

RFIDnordic.se

INFORMATION CONCERNING RFID IN SCANDINAVIA Oct 2009

AUTOMATIC VEHICLE IDENTIFICATION WITH RFID

The steel mill in Cherepovets is a part of Severstal's Russian steel segment and is the second largest steel mill in Russia with more than 50.000 employees and production that accounts for about 10 % of all Russian steel. The daily operation is characterized by a large volume of road and rail traffic entering and leaving the mill. With a new Automated Vehicle Identification System (AVI) the customer improved the overall traffic throughput and area security at the same time.

BUSINESS BENEFIT

The Cherepovets Industrial complex is situated at the crossroads of iron ore, coal and steel flows. Main rail and automobile roads and Mariinskay river system are situated nearby and that is why proper organization of vehicle control system is inevitable. The first challenge is the large workload of goods traffic creating long queues of trucks at the gates to enter the industrial area. The second challenge is to implement a high security level standard for goods control, so only authorized vehicles should be permitted for entry. Also there are different access zones for cars and trucks within the industrial area.

SOLUTION

Cherepovets industrial complex chose the TagMaster long-range RFID system for automated vehicle identification. Readers were installed at 11 gates, both entrances and exits for secure access control. Every vehicle was equipped with TagMaster MarkTag, easily mounted inside the windscreen. TagMaster readers were connected to high-reliability Apollo controllers provided by AAM Systems. With flexible software, powerful controllers and long-range readers in combination with a CCTV system, a high level of security is absolutely guaranteed.

CONCLUSION

TagMaster RFID system made the vehicle identification process when entering and exiting complex territory easy and rapid. Equipment and goods are completely safe as only authorized vehicles are permitted to enter the territory. TagMaster readers allowed the construction of a convenient and safe Automated Vehicle Identification (AVI) access control system.

*For further information please contact:
Mikael Bubenko, TagMaster +46 632 1962*



>>



CONTENTS:

- Page 1 Automatic vehicle identification with RFID
- Page 2 NP Collection - winner of the Golden Tag Award
- Page 3 This years nominees for the RFID NORDIC Scholarship
- Page 4 UPM Raflatac and Hansaprint partners to drive new NFC solutions
- Page 5 Passive humidity and temperature sensing RFID tag
- Page 6 Malaysia's first RFID library system implemented with tags from UPM Raflatac
- Page 7 Valtra automates material flows with RFID
- Page 8 ABB opts to use RFID technology to avoid shipment errors
- Page 9 Active RFID technology-truck tagging at Australian Ports
- Page 10 Exclusive parking with RFID
- Page 11 RFID tags at European youth Olympic Festival
- Page 12 ELARA - active humidity and temperature RFID tag
- Page 13 RFID speeds up Plandent's supply chain
- Page 14 Siemens benefits from UPM Raflatacs RFID tags for electronic tagging
- Page 15 Mobile phone and RFID tag solution

NP COLLECTION – WINNER OF THE GOLDEN TAG AWARD

It was NP Collection from Finland who won this years edition of The GOLDEN TAG AWARD for 2008 at the Prizeceremony in Kista, Stockholm. They recieved the Price for effective logistics and profitable trade through RFID.



The Award goes yearly to a RFID project with high Return-of-Investment and is always won by the buyer of the RFID commission. The Award this year goes to an application from 2008.

This Years winner of the MINITAG, that goes to the Consultant in charge of the commission, was won by UPM Raflatac from Finland and member of RFID NORDIC.

The Price is made possible every year through a cooperation between RFID NORDIC and the Swedish Trademagazin "Packmarknaden".

For further information please contact:
Tiina.kainulainen@upmraflatac.com Mobil +358 40 842 2470
Ove Canemyr Chairman RFID NORDIC +46 70 794 09 87.
www.rfidnordic.org



THIS YEARS NOMINEÉS FOR THE RFID NORDIC SCHOLARSHIP

BJÖRN KVARNSTRÖM AND ERIK VANHATALO

LULEÅ University of Technology
Using RFID to Improve Traceability in Process Industry

EARL PANNILA, JONGYUN MOON AND ARHO SUOMINEN

University of Turku
SAFETYSNIFF

**EMIL NILSSON, ARNE SIKÖ, PETER LINNÉR, URBAN BILSTRUP, PER-ARNE WIBERG
AND HERBERT ZIRATH**

Högskolan i Halmstad - Chalmers
A New CMOS Circuit Topology for Low Power RFID application

JUN CHEN

Royal Institute of Technology Sthlm
A Low Cost Anti-Lost Carts Monitoring System

MIA-MARIA NORDLUND

Department of Packaging
On the Road Again - a RFID

JESSIKA ISRAELSSON

Logistics, LTH
Implementation at a Third Party Logistics Provider

YASAR AMIN

Royal Institute of Technology Sthlm
Versatile UHF RFID printable tag antennas

ZHI ZHANG

Royal Institute of Technology Sthlm
Two-Layered RFID Network for Logistics and Retail

UPM RAFLATAC AND HANSAPRINT PARTNER TO DRIVE NEW NFC SOLUTIONS

UPM Raflatac and Hansaprint are pleased to announce a new partnership agreement that specifically targets the development of NFC/RFID market opportunities. As one part of the co-operation in the agreement, UPM Raflatac and Hansaprint will offer a new solution that provides an easy creation of low volume customised NFC tags and labels via an online service.

Both companies regard the emerging NFC market as a lucrative and promising opportunity due to NFC technology's capability to create intuitive and easy-to-use services and marketing possibilities for consumers and businesses.

"We are very enthusiastic to collaborate with Hansaprint and believe that both companies will benefit from this partnership."

