Readers

This section of the Electronic Access Control catalog covers Schlage proximity, smart, and multi-technology readers from Ingersoll Rand Security Technologies.

Overview

Schlage offers a comprehensive line of credential readers with a range of technologies and form factors to meet a variety of security needs and budgets. The Schlage line of readers includes both smart and proximity readers, as well as multi-technology readers to deliver complete flexibility when transitioning from proximity to smart technology. A variety of reader designs are available to accommodate a wide range of mounting applications.

Proximity Readers

· Schlage proximity technology offers your facility an easy and convenient access control solution. Proximity technology, which operates on 125 kHz frequency, is easily integrated into existing legacy proximity systems or ideal for a new installation.

· The SXF1050, SXF1550, and SXF2110P-K proximity readers are attractive, cost-effective, and well suited for exterior and interior applications. These readers also have a sleek and attractive architectural styling. Proximity readers by Schlage offer a visual indicator and audio feedback representing status and activity information which make access control simple for users to understand.

· Proximity readers by Schlage operate on a Wiegand interface, are compatible with all industry leading proximity credentials, and are completely ISO compliant.

Smart Readers

- Schlage contactless smart card readers are the most secure readers in the industry. Instead of using open transmission protocols, Schlage smart card readers utilize high security data. Each message between the card and the reader is digitally signed using Message Authentication Coding (MAC) to ensure the integrity of the data.

- Smart reader technology can be used in applications such as logical access, cashless vending, and cafeteria services.

Multi-Technology Readers

- Schlage multi-technology readers are the most flexible readers in the industry. Finally, one reader handles all applicable ISO standards (14443), and can handle multiple formats simultaneously. Schlage's multi-technology readers contain both 125 kHz proximity and 13.56 MHz contactless smart card capability in one unit, which allows customers to economically migrate to the latest in smart card technology at their own pace.

	Proximity Readers		
Base Part Number	**SXF1050**	**SXF1550**	**SXF2110P-K**
Mount	Mini-Mullion Reader	Wall Mount	Mid-Range (wall mountable)
Technology	Proximity		
	125 kHz Proximity Technology		
FIPS 201 Compliant Model	No		
Physical Dimensions (HWD)	4.2 in. x 1.72 in. x 1.0 in.	5.1 in. x 3.25 in. x 0.76 in.	5.85 in. x 4.5 in. x 1.45 in.
	10.7 cm x 4.3 cm x 2.5 cm	12.9 cm x 8.3 cm x 1.9 cm	14.9 cm x 11.4 cm x 3.7 cm
Weight	0.6 lbs	0.6 lbs	1.1 lbs
Voltage Range	5V - 16V DC		
Power Supply	Linear DC		
Average Current Requirement	110 mA DC		55 mA DC
Peak Current Requirement	160 mA DC		
Maximum Read Range*	up to 4.5 in. (11.4cm)		Up to 6.0 in. (15.24 cm)
Cable Specification	18 AWG, 5 Conductor Stranded/Shielded		
System Interfaces	Wiegand		
Operating Temperature	from -31˚ to 151˚F (-35˚ to 67˚C)		
Additional Technologies Supported	Schlage Proximity		
	XceedID® Proximity		
	HID® Proximity protocols		
	GE/CASI ProxLite®		
	AWID® Proximity		
	LenelProx®		

* Maximum read range depends on credential type/form factor and installation conditions

	Smart Readers				
Base Part Number	**1060MF**	**SXF1200**	**SXF1560**	**SXF2200**	**SXF2210**
Mount	Mini-Mullion Reader	Mullion Reader	Wall Mount Reader	Mid-Range Wall Mount	Mid-Range Wall Mount
Technology	Smart				
	13.56 Smart Technology				
FIPS 201 Compliant Model	No	Yes	No	Yes	Yes
Physical Dimensions (HWD)	4.2 in. x 1.72 in. x 1.0 in.	6.07 in. x 1.72 in. x 1.14 in.	5.1 in. x 3.25 in. x 0.76 in.	6.10 in. x 4.55 in. x 1.27 in.	
	10.7 cm x 4.3 cm x 2.5 cm	15.4 cm x 4.4 cm x 2.9 cm	12.9 cm x 8.3 cm x 1.9 cm	15.5 cm x 11.6 cm x 3.2 cm	
Weight	0.45 lbs	0.6 lbs	0.6 lbs	1.6 lbs	1.1 lbs
Voltage Range	5V - 16V DC				
Power Supply	Linear DC				
Maximum Read Range*	Up to 2 in. (5.1 cm)	Up to 4.0 in. (10.2 cm)	Up to 4.5 in. (11.4cm)	Up to 4.5 in. (11.4cm)	Up to 4.5 in. (11.4 cm)
Cable Specification	18 AWG, 5 Conductor Stranded/Shielded				
System Interfaces	Wiegand	Wiegand (standard)	Wiegand	Wiegand (standard)	Wiegand (standard)
		RS-485		RS-485	RS-485
Operating Temperature	from -31˚ to 151˚F (-35˚ to 67˚C)	from -31˚ to 149˚F (-35˚ to 65˚C)	from -31˚ to 151˚F (-35˚ to 67˚C)	from -31˚ to 149˚F (-35˚ to 65˚C)	from -31˚ to 149˚F (-35˚ to 65˚C)
Additional Technologies Supported**	MIFARE® Secure Sector				
	MIFARE® CSN	MIFARE® CSN		MIFARE® CSN aptiQ™ smart cards using MIFARE® DESFire™ EV1 with PACSA* Secure Sector	
	DESFire™ CSN	MIFARE® DESFire™ CSN (configurable)			
	HID iClass® CSN				
	Inside Contactless PicoTag® CSN				
	ST Microelectronics® CSN				
	MIFARE DESFire™ EV1 CSN				
	Phillips I-Code® CSN				
	Texas Instruments Tag-It® Serial Number				

