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TAKE A PAGE
OUT OF OUR BOOK

RFID FOR LIBRARIES

UPM RAFLATAC



RFID for libraries – A growing worldwide trend

In the last few years, an increasing number of libraries have taken advantage of RFID, or Radio Frequency Identification technology. This trend is now spreading across the globe, with establishments in North America, Europe and Asia leading the way. Central libraries have been the trailblazers in the adoption and implementation of RFID, and regional district libraries are now following their lead.

In addition to the benefits of automatic check-out and return, RFID is introducing major changes to the way libraries operate. RFID enhances both the sorting and inventory processes. It also improves security by making use of the EAS (electronic article surveillance) function available in most book tags. What this means in practice is that library staff have more time for library development and

providing assistance to patrons. Simply put, RFID enables a more proactive approach to media management, benefiting everyone involved.

What exactly is RFID?

RFID has revolutionized the way major industries do business in the space of a decade. RFID systems consist of a tag, reader and host system. These systems use a microchip and radio-frequency-based technology to uniquely identify an object. A host computer manages the information flow, while the data flow between the reader and tag occurs over an open air interface, or radio frequency (RF) link. RFID is in increasing use as a more effective alternative to bar codes in a wide range of industries, from logistics to media management.



How does it work in libraries?

For a sophisticated technology, RFID is simple to install and easy to understand. The tag is attached to a book and the reader uses radio frequency waves to transmit a signal that activates it. When activated, the tag transmits data back to the reader. The data is used to notify a computer that an action should occur. This action could be as simple as opening an access gate or as complicated as interfacing with a database to carry out a monetary transaction.

What are the benefits for me?

Where media management is concerned, RFID offers three major benefits. To start with, it doesn't require direct contact or a line of sight for scanning. Next, several tagged books can be identified at the same time, though CDs and DVDs require individual scanning if the tag is on the CD rather

than the cover. Last but not least, the tags have read and write capabilities.

Using RFID also reduces the amount of time required to perform circulation operations. The most significant time savings are attributable to the fact that information can be read from RFID tags much faster than from bar codes, and that several books in a stack can be read at the same time.

Another application of RFID technology is automated materials handling, including conveyor and sorting systems that 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.

The benefits for your library system

1. Increased circulation due to the elimination of time consuming processes
2. Built-in materials security
3. Self check-out
4. Automated book check-in
5. Check in/out processes for multiple books
6. Read/write tag capabilities



Case studies: Who is using it and why?

Europe

BACKGROUND Munich Public Library and its 25 district libraries process more than 49,000 items every day.

CHALLENGE To safeguard the library books, streamline checking processes and provide 24-hour service to the citizens of Munich.

SOLUTION The library tagged 1.5 million items with UPM Raflatac's BullsEye and RaceTrack HF tags.

RESULT The installation has led to improvement in a range of areas, including book identification, sorting, inventory control, self check-out and theft prevention. Furthermore, librarians can now spend their time on more important tasks like assisting customers. In short, everyone benefits.

To make sure you get the most out of this technology, take a page out of Munich Public Library's book and invest in RFID.

Asia

BACKGROUND Jimei University Library in Xiamen, China, has a total collection of 2,119,700 volumes and serves over 22,000 full-time students.

CHALLENGE To automate the lending and return of library items, reducing queuing times and theft.

SOLUTION The library has installed an RFID system and implemented a conversion program.

RESULT The new RFID system has not only reduced queuing times and theft as hoped, but it has also made sorting library items faster so that books can be returned to the shelves quicker. Passing an RFID reader along the bookshelves makes the inventory process easier and much faster.



Americas

BACKGROUND Salt Lake County Library Services (SLCLS) includes 18 branch libraries and circulates 13.7 million items each year.

CHALLENGE This busy library system was facing a yearly increase in circulation of about seven percent, while the number of library staff remained the same. SLCLS also faced the challenge, in 2005, of opening two new larger libraries. SLCLS needed to meet the growing demands of increased circulation without depending on increases in staffing.

SOLUTION In 2005, SLCLS, using Tech Logic as the solution provider, began implementing RFID technology with the goal of simplifying the self-checkout process for patrons and increasing efficiency in the staff handling of library materials.

RESULT Salt Lake County Library currently experiences 60 to 90 percent of checkouts through self checkout—a

resounding success. RFID is also used for two Tech Logic automated material handling systems to check in materials and pre-sort them into bins for re-shelving. Additional RFID benefits for the library include inventory at the shelves with a hand-held device and materials security using RFID anti-theft capabilities. RFID is fully implemented to date at seven libraries to help serve patrons faster and process materials more efficiently. The project has been a success for the library and provided a return on its investment.

A world of opportunity

It is reported that less than five percent of the world's libraries are RFID-enabled, but many are now looking into the option. By adopting RFID, you can thoroughly transform your library's performance. Although academic, university,

medical and government libraries benefit enormously, RFID is potentially priceless for reference libraries that store some of the oldest and most valuable books.

Take a look at your library and the inside back cover of a book. Does it have an RFID label? Do you have self check-out? If not, it's time for a change – by joining a growing number of establishments using RFID.



Where does UPM Raflatac fit in?