"We are very enthusiastic to collaborate with Hansaprint and believe that both companies will benefit from this partnership. UPM Raflatac is the leading producer of HF and UHF tags and inlays and has a strong focus on the NFC market. Hansaprint is the leading printing services provider in the Nordic countries. Thanks to the



digital printing technique, Hansaprint is able to provide both high and low volumes of individually customised NFC products," says Samuli Strömberg, Vice President, Marketing, UPM Raflatac, RFID.

"We keenly and optimistically look forward to the possibilities in the NFC market. By combining UPM Raflatac's and Hansaprint's expertise and knowledge in tag manufacturing and print services we can jointly offer something really new and exciting for the

"We keenly and optimistically look forward to the possibilities in the NFC market."

NFC market in the very near future," acknowledges Jukka Saariluoma, Development Director, Hansaprint.

Near-field Communication (NFC) is a very short-range radio communication technology. NFC technology offers people an efficient and easy way of handling several every day affairs. Applications enabled by NFC are for example contactless transactions for payment and transit ticketing, access to online content and simple data transfer.

*For further information, please contact:
Mr Samuli Strömberg, Vice President,
Marketing, UPM Raflatac, RFID, +358
(0)40 740 9588*

Mr. Jukka Saariluoma, Development Director, Hansaprint, +358 (0)400 447 619

PASSIVE HUMIDITY AND TEMPERATURE SENSING RFID TAG

By combining sensors with RFID tags, make it possible to not only locate and identify items but significantly improve monitoring of different parameters of interest during handling. For example, a special RFID sensor tag could control and record temperature and humidity of goods throughout transport. The addition of an accelerometer / inclinometer could give you important information about

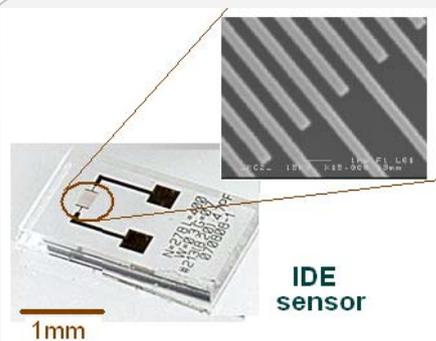
the handling status during unloading of the goods.

An example is the passive humidity and temperature sensing RFID tag based on Imego's capacitive humidity sensor and the commercially available RFID tag IDS-SL13A.

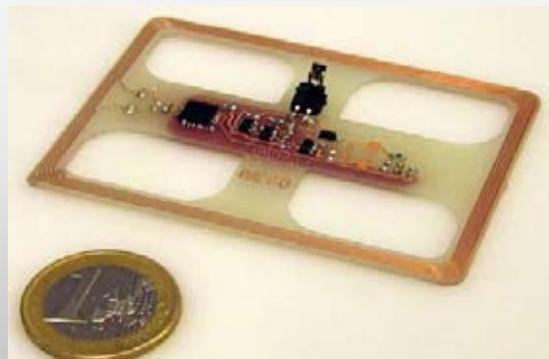
Different types of sensors are available for custom designed applications (ex. pH, molecules/substance detection in liquids). The sensor is based on capac-

itive detection by using interdigitated electrodes covered by a sensitive polymer layer. The design is generic, in the sense that working range, electrical output (capacitance / voltage / time or analog / digital) or signal transmission method can easily be adapted to your specific application.

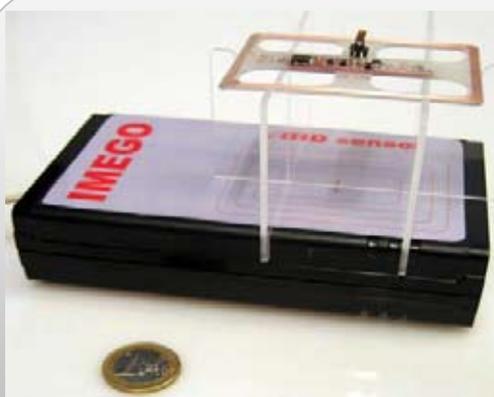
*For further information please contact:
Cristina Rusu cristina.rusu@imego.com,
phone: +46 750 18 68*



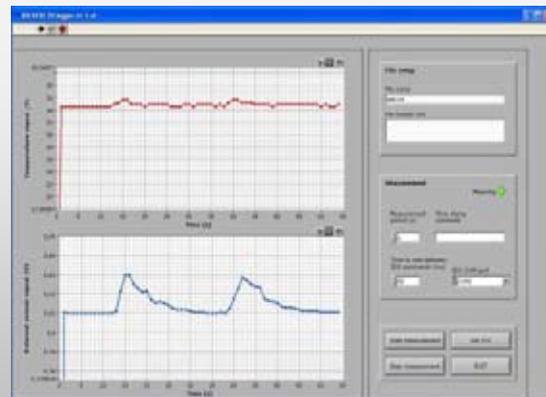
Imego's capacitive humidity sensor



RFID tag IDS-SL13A with internal temperature sensor together with Imego's humidity sensor and interface electronics



RFID reader IDS-R13MP (inside box) and RFID sensor tag



Temperature (red) and humidity (blue) data received from RFID sensor tag

MALAYSIA'S FIRST RFID LIBRARY SYSTEM IMPLEMENTED WITH TAGS FROM UPM RAFLATAC

Penang Public Library is Malaysia's first library to use an RFID system compliant to the EPC Global Gen2 standard. The system, implemented by Smart-tag Solutions Bhd., uses RFID tags supplied by UPM Raflatac.