* Maximum read range depends on credential type/form factor and installation conditions
** CSN = Card Serial Number

Note: Support for certain technologies requires configuration.

	Multi-Technology Readers			
Base Part Number	SXF1100	SXF1500	SXF2100	SXF2110
Mount	Mullion Reader	Wall Mount Reader	Mid-Range Wall Mount	Mid-Range Wall Mount
Technology	Multi-Technology			
	125 kHz Proximity Technology			
	13.56 MHz Smart Technology			
FIPS 201 Compliant Model	Yes			
Physical Dimensions (HWD)	5.85 in. x 1.72 in. x 1.14 in.	5.1 in. x 3.25 in. x 0.76 in.	5.85 in. x 4.5 in. x 1.45 in.	5.85 in. x 4.5 in. x 1.45 in.
	14.9 cm x 4.3cm x 2.9 cm	12.9 cm x 8.3 cm x 1.9 cm	14.9 cm x 11.4 cm x 3.7 cm	14.9 cm x 11.4 cm x 3.7 cm
Weight	0.6 lbs		1.1 lbs	
Voltage Range	6V - 16V DC	5V - 16V DC	6V - 16V DC	8V - 16V DC
Power Supply	Linear DC			
Maximum Read Range*				
125 kHZ:	up to 5 in. (12.7cm)	Up to 4.5 in. (11.4cm)	up to 6 in. (15.24cm)	
13.56 MHz:	ISO 14443: up to 1.5 in. (3.8cm)	Up to 4.5 in. (11.4cm)	ISO 14443 MIFARE Standard: up to 3 in. (7.62cm) ISO 14443 DESFire: up to 2.5 in. (6.35cm) ISO 15693: up to 6 in. (15.24cm)	
Cable Specification	18 AWG, 5 Conductor Stranded/Shielded			
System Interfaces	Wiegand			
Operating Temperature	from -31˚ to 151˚F (-35˚ to 67˚C)			
Additional Technologies Supported**	Schlage Proximity			
	XceedID® Proximity			
	MIFARE® Secure Sector			
	MIFARE® CSN			
	aptiQ™ Smart Cards using MIFARE® DESFire™ EV1 with PACSA			
	MIFARE DESFire™ EV1 CSN			
	DESFire™ CSN			
	HID® Proximity protocols			
	HID iClass® CSN			
	Inside Contactless PicoTag® CSN,			
	GE/CASI ProxLite®			
	ST Microelectronics® CSN			
	Texas Instruments Tag-It® Serial Number			
	Phillips I-Code® CSN			
	AWID® Proximity			
	LenelProx®			

* Maximum read range depends on credential type/form factor and installation conditions
** CSN = Card Serial Number

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Security Technologies

Smart Card Readers

Overview

Contactless Smart Card Readers allow your facility to meet the requirements of today while planning for the future. Operating on 13.56 MHz frequency, these Contactless Smart Card Readers by Schlage provide one of the most advanced identification reader technologies available today. The combination of Contactless Smart Card Readers and smart credentials provides more security, more speed, and more data storage than the more common systems of today.

All Contactless Smart Card Readers by Schlage provide advanced security by supporting all applicable ISO standards (14443). Rather than using open transmission protocols, Schlage smart card readers utilize high security data. Each message between the card and the reader is digitally signed using Message Authentication Coding (MAC) to ensure the integrity of the data.

These readers are an excellent choice for an entirely new installation that does not need to support legacy technology and will simplify administration and strengthen campus security. Additionally, smart reader technology can be used in various applications, such as logical access, cashless vending, and cafeteria services.

