

iCLASS[®] Tag

Contactless Smart Adhesive Tag • 2060, 2061, 2062, 2063, 2064

13.56 MHz Contactless



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 Tag provides the convenience of iCLASS technology in a coin-sized, disk-shaped transponder that can be simply attached to any nonmetallic card or device to instantly have 13.56 MHz read/write contactless smart card technology to utilize as a transition device during the rebadging process. You can seamlessly upgrade from Wiegand, magnetic stripe or barium ferrite technologies and can easily and cost-effectively turn an existing plastic ID badge or contact smart card into a contactless proximity credential.

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 14443B for contactless communications.

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 tag and reader is encrypted using a secure algorithm. By using industry standard encryption techniques, iCLASS reduces the risk of compromised data or duplicated tags. 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.

Durability

Strong, flexible, and resistant to cracking and breaking.

Options

- External card numbering (inkjet or laser engraving)
 - Custom artwork (text or graphics)
 - Color - Textured, matte, gray, or black
- (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

- 2060 for 2k bit (256 Byte) card with 2 application areas
- 2061 for 16k bit (2k Byte) card with 2 application areas
- 2062 for 16k bit (2k Byte) card with 16 application areas
- 2063 for 32k bit (4k Byte) 16k/2+16k/1.
- 2064 for 32k bit (4k Byte) 16k/16 + 16k/1.

Description

13.56 MHz contactless smart adhesive tag.

Specifications

Typical Maximum Read Range*

- 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)
- *Dependent upon installation conditions.

Dimensions

Diameter: 1.285" (3.264 cm)
Thickness: 0.070" (0.178 cm)

Weight

0.04 oz. (1.18 g)

Outer Shell Material

Lexan

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) 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.

Write Endurance

Min. 100,000 cycles

Data Retention

10 years