There are roughly 500,000 copies of reading materials in six different libraries in Penang, and over 800,000 library users. A successful RFID project now provides Penang Public Library Corporation with optimal performance through a unique combination of technologies.

The Library Tagging system from Smart-tag Solutions uses UPM Raflatac's DogBone tags, which ensure that accurate readings taken in a split second can be documented using RFID Inventory Management. The RFID technology provides Penang Public Library

Corporation with a fast, accurate means of gathering inventory information on large quantities of library materials.

With the RFID system, the library has realized its vision of a fully automated library. The RFID self check-in/out station is an easy to use interface which enables library patrons to manage their own transactions, review their account status and renew materials in real time.

With the RFID system, the library has realized its vision of a fully automated library.

the RFID reader, and within seconds the material and user information are updated in the library system," says Shukriah Yon, Director, Penang Public Library Corporation.

"The tagged library materials enable patrons to self-checkout and return materials quickly and efficiently."

The UHF reader, which is an anti-theft component of the RFID Library System, has a range greater than an HF reader, providing functionality at up to seven metres. A computer instructs the reader to detect tagged books that don't have a checkout code, and an alarm is triggered when items pass through that haven't been coded as borrowed.

*For further information, please contact:
Mr Edward Lu, Sales and Marketing Director, Asia, UPM Raflatac, RFID, tel. +65 9173 0884*

VALTRA AUTOMATES MATERIAL FLOWS WITH RFID

Valtra has automated the material supply process and material buffer management with RFID at its' Suolahti tractor manufacturing plant. The RFID system implemented by Vilant Systems triggers replenishment orders based on material consumption movements directly to the suppliers. Goods receiving is automated with RFID enabled conveyors and RFID gates at the dock doors and material stock levels are maintained in real time. The system improves material handling efficiency and reduces manual errors. The real time material inventory information and inbound shipment data enable prevention of material shortages.

Valtra's system is based on RFID enabled forklifts that read material pallets while transporting them from the material buffer to the consumption area and trigger replenishment orders. The system is based on pallets that have reusable RFID tags. Goods receiving dock doors and inbound conveyors are equipped with RFID readers for automatic goods reception. Vilant's RFID software controls the RFID readers and integrates the information to Valtra's ERP system.

The Vilant Server 5 RFID software system presents real time inventory information of the material buffer. For each material a target buffer amount is set. For single materials the buffered quantity can be followed. The buffered amount, pending replenishment orders and inbound shipments are visible.



An RFID enabled forklift for automated material replenishment order triggering.

Automatic goods receiving with an RFID enabled inbound conveyor.

The information is based on Valtra's RFID readers and readers deployed to suppliers.

The material flow visibility provided by the RFID system can improve material availability at the factory. Goods receiving automation saves labor cost in the inbound process. Real time visibility of goods movements enhances control and inventory information is more accurate. The real time replenishment for material consumption improve inventory cycle time. In total the RFID system improves many areas of material flow. Improving material flow is one of the key components of modern Lean production improvement methodology.

Valtra's Supply Chain Manager Timo Husso has expanded RFID development to new areas already:

"Thorough preparation work for this system implementation was started already in 2003. We conducted an RFID pilot that gave us satisfactory results and experience. New application areas emerged quickly, too. We have implemented production traceability and internal material movement automation with RFID already."

Valtra's RFID system is based on Vilant Server 5 RFID software and Vilant's RFID hardware products. Prior to production use the system was piloted with Valtra's supplier Metalpower. The IT systems were implemented in partnership with Tieto and Liaison.

*For further information please contact:
Ville Kauppinen, Vilant Systems Oy, Tel.:
+358 (0)50 328 8001,
ville.kauppinen@vilant.com*

ABB OPTS TO USE RFID TECHNOLOGY TO AVOID SHIPMENT ERRORS

RFID technology provides significant benefits to ABB Oy in the management of outbound goods streams. An RFID-based system records movements of goods automatically in the stock control system and prevents loading errors of consignments.

Moreover, the RFID-system offers ABB a significant saving in floor space used. When outbound consignments are loaded, it is no longer necessary to assemble goods in a consolidation area. Instead, goods-vehicle trailers can be used for storage. The automation in question covers around two million transactions per year.

ABB's system uses UPM Raflatac's RFID tags that were implemented by Vilant Systems. All transport units belonging to a consignment are marked

with adhesive RFID tags at parcel level. The trailer loading docks are equipped with RFID readers, which scan all loaded parcels. Vilant's RFID software has been integrated with ABB's own SAP system.

The registration number of the vehicle arriving for loading is recorded in the SAP-system and the progress of the delivery is automatically controlled. The system knows what the consignment should include and the gate issues an error warning if there is an attempt to load the wrong goods onto a vehicle. Furthermore, the gate will not close until all goods belonging to a consignment have been loaded onto a vehicle. All this makes it virtually impossible to make incorrect deliveries.

ABB has been using pioneering RFID solutions since 2004. Their first RFID application was designed to control the re-usable plywood boxes which

were used in standard raw material deliveries. This system, which is still in use, is based on the fact that all boxes equipped with RFID tags travel through RFID gates both at the supplier and at the factory.

ABB Oy's Head of Processes Julle Ala-Lahti has been pleased with the RFID applications.

ABB's systems are based on the Vilant Server 5 product family and Vilant Systems' RFID hardware products. UPM Raflatac's RFID tags are used as identifiers.

*For further information please contact:
Mr Samuli Strömberg, Vice President,
Marketing, RFID, UPM Raflatac,
+358 40 740 9588*

*Mr Ville Kauppinen, Director, Markets,
Vilant Systems, +358 50 328 8001*

"ABB has been using pioneering RFID solutions since 2004."

