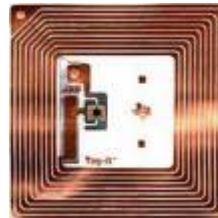# Simplifying your **RFID** Applications

What is RFID technology?

RFID works using small (sometimes smaller than a fingernail) pieces of hardware called **RFID chips or tags**. These tags feature an antenna to transmit and receive radio signals. **Passive RFID** tags do not have a power source, but **Active RFID** tags do. **RFID** tags may be attached to objects, or in the case of some passive **RFID** systems, injected into objects. Whenever a reader within range sends appropriate signals to an object, the associated **RFID** tag responds with the requested information, such as an identification number or product date etc. Passive **RFID** systems derive their energy to send responses from the incoming signal. The reader, in turn, displays the response data to an operator. Readers may also forward data to a networked central computer system. **RFID** systems generally support storing information on the chips as well as simply reading data. Active tags are self powered & constantly pulse their information for any antennae within range. **RFID systems** were created as an alternative to barcodes. Relative to barcodes, RFID allows objects to be scanned from a greater distance, supports storing of data, and allows more information to be tracked per object. Our passive RFID solutions allows for a mass scan mode which enables the user to collect an entire warehouse.

In association with

The RFID Institute of South Africa, we at

Bytes Systems Integration Pty Ltd, are able to offer our

clients a stable RFID platform that produces results

irrespective of your onsite RFID skills. We are able to

provide the following services & resources:

- Feasibility & business requirements analysis
- Onsite proof of concept (POC) testing
- Access to case studies
- Access to live sites
- Best of breed technologies
- Security & authentication
- Track & trace
- Real Time Locating (RTLS)
- Environment Sensing & Monitoring

We provide a unique software platform, coupled with RFID (active & passive) & Barcode technology to assist you in achieving your *Asset Management* goals.

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RFID Institute.SA
Africa's Independent Advisory Centre
JOHANNESBURG · DURBAN · CAPE TOWN

RFID = Radio Frequency Identification

RFID solutions that work for your business.

YOU CANT MANAGE WHAT YOU CANT MEASURE

RFID = Radio Frequency Identification

Key Reference Clients

Toyota SA Manufacturing

Toyota Boshoku

Aunde

Unilever

CUSTOM SOLUTIONS

RFID is NOT a one size fits all technology. Each application is business requirement dependant. Selecting the correct technology depends on the user needs & application criteria.

RFID SOLUTIONS

- ASSET MANAGEMENT
- ASSET TRACKING & LOCATING
- STORES & PARTS CONTROL
- TIME, ACCESS & SECURITY
- TRACK & TRACE
- WASTE MANAGEMENT

PHASED APPROACH TO RFID

- Feasibility
  - o Understand the technology
  - o Identify all priority applications
  - o Assign appropriate technologies
  - o Establish deployment costs & benefits
- Design
  - o Select applications for deployment
  - o Design system & prepare RFID
- Deployment
  - o RFID deployment
  - o Application deployment
  - o Management of deployment

Flexible RFID solutions for Your business needs

ASSET MANAGEMENT SYSTEM

Our in-house developed Asset Management System offers a unique solution which utilizes both RFID & Barcode technologies. Easy ERP integration allows for accurate auditing, control & verification. We also provide an all in one reading device that boasts an RFID scanner, Barcode scanner, digital camera & PDT with large memory. Various add-in modules also available & in-house development for customised applications.

STORES & PARTS CONTROL

This custom developed solution provides complete control over your stores, parts centre, PPE centre, Hazardous Materials & many more. Each item in the controlled area is tagged. Access to the area is via access control. Upon exiting the area, the employee swipes the access control card & the fixed RFID reader scans the contents of his trolley etc. This information is then logged against his user ID for accurate control.

BYTES TECHNOLOGY GROUP
IT Services for the Enterprise
SYSTEMS INTEGRATION

WE'VE WORKED WITH A DIVERSE CUSTOMER BASE. HOW CAN WE HELP YOU WITH YOUR BUSINESS ENHANCING RFID SOLUTIONS?

Please do not hesitate to contact us for an RFID business analysis meeting.