The global leader

UPM Raflatac is a world-leading supplier of RFID tags and inlays. We are at the forefront in the development and high-volume production of RFID tags and inlays offering superior performance. UPM Raflatac is also a leading supplier of pressure sensitive labelstock.

With over a decade's experience in RFID, we supply libraries with more RFID book tags than any other company. Our book tags are in use all over the world, and we're constantly helping more libraries to adopt RFID technology. Our global partners place their trust in us to supply the highest quality and the most reliable book tags at the fairest price.

An extensive portfolio

Our proud history of innovation means we have a portfolio to suit your every need – the RaceTrack HF tag is ideal for media management, for example. UPM Raflatac's cost-effective production of HF and UHF tags and inlays emphasizes quality, product yield and performance. The resulting products feature the latest HF and UHF technology and include EPC certified Class1 Gen2 tags and inlays. Contact us or your local library system integrator, and ask for advice about solutions using RFID tags from UPM Raflatac.

www.upmrfid.com



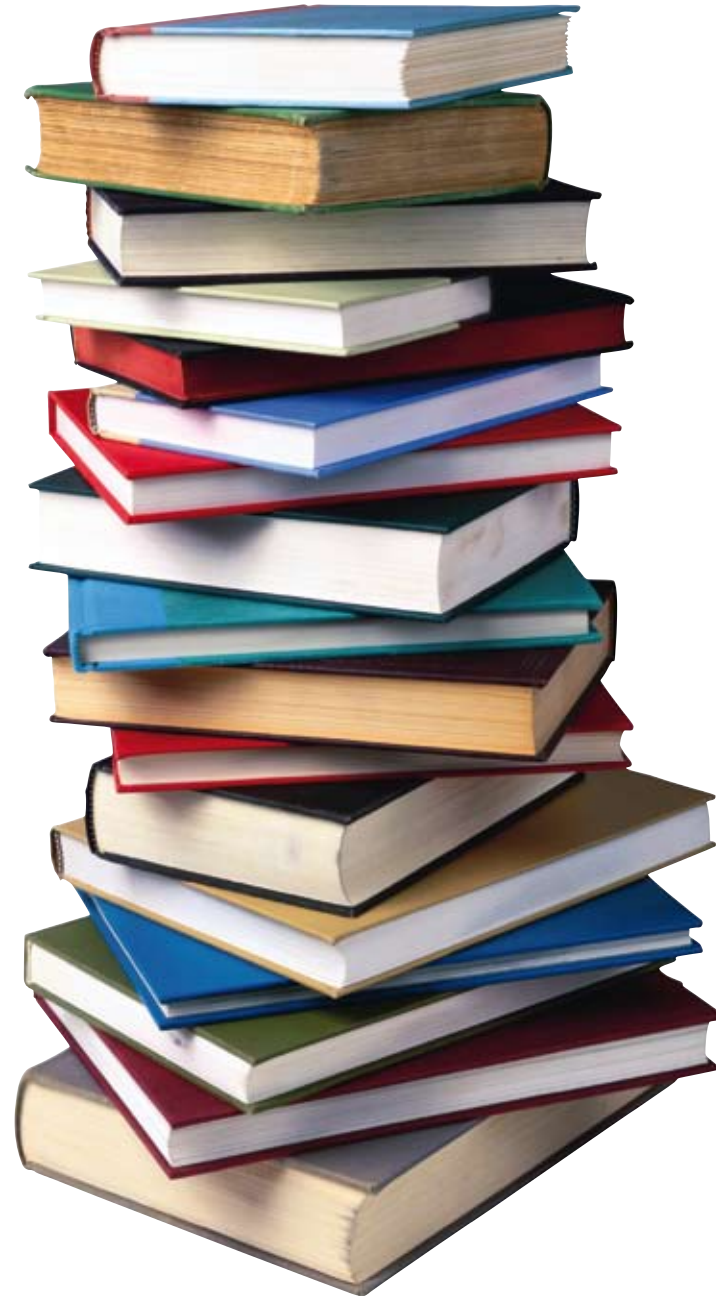
Warranty

UPM Raflatac RFID tags designated for books and sold into library applications are guaranteed for the lifetime* of the book in standard environmental conditions (typically +20 °C, 50% relative humidity). The warranty starts from the date of delivery from UPM Raflatac. The storage of book tags prior to use must be in accordance with UPM Raflatac guidelines (+15 – +25°C, 40 – 60% relative humidity).

* Lifetime in a public lending library is considered to be 10 years.

N.B.

- a. It is highly recommended that book tags are placed on the inside of the back cover.
- b. Extremes in temperature and/or humidity may adversely affect the performance of the book tag.
- c. Damage through physical and malicious abuse is not covered.
- d. IC data retention is guaranteed for 10 years, with a minimum endurance of 100,000 rewrites.
- e. Adhesive performance may vary depending on the substrate. Surfaces which are rough and fibrous reduce adhesive performance. Surfaces which contain plasticizers (PVC/vinyl) should be avoided. Surfaces which are highly varnished or have high silicone content also affect adhesive performance.
- f. The warranty covers the replacement cost of the tag only. No consequential claims will be accepted.
- g. All claims are investigated before approval.





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