Bar Code & RFID Systems

Automatic Identification and Data Capture (AIDC)

Automatic Identification and Data Capture (AIDC) refers to the methods of automatically identifying objects, collecting data about them, and entering that data directly into computer systems (i.e. without human involvement). AIDC is also commonly referred to as "Automatic Identification," "Auto-ID," and "Automatic Data Capture."

Technologies typically considered as part of AIDC include Bar Codes and Radio Frequency Identification (RFID).
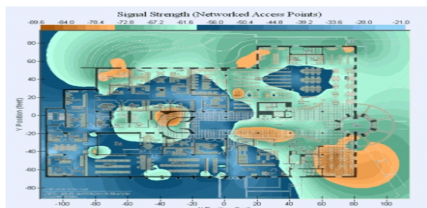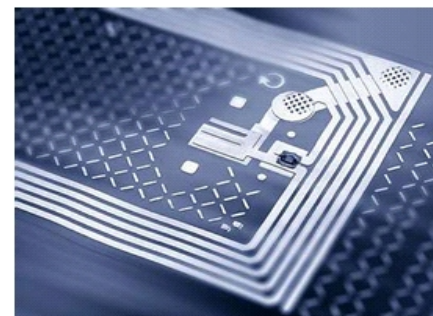
Bar Code

Bar Code technology has been around since the 1960's and since then bar codes have slowly become an essential part of modern civilization. Their use is widespread, and the technology behind barcodes is constantly improving.

Originally, bar codes represented data in the widths (lines) and the spacing of parallel lines referred to as linear or 1D (1 dimensional) barcodes or symbologies. They have since been developed and now also come in patterns of squares, dots, hexagons and other geometric patterns within images termed 2D (2 dimensional) matrix codes or symbologies. 2D bar codes offer the user significantly more data in a relatively small space.

Radio frequency identification (RFID)

Radio frequency identification (RFID) is relatively a new AIDC technology which was first developed in 1980's. The technology acts as a base in automated data collection, identification and analysis systems worldwide.

RFID has found its importance in a wide range of markets including livestock identification and Automated Vehicle Identification (AVI) systems because of its capability to track moving objects. These automated wireless AIDC systems are effective in manufacturing environments where barcode labels could not survive.

Wireless Site Surveys and Analysis

For RFID Systems, many considerations about the application must be factored in. Can-Technologies can provide valuable services such as Facility Analysis to ensure that the system has the proper throughput, no dead zones, redundancy, no interference, and proper network management.

Can-Technologies AIDC system solutions using Bar Code and RFID technologies can include any of the following:

- Initial System Evaluation - Discovery
- Site Survey & facility Analysis
- Functional Specifications
- Project Management
- Application Design
- Material Procurement
- Programming, Configuration and Testing
- Integration, Installation and Commissioning
- Manufacturing Enterprise Solutions (MES)
- SAP/(ERP) Integration
- Genealogy/Birth Certificate, Track & Trace
- Data Acquisition System Development
- Training, Documentation & On-Going Support
- Retrofit/Upgrade Services

"Providing Quality Services & Attention to Our Customer Needs."