

# SmartID™ Readers

13.56 MHz MIFARE® and DESFire® Contactless Cards and Readers



SmartID Contactless Smart Card Readers are completely compatible with the requirements of ISO 14443A (MIFARE/DESFire) and are a perfect choice for access control, data storage solutions and multiple applications. The open architecture and highly customizable platform enables adaptation to an assortment of card population scenarios. Adding to the security and flexibility of tailored ISO 14443 applications, a wide variety of form factors and multi-factor authentication product is available, including keypad and biometric readers. Choose from a full range of HID's 13.56 MHz offerings encompassing the industry's broadest range of open standard contactless smart card products, available from over 40,000 resellers worldwide.



## Did You Know...

The SmartID reader offers the ultimate choice in interoperability and programmability. Designed for a wide variety of applications from entry level access control to secure ID management, the reader family is completely configurable for every access control application challenge.

### SmartID Mullion - S10 ISO 14443A Contactless Smart Card Reader Base Part Number • 800-8030\*

- Reads data from any ISO 14443A (MIFARE/DESFire) Contactless Smart Card
- Can be configured for almost any custom card population
- Choose from a variety of reader outputs, including Wiegand, Clock-and-Data, RS232, RS485 and RS422.
- Reader firmware loaded from smart card makes upgrades and maintenance painless
- Dimensions: 5.59" x 1.81" x 0.98" (14.2 x 4.6 x 2.5 cm)
- Read Range: up to 1.8" (4.6 cm)
- Additional accessory (p/n 500-8090) turns reader into single-gang electrical mount



Silver

FIPS 201 Approved. Call for details **800-872-5359**



(Part number 800-8080 is the GSA approved model.)

### SmartID Mullion Keypad - SK10 ISO 14443A Contactless Smart Card Keypad Reader Base Part Number • 800-8045\*

- Reads data from any ISO 14443A (MIFARE/DESFire) Contactless Smart Card
- Can be configured for almost any custom card population
- Choose from a variety of reader outputs, including Wiegand, Clock-and-Data, RS232, RS485 and RS422.
- Keypad offers dual-factor authentication
- Reader firmware loaded from smart card makes upgrades and maintenance painless
- Dimensions: 5.59" x 1.81" x 0.98" (14.2 x 4.6 x 2.5 cm)
- Read Range: up to 1.8" (4.6 cm)
- Additional accessory (p/n 500-8090) turns reader into single-gang electrical mount



Silver

FIPS 201 Approved. Call for details **800-872-5359**



(Part number 800-8085 is the GSA approved model.)

\* Multiple base part numbers available depending upon application.

# SmartTOUCH™ Biometric Readers



## SmartTOUCH - SB10

### ISO 14443A Contactless Smart Card Biometric Reader

Base Part Number • 800-8050\*

- Biometric authentication in conjunction with data from any ISO 14443A (MIFARE/DESFire) Contactless Smart Card
- Can be configured for almost any of custom card population
- Choose from a variety of reader outputs, including Wiegand, Clock-and-Data, RS232, RS485 and RS422.
- Field fingerprint enrollment at the reader for simplicity and convenience
- Dimensions: 7.58" x 1.99" x 1.69" (19.25 x 5.05 x 4.3 cm)
- Read Range: up to 1.18" (3.0 cm)
- Additional accessory (p/n 500-8095) turns reader into single-gang electrical mount



## SmartTOUCH Keypad - SBK10

### ISO 14443A Contactless Smart Card Biometric Keypad Reader

Base Part Number • 800-8055\*

- Biometric authentication in conjunction with data from any ISO 14443A (MIFARE/DESFire) Contactless Smart Card
- Can be configured for almost any custom card population
- Three-factor authentication finger + card + pin
- Field fingerprint enrollment at the reader for simplicity and convenience
- Dimensions: 7.58" x 1.99" x 1.69" (19.25 x 5.05 x 4.3 cm)
- Read Range: up to 1.18" (3.0 cm)
- Additional accessory (p/n 500-8095) turns reader into single-gang electrical mount



\* Multiple base part numbers available depending upon application.