ACTIVE RFID TECHNOLOGY

SELECTED BY DP WORLD FOR STREET TRUCK TAGGING PROGRAM AT THREE AUSTRALIAN PORTS

IDENTEC SOLUTIONS announced recently that its industry-leading active RFID technology has been selected by DP World, one of the world's largest container terminal operators, for truck identification and access control at all their Australian container terminals.

IDENTEC SOLUTIONS, in conjunction with RAMP, a local Sydney, Australia based system integrator, will deploy the total active RFID based solution including long-range tags, readers and integration software. IDENTEC SOLUTIONS' readers and positional markers will be located at all terminal access points. Trucks each be "read" as they enter and exit the facility and the tag ID communicated to the gate application of the Terminal Operating System (Navis SPARCS). The first deployment has already been completed at the Port Botany Terminal, Australia's second largest container port, located in Sydney. The system will be rolled out to DP World's Brisbane and Fremantle sites over the next six months.

Prior to the award, IDENTEC SOLUTIONS, along with competing vendors, undertook a rigorous proof-of-concept test that was evaluated by DP World's Australia operations teams. IDENTEC SOLUTIONS' patented, Intelligent Long Range (ILR) technology, long noted for its exceptionally robust features and long read ranges

in even the harshest of environmental conditions was a key component of the awarded contract.

"We believe that active RFID is a key process automation technology for gate and yard operations - and it supports DPW's commitment to both improving safety and increasing productivity," states Joe Schofield, National Manager Operations Efficiency for DP World's Australia region. "Multiple vendors were evaluated; however we found IDENTEC SOLUTIONS technology's robust features, exceptional performance and reliability were well

We believe that active RFID is a key process automation technology for gate and yard operations

suited to the demands of marine container operations."

The contract was awarded to, and is being deployed by Ramp RFID, a member of IDENTEC SOLUTIONS' worldwide reseller program. "This is a major step forward for the application of active RFID in the transportation and logistics market in Australia,"

comments Kevin Cohen, Ramp RFID, CEO. "We are looking forward to increased adoption of active RFID across the ports sector and in the Australian market in general".

"We were pleased to partner with DPW Australia and Ramp RFID, on this project," states Gerhard Schedler, CEO, IDENTEC SOLUTIONS. "By combining our industry leading active RFID technology with RAMP's integration and application development expertise, we were able to deliver DP World, a solution that met their logistical needs for today and will easily be able to keep up with the significant growth anticipated at these terminals in the future. This award further demonstrates IDENTEC SOLUTIONS' position as an emerging leader in the marine/intermodal and ports sector."

This announcement represents IDENTEC SOLUTIONS' second major award from DP World for RFID enabled gate automation. The first was for the Jebel Ali container terminals located in Dubai, UAE. An IDENTEC SOLUTIONS supplied RFID gate solution is also utilized by the Georgia Port Authority in Savannah, Georgia.

*For further information please contact:
Anders Boman
Phone+46 36 13 50 80
Fax+ 46 36 13 51 80
Mobil +46 708-139454
aboman@identecolutions.com*

EXCLUSIVE PARKING WITH RFID

The Americana at Brands is a \$400 million dollar mixed-use urban development featuring luxury retail and housing in downtown Glendale, California, just outside Los Angeles. There are 75 shops and boutiques along with indoor and outdoor dining. The development encompasses 15.5 acres with 238 luxury apartments, 100 premier luxury condominiums, a movie theatre, and a two-acre park with a dramatic dancing fountain. Designed by Rick Caruso, The Americana at Brand is the model of luxury shopping and convenient living. Sentry Control Systems performed the installation of TagMaster's 15 Readers, SKIDATA's entrance and exit columns, a unique Self-Park exit, concierge service, an Automated Valet System and Darktronics' stall count-signs for each level allowing quick and efficient access for the residents.

BUSINESS BENEFIT

A complex such as The Americana at Brands draws huge crowds that come to explore and enjoy the experience of



luxury shopping and fine dining. Americana wanted a system that could prevent non-permitted vehicles from entering the restricted residential parking areas.

SOLUTION

The concern from Americana about the shoppers parking and wandering through restricted areas was addressed and overcome through the installation of TagMaster's AVI system. With TagMaster's AVI system the residents and shop owners know that only cars with TagMaster tags will be allowed into restricted parking areas.

CONCLUSION

In May 2008, residents of The Residences Apartment Homes are able to park hands-free and worry free using TagMaster's RFID technology in addition to Sentry Control Systems' seamless integration.

*For further information please contact:
Bo Tidermann, Tagmaster
Phone +46 8 632 19 50
bo.tidermann@tagmaster.se*

UPM RAFLATAC'S RFID TAGS FOR ACCESS CONTROL AT EUROPEAN YOUTH OLYMPIC FESTIVAL

UPM Raflatac will supply RFID inlays for access control in support of the July 18th – 25th European Youth Olympic Festival (EYOF) in Tampere, Finland.

All authorised individuals involved in the upcoming event will be issued integrated UPM Raflatac RFID tag identification passes. The identification cards will facilitate access to e.g. accommodation, dining and competition venues. Moreover, the RFID tag passes will allow access to free usage of the public transportation system in Tampere.

The utilisation of RFID-technology in access control offers event organisers an efficient and cost effective solution, which incorporates screening and security issues. Volunteers and other event organisers are able easily, quickly and smoothly allow people access to the various venues, which reduces their overall workload.

“By supporting the EYOF we can directly show event organisers the

benefits of using RFID-technology and indirectly the authorised event participants.

This event is about young international athletes from various cultures, and we firmly believe that the access control supported by our RFID inlays will go seamlessly,” says Samuli Strömberg, Vice President, Marketing, UPM Raflatac, RFID.

