

# THE ULTIMATE GUIDE TO RFID INTEGRATION

Your **5 Step Plan** to Create, Implement, and Deploy the RFID System of Your Park's Dreams



# WHAT'S THE BUZZ ABOUT RFID?

If you're reading this, then chances are you've noticed how RFID (Radio Frequency Identification) technology is completely reshaping the way amusement and waterparks operate. It all began in 2005 at PDC's first SmartBand® RFID wristband system deployment at Hyland Hills Water World in Denver, CO. Soon after, SmartBand® was put to the test by the first of 9 Great Wolf Properties in Poconos, PA. Cashless payments, resort access control, and keyless room entry means Great Wolf guests no longer have to worry about keys, wallets, or cash. Everything is on the wrist — you can't get more convenient than that!

PDC's Smart® RFID wristband systems proved to be so successful that even Disney jumped at the chance to make their guests' experiences more interactive and meaningful with the launch of the MagicBand RFID wristband system in 2013. Today, leading amusement parks, water parks, resorts, and music festivals around the world are using the technology with overwhelming success attributed to two important factors:



1. Parks profit through increased purchases, enhanced efficiencies, and guest loyalty



2. Guests love the technology for its convenience and security features

## **CONTENTS**

- 4. How Does RFID Work?
- 5 What Are PDC Smart® Bands?

## YOUR 5 STEP PLAN:

- 6 Step 1: Identify the Right RFID Applications
- **Step 2:** Select Your RFID Partner
- Step 3: Define Your Budget & Timeline
- 1 Step 4: Select the Right RFID Credentials
- 12 Step 5: Create a Roll-out Plan
- 13 Why Partner With PDC?
- 14. PDC's Integrated Services Offering

## HOW DOES RFID WORK?

An RFID tag is comprised of two parts — an antenna for transmitting and receiving signals, and an RFID chip which stores the tag's ID and other information. Unlike a magnetic stripe or bar code, RFID allows for passive data transfer without the need for physical contact or line-of-sight reading. RFID is used in hundreds of applications worldwide and comes in various forms: Low Frequency (LF), High Frequency (HF), and Ultra High Frequency (UHF)

HF tags at 13.56 MHz are most commonly used in the amusement and water park industries with a read/write range of just a few inches, high storage capacities, and fast data writing. These advanced capabilities make RFID extremely quick and accurate, requiring little to no effort on the part of staff or guests to use effectively.

#### Low Frequency (LF) 125-134 kHz

#### Common uses:

Animal Tracking, Car Key fobs, and Access Control

- Very short read/ write range of a few centimeters
- Limited quantity of memory storage capacities
- Low data transmission rate (reads very few tags at once)

#### High Frequency (HF) 13.56 MHz

#### Common uses:

Personal Identification, Access control, and Cashless Payments

- Short read/write range of just a few inches
- Large memory storage capacities
- Medium data transmission rates (reads a few tags at once)

## Ultra High Frequency (UHF)

433 MHz & 856-960 MHz

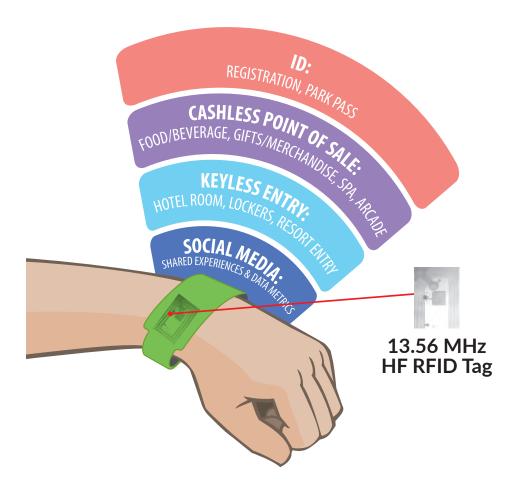
#### Common uses:

Conference Tracking, Marathon Timing, and Manufacturing

- Very long read/write range up to 70 feet or more
- Large memory storage capacities
- High data transmission rates (reads multiple tags at once)

# WHAT ARE PDC SMART® WRISTBANDS?

PDC Smart® wristbands contain a securely sealed waterproof RFID tag, which is programmed with a unique alpha-numeric code. When scanned by an RFID reader, a low-power radio wave activates the chip to securely collect and transfer data. PDC Smart® wristbands replaces traditional forms of identification and access credentials including keys, badges, and door cards that can de-magnitize, or don't mix well with water. From cashless point-of sale, to keyless entry, and social media integration, PDC Smart® Wristbands drive any variety of guest-convenience applications with a simple wave of the wristband.