Features & Benefits

- Industry standard 13.56 MHz contactless smart card technology
- Compliant with ISO standards
- Manufactured with high-quality UV resistant materials
- Tri-state LED (red, green, amber) provides a visual indicator and audio feedback representing status and activity information
- Accommodates interior, exterior, metal, and non-metal installation environments
- Security/Key Management: several options to ensure the greatest choice between "open" or high credential security
- Lifetime limited warranty against defective workmanship and materials

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Security Technologies

Base Part Number	1060MF	SXF1200	SXF1560	SXF 2200	SXF 2210
Technology	13.56 Smart Technology				
Mount	Mini-Mullion Reader	Mullion Reader	Wall Mount Reader	Mid-Range Wall Mount	Mid-Range Wall Mount
FIPS 201 Compliant Model	N/A	Yes	N/A	Yes	Yes
Frequency	13.56 MHz				
Standard Default Configuration	N/A	75 bit PIV	75 bit PIV	75 bit PIV	75 bit PIV
Standards	ISO 14443	ISO 14443 and 15693			
Physical Dimensions (HWD)	4.2" x 1.72" x 1.0" 10.7 cm x 4.3 cm x 2.5 cm	6.07" x 1.72" x 1.14" 15.4 cm x 4.4 cm x 2.9 cm	5.1" x 3.25" x 0.76" 12.9 cm x 8.3 cm x 1.9 cm	6.10" x 4.55" x 1.27" 15.5 cm x 11.6 cm x 3.2 cm	6.10" x 4.55" x 1.27" 15.5 cm x 11.6 cm x 3.2 cm
Weight	0.45 lbs	0.6 lbs	0.6 lbs	1.6 lbs	1.1 lbs
Certifications	FCC Certification Canadian FCC Certification UL 294 Listed R&TTE Directive (15 EU Countries) CE Mark	FCC Certification UL 294 CE Mark	UL 294 Listed CE Mark	FCC Certification UL 294 Listed CE Mark	FCC Certification UL 294 Listed CE Mark
Voltage Range	5-16 VDC				
Power Supply	Linear DC				
Average Current Requirement	50 mA DC	65 mA DC	110 mA DC	70 mA DC	110 mA DC
Peak Current Requirement	85 mA DC	80 mA DC	160 mA DC	105 mA DC	140 mA DC
Maximum Read Range*	Up to 2" (5.1 cm)	Up to 4.0" (10.2 cm)	Up to 4.5" (11.4cm)	Up to 4.5" (11.4cm)	Up to 4.5" (11.4 cm)
Cable Specification	18 AWG, 5 Conductor Stranded/Shielded				
System Interfaces	Wiegand				
	N/A	RS-485	N/A	RS-485	RS-485
Operating Temperature	-31 to 151F (-35 to 67C)	-31 to 149F (-35 to 65C)	-31 to 151F (-35 to 67C)	-31 to 149F (-35 to 65C)	-31 to 149F (-35 to 65C)
Color Options	Black (standard) Gray (optional)				
Additional Technologies Supported**	Schlage XceedID® MIFARE® Secure Sector MIFARE® CSN aptiQ™ Smart Cards using MIFARE DESFire™ EV1 with PASCA DESFire® EV1 CSN (configurable) DESFire® CSN HID iClass® CSN Inside Contactless PicoTag® CSN ST Microelectronics® CSN Texas Instruments Tag-It® Serial Number Phillips I-Code® CSN				

** CSN = Card Serial Number

* Maximum read range depends on credential type/form factor and installation conditions

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Multi-Technology Readers

Overview

All Schlage Multi-Technology Readers contain both 125 kHz proximity and 13.56 MHz smart card capability in one unit, making them the most flexible readers in the industry. With the ability to simultaneously read smart and proximity cards, customers are protected from obsolescence in the transition from proximity technology to contactless smart card technology. Even if customers want to continue using proximity technology today, these multi-technology readers offer economical migration to the latest in smart card technology on their budget or timeline.

The smart capability of the multi-technology reader provides higher security when used with a smart credential . Each message between the card and the reader is digitally signed using Message Authentication Coding to ensure the integrity of the data. Additionally, smart reader technology can be used in various applications, including logical access, cashless vending, and cafeteria services.

These readers are compliant with all applicable ISO standards (14443).

Features & Benefits

- Multiple Color Options
- Modular design allows for easy, upgradeable changes in the field
- Manufactured with high-quality UV resistant materials
- Tri-state LED (red, green, amber) provides a visual indicator and audio feedback representing status and activity information
- Accommodates interior, exterior, metal, and non-metal installation environments
- Security/Key Management: several options to ensure the greatest choice between "open" or high credential security
- Lifetime limited warranty against defective workmanship and materials