The EYOF is a biennial multi-sport event for youth athletes from the 49 European Union member countries of the association of European Olympic Committee. EYOFs first summer event was hosted in Brussels, Belgium in 1991, followed by the winter event two years later in Aosta, Italy. EYOF is the only all-European multi-sport event.

In Tampere, more than 2600 young European athletes will compete in nine different sports: athletics, basketball, cycling, gymnastics, volleyball, judo, swimming, tennis and handball.

For more information about the event, please see www.tampere2009.fi

For further information, please contact:

*Mr Samuli Strömberg, Vice President,
Marketing, RFID, UPM Raflatac,
+358 40
740 9588*

*Mr Mikko Heinonen, Project Manager,
European Youth Olympic Festival,
+358
50 554 5835*

ELARA - ACTIVE HUMIDITY AND TEMPERATURE RFID-TAG

Elara contains a sensor that measures relative humidity and temperature and a clock for programmable logging intervals for humidity readings.

Communication with the reader is via a special protocol. This protocol enables several tags to be within range of the reader at the same time. Each tag has a unique serial number.

The electronics are of the highest quality and classed for higher operating temperatures. For optimal op-

erating life, the tag is powered by a lithium battery.

Fully encapsulated. Standard plastic colours are blue, black or transparent, and other colours can be specially ordered. The company's own logotype can also be inlaid in the mould.

For further information please contact:

Anders Hermansson Bnearlt

+46 920 211 800

Anders.hermansson@bnearit.se



CRAYCOM
SINCE 1984

RFID SPEEDS UP PLANDENT'S SUPPLY CHAIN

Finnish dental consumable supplier Plandent has implemented an RFID based shelf replenishment system for its customers' dental supply storages. The system implemented by Vilant Systems Oy enables real time replenishment orders based on material consumption at dental practices. The system helps preventing material shortages and manual mistakes as it reduces manual inventory and ordering work.

Plandent's system is based on RFID tagged consumable boxes used in the supply store rooms of dental practices. Nurses show emptied boxes to an RFID reader that immediately sends replenishment orders for that material to Plandent. Vilant System's RFID software forwards the order information to Plandent's ERP system. The software monitors the read points and takes care that no orders are lost or delayed.

The fast and accurate replenishment rhythm avoids over stocking and thus improves inventory cycle times.



Order automation helps in preventing material shortages. The orders are sent immediately and there is no possibility of entering wrong material codes or quantities. What is even more important, the system reduces staff's time used in the administrative work and thus releases more time for the essential clinical work.

Vilant has previously implemented similar systems to industrial supply chains and material handling processes. This is the first time UHF RFID technology is implemented in this manner for managing customer supply stock in the health sector. The efficiency benefits introduced by automation and the decrease of manual errors in the replenishment process are equal for both application areas.

Markus Kühn, Director at Plandent, is satisfied with the system implemented

by Vilant Systems: "The implementation was fast and the system is reliable and easy to use. The system's benefits in reducing administrative work show instantly. Customer feedback has been excellent and we are continuing the system roll out."

The Plandent system is based on Vilant Server 5 –RFID software products and Vilant RFID eKanban readers. UHF inlays are supplied by UPM Raflatac.

Contact details: Ville Lukkari, Vilant Systems Oy, Tel.: +358 (0)44 539 2712, ville.lukkari@vilant.com



SIEMENS BENEFITS FROM UPM RAFLATAC'S RFID TAGS FOR ELECTRONIC TAGGING

Siemens Enterprise Communications Manufacturing GmbH, has gained considerable savings in both time and costs in various steps in their production and logistics chain since implementing an RFID solution in 2007. Simultaneously, a giant step has also been gained in the fight against counterfeiters of the high-end business telephones in their portfolio. Siemens Enterprise Communications Manufacturing uses UPM Raflatac's UHF EPC Gen2 Web inlays with NXP U-Code G2XL ICs in their RFID solution.

At Siemens Enterprise Communications Manufacturing, an RFID tag is embedded inside each business telephone. After assembly and technical testing, a unique identification number (MAC) is given to each phone and programmed to the RFID inlay. Based on that information, each product is then packed and correct labels are attached to the outer boxes. An individual pallet can include 114 phones. The pallet then moves on to Siemens' logistics centre concurrently with the data of the delivery.

Data from the tagged phones is read in the logistics centre without having to unpack them from the outer boxes. This is a huge advantage since previously all products had to be identified manually. To optimise the whole process with precision, all gathered data is automatically transferred into the

centre's ERP and IT systems. Benefits are not limited to just production. Thanks to linking the RFID system with CRM systems, it is possible to track customer deliveries and gain base data for evaluations and stock overviews. Knowing the exact identification numbers of the phones, installation and service processes are efficiently accelerated. In cases where several hundreds or thousands of phones need installations or updates, it is a major saving in time and resources when this can be done electronically.

Thanks to linking the RFID system with CRM systems, it is possible to track customer deliveries and gain base data for evaluations and stock overviews

Security issues present also an important advantage. Data transfer between tags and readers happens via an electronic field, and thus keeps the information protected from outsiders. "By embedding the RFID tag inside the phone it is nearly impossible to remove or destroy the data they carry without visibly damaging the product. This makes counterfeit or imitations

nearly impossible," says Mikko Nikkanen, Business Development Director, UPM Raflatac RFID.

UPM Raflatac's globally functioning Web inlay was chosen for this solution due to its ideal dimensions and excellent performance even when it is embedded into the phones plastic protective cover. Given that the assembly lines and the products on them at Siemens Enterprise Communications Manufacturing factory are close to one another, it is important that the Web inlays are not affected by the nearness of other tags.

