K-SECURE

Keyscan Contactless Smartcard

Keyscan's K-SECURE Contactless Smartcard

Keyscan's K-SECURE is equipped with numerous anti-counterfeiting and card anti-duplication technologies. And just as with the K-SMART reader, Keyscan has layered its own robust AES multi-layer encryption technology onto the K-SECURE card.

K-SECURE is designed for access control applications with the exceptional versatility to store third party applications including biometric templates. K-SECURE cards are also ISO printable!

- Uses internationally recognized contactless smartcard technology
- K-SECURE 13.56MHz contactless smartcard credentials provide the highest level of credential anti-counterfeiting protection
- K-SECURE contactless comply with international interoperability (ISO14443) standards suitable for 3rd party applications (eg: logical network access and cashless vending)
- Provides increased security compared to regular 125 kHz credentials which simply transmit their card number in an "open" environment
- 36-bit format for even more security over industry 26-bit 125kHz credentials which further expose the end-user to potential card duplication and easily ordered duplicate card and batch numbers
- K-SECURE smartcard credentials work with Keyscan's K-SMART readers

How K-SECURE smartcards work:

1. K-SECURE card enters a K-SMART reader "excite" field
2. Smartcard transmits an encrypted "Max Secure Code" to Keyscan's K-SMART reader
3. The K-SMART reader decrypts and authenticates the "Max Secure Code".
4. The reader then completes a 3-pass authentication, encryption / decryption unlock algorithm with the card
5. The K-SECURE credential then transmits its secured access control identification
6. The K-SMART reader passes the card's access control identification to the controller using Keyscan's proprietary 36-bit Wiegand protocol

The Result:

- Higher credential security and increased protection against card counterfeiting
- Keyscan assures no duplicate cards are created
- Keyscan's 36-bit Wiegand output from reader to control panel adds an additional layer of security

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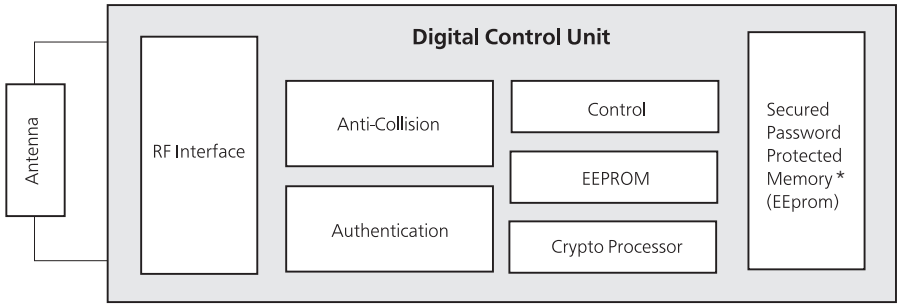
Features and Benefits

- Uses industry renowned smartcard technology
- Provides credential anti-counterfeiting protection

Card Memory and Security Algorithm Diagrams

K-SECURE Contactless Smartcard :: Built-in security, Built-in capability for support of 3rd party applications



*Secured memory slots are available for 3rd party applications. One memory slot is specifically secured and password protected for Access Control.

K-SECURE Security Algorithm

1. Card enters reader's 'excite' field
2. Card transmits MAX Secure Code
3. Reader validates MAX Secure Code
4. Reader initiates 3-pass authentication algorithm and sends secure-sector unlock code
5. Reader transmits secure-sector access identification code
6. Reader passes card details using 36-bit Wiegand output to Keyscan Access Control Panel

K-SMART Reader

125kHz card Security Algorithm

1) Transmit card serial number

36 bit Wiegand Output to Keyscan panel

KEYSCAN ACCESS CONTROL SYSTEMS from KEYSCAN INC

901 Burns Street East
Whitby, Ontario, L1N 6A6, Canada
Toll Free: 1.888.KEYSCAN (Canada/US)
Tel: +1.905.430.7226
Web: www.keyscan.ca

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