MiFare Reader & 13.56 MHz Contactless Smart Card

MiFare Reader Applications

HID's affordable Smart Card reader utilizes MiFare® technology to read contactless Smart Cards, which can be used for access control, stored value (phonecard and vending), fare collection and stored information (health/ID cards).

Features

- Designed to work with HID's IQ Card line of contactless Smart Cards
- Easily integrated with most access control systems
- Features bi-color LED indicator and system controlled built-in buzzer
- One-piece housing combines transmitting/receiving antenna and electronics
- Readily installed on metal surfaces, walls and doors

Specifications

Dimensions: 4.53" x 2.95" x 0.59" (115 mm x 75 mm x 15mm)
Environment Rating: IP 20
Operating Temperature: 14° F to 122° F (-10° C to +50° C)
Power Requirements: 12 VDC - 80 mA
Reading Distance: Typically 1.2" (3 cm)
Output Format:
32-bit Unique MiFare ID number
Wiegand format

Smart Card Applications

HID's IQ Smart Card can be used for diverse applications such as public transportation, access control, road tool, park & ride, airline ticketing, customer loyalty and ID cards. Sixteen securely separated files enable complex applications and provide room for future extensions.

Features

- 13.56 MHz operating frequency provides high-speed, reliable communication with high data integrity
- Read range of up to 10 cm operating distance with card-sized antenna.
- High security (mutual authentication, data encryption, unique 32-bit serial number)
- User-definable access conditions
- Purse functions (read/write)
  Meets ISO standards for thickness, for use with all direct image dye sublimation printers
- Microprocessor functionality for multi-functional applications

Sixteen securely separated files (sectors), each protected by a set of two keys and programmable access conditions, allowing complex applications and giving room for future extensions. Each sector potentially represents a different application. Arithmetic functions are used for expanding the capabilities of the chip. Different keys can protect read/write operations in order to build key hierarchies in the system. Security mechanisms, such as mutual authentication and encryption are efficiently combined with fast processing and data communication, resulting in transition times of less than 100 ms for a typical security ticketing transaction. HID's affordable Smart Card access control readers utilize MiFare technology to read 13.56 MHz contactless proximity cards.

Smart Card - Proven Reliable Technology

The read range is extremely consistent and is unaffected by body shielding or variable environmental conditions, even when close to keys and coins.

Thin - can be carried with credit cards in a wallet or purse.

Photo compatible - can be directly printed with video image printers and vertically slot-punched for easy use.

Long life - passive, no-battery design allows an infinite number of reads.

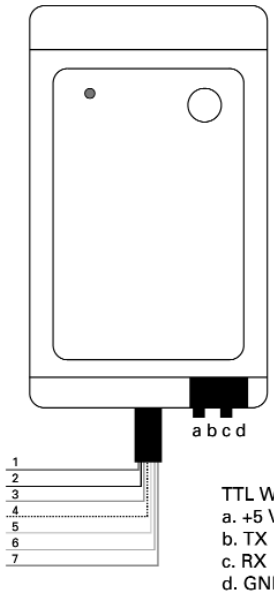
Durability

Strong, flexible and resistant to cracking and breaking.

Options

Magnetic stripe
External card numbering
Vertical slot punch
Custom graphics
Custom applications
Contact smart chip module

HID MiFare Reader



Wiring	Wire Color
1.+12V	Red
2.GND	Black
3.Wiegand/Data 0	Green
4.Wiegand/Data1	White
5.Green LED	Orange
6.Red LED	Brown
7.Buzzer	Blue

Smart Card Specifications

Typical maximum read range: Up to 3.9" (10 cm), depending on local installation conditions and card reader selection.

Dimensions: 2.125" x 3.375" x .031" max (5.40 x 8.57 x .079 cm)

Card Construction: Thin flexible polyvinyl chloride (PVC) laminate

Operating Frequency: 13.56 MHz

RF Interface: As suggested by Iso/IEC 14443, Type A

Memory Size: 1Kbyte

Memory Type: EEPROM, read/write

Multi-application memory: 16 sectors

Fixed Serial Number: Unique, 32 bit

Write Endurance: Min. of 100,000 cycles

Data Retention: 10 years

Operating Temperature: -13º to 158º F (-25º to 70º F)