In general, package level RFID tagging of consumer electronics, such as laptops, LCD screens, televisions and cameras, can provide return on investment within 6 to 12 months. This is because utilising RFID technology makes several business processes more efficient.

Embedded item level tagging of consumer electronics has even more to offer. It simplifies considerably the after sales services and recycling processes. As the electronics device itself can be read, information e.g. about origin, updates, warranty and maintenance are constantly on hand throughout the products life-cycle. This is definitely a noteworthy benefit for both manufacturer and consumers.

*For more information, please contact:
Mr Mikko Nikkanen, Business Development Director, RFID, UPM Raflatac,
tel. +1 828 275 5162*



MOBILE PHONE AND RFID TAG SOLUTION

Reslink's latest product for field service workers is an easy-to-use mobile phone proof-of-attendance solution that can be configured to suit the requirements of both the service company and its clients.

By touching pre-positioned RFID tags with their mobile phone, proof of a workers' attendance at a particular location, and at a particular time, is instantly recorded.

After registering their location, the system can also present the worker with a list of contextsensitive options

on their phone – options that may be related to the type of location or customer. For example, they can select to record the job number they are about to begin, or the status of their visit. Other reporting options instigated by touching an RFID tag in their van could let them record start and end of shift, or current mileage readings.

The field worker needs to carry only one device, a mobile phone, in order to confirm where they are, for how long, and the tasks performed whilst there. Additional expensive and difficult-to-use mobile devices such as a PDA are not required, and time-

consuming and error-prone manual form-filling is greatly reduced.

The maintenance company thus collects in-field data quickly and more accurately, helping them provide a better service to their clients and giving them immediate visibility of field visits and data logged by workers. Web-browser based reports and enquiries allow both managers and clients to access real-time information that can also automatically be transferred to the main operational system.

*For further information please contact:
Lars Ölvestål, Reslink
Mobil; +46 733 18 33 87
lars.olvestal@reslink.fi*

Contact RFID Nordic organisation

C = Consultant P = Producer U = User F = Federation M = Media

Associated:

AMD
Leif Nordlund
+46 73 625 40 61

P
ACSC INTERNATIONAL
Birgitta Hansson
Box 119, 599 23 Ödeshög
Tel 0144 10 000
Fax 0144 100 82
Mobil 0706 42 42 88
birgitta.hansson@acsc

C
ADAGE SOLUTIONS
Juha Rajala
Box 10021, 952 27 Kalix
Tel 0923 668 81
Fax 0923 668 88
Juha.rajala@adage.se

F
samarbete med:
AIM DENMARK
Arne Rask, ordförande
ar@logisys.dk

samt
F
AIM EUROPE
milagros@aimglobal.org

C
ADHTECH AB
Peter Nilsson
Box 22023
250 22 Helsingborg
Tel 042-25 60 21
Mail contact@adhstech.se
www.adhstech.se/

P
AREFF SYSTEMS AB
Fredrik Martinsson
Verkövägen 102, 371 65 Lyckeby
Tel +46 455 61 66 02
Mobil +46 733 526102
Mail fredrik.martinsson@areff.se

C
BNEARIT AB
Spantagatan 2
973 46 Luleå
+46 920 211 800
anders.hermansson@bnearit.se

C
CAPGEMINI
David Glans
Gustavslundsvägen 131, Box 825
161 24 Bromma
Mobil 0736 737355
david.glans@capgemini.se

P
CIVIL ID SYSTEMS
Pierre Wincent
Box 933, 194 29 Upplands-Väsby
Tel +46 8 626 85 60
Pierre.wincent@civildidsystems.com

C
COMBIQ AB
Gjuterigatan 9 Science Park
553 18 Jönköping
Tel +46 705 74 04 72
torbjorn.birging@combiq.com

P
CONFIDEX LTD
Torbjörn Andersson
Haarlinkatu 1, 33230 Tampere, Finland
+46 768 530 130 (mobile)
+358 10 424 4100 (office)
Skype ID: lakselva
torbjorn.andersson@confidex.net
www.confidex.fi

P C
DATAFÅNGST SVENSKA AB
Brännögatan 9A, 211 24 Malmö
Lars Enoksson
Mobil +46 709 41 67 87
Lars.enoksson@datafangst.se

C
DATEMA
SolnaStrandväg 98
Mobil: 0730-93 52 01
Tel 08 517 150 86 (00 vx)
Fax 08 28 77 05
oskar.josefsson@datema.se

I samarbete med:
F
EFORUM I STANDARD
Postboks 242, 1326 Lysaker
Tel 67 83 86 93
post@eforum.no

C
ELECTRONA-SIEVERT AB
Jonas Buskenström,
Gårdsvägen 4, 169 70 SOLNA
Tel 08 447 31 00
Jonas.buskenstrom@electrona.se

C
ELGAB
Lars-Göran Johansson
Atlasvägen 777 34 Smedjebacken
Tel +46 240 760 20
Cell +46 70 899 47 80
l-g.johansson@rfid.se

C
ESCS AB,
christer@escs.se
Heberg117, 31196 Heberg
Besök Skreavägen 5
0346-13075., 0705088403
www.escs.se

P
FERROXCUBE
Rolf Lindgren
Seminariegatan 29B
752 28 Uppsala
Tel +46 18 509 02 40
Mobil +46 70 659 0205
Rolf.lindgren@ferroxcube.com

C
FREE2MOVE
Dan Hellgren
Serlingsgatan 7
302 48 Halmstad
Tel 035 15 22 60
dan.hellgren@free2move.se

