Public Transportation

Cashless Vending

Phone Cards

University Cards

Airline Ticketing

Access Control

Customer Loyalty

HID Proximity and MIFARE® Card

125 kHz Proximity and 13.56 MHz MIFARE Contactless Smart Card

Application

HID's Proximity and MIFARE contactless card combines smart card technology with the benefits of HID's proven proximity technology. The card can be used for diverse applications such as access control, cashless vending, public transportation, airline ticketing, customer loyalty and photo ID cards. Sixteen securely separated files enable multiple applications and support future growth.

Features

- Ideal for companies that want to add smart card applications to an existing HID proximity technology access control system.
- Supports all HID proximity card formats, including Corporate 1000.
- 13.56 MHz operating frequency provides high-speed, reliable communications with high data integrity.
- MIFARE technology ensures high security (mutual authentication, data encryption, unique 32-bit serial number).
- Meets ISO standards for thickness; use with all direct image and thermal transfer printers.

1431-3688

HID
HID CORPORATION

HID PROXIMITY & MIFARE® CARD

1431

• FINISHED CREDENTIAL
Card printing by HID's Card Personalization Service

2476

MANUFACTURING

EVEN SMARTER •
Embed this card with a contact smart chip module

An ASSA Abloy Group company
MIFARE® is a registered trademark of Philips Electronics, N.V.

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Features

Read/write Functionality for Multi-functional Memory Applications
Sixteen securely separated files (sectors), each protected by a set of two keys and programmable access conditions, allow complex applications and provide for future expansion. Each sector potentially represents a different application. Arithmetic functions are used for expanding the capabilities of the chip.

Different keys can protect read/write operations in order to build key hierarchies in the system. Security mechanisms such as mutual authentication and encryption are efficiently combined with fast processing and data communication, resulting in transition times of less than 100 milliseconds for a typical secure ticketing transaction.

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

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 infinite number of reads.

Durability
Strong, flexible and resistant to cracking and breaking.
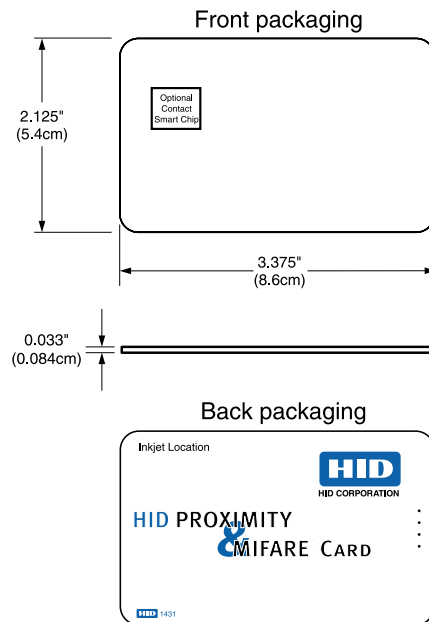
Part Number
Base Part No.: 1431

Description
125 kHz proximity and 13.56 MHz MIFARE contactless smart card, location marked for vertical slot punch.

Options

• External card numbering (inkjet or laser engraving)
• Vertical slot punch
• Custom artwork (text or graphics)
• Contact smart chip module

(Please see "How to Order Guide" for a description of the options and associated part numbers.)

Warranty: Conditional one-year warranty. See complete warranty policy for details.

Front packaging

Optional Contact Smart Chip

2.125"
(5.4cm)

3.375"
(8.6cm)

0.033"
(0.084cm)

Back packaging

Inkjet Location

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HID PROXIMITY
& MIFARE CARD

HID 1431

Specifications (Proximity)

Typical Maximum* Proximity Read Range
MiniProx™ reader-up to 5" (12.5 cm)
ThinLine II® reader-up to 5" (12.5 cm)
ProxPoint® Plus reader-up to 2.5" (6.25 cm)
ProxPro® reader-up to 7" (17.5 cm)
MaxiProx® reader-up to 20" (50 cm)

*Dependent on local installation conditions.

Card Dimensions
2.125" x 3.375" x 0.033" max.
(5.40 x 8.57 x 0.081 cm)

Card Construction
Thin, flexible polyvinyl chloride (PVC) laminate

Operating Temperature
-13° to 158° F (-25° to 70° C)

Weight
0.24 oz. (6.8 gm)

Specifications (13.56 MHz)

Typical Maximum* MIFARE Read Range
Up to 3.9" (10 cm), depending on local installation conditions.

RF Interface
As suggested by ISO/IEC 14443, Type A

Transaction Time
<100 ms typical

Baud Rate
106 Kbaud

Memory Size
1 Kbyte

Memory Type
EEPROM, read/write

Multi-application Memory
16 sectors

Fixed Serial Number
Unique, 32 bit

Write Endurance
Min. 100,000 cycles

Data Retention
10 years

LIT1431DS 6/01, supersedes 11/00

ISO 9001
SGS

ANSI•RAB QMS
ACCREDITED

HID

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