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Security Technologies

Base Part Number	SXF1100	SXF1500	SXF 2100	SXF 2110
Technology	Multi-Technology 125 kHz Proximity Technology 13.56 Mhz Smart Technology			
Mount	Mullion Reader	Wall Mount Reader	Mid-Range Wall Mount	Mid-Range Wall Mount
FIPS 201 Compliant Model	Yes			
Frequency	125 kHz and 13.56 MHz			
Standard Default Configuration	75 bit PIV			
Standards	ISO 14443 and ISO 15693			
Physical Dimensions (HWD)	5.85" x 1.72" x 1.14" 14.9 cm x 4.3 cm x 2.9 cm	5.1" x 3.25" x 0.76" 12.9 cm x 8.3 cm x 1.9 cm	5.85" x 4.5" x 1.45" 14.9 cm x 11.4 cm x 3.7 cm	5.85" x 4.5" x 1.45" 14.9 cm x 11.4 cm x 3.7 cm
Weight	0.6 lbs		1.1 lbs	
Certifications	FCC Certification Canadian FCC Certification UL 294 Listed R&TTE Directive (15 EU Countries) CE Mark	FCC Certification UL 294 Listed CE Mark	FCC Certification Canadian FCC Certification UL 294 Listed R&TTE Directive (15 EU Countries) CE Mark	FCC Certification Canadian FCC Certification UL 294 Listed CE Mark CE Mark
Voltage Range	6-16 VDC	5-16 VDC	6-16 VDC	8-16 VDC
Power Supply	Linear DC			
Average Current Requirement	95 mA DC	110 mA DC	95 mA DC	120 mA DC
Peak Current Requirement	254 mA DC	160 mA DC	218 mA DC	215 mA DC
Maximum Read Range*				
125 kHZ:	up to 5" (12.7cm)	Up to 4.5" (11.4cm)	up to 6" (15.24cm)	up to 6" (15.24cm)
13.56 MHz:	ISO 14443: up to 1.5" (3.8cm)		ISO 14443 MIFARE Standard: up to 3" (7.62cm) ISO 14443 DESFire: up to 2.5" (6.35cm) ISO 15693: up to 6" (15.24cm)	ISO 14443 MIFARE Standard: up to 3" (7.62cm) ISO 14443 DESFire: up to 2.5" (6.35cm) ISO 15693: up to 6" (15.24cm)
Cable Specification	18 AWG, 5 Conductor Stranded/Shielded			
System Interfaces	Wiegand			
Operating Temperature	-31 to 151F (-35 to 67C)			
Color Options	Black (standard), Gray (optional)			
Additional Technologies Supported**	Schlage XceedID™ MIFARE® Secure Sector MIFARE® CSN aptiQ™ Smart Cards using MIFARE DESFire™ EV1 with PASCA DESFire® EV1 CSN (configurable) DESFire® CSN HID® Proximity protocols		HID iClass® CSN Inside Contactless PicoTag® CSN, GE/CASI ProxLite® ST Microelectronics® CSN Texas Instruments Tag-It® Serial Number Phillips I-Code® CSN AWID® Proximity LenelProx®	

** CSN = Card Serial Number
* Maximum read range depends on credential type/form factor and installation conditions

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Security Technologies

Proximity Card Readers

Overview

Schlage offers a full line of proximity readers that provide an attractive and cost-effective solution for facilities already using proximity technology or looking to upgrade from more traditional technologies. Schlage proximity readers provide the convenience of 125 kHz proximity technology, and are compatible with most industry leading proximity credentials. These readers are ideal for applications utilizing legacy proximity systems or credentials, as they can easily be integrated into existing 125 kHz access control systems.

Proximity Readers by Schlage operate on a Wiegand interface, are compatible with all industry leading proximity credentials, and are also completely ISO compliant.

Features & Benefits

- Manufactured with high-quality UV resistant materials
- Tri-state LED (red, green, amber) provides visual indicator and audio feedback representing status and activity information
- Accommodates interior, exterior, metal, and non-metal installation environments
- Limited lifetime warranty against defective workmanship and materials

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Security Technologies

Base Part Number	SXF1050	SXF1550	SXF 2110P-K
Technology	Proximity 125 kHz Proximity Technology		
Mount	Mini-Mullion Reader	Wall Mount	Mid-Range (wall mountable)
FIPS 201 Compliant Model	Not Applicable		
Frequency	125 kHz		
Standards	ISO 14443	ISO 14443 and 15693	
Physical Dimensions (HWD)	4.2" x 1.72" x 1.0" 10.7 cm x 4.3 cm x 2.5 cm	5.1" x 3.25" x 0.76" 12.9 cm x 8.3 cm x 1.9 cm	5.85" x 4.5" x 1.45" 14.9 cm x 11.4 cm x 3.7 cm
Weight	0.6 lbs		1.1 lbs
Certifications	FCC Certification UL 294 Listed CE Mark	FCC Certification UL 294 Listed CE Mark	FCC Certification Canadian FCC Certification UL 294 Listed R&TTE Directive (15 EU Countries) CE Mark
Voltage Range	5-16 VDC		
Power Supply	Linear DC		
Average Current Requirement	110 mA DC		55 mA DC
Peak Current Requirement	160 mA DC		167 mA DC
Maximum Read Range*	Up to 4.5" (11.4cm)		Up to 6.0" (15.24 cm)
Cable Specification	18 AWG, 5 Conductor Stranded/Shielded		
System Interfaces	Wiegand		
Operating Temperature	-31 to 151F (-35 to 67C)		
Color Options	Black (standard) Gray (optional)	Black (standard)	Black (standard) Light Gray (optional) Gray (optional)
Additional Technologies Supported	Schlage Proximity XceedID™ Proximity HID® Proximity protocols GE/CASI ProxLite® AWID® Proximity LenelProx®		

