iCLASS®/Prox Embeddable Card

Embeddable Combination Contactless Smart Card and Proximity Card
PVC Cards 2010, 2011, 2012, 2013, 2014
Composite PVC/PET cards 2130, 2131, 2132, 2133, 2134

HID

ACCESS flexibility.

HID's iCLASS® 13.56 MHz Embeddable read/write contactless smart card technology can be used for diverse applications such as access control, biometrics, cashless vending, public transportation, airline ticketing and customer loyalty programs. Multiple, securely separated files enable numerous applications and support future growth.

The iCLASS Prox Embeddable Card integrates iCLASS 13.56 MHz contactless read/write smart card and 125 kHz proximity technology on a single card with the ability to embed a smart chip of your choice along with adding a magnetic stripe, barcode, and anti-counterfeiting features including custom artwork or a photo identification directly on the credential. You can now take full advantage of iCLASS and Prox technologies along with access control, network log-on security, automotive vehicle identification, cashless vending, time and attendance, and biometric verification. The iCLASS Prox Embeddable Card meets strict ISO thickness standards for use with direct image and thermal transfer printers.

Features:
- 13.56 MHz read/write contactless smart card and 125 kHz proximity technology provides high-speed, reliable communications with high data integrity.
- iCLASS technology ensures high security with mutual authentication, encrypted data transfer, and 64-bit diversified keys for read/write capabilities.
- Any existing HID format can be factory or field programmed into the secure HID access control application area.
- Available in 2k bit (256 Byte), 16k bit (2K Byte) or 32k bit (4K Byte) configurations.
- Designed to be embedded with a contact smart chip module of your choice.
- A single multi-technology card can be used for multiple applications.
- Add a magnetic stripe, barcode, anti-counterfeiting, or photo ID

All 2k bit (256 Byte) iCLASS credentials have the following features:
- Available in two application area configuration only.
- Provides the HID standard access control application area and one other application area for user customization.
- Meet ISO 15693 standard for contactless communications.
- Provides a cost effective way to improve the security of your access control installation.

All 16k bit (2k Byte) and 32k bit (4k Byte) iCLASS credentials have the following features:
- Sufficient read/write memory to store multiple biometric templates.
- 16k available in a two or sixteen application area configuration. 32k available with 16k memory configured in either 2 or 16 application areas, plus an additional 16k user configurable memory.
- Multiple securely separated files enable numerous applications, including the HID standard access control application, and support future growth.
- Meet ISO 15693 and 14443B2 for contactless communications.
- Meet ISO 15693 and 14443B2 for contactless communications.

ASSA ABLOY

Features

Specifications

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 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). Note: custom graphics may increase overall card thickness.
- Contact Smart Chip Module. The Embeddable iCLASS card can be purchased:
- Ready to be embedded with the contact smart chip module of your choice.
- With the contact smart chip module already embedded. Note: optional contact smart chip module memory requirement is dependent on operating system and application chosen. Contact your HID representative for information about the modules that match your application. (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

- 2030 for 2k bit (256 Byte) card with 2 application areas
- 2031 for 16k bit (2k Byte) card with 2 application areas
- 2032 for 16k bit (2k Byte) card with 16 application areas
- 2033 for 32k bit (4k Byte) 16k/2+16k/1.
- 2034 for 32k bit (4k Byte) 16k/16 + 16k/1.

Description

13.56 MHz contactless smart card and 125 kHz proximity card with optional contact smart chip module.

Typical Maximum Read Range*
R10 2-3"
R30/RW300 2-3.5"
R40/RW400 2.5-3.5"
RK40/RWK400 3.0-4.0"
*Dependent upon installation conditions.

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

Weight
0.24 oz (6.8g)

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:
14443B read/write (16k only)
15693 read/write

Transaction Time
<100 ms typical

Baud Rate
14443B mode-106 kbps
15693 mode - 26 kbps

Memory Type
EEPROM, read/write

Multi-application Memory
2k bit (256 Byte) card – 2 application areas
16k bit (2k Byte) card– 2 or 16 application areas
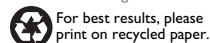32k bit (4k Byte) card – 16k bits in 2 or 16 application areas plus 16k bits user configurable.

Write Endurance
Min. 100,000 cycles

Data Retention
10 years

HID

ACCESS experience.

hidcorp.com

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