

iCLASS® insert 207x • 2070, 2071, 2072

- ▶ 13.56 MHz technology – High speed, reliable communications with high data integrity
- ▶ Convenience of iCLASS technology – Disk-shaped transponder for OEM use
- ▶ Versatile – Available in 2k bit, 16k bit or 32k bit configurations



## ACCESS flexibility.

HID's iCLASS® 13.56 MHz 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 eUnit provides the convenience of iCLASS technology in a coin-sized, disk-shaped transponder that can be inserted into any nonmetallic card or device to instantly provide 13.56 MHz read/write contactless smart card technology capabilities to utilize as a transition device during the rebadging process.

### Features:

- ▶ 13.56 MHz read/write contactless smart card 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.

### 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.
- ▶ Meets 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.
- ▶ Meets ISO 15693 and I4443B for contactless communications.

\* Due to variations in card and reading devices, HID does not claim that the iCLASS eUnit will work in every situation. Functional and nonfunctional iCLASS eUnits are available for compatibility testing with existing credential and reader technologies. Compatibility should be confirmed prior to ordering.

## Read/write Functionality for Multi-functional Memory Applications

iCLASS® was specifically designed to make access control more powerful, more versatile and more secure. By using industry standard encryption techniques, iCLASS reduces the risk of compromised data or duplicated cards. All radio frequency data transmission between the card and reader is encrypted using a secure algorithm. For even higher security, the tag 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.

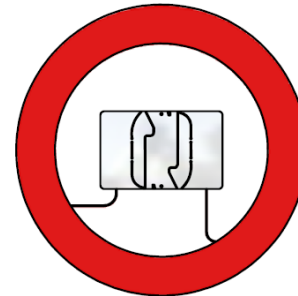
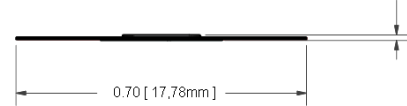
## Proven, Reliable Technology

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

## Long Life

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

0.017 [0,432mm]



<b>Base Part Numbers</b>	<ul style="list-style-type: none"> <li>• 2070 for 2k bit (256 Byte) card with 2 application areas</li> <li>• 2071 for 16k bit (2k Byte) card with 2 application areas</li> <li>• 2072 for 16k bit (2k Byte) card with 16 application areas                             <ul style="list-style-type: none"> <li>• 2073 for 32k bit (4k Byte) 16k/2+16k/1.</li> <li>• 2074 for 32k bit (4k Byte) 16k/16 + 16k/1.</li> </ul> </li> </ul>
<b>Description</b>	13.56 MHz iCLASS eUnit
<b>Typical Maximum Read Range</b>	R10 1.0" (2.5 cm) R30/RW300 1.0" (2.5 cm) R40/RW400 1.0" (2.5 cm) RK40/RWK400 1.0" - 1.5" (2.5 cm - 3.8 cm)
<b>Dimensions</b>	Diameter: 0.749" (19,02mm) Thickness: 0.017" (0,4318mm)
<b>Weight</b>	0.008 oz. (0,23 g)
<b>Operating Temperature</b>	-40° to 158° F (-40° to 70° C)
<b>Operating Frequency</b>	13.56 MHz
<b>RF Interface</b>	As suggested by ISO/IEC: 14443B read/write 15693 read/write
<b>Transaction Time</b>	<100 ms typical
<b>Baud Rate</b>	14443B mode - 106 kbps 15693 mode - 26 kbps
<b>Memory Type</b>	EEPROM, read/write
<b>Multi-application Memory</b>	2k bit (256 Byte) tag – 2 application areas 16k bit (2k Byte) tag – 2 or 16 application areas 32k bit (4k Byte) card – 16k bits in 2 or 16 application areas plus 16k bits user configurable.
<b>Write Endurance</b>	Min. 100,000 cycles
<b>Data Retention</b>	10 years
<b>Warranty</b>	See complete sales policy for details.



## ACCESS experience.

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