* Maximum read range depends on credential type/form factor and installation conditions

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FIPS 201 Compliant Readers

Overview

Schlage's leading line of Multi-Technology card readers have been approved by the U.S. Government under HSPD-12 for FIPS 201 compliance as PIV Transparent Readers. PIV compliance is now available in seven reader models including mullion mount (SXF1100 and SXF1200), wall mount (SXF1500), midrange (SXF2100 and SXF2200), and midrange with keypad (SXF2110 and SXF2210).

Schlage Multi-Technology readers are a unique and critical component of successful security upgrades in all sectors of the government. FIPS 201 is a Federal Information Processing Standard ("FIPS") developed by the National Institute of Standards and Technology ("NIST") to satisfy the requirements of HSPD-12, a Homeland Security Presidential Directive. One of the main objectives of HSPD-12 is to ensure government-wide interoperability for information technology and security through the implementation of a range of federal standards and product requirements. FIPS 201 seeks to improve identification and authentication of Federal employees and contractors for access to the Federal factilities and information systems.

Schlage FIPS 201 PIV compliant readers are available with two different data formats (75 bit and 200 bit format; 75 bit default). These output formats provide unprecedented versatility within the PIV II specification.

In addition to reading approved FIPS 201 PIV II credentials, Schlage Multi-Technology readers are also compatible with many standard proximity and leading smart card technologies (see specifications). The ability to read multiple existing card types and PIV II cards simultaneously is a tremendous benefit to those agencies looking to transition seamlessly from older proximity technologies to new, mandated PIV II credentials. A mixed population of old prox credentials and new PIV II credentials is unavoidable during the government's multi-year upgrade path to FIPS 201 compliance.

Features & Benefits

- Compatibility: compatible with industry standard 125 kHz and 13.56 MHz contactless technologies
- Read Range: up to 6 inches (proximity), up to 2 inches for PIV II credentials
- Tri-state LED (red, green, amber): Visual indicator and audio feedback representing status and activity information
- Tamper Detection
- Environment: accommodates interior, exterior, metal and non-metal installation environments

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ADDITIONAL FEATURES

· Compliance: compatible with applicable ISO standards
· Compatible with all access control systems that
  support wiegand format
· Warranty: limited lifetime against defective
  workmanship and materials
· Additional Technologies Supported
  - Proximity
    · Schlage
    · XceedID®
    · HID® Proximity (certain formats)
    · GE/CASI ProxLite™
    · AWID® Proximity
  - Smart Card (secure sector only)
    · Schlage
    · XceedID®
    · MIFARE®
    · FIPS 201/PIV II
  - Smart Card (card serial number only)
    · DESFire® Application HID iClass®
    · Inside Contactless PicoTag™

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Security Technologies

SERIII-W
Scramble Keypad

Overview

The SERlll Scramble Keypad is a keypad reader designed to prevent onlookers from detecting the PIN code being entered. The LED's display a randomly allocated set of numbers from 0 to 9. The position of the numbers change every time the keypad is activated. Only the user standing directly in front of the keypad can see the scrambled digits.

Features and Benefits

· Very narrow viewing angle of the lighted, scrambled digits
· The membrane keypad is extremely durable
· Random allocation of digits ensures even wear to the keys
· Individual PIN codes can be up to 9 digits in length
· The SERlll has a weatherproof rating of IP65
· An audible alarm signals when a button is depressed
· Robust polycarbonate enclosure
· The unit is equipped with power-up diagnostics and self-test routine
· The SERlll is provided with Wiegand communication protocol
· Over 3.6 million unique permutations are available
· Terminal connection on the rear of the unit

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Specifications

Dimensions	5.39" x 4.17" x 2.05"
Input Voltage	8-14 VDC
Input Current	500mA max.
Operating Temperature	5° F to 122° F
Weight	16.76 oz.
Cable Distance (Wiegand)	500′ with 22AWG 6 conductor stranded with overall shield

ORDERING INFORMATION

SERIII-WS – Scramble Keypad with Surface Mount

SERIII-WF – Scramble Keypad with Flush Mount

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Security Technologies

SMR10 and SMR20
Mercury Magnetic Stripe Readers

Overview
The SMR10 and SMR20 Mercury Stripe Readers have a slim, mullion style design. The die cast metal housing makes it ideal for indoor or outdoor applications. The SMR20 has a 12 position membrane style keypad.