## IDENTIFY THE RIGHT RFID APPLICATIONS TO SUPPORT YOUR PARK'S GOALS

RFID systems are not one-size-fits-all. Start with your key objectives in mind. Do you want to provide faster access to your park? Do you want to reduce transaction times so guests spend less time waiting in line and more time enjoying your park? Do you want to enable guests to make impulse purchases without their wallet? Do you want to provide self-service capabilities? Select the right applications that support your parks goals to realize substantial ROI.



#### **Cashless Point of Sale**

- Decrease retail, food, and rental transaction times
- Reduce cash theft and shrinkage
- Increase average per cap spending



## Season Pass & Customer Loyalty Programs

- Increase repeat customers and revenue
- Provide customer loyalty incentives and rewards
- •Gather real-time data from customers and purchasing channels



## **Entrance Turnstiles**

- Provide faster access to the park
- Track & monitor real-time guest access data
- Reduce labor costs



## PDC Smart® Wristband Kiosk

- Provide guest self-service capabilities
- Reduce the need for guest service manual labor
- Decrease transaction times



## **Keyless Doors & Lockers**

- Increase security & guest convenience
- Eliminate lost keys and access cards
- Reduce locker/door lock maintenance requirements



## Social Media Integration & Data Metrics

- Maximize your social reach and advertising dollar
- Generate extra revenue through sponsorships
- Gather real-time data on your guests and demographic information



## SELECT YOUR RFID PARTNER

## Do They Have Industry Experience?

The key to success with any emerging technology is to partner with a company that has been there before and is a leader in consulting, project management, and RFID consumables. Do your research. Who are their best clients? Can they provide industry referrals? What guarantees do they offer? A partner with a proven track record brings industry knowledge and a solid partner network that will help you plan, integrate, and support the custom RFID system that fits your needs.

## Do They Offer On-Going Service & Support?

Implementing any RFID application at your park is a long-term strategy, so consider this as a true partnership and not a one-off supplier transaction. Your RFID partner should be able to provide staff training, on going technical services, support, and future development opportunities to ensure an efficient and functional RFID solution.



Implementing RFID technology will require an investment in time and money. However, the upside of a proper implementation is substantial and more than outweighs the investment:



## You Don't Need a Large Budget

You don't have to have a large budget to take advantage of the benefits RFID has to offer. Modern point-of-sale systems can be easily integrated with an RFID reader with minimal investment. There are plenty of low-cost options to incorporate RFID with your park fixtures such as lockers, doors, and turnstiles. If you're currently planning or building, now's the perfect time to source RFID compatible equipment for the applications on your list. The growing popularity of RFID means there are a multitude of equipment options to fit your needs and budget.

## Integrate at Any Pace

The flexibility of RFID allows you to integrate as many applications as you like at once, or opt for a staged roll-out, where selected applications are deployed each season. Staged roll-outs can be completed over a few seasons if necessary—whatever is most convenient for your park.



## DEFINE YOUR BUDGET & TIMELINE



SELECT THE RIGHT RFID CREDENTIALS



RFID credentials come in all shapes and sizes. Single-use wristbands with adhesive, plastic snap, or sliding lock closures are non-transferable for maximum security. Rewearable wristbands made of silicone or fabric material are long lasting and durable for long-term use. Cards, badges, and key fobs are the perfect complement to your RFID wristband applications.

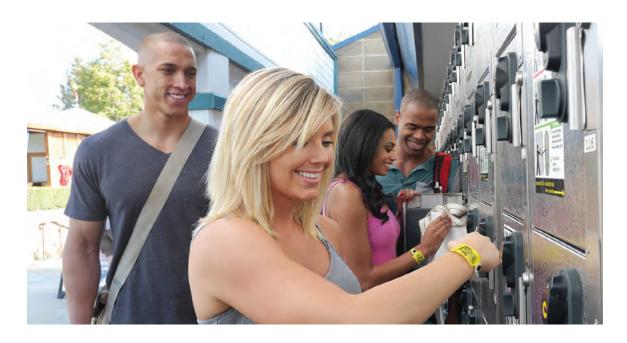


## **Staff Credentials**

RFID cards and badges provide seamless integration for employee access control, attendance, and timekeeping. Using a single RFID credential to power these functions simplifies employee management through automated reports and unique access control assignments, including different levels and hours of access per employee.