# SmartID™ Card Programmers

The SmartTOOLS™ desktop card programmer suite is a flexible, highly secure and stylish Contactless Smart Card programmer, ideal for customers that require access card programming and/or reader customization for new or existing installations. The SmartTOOLS software suite offers two software packages:

ProxBurn CPI00, part number 501-7753

ReaderTOOLS CPI01, part number 501-7756

ProxBurn is a card programming suite for MIFARE cards that allows the user to program 32-bit Wiegand card numbers and flexible Clock-and-Data card formats up to 10 digits using site specific security keys for MIFARE and DESFire cards. ReaderTOOLS is a SmartID reader configuration tool. ReaderTOOLS allows users to create configuration cards that customize the behavior of any SmartID reader. Using an existing key management process, ReaderTOOLS enables customers to secure readers with site specific keys known only to the site manager. After creation of configuration cards, site managers configure readers by placing the configuration card in front of the reader. After configured, SmartID readers will read, process and output custom programmed MIFARE data.

ProxBurn and ReaderTOOLS are both available for Windows® 2000/XP/2003. Software licenses and/or NDAs are required for use.

---

## **ProxBurn - CP100**

### **Card Programmer**

#### **Base Part Number • 501-7753**

- Programs 32-bit Wiegand card numbers
- Programs up to 10 Clock-and-Data ABA digits
- Programs access cards with site specific security keys
- RS232 connection to computer

## **ReaderTOOLS - CP101**

### **Configuration Card Programmer**

#### **Base Part Number • 501-7756**

- Programs SmartID Reader Configuration Cards
- Allows users to setup secure site specific reader keys
- Enables users to configure a multitude of reader settings
- Configure any SmartID reader
- USB connection to computer



# SmartID™ Reader Specifications



	SmartID™ Mullion S10	SmartID™ Mullion Keypad SK10	SmartTOUCH™ SB10	SmartTOUCH™ Keypad SBK10
<b>Base Model Number*</b>	800-8030	800-8045	800-8050	800-8055
<b>Dimensions</b>	5.59" x 1.81" x 0.98" (14.0 cm x 4.5 cm x 2.5 cm)		7.58" x 1.99" x 1.69" (19.5 cm x 5.0 cm x 4.5 cm)	
<b>Weight</b>	4.3 oz (122 g)		5.5 oz (157 g)	
<b>Read Range</b>	Up to 1.8" (4.6 cm)		Up to 1.18" (3.0 cm)	
<b>Mounting</b>	Mullion or Single-gang electrical box**			
<b>Power Supply</b>	4.5-16 VDC (reverse current protected); Linear supply recommended	4.5-16 VDC (reverse current protected); Linear supply recommended	8-24 VDC regulated	8-24 VDC regulated
<b>Current Requirements</b>	1.5W/2.0W		2.5W/5.0W	
<b>Termination</b>	Terminal			
<b>Output Formats</b>	Wiegand, Clock-and-Data RS232, RS485, RS422			
<b>Tamper</b>	Option			
<b>Indoor/Outdoor</b>	Both	Both	Option	
<b>Additional Technologies</b>			Fingerprint Sensor	Fingerprint Sensor
<b>Warranty</b>	Two Years	Two Years	One Year	One Year

\* Multiple base part numbers available depending upon application  
 \*\* Single-gang mounting requires purchase of additional accessory

# FlexSmart<sup>®</sup> Readers



HID FlexSmart<sup>®</sup> MIFARE<sup>®</sup> and DESFire<sup>®</sup> Contactless Smart Card Readers are completely compatible with the requirements of ISO 14443A and are a perfect choice for access control, data storage solutions and multiple applications.

The open architecture, flexible, highly secure and stylish contactless smart card reader series augments HID's market-leading iCLASS<sup>®</sup> product line and features three models: FlexSmart MIFARE HID Format Secure Reader (6075), FlexSmart MIFARE Custom Reader (6076), and FlexSmart DESFire Custom Reader (6077). This HID family of contactless smart card products provides options for customers looking for either an out-of-the-box solution or requiring customizable readers. HID's 13.56 MHz offerings encompass the industry's broadest range of open standard contactless smart card products, available from over 40,000 resellers worldwide.