Features and Benefits

- Rugged Metal Housing
- All stainless steel hardware is standard
- Audiovisual indication provides Two LED's (red/green) and beeper sounds
- Static Discharge Protection
- Accepts low or high coercivity-magnetic cards
- Standard Track 2 encoding (Track 1 & 3 are available)
- One security screw mounting
- Supports Wiegand or Clock & Data interface formats via Dip Switches

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Specifications

Dimensions	1.95"W x 1.3"H x 5.5'L
Power requirements	5 or 12 VDC
Power consumption	20 mA at 12 VDC
Operating Temperature	-40º F to 170º F
Weight	10 oz.
Cable Distance	500' with 18AWG 6 conductor stranded with overall shield

ORDERING INFORMATION

SMR10 - 5 VDC standard, Magnetic Stripe Card Reader (specify black or beige)

SMR10-12V - 12 VDC Magnetic Stripe Card Reader (specify black or beige)

SMR20 - 5 VDC standard, Magnetic Stripe Card Reader w/keypad (specify black or beige)

SMR20-12V - 12 VDC Magnetic Stripe Card Reader w/ keypad (specify black or beige)

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Security Technologies

SMR5
Magnetic Stripe Reader

Overview

The SMR5 Mercury Magnetic Stripe Reader has a slim, mullion style design. The die cast metal housing makes it ideal for indoor or outdoor applications.

Features and Benefits

· Rugged Metal Housing
· All stainless steel hardware is standard
· Audiovisual indication provides multicolor LED (red/green) and beeper sounds
· Static discharge protection
· Accepts low or high coercivity-magnetic cards
· Standard Track 2 encoding (Track 1 & 3 are available)
· One security screw mounting
· Supports Wiegand or Clock & Data interface formats

Ingersoll Rand
Security Technologies

Specifications

Dimensions	1.95"W x 1.3"H x 5.5'L
Power requirements	5 or 12 VDC
Power consumption	20 mA at 12 VDC
Operating Temperature	-40º F to 170º F
Weight	10 oz.
Cable Distance	500' with 18AWG 6 conductor stranded with overall shield

ORDERING INFORMATION

SMR5 - 5VDC Magnetic Stripe Card Reader (specify black or beige)

SMR5-12V - 12VDC Magnetic Stripe Card Reader (specify black or beige)

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SEKPDWG and SEKPDMGW

Essex Electronic Keypads

Overview

The fully encapsulated Essex Electronic Keypad can be used by itself or next to another reader device for additional security. Its stainless steel construction is ideal for indoor or outdoor applications. The two designs, single gang box or the mullion mount style, give it the diversity needed for any application.

Features and Benefits

- Field selectable keypad configurations
- SEKPDWG mounts directly to a single gang electrical box
- SEKPDMGW mounts to any mullion style frame
- No moving parts to replace

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Security Technologies

Specifications

Dimensions	SEKPDWG: 5.125" x 3.375" x .437" SEKPDMGW: 7.125" x 1.75" x .75"
Power supply	5-12 VDC (field selectable)
Operating temperature	-40º F to 160º F
Weight	SEKPDWG: 16 oz. SEKPDMGW: 4.4 oz
Material	316L Stainless Steel
Standby current draw	SEKPDWG: 5V-20mA, SEKPDMGW: 5V-20mA

ORDERING INFORMATION

SEKPDWG - Single Gang Style Keypad

SEKPDMGW - Mullion Style Keypad

SEKPD8B - Mullion Style Keypad (8 Bit)

Note: Specify 5V or 12V

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SCHLAGE

SWSRBL
Wiegand Swipe Reader

Overview

The SWSRBL Wiegand Reader combines innovative circuitry and rugged construction to resist vandals. The polymeric housing and epoxy potted electronics makes it ideal for indoor or outdoor applications. The reader can be mounted on a vertical surface with the slot orientation either upward or downward, facing to the left or the right.

Features and Benefits

· Rugged polymeric housing and epoxy potted electronics
· Visual indication provides tri-colored LED
· Immune to external magnetic fields and RF signal
· Supports Wiegand interface format
· Versatile mounting configurations
· Slot width is 0.062″ to 0.069″

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Specifications

Dimensions	2.3" x 5.3" x 1.7"
Power requirements	5-12 VDC
Power consumption	30 mA at 12 VDC
Operating Temperature	-40º F to 160º F
Weight	12.1 oz.
Cable Distance	500′ with 18AWG 6 conductor stranded with overall shield
For use with code stripe layout options	
A	long edge/right side
A1	long edge/left side
D	short edge