U
HANDELSBANKEN
Henrik Sirborg
Tegeluddsvägen 31 115 82 Stockholm
Mobil 070 - 53 156 34
hesi02@handelsbanken.se

C
HENCOL
Henrik Östergren
Mosskroken 24
167 56 BROMMA
Tel +46 8 26 91 49
Cell +46 70 733 36 78
info@hencol.se

P
HP
Kent Roger Wistam
Gustav III Boulevard 36
169 85 SOLNA
Tel 08 524 910 00
kent-roger.wistam@hp.com

C
IDENTEC SOLUTIONS
Blekingegatan 3
554 48 Jönköping
Tel +46 36 13 50 80
Fax+ 46 36 13 51 80
Mobil +46 708-139454
aboman@identecsolutions.com

C
IDENTEC SOLUTIONS NORWAY AS
(formerly Wtek AS)
Skarpengland
4715 ØVREBØ, Norway
Phone: +47 38 13 91 53
Fax: +47 38 13 96 91
Mobile: +47 951 16 047
E-Mail: mona@identecsolutions.no

P
INTERMEC
Patrik Fredriksson
Vendevägen 85 B
182 91 Danderyd
Tel 08 622 06 60
patrik.fredriksson@intermec.com

I samarbete med:
F
KOMPETANSENETTVERKET
EFORUM
i Standard Norge
August Nilssen
Prosjektleder
Tlf dir: 67838689
Mobil: 90140566
http://www.eforum.no/

I samarbete med:
F
KTH INFORMATION AND COMMUNICATIONS TECHNOLOGY
Li-Rong Zheng
Box Elctrum 229
164 40 Kista
+46 8 790 4104
lirong@imit.kth.se

C
LEARNINGWELL
Cylindervägen 18
Box 1113, 131 26 NACKA STRAND
+46 70 332 84 70
gunnar.ivansson@learningwell.se

P
LOGOPAK SYSTEMS AB
Lilla Bommen 1
SE-411 04 Göteborg
Tel 0 31 - 700 12 30
mobile: 0709 - 67 84 70
fax: 031 - 15 12 01
mail: LThuring@Logopak.se
web: www.logopak.se

P
MECTEC ELEKTRONIK AB
Joachim Holgersson
Agnesfridsvägen 189
S-213 75 Malmö
Tel 040 689 25 01 (Direct)
Mobil 070 354 75 01 (Mobile)
Växel 040 689 25 00 (Switchboard)
Fax 040 689 25 25 (Fax)
joachim.holgersson@mectec.se
http://www.mectec.se

M
MEDIAPLANET
Richard Ohlsson
Norrländsgatan 22
111 43 Stockholm
Tel +46 8 545 953 00
richard.ohlsson@mediaplanet.com

Associated:
Björn Söderberg
Mobil 073 805 09 00
Bjorn.soderberg@kiwok.com

M
MENTOR ONLINE
Lars Nordmark
Tel 042 490 19 17
Fax 042 490 19 99
Mobil 0709 75 99 42
Mats.b@mentoronline.se

P
MOTOROLA ENTERPRISE MOBILITY
Jonas Folkesson
Solna Strandväg 78, 171 26 Solna
+46 8 445 29 23
Mobil +46 733 35 29 23
Jonas.Folkesson@motorola.com

P
NILÖRNGRUPPEN AB
Per Wagnäs
Box 499, 503 13 Borås
Tel +46 33 700 88 53
Mobile +46 70 915 18 67
Per.wagnas@nilorn.com

M
NORD-EMBALLAGE
Bo Wallteg
Bankvägen 30
262 70 Stöveltorp
Tel 042/207166
Mobil 0703/207163
bo.wallteg@n-e.nu

P
NORDICID
Miia Kivela
Myllyojankatu 2A
24100 SALO, Finland
Tel +358 2 727 7700
miia.kivela@nordicid.com

P

**OBERTHUR TECHNOLOGIES
SWEDEN AB**

Torjörn Noré
Färögatan 7, 164 40 KISTA
Tel +46 8 658 75 00
t.noree@oberthurcs.com

I samarbete med:

F

ODETTE

Sten Lindgren
Karlavägen 14, Stockholm
Tel +46 8 700 41 20
Sten.lindgren@odette.se

Associated.

Olle Hydbom
Phone +46 705 28 47 50
rfid_expert@telia.com

P

OPTICON

Henrik Sittkoff
Spjutvägen 5, Hus C
175 61 Järfälla
Tel +46 8 585 485 60
henrik@opticon-sensors.se

C

OPTIDEV

Johan Malm
Gullbergs Strandgata 36 D
411 04 Göteborg
Tel +46 31 80 93 80
Johan.malm@optidev.se

PETER ÖST

Lagman Eskils väg 4
443 34 Lerum
0706-376803

P

POCKETMOBILE

Anders Gilbertsson
Sveavägen 168, 113 46 Stockholm
Tel +46 8 736 77 05
Anders.gilbertsson@pocketmobile.se

U

POSTEN LOGISTIK AB

Produktion
A11V2-9
105 00 Stockholm
Tel 08 781 15 03
annika.nasstrom@posten.se

C

RESLINK SOLUTIONS LTD

attn Lars Ölvestål
Kumitehtaankatu 5
Fin-04260 KERAVA
+46 733 18 33 87
Mail: lars.olvestal@reslink.fi

I samarbete med:

F

RFID INNOVASJONSSENER AS

Petter Thune-Larsen
Postboks 124 Blindern, 0314 Oslo
www.rfidlab.no
Petter@rfidlab.no

I samarbete med:

F

RFID SOCIETY

www.rfidsociety.com

I samarbete med:

F

RFID BUSINESS ASSOCIATION

www.rfidba.org

I samarbete med:

F

WWW.MORERFID.COM

C

RFID CONSTRUCTORS

Niklas Hild
Scheelevägen 19A
223 70 LUND
Tel +46 46 286 30 61
Mobile +46 709 98 13 70
Mail/Skype niklas.hild@rfidconstructors.com
www.rfidconstructors.com

*Associated member:***RETORIUM**

Box 23, 182 11 Danderyd
Lucas Åhlström
Mobil 070 182 15 00
Mail: lucas@retorium.com

P C

SIEMENS AB,

Eva Eliopoulos
Johanneslundsvägen 12 – 14
194 87 Upplands-Väsby
Tel 08 – 728 16 63
Mobile 070 728 16 63
eva.elopoulos@siemens.com

I samarbete med:

F

**SIS SWEDISH STANDARDS
INSTITUTE**

Stina Wallström
118 80 Stockholm
+46 8 555 520 00
stina.wallstrom@sis.se

C

SOFTCENTER

Mattias Selberg
Kaserngatan 14
981 37 Kiruna
Tel vx: 0980-770 50
Mattias.selberg@softcenter.it

C

SOGETI

Hoss Eizaad
Gustavslundsvägen 131
Box 825 161 24 BROMMA
Tel 08 536 820 07
070 922 99 77
hoss.eizaad@sogeti.se

C

STARBRIGHT CONSULTING

Hans Börjesson
Gjuterigatan 9
553 18 Jönköping
Tel +46 704 21 04 04
hans.borjesson@starbright.se

F

STF INGENJÖRSUTBILDNING

Martin Rawet
Box 1080, 101 39 Stockholm
+46 8 586 386 46
martin.rawet@stf.se

M

STOCKHOLMSMÄSSAN

Daniel Andersson
125 80 Stockholm
Tel 08 749 41 00
Daniel.andersson@stofair.se

P

STRÅLIN & PERSSON AB

Stig Forslund
Skagersvägen 34
120 38 ÅRSTA
08 91 27 50
Mobil 0707821760
stig.forslund@stralin-persson.se
Tauno Ollinen
Rottnebyvägen 6, 791 44 FALUN
+46 23 350 60
tauno.ollinen@telia.com

F

SVENSK HANDEL

Bo Svensson
103 29 Stockholm
Tel 08 762 78 28
bo.svensson@svenskhandel.se

U

SWEDBANK

Angelika Melchior
105 34 Stockholm
Tel 08 585 900 00
Angelika.melchior@swedbank.se

P

SYMBOL

Lena Järlesand / Mats
Box 1115, 164 22 KISTA
Tel nr 070 744 88 06, 076 85553 27
Lena.jarlesand@symbol.com

C

TAGMASTER

Bo Tideman
Kronborgsgränd 1
164 87 Kista
Tel 8 632 19 50
Bo.tideman@tagmaster.se

P

TELENOR

Katrin Calderon
116 45 STOCKHOLM
Tel +46 709 33 55 12
Katrin.calderon@telenor.com
Thor.steffensen@telenor.com

P

TELIASONERA

Krister Pihl
Mobil 0706 55 66 05
Tel 040 901 00
christer.pihl@teliasonera.com

*associated:***TELMINA**

Stefan Tjerngren
Vendelsö Skolväg 240
136 71 Haninge
Tel +46 8 81 35 13
Mobil 070 332 84 70
stefan.tjerngren@bredband.net

C

TEXI AS

Arild Engesbak
Abelsgatan 5
N-7030 Trondheim
Tel +47 99 53 54 64

P

THE IMEGO INSTITUTE

Cristina Rusu
Arvid Hedvalls Backe 4, Box 53071
SE-400 14, Göteborg, Sweden
Tel. dir: +46 (0)31 7501 868
Fax: +46 (0)31 7501 801
cristina.rusu@imego.com
www.imego.com

C

TRACTEchnology

Hans Lewin
Gustavslundsvägen 147
167 51 Bromma
Tel: 08-556 934 01
Fax: 08-556 934 19
Mobil 0705 959492
hans.lewin@tractechnology.se

P C

UPM RAFLATAC

Tiina Kainulainen
P.O. Box 669
Myllypuronkatu 31
FI-33101 Tampere
Tel +358 40 5434654
Mobil +358 40 842 2470
Tiina.kainulainen@upmraflatac.com

C

VILANT SYSTEMS OY

Antti Virkkunen
Sinikalliontie 4
02630 Espoo, Finland
Tel +358 9 8561 9900
Mobil +358 50 529 4574
Antti.virkkunen@vilant.com

P

VISMA RETAIL

Box 274
S-761 23 Norrtälje
Besökadress: Roslagsgatan 6-8
Tel 0176 - 745 00
Direkt: 0176 - 745 22
www.vismaretail.se

P

WISTEQ OY

Olavi Meriläinen
Salvesenintie 6
40420 Jyskä, Finland
Mobil +358 40 504 7963
olavi.merilainen@wisteq.com

C

ÅF-ENGINEERING

Greger Du Rietz
Kvarnbergsgatan 2 |
Box 1551, 401 51 GÖTEBORG
Tel 010 505 30 84
Mobil: 0730 70 10 84
Fax: 010-505 30 10
greger.durietz@afconsult.com

Follow the exciting developments at: WWW.RFIDNORDIC.SE

If you want to join our non-profit organization call +46 8 662 31 95 or give us a mail at ove.canemyr@trendsetter.se You can also put your entrance fee at our account : pg 6181749-0 Please give out Treashurer a mail in advance stefan.tjerngren@bredband.net Yearly fee 7 000:-.

Much welcome.