



RFID - 13.56 MHz Reader

RFID System
Frequencies and Market Size
Categories
Products - IDS-R13MP





- **Tag/Transponder**

- Chip tags consist of a microchip and a coupling element - an antenna

- **Interrogator/Reader**

- Read, but also remotely write to, the tags

- **Middleware/MCU**

- Middleware is the interface needed between the interrogator/reader and the existing company databases and information management software

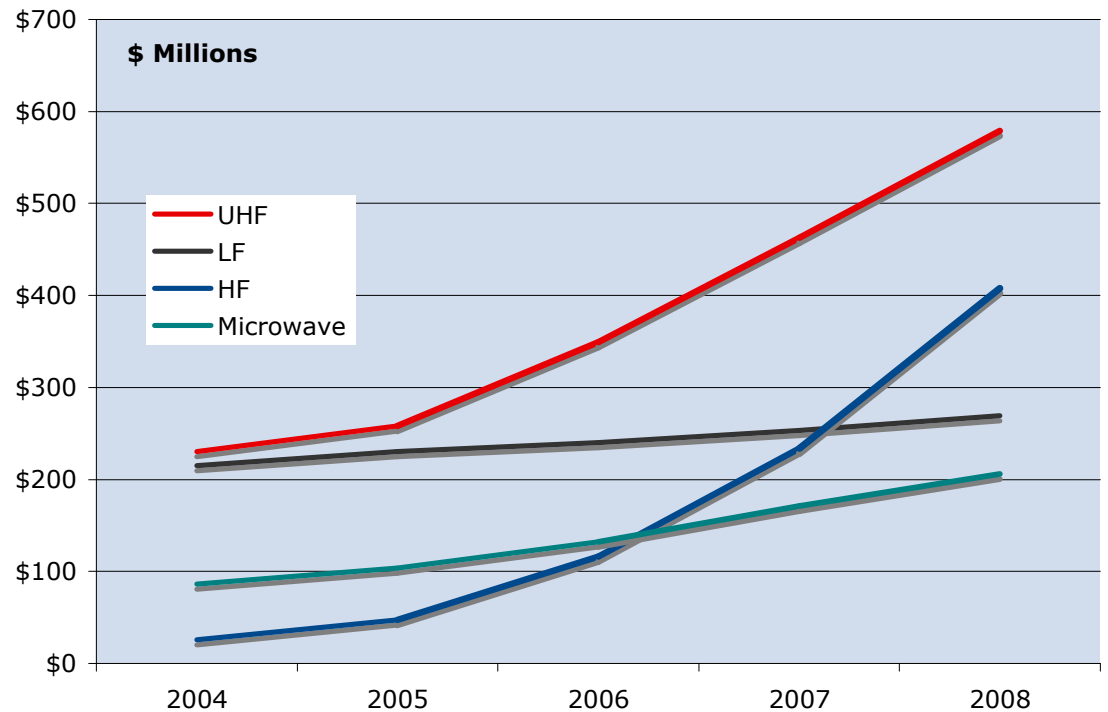
RFID System

QuickTime™ and a
TIFF (LZW) decompressor
are needed to see this picture.



- Low Frequency (LF)
125-135 KHz
- High Frequency (HF)
13.56 MHz
- Ultra High Frequency (UHF) 868-930 MHz
- Microwave
 - 2.45 GHz
 - 5.8 GHz

RFID Frequencies and Market Size



Worldwide Reader Market

Source: IDTechEx



RFID System Categories

- EAS (Electronic Article Surveillance) systems
 - typically one-bit systems used to sense the presence/absence of an item
- Portable Data Capture systems
 - characterised by the use of portable data terminals with integral RFID readers
- Networked systems
 - generally characterised by fixed position readers deployed within a given site and connected directly to a networked information management system
- Positioning systems
 - use transponders to facilitate automated location and navigation support for guided vehicles
- Other (beyond RFID)
 - NFC (Near Field Communication), spare part securing (e.g. ink for printers), etc.



IDS-R13MP *Multi-Protocol 13.56 MHz RFID Reader*

- Supply voltage range 2.7 to 5.5V
- Multi-Protocol options
- Antenna driver using OOK or ASK
- Dual receiver input providing both AM and PM demodulation avoiding communication holes
- Reception automatic gain control
- 3.3V voltage regulator providing up to 20 mA for external MCU
- Reader to reader anti-collision

Block Diagram

13.56 MHz Multi-Protocol RFID Reader