ORDERING INFORMATION

SWSRBL - Wiegand Reader

SWTRB - Wiegand Turnstile Reader

SWINS - Wiegand Insertion Reader

SWKEY - Wiegand Key Reader

SWPIN - Wiegand PinPad

Ingersoll Rand
Security Technologies

SENROLL
Enrollment Reader

Overview

The SENROLL Enrollment Reader can be used in conjunction with the Schlage Security Management System (SMS) Select, Premier or Enterprise Software to facilitate automatic enrollment of online and/or offline credentials into your access control system. Automatic enrollment eliminates the time involved in manually entering credential data and greatly reduces the potential for human error. The SENROLL contains read heads for:

- Proximity / Smartcard
- iButton®
- Magnetic Stripe

The SMS software will automatically store the credential data in the database upon presentation of a credential to one of the read heads. This all-in-one unit allows the end-user to utilize different credential technologies or migrate to different technologies in the future. The SENROLL can be connected to the SMS workstation using either a serial port or a USB port (the latter via an inline USB/Serial converter that is included with the reader). For your convenience, the unit can be located at the SMS workstation for easy enrollment. No additional hardware is required.

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Specifications

Dimensions	1.53″ H x 4.20″ W x 6.92″ D
Power supply	included
Power consumption	100mA
Ambient Temperature	0° to 70° C or –40° to 185° F
Humidity	10% to 90% (non-condensing)
Maximum distance to SMS PC	50 feet, RS-232 communication
Recommended cable	included
Please refer to SMS Manual for supported formats	

ORDERING INFORMATION

SENROLL- Provides multiple read head technologies for entering credential data into the Schlage Security Management System database (SMS Select, Premier or Enterprise)

NOTE: Please specify if using with multi-technology cards

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SBSRW
Barcode Slot Reader

Overview

The SBSRW Barcode Slot Reader combines innovative circuitry and optics to provide high 'first read' rates. The polycarbonate housing makes it ideal for indoor or outdoor applications.

Features and Benefits

- Polycarbonate housing
- Visual indication provides one LED
- 3"-30" per second barcode scanning speed
- Bi-directional scanning
- Slot width is 0.050"
- Supports TTL/Open Collector interface format or Wiegand
- Optics resolution is 5 mil (high)/ 10 mil (low)
- Light source is 630nm visible/940 nm infrared

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Specifications

Dimensions	2.4"W x 1.4"H x 4.6"L
Power requirements	5VDC
Power consumption	145mA typical 245 max at 5VDC
Operating temperature	-40º F to 170º F
Weight	7 oz.
Cable distance	50' with 18AWG 6 conductor stranded with overall shield to reader interface

ORDERING INFORMATION

SBSRW - Barcode Slot Reader TTL/Open Collector

SBSRW-WIEG - Barcode Slot Reader Wiegand interface format

SBSRW-TP - Barcode Slot Reader Thermal Paper

SBSRW-V - Barcode Slot Reader- Visual

SBSRW-OP - Barcode Slot Reader- Optical

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KP212 and KP232
Mullion Mounted Keypad Series

Overview

The Mullion Keypad Series is a stand alone solution and is ideal for controlling electrified door hardware such as electric strikes or electromagnetic locks. The one-piece design allows easy installation, mounting directly to mullion. Designed with backlit keys and weather resistant, they are well suited for both indoor and outdoor applications.

The mullion stile readers can be programmed to accept up to 120 user codes, are equipped with a Form C, dry contact relay and can be released by using a momentary Request to Exit switch.

The KP232 is designed to meet most residential, commercial, and industrial single door access control needs, and has two inputs and four outputs and factory set access control.

KP2000
Single Gang Flush Mount

Overview

The KP2000 Series Single gang flush mount keypads manage up to 500 users and provide complete access control functionality including monitoring door position, controlling locking hardware, triggering propped or forced alert or alarm shunt output. Other applications for the KP2000 Series keypads include: controlling electronic devices such as handicapped doors, gate controls, alarm systems, ATM vestibules, and other types of machinery requiring momentary or latched outputs.

You can select between two modes of functionality with the KP2000 Series Keypads. They can operate most Wiegand access system controllers, or as standalone access control devices.

The KP2000 Series comes in two different styles: the "e" style and the "eM" style. The "e" style keypad uses hardened backlit keys while the "eM" style uses a durable metal keypad including Braille alpha-numeric keys. The KP2000 series can be used in interior and exterior applications. The flush-mount keypads are constructed to meet your aesthetic needs while ensuring long-term durability and high-quality performance.

