

Radio Frequency Identification (R.F.I.D.)

Introduction

Radio Frequency Identification is a form of contact-less **Automatic Identification and Data Capture (AIDC)** technology.

R.F.I.D. is often mistaken as a single technology, however it is actually a general classification for some very different technologies that have one main attribute in common - transmission of data by radio waves.

R.F.I.D. was originally developed for specialized asset tracking and access control applications (known as "closed" systems) and now in conjunction with the development of international standards, is being implemented in Supply Chain Logistics applications (known as "open" systems) to replace &/or co-exist with barcodes.

Like barcodes, R.F.I.D. is best suited to applications where tag "reading" conditions are very predictable & repeatable, however unlike barcodes, R.F.I.D. is ideal for automated tag reading.

R.F.I.D. is also better than barcodes for non "line of sight" tag reading, however as metals & liquids have both positive & negative effects on radio waves, specialist advice & design is a crucial factor in ensuring a successful system is implemented.

Due to power limitations, portable tag readers cannot read tags from long distances compared to fixed readers, however most R.F.I.D. systems are designed to be fully automated & therefore are predominantly "hands-free".

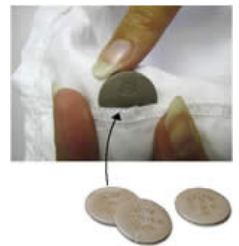
R.F.I.D. Tags

R.F.I.D. Tags can be used with or instead of barcodes.

While the most common method of attaching tags is using self-adhesive materials this is not always suitable or possible—it must be reasonably quick, easy and permanent!

Other methods include:

- Plastic or wire cable ties
- 2 part epoxy adhesive
- Silicon or similar waterproof products
- Key tags
- Rivet or screws



There are a huge range of Tags available, all with quite different characteristics.

- Un-powered (passive) or battery powered (active)
- Short Range
- Long Range
- Read Only
- Read & Write

Standard & Custom Built Readers & Antenna

- Desk top or wall mounted
- Free standing
- Hand—held
- Portable Terminals
- Chute adaptable
- Custom made



| Sales | Service | System Design & Installation |

Ph (08) 8362 9230 Fax (08) 8362 9268

E-mail sales@comwareptyltd.com.au

Website www.comwareptyltd.com.au

More than just barcodes!

COMWARE Pty Ltd ABN 31 073 906 751

Barcode & R.F. Identification, Data Collection & Mobile Computing, Labeling Systems, Software & Supplies

∞ BARCODE SCANNERS: Hand-held, Computer connected, Portable, Fixed Mount Retail and Industrial ∞ R.F.I.D. : Readers, Tags, short & long range ∞ DATA COLLECTION: Batch and wireless Terminals and Connectivity Options ∞ WIRELESS LANS: Access Points & antennae ∞ MOBILE COMPUTERS: Key or Pen Based, Peripherals ∞ PRINTERS: Label / Plastic card / receipt / barcode / R.F.I.D., Mobile, industrial, desktop, Design & Print Software ∞ SYSTEMS: Concept to Completion