan, United Arab Emirates, Qatar, Afghanistan and Bangladesh. Under terms of the partnership, Trakker will add to its asset management and security solutions Wavetrend's real-time location system (RTLs), which leverages active 433 MHz RFID technology. Also, the companies will work together on several customer projects, product solutions and other key developments specifically for asset-tracking, security and authentication requirements in Pakistan and the Middle East.

### **MysticMD Wins Research Grant for RFID Antenna**

MysticMD Inc., a developer of advanced materials including proprietary nanocoatings and nanofilms, announced it has received a Phase I Small Business Innovation Research (SBIR) grant from the National Science Foundation (NSF), an independent federal agency created by Congress in 1950 to promote science. MysticMD will use the \$98,622 grant to develop a screen-printable conductive ink for RFID tag antenna

applications, teaming with Identica Holdings, a maker of biometric identification and security solutions. MysticMD says the bendable RFID antennas it will develop are expected to cost about 90 percent less than comparable copper antennas, and will improve reliability and encourage expansion of RFID for a variety of identification and tracking applications. MysticMD will develop and print a conductive ink, forming an antenna for a 13.56 MHz tag that will comply with the ISO 15693 standard and that Identica will design and test. Based on positive Phase I results, MysticMD will seek SBIR Phase II funding to build prototypes for target commercial applications in situations where low cost and reliability are critical, the company says.

Copyright ©2005 RFID Journal, Inc. All Rights Reserved