## MIFARE® HID Format Secure Reader 6075

ISO 14443A Contactless Smart Card Series

Base Part Number • 6075

- All keys and formats are preconfigured, making installations easy
- Choose from a variety of HID formats: OEM, Corporate 1000 or 26-Bit
- Complete flexibility to read HID Sector formats and/or CSN
- HID manages all reader and card security for the customer
- Dimensions: 4.3" x 1.5" x 0.72" (10.9 cm x 3.8 cm x 1.8 cm)
- Read Range: up to 2.0" (5.0 cm)\*



Wave (Black, Blue)



Arch (Black, Beige)



## MIFARE® Custom Reader 6076

ISO 14443A Contactless Smart Card Series

Base Part Number • 6076

- Can be configured to read any third-party formatted cards or to develop a custom format for a new application
- ISO 14443A compatible for card interoperability
- Can read data from any MIFARE sector of the card
- Ideal for customers that require a customizable reader for new or existing installations
- Dimensions: 4.3" x 1.5" x 0.72" (10.9 cm x 3.8 cm x 1.8 cm)
- Read Range: up to 2.0" (5.0 cm)\*



Wave (Blue)



Arch (Black, Beige)



## DESFire® Custom Reader 6077

ISO 14443A Contactless Smart Card Series

Base Part Number • 6077

- Highly secure data transactions with Triple DES encryption
- ISO 14443A compatible for card interoperability
- Reads data from any DESFire application file on the card
- Ideal for customers that require a customizable reader for new or existing installations
- Dimensions: 4.3" x 1.5" x 0.72" (10.9 cm x 3.8 cm x 1.8 cm)
- Read Range: up to 2.0" (5.0 cm)\*



Wave (Blue)



Arch (Black, Beige)



## MIFARE® Reader/Writer 6055

13.56 MHz Contactless Smart Card Reader

Base Part Number • 6055

- Configurable as a MIFARE MAD, Sector or CSN Reader
- Wiegand or RS-232 Outputs
- Compatible with all HID formats
- Mounts on a single-gang electrical box for easy installation
- Dimensions: 4.7" x 3.0" x 0.68" (11.9 cm x 7.6 cm x 1.7 cm)
- Read Range: up to 2.0" (5.0 cm)\*



(Black, Gray, Beige, White)

\* All Read Ranges are dependent on the type of credential used.



# FlexSmart® Readers

## **MIFARE® HID Format Secure Keypad Reader 6071**

### **ISO 14443A Contactless Smart Card Series**

#### **Base Part Number • 6071**

- Keypad enables multi-factor authentication
- Ideal for high traffic areas
- All keys and formats are preconfigured, making installations easy
- Choose from a variety of HID formats: OEM, Corporate 1000 or 26-Bit
- Complete flexibility to read HID Sector formats and/or CSN
- HID manages all reader and card security for you
- Dimensions: 4.7" x 2.9" x 1.1" (11.9 cm x 7.4 cm x 2.8 cm)
- Read Range: Up to 2.0" (5.0 cm)



---

## **MIFARE® Custom Keypad Reader 6072**

### **ISO 14443A Contactless Smart Card Series**

#### **Base Part Number • 6072**

- Keypad enables multi-factor authentication
- Completely configurable for every access control application challenge
- ISO 14443A compatible for card interoperability
- Can read data from any MIFARE sector of the card
- Dimensions: 4.7" x 2.9" x 1.1" (11.9 cm x 7.4 cm x 2.8 cm)
- Read Range: Up to 2.0" (5.0 cm)



---

## **DESFire® Custom Keypad Reader 6073**

### **ISO 14443A Contactless Smart Card Series**

#### **Base Part Number • 6073**

- Keypad enables multi-factor authentication
- The reader is completely configurable for every access control application challenge
- ISO 14443A compatible for card interoperability
- Reads data from any DESFire application file on the card
- Secure data transactions with Triple DES encryption
- Dimensions: 4.7" x 2.9" x 1.1" (11.9 cm x 7.4 cm x 2.8 cm)
- Read Range: Up to 2.0" (5.0 cm)





# FlexSmart® Reader Specifications



	MIFARE® HID Format Secure Reader	MIFARE® Custom Reader	DESFire® Custom Reader
<b>Base Model Number</b>	6075	6076	6077
<b>Dimensions</b>	4.3" x 1.5" x .72" (10.9 cm x 3.8 cm x 1.08 cm)		
<b>Weight</b>	4.0 oz (113 g)		
<b>Read Range</b>	Up to 2.0" (5.0 cm)		
<b>Mounting</b>	Mullion base with interchangeable bezels		
<b>Power Supply</b>	Power Supply 9-16 VDC, Linear supply recommended		
<b>Current Requirements</b>	15-75 mA		
<b>Termination</b>	Pigtail		
<b>Output Formats</b>	Wiegand or Clock-and-Data		
<b>Certifications/ Approvals</b>	FCC Certification, Canada Certification, CE Mark (Europe), New Zealand, Australia c-Tick Pending Certifications: Taiwan, Singapore, Germany VdS, UL 294/ cUL,		
<b>Tamper</b>	No		
<b>Indoor/Outdoor</b>	Both		
<b>Warranty</b>	Lifetime		



