



## Radio Frequency Identification Systems (RFID)

Our RFID solutions can transform the way your business tracks, manages and measures key assets. We have the expertise to implement this technology to produce dramatic cost savings and efficiencies over other tracking technologies you may be using currently. We can implement RFID solutions in many environments like Supply Chain, Retail, Passports/ID Cards, Transportation, Product Tracking, Animal Identification, Inventory Systems, Libraries, Museums and many more.

We have successfully designed, implemented and integrated RFID solutions using leading technology (hardware/software) platforms. We also have experience in using Microsoft's RFID Infrastructure and can design, develop and support RFID solutions as per your industry's requirement.

### Library

RFID is very suitable for the Library functions. Various transactions like Issue, return of books and other material, Stock taking etc. We have successfully implemented RFID solution for a large Library wherein we have provided functionality like Tagging the books, self Check-IN & Out of books, Electronic Article Surveillance for controlling the theft of books and the stock taking.

### Supply Chain Management:

One of the main challenges in implementing the RFID solution for a supply chain management system is the industrial environment and the disturbances due to high voltage equipments. Here while implementing a RFID solution normally the UHF range of antennas are used, which offer not just a long range but also better anti-collision (ability to read multiple tags in one go).

### ID Cards & Tracking:

Normally ID are Smart Cards but because of the smart card technology, there are limitations with the scanning distance. Using UHF RFID tags one can read the tags from a distance and can record the attendance or the movement of a person from a long distance.

Various reports and statistics can be generated by this system, which helps in better security staff management and controlling the efficiency of the system.





What are the benefits of RFID Track over barcode technology?

	RFID	Barcode
Visibility	Works in any direction, does not require line of sight	Directional, requires line of sight
Read range	Between 4 and 80cm (1.5 - 31 inches) using passive tags, up to 100 metres (328 feet) using active tags	Typically 15 - 30cm (6 - 12 inches)
Read rate	Up to 200 tags per second	Limited to rate at which objects can be physically located in front of scanner
Automation	No human intervention required	No human intervention required
Data storage	Up to 4 KB using passive tags and 32KB using active tags	None
Durability	Withstands harsh environments (snow, rain, sunlight), and dirty environments (dirt, dust, moisture and oil) and will last for decades.	Prone to scratching and tearing
Flexibility	Tags can be packaged for a wide variety of applications (consumer goods, animal tracking, vehicle tracking, personnel logging)	Must be located on outside of package, on a relatively flat surface
Environment	Low frequency technology can read tags located underground	Cannot read without line of sight
Security	Near impossible to replicate	Simple to replicate
Maintenance	Can operate for extended periods of time with no maintenance	Lenses must be cleaned periodically

**Benefits of RFID Track System**

- Automated operations : All one needs to do is place the items on the station.
- Durable solution : Tags have a life of almost two decades.
- Stop thefts : Not issued items can not leave the premises.
- Quick stock taking : Scan items @200 per second.



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