

iCLASS[®] CARD

13.56 MHz Contactless Smart Card

HID

Features

Read/write Functionality for Multi-functional Memory Applications

iCLASS was specifically designed to make access control more powerful, more versatile, and more secure. All radio frequency data transmission between the card and reader is encrypted using a secure algorithm. By using industry standard encryption techniques, iCLASS reduces the risk of compromised data or duplicated cards. For even higher security, the card data may also be protected with DES or triple DES encryption. Multiple securely separated application areas are each protected by 64-bit diversified read/write keys which allow complex applications and provide for future expansion.

Security mechanisms such as mutual authentication and encryption are efficiently combined with fast processing and data communication, resulting in transaction times of less than 100 milliseconds for a typical secure e-purse transaction.

Proven, Reliable Technology

Offers extremely consistent read range. Unaffected by body shielding or variable environmental conditions.

Thin

Can be carried with credit cards in a wallet or purse. Use with a strap and clip as a photo ID badge.

Photo ID Compatible

Print directly to the card with a direct image or thermal transfer printer. Slot punch vertically for easy use.

Long Life

Passive, no-battery design allows for an estimated minimum 100,000 reads.

Durability

Strong, flexible, and resistant to cracking and breaking.

Options:

- Magnetic stripe
- External card numbering (inkjet or laser engraving)
- Vertical slot punch
- Custom artwork (text or graphics)

(Please see "How To Order Guide" for a description of the options and associated part numbers.)

Warranty

Lifetime warranty. See complete warranty policy for details.

Base Part Numbers

- 2000 for 2K bit (256 Bytes) card
- 2001 for 16K bit (2K Bytes) card with 2 application areas
- 2002 for 16K bit (2K Bytes) card with 16 application areas

Description

13.56 MHz contactless smart card.

Specifications:

Typical Maximum Read Range*

R10 2.0-3.0" (5.0-7.6cm)
R30/RW300 2.0-3.5" (5.0-8.9cm)
R40/RW400 2.5-4.5" (6.3-11.4cm)
RK40/RWK400 3.0-4.0" (7.6-10.1 cm)

*Dependent upon installation conditions.

Dimensions

2.127" x 3.375" x 0.033" max. (5.40 x 8.57 x 0.084 cm)

Weight

0.20oz (5.7 g)

Card Construction

Thin, flexible polyvinyl chloride (PVC) laminate.

Operating Temperature

-40° to 158° F (-40° to 70° C)

Operating Humidity

5-95% non-condensing

Operating Frequency

13.56 MHz

RF Interface

As suggested by ISO/IEC:
15693 read/write
14443B mode - 106 kbps

Transaction Time

<100 ms typical

Baud Rate

14443 B2 mode - 212 Kbps
15693 mode - 26 Kbps

Memory Type

EEPROM, read/write

Multi-application Memory

2K bit (256 Bytes) card – 2 application areas
16K bit (2K Bytes) card – 2 or 16 application areas

Write Endurance

Min. 100,000 cycles

Data Retention

10 years