Features and Benefits

KP212 and KP232

· Up to 120 Users
· Illuminated Hardened Keys
· Sounder
· Doorbell Relay
· Weather Resistant
· Programmable 00-99 Second Relay Activation Time
· Remote Trigger Input (REX)
· Bell Output (timed or continuous)
· Applications:
    - Heavy Traffic
    - Indoor/Outdoor

(KP2000 on back)

KP2000 Features

- 500 users
- Door position input
- Request to Exit input
- 2 Form C SPDT relay outputs – default for access control function
- Sounder for key press and alert conditions
- All outputs can be programmed independently if required
- Option for secure installation with control electronics in protected area

- Widest array of user type options including single use and two man rule
- 10-30 VDC and 12-24 VAC operation
- Over-voltage protection for reliable operation
- Single-gang flush mount design
- Indoor/outdoor use
- Keypad programmable
- Key press feedback via sounder and yellow LED
- Built-in assignable sounder
- Bi-color Red/Green LED indicates relay status

Reader Specifications

Feature Set	KP212	KP232	KP2000E	KP2000EM
Mounting	Mullion	Mullion	Single Gang/Flush	Single Gang/Flush
Users	120	120	500	500
PIN Length	1-6 digits	1-6 digits	1-10 digits	1-10 digits
Duty Cycles	Medium	Medium	Medium	Heavy Duty
Back Light	Yes	Yes	Yes	No
Keys	Hard Plastic	Hard Plastic	Heavy Duty Plastic	Heavy Duty Metal w Braille
Weather Resistant	Indoor/Outdoor	Indoor/Outdoor	Indoor/Outdoor	Indoor/Outdoor
Doorbell Key	Yes	Yes	No	No
Wiegand Output	No	Yes	Yes	Yes
Remote Trigger (REX)	Yes	Yes	Yes	Yes
Access Control Functionality	Programmable relay activation time (0-99 seconds). Perfect for electric or magnetic locks requiring momentary control.	4 dedicated relay outputs (Lock release, door forced, door propped and alarm shunt)	Monitors DPS, controls various electronic hardware, triggers door propped, forced door alert or alarm shunt	Monitors DPS, controls various electronic hardware, triggers door propped, forced door alert or alarm shunt
Relays	2 Relays (Main and Aux)	Main, Prop Door, Forced Door and Alarm Shunt Relay	2 Form C, expandable to 10 programmable outputs	2 Form C, expandable to 10 programmable outputs
Outputs	2 Independent (configurable)	4 Independent (dedicated)	2 Independent (Programmable with the option to add 8 more)	Programmable
Finish	Aluminum	Aluminum	Aluminum	Aluminum
UL 294	No	No	Yes	Yes

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CRM2 and CRP2
Enrollment Readers

Overview

The CRM2 Magnetic Stripe Credential Enrollment Reader and the CRP2 Proximity Credential Enrollment Reader are designed to allow easy enrollment of credentials into the SMS Express access control system. These compact readers eliminate the need for manual data entry, and provide error-free identification and security throughout the workplace. The plug and play functionality provided via a convenient USB connection allows either of these readers to seamlessly integrate with the SMS Express software. Additionally, the reader allows for keystrokes to be added before and after the card's data, providing flexibility and data customization.

Note: Compatible with SMS Express version 4.0 and higher

Features and Benefits

CRM2
· Magnetic stripe reader
· Reads data from any data track location on the card
· USB connectivity
· Plug-and-play functionality

CRP2
· Proximity reader
· USB connectivity
· Plug-and-play functionality

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CRP2 Specifications

Typical Maximum read range:	1.0" – 3.0" (2.5 – 7.6cm) dependent upon proximity card type and environmental conditions
Dimensions:	3 3/8" x 2" x 0.6"
Weight:	0.45 lbs (12.7g)
Power supply and interface:	USB self-powered
Indicators:	Tri-state LED, beeper
Transmit frequency:	125 kHz
Operating temperature range:	-22° to 150°F (-30° to 65°C)
Operating humidity range:	5% to 95% relative humidity, non-condensing
Storage temperature range:	-40° to 185°F (-40° to 85°C)
Certifications:	FCC, United States; CE Mark Europe, C-tic Australia, RoHS
Warranty:	One year for material/workmanship and defects

CRM2 Specifications

Desktop Dimensions:	3.674" x 1.325" x 1.193" (93.32 x 33.65 x 30.3 mm); Optional base: 3.375" x 3.5" x 0.5" (86 x 89 x 13 mm)
Desktop Weight:	4.6 oz. (136g); Base: 13 oz. (369g)
Media Thickness:	0.015" (0.127 mm) to 0.038" (1.14 mm)
Slot Width:	0.040" (1.0 mm)
Swipe Speed:	3 to 60 inches per second, bi-directional
Power Supply and Interface:	USB: self-powered; RS-232 [DB9F] model: 5V supplied by either PS/2 keyboard pass-through or USB power tap
Indicators:	Tri-state LED, beeper
Operating Temperature Range:	32° to 131°F (0° to 55°C)
Operating Humidity Range:	5% to 95% relative humidity, non-condensing
Storage Temperature Range:	-22° to 158°F (-30° to 70°C)
Cable Length:	6-foot articulated cable
Operating Life:	1,000,000 cycles minimum
Warranty:	One year for material/workmanship and defects

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