FALKEN
Secure Networks

RFID Applications For Libraries

What do Guelph, New Orleans, Seattle and Shenzhen, China have in common? They all have libraries that use RFID technology to track their book inventory.

The New Orleans Public Library had all of its branches damaged by Hurricane Katrina in late 2005. The Alvar branch was completely rebuilt including all of its books and CDs/ DVDs with RFID tags, which will be used to check books in and out. Now, students and faculty can check books with a single swipe of their RFID-enabled Library cards.

The new system will allow customers to self check-out items at new checkout stations. This is a necessity, as the library will be short-staffed due to insufficient funds. Shenzhen's new public library in China, enormous in comparison - over 500,000 sq ft - will have around 2 million books tagged.

Seattle's New Library

Seattle's RFID library project is the largest in the world, with Shenzhen's second. Approximately 4% of libraries in the US use RFID, and 10% worldwide and growing quickly.

RFID FOR LIBRARIES

1. RFID tags replace both the EM security strips and Barcode.
2. Simplifies patron self check-out / check-in.
3. Ability to handle all library assets including documents, video and audio tapes.
4. RFID anti-theft detection is innovative and safe.
5. High-speed inventory and identify items which are out of proper order.
6. Long-term development and support assurance when using Open Standards such as EPC Gen 2 UHF tags.

RFID-enabled systems have moved beyond security to become tracking and management systems that combine security with more efficient tracking of materials throughout the library, including easier and faster charge and discharge, inventorying, and materials handling.

The tags affixed to library materials are read using RFID technology regardless of item orientation or alignment (i.e., the technology does not require line-of-sight or a fixed plane to read tags as do traditional theft detection systems) and distance from the item is not a critical factor except in the case of extra-wide exit gates. The corridors at the building exit(s) can be as wide as four to 6 feet with two parallel exit sensors.

Advantages of RFID systems

Rapid Locate

Fast and flexible locating increases productivity of staff and enhances the customer experience. UHF RFID tags to track the location of each book on the shelf, and items can be classified by genre, author, subject, or other characteristics much like you see to today's bookstores. The middleware that runs system can integrate with a library's ILS (Integrated Library System), allowing customers to search for books and identify which shelf in the library they are on, even if they are misplaced in a different section.

Rapid Check-In/Check-Out

The use of RFID reduces the amount of time required to perform circulation operations. The most significant time savings are attributable to the anti-collision RF algorithm that allows many tags to be read simultaneously with excellent accuracy

The other time savings realized by circulation staff are enhanced if the RFID tags replace both the EM security strips or RF tags of older theft detection systems and the barcodes of the automated library system .There can be as much as a 50 percent increase in throughput.

For library patrons using self-check-out, there is a marked improvement because they do not have to carefully place materials within a designated template and they can check-out multiple items simultaneously. Staff is relieved further when readers are installed in book-drops.

High reliability

The readers are highly reliable. RFID library systems claim an almost 100 percent detection rate using RFID tags.

High-speed inventory

A unique advantage of RFID systems is their ability to scan books on the shelves without tipping them out or removing them. A hand-held inventory reader can be moved rapidly across a shelf of books to read all of the

unique identification information. Using wireless technology, it is possible not only to update the inventory, but also to identify items which are out of proper order.

Automated materials handling

Another application of RFID technology is automated materials handling. This includes conveyer and sorting systems that can move library materials and sort them by category into separate bins or onto separate carts. This significantly reduces the amount of staff time required to ready materials for re-shelving.

Long tag life

Finally, RFID tags last longer than barcodes because nothing comes into contact with them. Most RFID vendors claim a minimum of 100,000 transactions before a tag may need to be replaced

FALKEN Secure Networks(FSN)—Your partner for RFID automation

If you choose to pursue RFID implementation in your organization, here is the FALKEN Secure Networks commitment to you:

- FSN will provide solution architects to work with you to define system requirements for your particular installation. Multiple locations can be networked together for a central and real-time view and centralized management.
- FSN will do a RFID site survey to validate radio frequencies, tag types, system design and performance
- FSN will provide all necessary hardware and software to make the system work for you
- FSN will integrate the system with your existing enterprise management software
- FSN will provide documentation for the system, including operating procedures
- FSN will train your people
- FSN will provide warranty and continued system support

For RFID-enabled Document Tracking and Management, FALKEN Secure Networks (FSN) and partners bring together the right technologies to give you control over your files and make your office run more efficiently. Our automated and secure processes save time and labor, and prevent problems before they occur. With FSN ,you get the latest, non-proprietary secure RFID technology with the most powerful and flexible RFID file tracking software available.

Contact Us

FALKEN Secure Networks is a specialized System Integrator, RFID Solution Architect, and Value-Added Reseller with focused expertise in the RFID site survey, cost-effective design, and turn-key project implementation.

Contact FSN at sales@falkensecurenetworks.com

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