iCLASS

Key
13.56 MHz Contactless Smart Keyfob
Base Model Numbers: 2050, 2051, and 2052

Application:

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* Key provides the convenience of *iCLASS* 13.56 MHz contactless read/write smart card in a molded plastic key fob enclosure that is durable in a harsh environment. This key fob is the size of a typical automotive key and offers custom artwork printing capabilities directly on the key fob credential. You now can offer a credential that can be placed on a key ring or lanyard for such diverse applications including access control, network log-on security, automotive vehicle identification, cashless vending, time and attendance, and biometric verification.

Features:

- The *iCLASS* 13.56 MHz read/write contactless smart key 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 Bytes) or 16K bit (2K Bytes) configurations.
- Molded plastic enclosure provides durability in harsh environments.
- Can be placed on a key ring or clipped to a lanyard for convenient entry.

All 2K bit (256 Bytes) *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 Bytes) *iCLASS* credentials have the following features:

- Sufficient read/write memory to store multiple biometric templates.
- Available in a two or sixteen application area configuration.
- 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.

iCLASS® *by* HID®

Smart • Powerful • Trusted

iCLASS® Key
13.56 MHz Contactless Smart Keyfob

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 key and reader is encrypted using a secure algorithm. By using industry standard encryption techniques, *iCLASS* reduces the risk of compromised data or duplicated keys. For even higher security, the key 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.

Small and Convenient
Can be carried with keys in pocket, handbag, or clipped on a lanyard.

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

Durability
Polycarbonate package is resistant to cracking and breaking.

Options:
- External key numbering (inkjet or laser engraving)
- 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
- 2050 for 2K bits (256 Bytes) key
- 2051 for 16K bits (2K Bytes) key with 2 application areas
- 2052 for 16K bits (2K Bytes) key with 16 application areas

Description
13.56 MHz contactless smart key. Available in textured, matte or black.

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
1.350 x 1.250 x 1.51 in. max. (3.43 x 3.18 x 3.84 cm)

Weight
0.17 oz (4.9g)

Keyfob Construction
Ultrasonically welded polycarbonate shell.

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 read/write - 26 Kbps

Memory Type
EEPROM, read/write

Multi-application Memory
2K bit (256 Bytes) key – 2 application areas
16K bit (2K Bytes) key – 2 or 16 application areas

Write Endurance
Min. 100,000 cycles

Data Retention
10 years

Specifications subject to change without notice.
© 2004 HID Corporation. All trademarks and registered trademarks are property of their respective owners.
All rights reserved.
Printed in the U.S.A.

LIT205XDSUS 11/2004

ISO 9001

ANSI • RAB QMS ACCREDITED

www.hidcorp.com

An ASSA ABLOY Group company

9292 Jeronimo Road
Irvine, CA 92618-1905 U.S.A.
PHONE +1 (949) 598-1600 or (800) 237-7769
FAX +1 (949) 598-1690

ASSA ABLOY