	MIFARE® HID Format Secure Keypad Reader	MIFARE® Custom Keypad Reader	DESFire® Custom Keypad Reader
<b>Base Model Number</b>	6071	6072	6073
<b>Dimensions</b>	4.7" x 2.9" x 1.1" (11.9 cm x 7.4 cm x 2.8 cm)		
<b>Weight</b>	12.0 oz (340 g)		
<b>Read Range</b>	Up to 2.0" (5.0 cm)		
<b>Mounting</b>	Single-gang electrical box		
<b>Power Supply</b>	Power Supply 9-16 VDC, Linear supply recommended		
<b>Current Requirements</b>	25 mA / 100 mA @ 12 VDC; Linear power supply recommended		
<b>Termination</b>	Pigtail		
<b>Output Formats</b>	Wiegand or Clock-and-Data		
<b>Certifications/ Approvals</b>	FCC Certification, Canada Certification, CE Mark (Europe), New Zealand, Australia c-Tick Pending Certifications: Taiwan, Singapore, Germany VdS, UL 294/ cUL,		
<b>Tamper</b>	No		
<b>Indoor/Outdoor</b>	Both		
<b>Warranty</b>	Lifetime		

# MIFARE®/DESFire® Credentials

## MIFARE® Card

### 13.56 MHz Contactless Smart Card

#### Base Part Number • 1430

- Credit card-thin MIFARE 1K ISO card provides high security with mutual authentication, data encryption and unique 32-bit serial number
- Ideal for diverse applications such as access control, cashless vending, public transportation, corporate and campus applications, event ticketing, customer loyalty and photo ID cards
- Photo ID compatibility allows printing directly to the card with a direct image or thermal transfer printer
- Cards can be produced with visual security and anti-counterfeiting features such as holograms, ultra-violet fluorescent inks, micro-printing or a custom logo
- Also Available in Composite Polyester / PVC, MIFARE 4K and magnetic stripe versions



## MIFARE®/Prox Combo Card

### 13.56 MHz Contactless Smart Card

#### Base Part Number • 1431

- Combine MIFARE 1K and proximity technologies to add smart card applications, such as cashless vending, corporate and campus applications, event ticketing, customer loyalty and photo ID cards, to access control systems
- Provides high security with mutual authentication, data encryption and unique 32-bit serial number and supports all HID proximity card formats, including Corporate 1000
- Photo ID compatibility allows printing directly to the card with a direct image or thermal transfer printer
- Cards can be produced with visual security and anti-counterfeiting features such as holograms, ultra-violet fluorescent inks, micro-printing or a custom logo
- Also Available in Composite Polyester / PVC and MIFARE 4K versions



## DESFire® Card

### 13.56 MHz Contactless Smart Card

#### Base Part Number • 1450

- Proven, Reliable Technology - Offers extremely consistent read range. Use is unaffected by body shielding or variable environmental conditions, even when close to keys and coins.
- Fast Processing and Data Communication - Transaction times are less than 100 milliseconds for a typical secure ticketing transaction.



## DESFire®/Prox Combo Card

### 13.56 MHz Contactless Smart Card

#### Base Part Number • 1451

- Proven, Reliable Technology - Offers extremely consistent read range. Use is unaffected by body shielding or variable environmental conditions, even when close to keys and coins.
- Fast Processing and Data Communication - Transaction times are less than 100 milliseconds for a typical secure ticketing transaction.
- True Credit Card Thickness - Use with all direct image and thermal transfer printers.





**MIFARE® Keyfob**  
**13.56 MHz Contactless Smart Card**  
**Base Part Number • I434**

- High Security - MIFARE technology ensures mutual authentication, data encryption and unique 32-bit serial number.
- Proven, Reliable Technology - Offers extremely consistent read range. Use is unaffected by body shielding or variable environmental conditions, even when close to keys and coins.
- Fast Processing and Data Communication - Transaction times are less than 100 milliseconds for a typical secure ticketing transaction.
- Multiple Memory Types - Available in MIFARE 1K and 4K.



**DESFire® Keyfob**  
**13.56 MHz Contactless Smart Card**  
**Base Part Number • I454**

- High Security - DESFire technology includes mutual authentication, DES and triple-DES data encryption, and unique 56-bit serial number.
- Proven, Reliable Technology - Offers extremely consistent read range. Use is unaffected by body shielding or variable environmental conditions, even when close to keys and coins.
- Fast Processing and Data Communication - Transaction times are less than 100 milliseconds for a typical secure ticketing transaction.



