

# SmartTOUCH™ SBI0 and SBKI0 Readers

ISO 14443 reader with fingerprint verification

- ▶ Custom Configurations – Completely configurable for every access control application challenge.
- ▶ Open Architecture Design – ISO 14443A MIFARE®/DESFire® contactless smart card, compatible for broad card interoperability.
- ▶ Ideal for High Security Applications – Offers higher assurance of valid transactions making it the ideal solution for securing rooms, payment applications and electronic time and attendance.



## ACCESS flexibility

SmartTOUCH™ is a flexible, highly secure and stylish contactless smart card reader ideal for customers that require a customizable reader for new or existing installations. Designed for a wide variety of applications from entry level access control to secure ID management, its unique capabilities, such as reading any MIFARE® sector and/or DESFire® application data file, meet all installation requirements.

SmartTOUCH not only verifies the validity of a MIFARE or DESFire card, it also verifies that the person who presents the card is its rightful owner. A scan of the fingerprint of the cardholder is stored on the secure part of the card. When there is a match between the finger scanned and the template stored on the card, the card data is transmitted. With the addition of PIN, the SmartTOUCH offers a third level of security.

For decentralized processing and verification, biometric data is kept outside a database and stored in an encrypted format on the card. Thus, the verification takes place in a totally independent system, allowing for fast and secure verification and eliminating privacy concerns.

Every SmartTOUCH can be used as an enrollment station. For programming, every order of SmartTOUCH is accompanied by a unique enroll-and-erase card.

SmartTOUCH readers offer one of the broadest ranges of card compatibility in the industry and can be configured as a specific solution for each project. The SmartTOUCH reader is available with or without PIN pad, adding an extra layer of protection for higher security installations.

- ▶ Configuration cards can further personalize reader configurations to best match installation requirements.
- ▶ Wiegand, Clock-and-Data, RS232, RS485 or RS422 outputs easily interface with existing access control panels.
- ▶ Retrofit existing readers with SmartTOUCH to simply and instantly add two or three-factor authentication.

# Features

**Mounting** The reader easily mounts on a door mullion or single-gang electrical box (using the electrical box cover plate accessories). An LED flashes green and the beeper sounds when reader is presented with MIFARE® and DESFire® or other reader application compatible card. The multiple LEDs and beeper can also be controlled by the host system.

**Security** MIFARE® Contactless smart card and reader platform according to the ISO 14443A. The card structure provides multi-application functionality, whereby each application is secured for read and read/write by security keys. All RF data transmission between card and reader is encrypted using mutual authentication and challenge response to prevent replay attacks. Readers and cards must have matching security keys.

DESFire® Contactless smart card and reader platform according to ISO14443 level 4. Featuring DES and 3DES Encryption on all RF data transmission. The card structure provides multi-application functionality, whereby each application is secured up to 14 different user-definable security keys for read and read/write access. Readers and cards must have matching security keys

### Easily Interfaced

The SmartID™ provides flexible configurable output formats and output protocols. Reader communication supported: Wiegand, Clock-and-Data, ISO 7811 Clock-and-Data ABA Track 2 Emulation, RS232, RS422, RS485 or custom format output.

<b>* Base Model Numbers</b>	<p><b>SB10</b> 800-8050 MIFARE® 800-8052 DESFire®</p> <p><b>SBK10</b> 800-8055 MIFARE 800-8057 DESFire</p>
<b>Dimensions</b>	7.58" x 1.99" x 1.69" (19.25 x 5.05 x 4.3 cm)
<b>Read Range</b>	MIFARE Card: Up to 1.18" (3 cm). Dependent upon installation conditions
<b>Mounting</b>	Ideally suited for mullion-mounted door installations, or any flat surface (Reader will not cover junction box). Optional single-gang electrical box mounting plate available. (see "Accessories" for more information)
<b>Power Supply</b>	8 – 24 VDC
<b>Power Consumption</b>	208 mA AVG / 417 mA PEAK (@ 12VDC) 104 mA AVG / 208 mA PEAK (@ 24VDC)
<b>Operating Temperature</b>	32° F – 140° F (0° C – 60° C)
<b>Operating Humidity</b>	30 – 80% non-condensing
<b>Environmental</b>	Indoor Use Only
<b>Transmit Frequency</b>	13.56 MHz
<b>Applications</b>	MIFARE (Sector), DESFire
<b>Reader Outputs</b>	Wiegand, Clock-and-Data, ISO7811 Clock-and-Data ABA Track 2 Emulation, RS232, RS485, RS422 or custom format output
<b>Cable Distance</b>	Wiegand 500 ft (150 m) (18 AWG / 1.02 mm / 0.82 mm2), Clock-and-Data 82 ft (25 m) (22 AWG / 0.65 mm / 0.33 mm2), RS232 15 ft (4.6 m) (24 AWG / 0.51 mm / 0.20 mm2), RS485/RS422 4000 ft (1219 m) (24 AWG / 0.51 mm / 0.20 mm2)
<b>Card Compatibility</b>	ISO 14443A MIFARE/DESFire
<b>Certifications</b>	FCC Certification, CE Mark (EU), C-tick (Australia, New Zealand), RoHS
<b>Housing</b>	SB TSG Polymers
<b>Color</b>	Silver
<b>Accessories</b>	500-8095 Single-gang Electrical Box Cover 800-0300 Tamper Switch
<b>Termination</b>	Terminal Strip
<b>Works With</b>	143x/144x SmartID MIFARE Credentials** 145x SmartID DESFire Credentials** 82000 EdgePlus E400 Single Door Controller*** 70100 VertX V100 Door/Reader Interface*** 72000 VertX V2000 Reader Interface/Network Controller***
<b>Fingerprint sensor type</b>	CMOS
<b>Fingerprint Sensor Size</b>	0.51" x 0.51" (1.3 x 1.3 cm)
<b>Fingerprint Sensor Array</b>	5.04" x 5.04" (12.8 x 12.8 cm)
<b>Fingerprint Sensor Resolution</b>	250 dpi
<b>Fingerprint Algorithm EER</b>	0.1%
<b>Fingerprint Template Size</b>	< 350 bytes
<b>Max. Finger Rotation</b>	+/- 12°
<b>Max. Finger Displacement</b>	+/- 0.2" (0.5 cm)
<b>Warranty</b>	Warrantied against defects in materials and workmanship for 1 year. (See complete warranty policy for details.)

\* Additional custom configuration format is required to accompany all reader orders. Contact customer service for more information. All readers are read only.  
\*\* See 13.56MHz HTOG for more details  
\*\*\* See Network Access Solutions HTOG for more details

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MKT-SmartTouch\_Rev\_B\_DS\_EN



**ACCESS** experience.

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