## Single & Multi-Day Guest Credentials

Thousands of guests will pass through your park's entrance on a daily basis. The most secure RFID credential is any selection of non-transferrable PDC Smart® wristbands. Made from water-proof, non-stretch plastic with a securely sealed RFID tag, these wristbands can withstand up to two weeks of wear. You can even use a color code system to help staff visually identify park VIP's, cabana renters, guests with special needs, etc. Customize your wristbands with your logo to promote your brand and website.



### **Season Pass Credentials**

Keep season pass holders coming back by adding unmatched value while creating unforgettable experiences. Issuing re-wearable SmartBand® RFID wristbands is a safe, secure solution that allows season pass holders to carry account balances between visits, accumulate loyalty points, and redeem instant coupons—all while integrating with your park's selected RFID applications.





# CREATE A ROLL-OUT PLAN

Creating a robust roll-out plan, driven by senior management, is critical to the success of your RFID program. Here are a few steps to consider when it's time to launch.



## **Train Your Team**

Make sure every employee is adequately trained on how your park's new RFID program works. All park employees should fully understand your parks applications to ensure guest transactions are a seamless experience. Your RFID partner should be able to provide staff training before program roll-out.

#### **Create Buzz**

Build a communication and marketing plan to promote your park's RFID program. You can use e-mail, your web site, social media, direct mail, press releases, and local news outlets to let everyone know what's new and how they will benefit from your parks new RFID applications. Your integrated marketing communication strategy should generate new interest in your park and help prepare your guests for a new park experience.

## **On-site Education**

Now's the time to create prominent park signage and educational brochures to help your guests get the most out of your new

RFID program. Provide a map to let them know where they can take advantage of cashless purchases and lockers rentals, or how to use the PDC Smart® Wristband Kiosk to re-load funds quickly and easily to their wristband. are a seamless experience. Your RFID partner should be able to provide staff training before program roll-out.

## WHY PARTNER WITH PDC?

## **Experience & Service You Can Trust**

As the innovator of the RFID wristband system, with over a decade innovating and deploying PDC Smart® RFID systems worldwide, PDC has earned its reputation as the leader in RFID wristband solutions. Our dedicated RFID Solutions team is available to provide any range of services you need to get your RFID program up and running—from consulting and planning to implementation, staff training, and on going support.



"Switching to RFID was easy with PDC's team of RFID experts. They helped us manage the project from start to finish and ensured us of a quality start to the program. Our guests truly appreciate the efficiencies and conveniences offered by the variety of RFID products here at the park."

Bob Owens, Park Manager Hyland Hills Water World, Denver, CO

## As Seen at These Popular Attractions:

















# PDC INTEGRATED SERVICES OFFERING





## **Needs Analysis**

How can RFID enhance the guest experience and add to your profits? Which applications make the largest positive impact on your customers and staff? PDC will ask the right questions and help shape the solution that best meets your unique needs.



### **Site Assessment**

It's impossible to recommend a sound solution without experiencing your vision first-hand. PDC's experienced team will evaluate your site and operation from top to bottom to define your unique use models and determine the correct mix of hardware and application features.



#### **Cost Evaluation**

Throughout the development process, PDC's focus is to maximize performance and profits by selecting system components that economically and technologically meet the needs of your application.

## We'll Take Your Vision from Concept To Reality





## **Solutions Sourcing**

Through many years of experience, PDC has built a diverse, reliable partner network with the nation's leading RFID application, equipment, hardware and software suppliers. These relationships allow us to develop and properly implement your customized solution.



## **System Installation**

Successful integration of any RFID application requires effective project management. PDC's skilled project management team guides the installation from development to execution. Project and vendor management, on-site installation supervision, staff training, and on-going services and support ensure an efficient RFID solution.



## **Future Development**

PDC serves your needs today and develops the RFID applications and services for tomorrow. Let us explore your visions and determine the value proposition for a variety of new RFID enhanced applications, such as interactive displays or rental programs.

## **WANT TO KNOW MORE?**

If you have any additional questions or want to speak with a member of the PDC RFID Solutions team, contact us today.

800.255.1865 | cs@wristbands.com | wristbands.com



U.S. Headquarters

25124 Springfield Court,

Suite 200

Valencia, CA 91355

Tel: 800.255.1865

Email: cs@wristbands.com

#### **EUROPE, MIDDLE EAST & AFRICA**

European Headquarters

**PDC BIG** 

Rue de l'Industrie, 17

1400 Nivelles, Belgium

Tel: +32 67 89 56 56

Fax: +32 67 21 77 70

Web: www.pdc-big.com Email: info@pdc-big.com