**MIFARE® Adhesive Tag**  
**13.56 MHz Contactless Smart Card**  
**Base Part Number • I435**

- High Security - MIFARE technology ensures mutual authentication, data encryption and unique 32-bit serial number.
- Proven, Reliable Technology - Offers extremely consistent read range. Use is unaffected by body shielding or variable environmental conditions, even when close to keys and coins.
- Fast Processing and Data Communication - Transaction times are less than 100 milliseconds for a typical secure ticketing transaction.
- Multiple Memory Types - Available in MIFARE 1K and 4K.



**DESFire® Adhesive Tag**  
**13.56 MHz Contactless Smart Card**  
**Base Part Number • I455**

- High Security - DESFire technology includes mutual authentication, DES and triple-DES data encryption and unique 56-bit serial number.
- Fast Processing and Data Communication - Transaction times are less than 100 milliseconds for a typical secure ticketing transaction.
- Upgrade Tool - Provides the security of DESFire contactless read/write technology in a small, disk-shaped package.

# MIFARE® / DESFire® Credentials



**MIFARE® Card**

**MIFARE® / HID Prox Combo Card**

**DESFire® Card**

**DESFire® / HID Prox Combo Card**

Base Part Number	MIFARE® Card	MIFARE® / HID Prox Combo Card	DESFire® Card	DESFire® / HID Prox Combo Card
	<b>1430:</b> PVC 1k Card <b>1440:</b> PVC 4k Card <b>1436:</b> Composite PET/PVC 1k Card <b>1446:</b> Composite PET/PVC 4k Card	<b>1431:</b> PVC 1k Card <b>1441:</b> PVC 4k Card <b>1437:</b> Composite PET/PVC 1k Card <b>1447:</b> Composite PET/PVC 4k Card	<b>1450:</b> PVC Card <b>1456:</b> Composite PET/PVC Card	<b>1451:</b> PVC Card <b>1457:</b> Composite PET/PVC Card
<b>Read Range: *</b>				
<b>MIFARE</b>	Up to 4.0" (10.0 cm)		N/A	
<b>DESFIRE</b>	N/A		Up to 4.0" (10.0 cm)	
<b>HID Prox</b>	N/A	Up to 4.5" (11.5 cm)	N/A	Up to 4.5" (11.5 cm)
<b>Indala Prox</b>	N/A		N/A	
<b>Memory Size/ Application Areas</b>	1k Byte (8k bits) or 4k Bytes (32k bits)		4k Bytes (32k bits)	
<b>HID Proximity 125 kHz</b>	No	Yes	No	Yes
<b>Contact Smart Chip Module Embeddable</b>	Yes**			
<b>Wiegand Strip</b>	No			
<b>Magnetic Stripe</b>	Optional			
<b>Printable ***</b>	Yes			
<b>Standard HID Artwork</b>	Optional			
<b>Slot Punch</b>	Vertical optional			
<b>Visual Security Options</b>	Yes			
<b>Additional Security Options</b>	Corp 1000			
<b>Warranty</b>	Lifetime			

\* Dependant upon installation conditions.

\*\* Contact smart chip module not included. Ask about HID's SMARTS Program for off-the-shelf contact smart chip embedded cards.

\*\*\* Some types of printing processes can take these credentials out of ISO compliance for thickness. Consult factory for more information.



**MIFARE® Keyfob**

**DESFire® Keyfob**

**MIFARE® Adhesive Tag**

**DESFire® Adhesive Tag**

<b>1434:</b> 1k Keyfob <b>1444:</b> 4k Keyfob	<b>1454</b>	<b>1435:</b> 1k Tag <b>1445:</b> 4k Tag	<b>1455</b>
Up to 2.0" (5.0 cm)	N/A	Up to 2.0" (5.0 cm)	N/A
N/A	Up to 2.0" (5.0 cm)	N/A	Up to 2.0" (5.0 cm)
N/A			
N/A			
1k Byte (8k bits) or 4k Bytes (32k bits)	4k Bytes (32k bits)	1k Byte (8k bits) or 4k Bytes (32k bits)	4k Bytes (32k bits)
No			
No			
No			
No			
No			
Yes			
Key Ring Hole		No	
No			
Corp 1000			
Lifetime			