

# iCLASS® Clamshell Card

13.56 MHz Contactless

Value Priced 13.56 MHz Contactless Smart Card  
• 2080

- ▶ **Durability** - Strong, flexible, and resistant to cracking and breaking.
- ▶ **Long Life** - Passive, no-battery design allows for an estimated minimum 100,000 reads.
- ▶ **Convenient To Use** - Can fit into a wallet or purse. Use with a strap and clip as a photo ID badge.



**ACCESS** affordability.

HID's iCLASS® Clamshell card provides 13.56 MHz read/write contactless smart card technology in a cost effective card package, with an ABS shell construction that provides durability in harsh environments. iCLASS provides enhanced security through encryption and mutual authentication while delivering the convenience, affordability and reliability of proximity technology for which HID is known worldwide.

## Features:

- ▶ 13.56 MHz read/write contactless smart card technology provides high-speed, reliable communications with high data integrity.
- ▶ Provides a cost effective way to improve the security of your access control installation.
- ▶ Constructed with ABS shell and PVC cover label, offering durable packaging.
- ▶ Available in 2k bit (256 Byte), two application area configuration only.
- ▶ Provides the HID standard access control application area and one other application area for user customization.
- ▶ 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.
- ▶ Meets ISO 15693 standard for contactless communications.
- ▶ A PVC Overlay allows for on-site Photo ID production using most direct image printers.

## 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.

Securely separated application areas are each protected by 64-bit diversified read/write keys. Security mechanisms such as mutual authentication and encryption are efficiently combined with fast processing and data communication, resulting in typical transaction times of less than 100 milliseconds.

### Proven, Reliable Technology

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

### Convenient To Use

Can fit into a wallet or purse. Use with a strap and clip as a photo ID badge.

### Long Life

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

### Durability

Strong, flexible, and resistant to cracking and breaking.

### Warranty

Lifetime warranty. See complete warranty policy for details.

### Base Part Numbers

2k bit (256 Byte) card: 2080

### Companion Products

I321 Photo pouch overlay  
I324 PVC Direct print overlay

### Description

13.56 MHz contactless smart card.

## Specifications

### Typical Maximum Read Range\*

R10: 1.5-2.5" (3.8-6.3 cm)  
R30/RW300: 1.5-3.0" (3.8-7.6 cm)  
R40/RW400: 2.5-4.5" (5.1-10.2 cm)  
RK40/RVK400: 3.0-4.0" (6.3-8.9 cm)

\*Dependent upon installation conditions.

### Dimensions

2.125" x 3.375" x 0.070" max. (5.40 x 8.57 x 0.18 cm)

### Weight

0.24 oz (6.8 g)

### Card Construction

ABS Shell with PVC Cover Label.

### Operating Temperature

-40° to 160° F (-40° to 70° C)

### Operating Humidity

5-95% non-condensing

### Operating Frequency

13.56 MHz

### RF Interface

ISO 15693 read/write

### Transaction Time

<100 ms typical

### Baud Rate

26 Kbps

### Memory Type

EEPROM, read/write

### Multi-application Memory

2k bit (256 Byte) card – 2 application areas

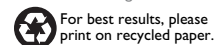
### Write Endurance

Min. 100,000 cycles

### Data Retention

10 years

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MKT-CLAMSHELL-DS-EN



**ACCESS** experience.

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