Security Expert Smartcard Reader Mini

The Security Expert Smartcard Reader provides a complete multi-technology smart card RFID solution. Compatible with all Wiegand data capable control systems and incorporating RS-485 communication, Security Expert Smartcard Readers allow for rapid deployment of secure technology in any environment. Available in multiple card capabilities (13.56MHz and 125kHz cards), and in a choice of black or white, you can select the model to fit your needs and your decor.

Feature Highlights

- Support for either DESFire and Mifare, or 125kHz cards

- Encrypted RS-485 or standard Wiegand connection

- Fully encapsulated design with environment IP Rating of IP65 for outdoor and indoor operation

- Bi-color LED (blue and green) with independent or single LED control

- Read range up to 60mm (2.36") with proximity ISO cards

Flexible Communication

Choose between the intelligent RS-485 connection for fast, flexible, secure communication, or Wiegand for compatibility with all standard access control systems. RS-485 provides the added benefits of being easier and more cost effective to wire and deploy.

IP65 Protection

The IP65 environmental rating provides a high degree of protection from the elements, making the Security Expert Smartcard Reader suitable for harsh environments. Readers can be mounted indoors or outdoors, located anywhere from the car park gate to the office door.

Optional Features

Optional features mean there is a model to suit everyone:

- Choose from the 125kHz or Mifare/DESFire models, or the Multi-Technology model that supports all formats

- Opt for either black or white according to your decor

Available Models and Optional Features

The Smartcard Reader comes in three sizes (Mullion, Wall Plate, and Mini) and with a range of optional features. Each model is available with support for 13.56MHz (Mifare/DESFire) cards, or as a Multi Technology model combining support for Mifare, DESFire, and 125kHz cards from a

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single reader. The Mullion and Wall Plate are also available with an optional capacitive touch keypad, and some models are available in either black or white.

Product Code		Black	White	Keypad	125kHz	13.56MHz
Mullion Mount	115 x 45 x 18mm (4.53 x 1.77 x 0.71")					
SX-DRD-SB	13.56MHz/125KHz Card Reader	✔			✔	✔
SX-DRK-SB	13.56MHz/125KHz Card Reader with PIN	✔		✔	✔	✔
SX-RD-SB	13.56MHz Card Reader	✔				✔
SX-RD-SW	13.56MHz Card Reader		✔			✔
SX-RK-SB	13.56MHz Card Reader with PIN	✔		✔		✔
SX-RK-SW	13.56MHz Card Reader with PIN		✔	✔		✔
Wall Plate	115 x 73 x 18mm (4.53 x 2.87 x 0.71")					
SX-DRD-XB	13.56MHz/125KHz Card Reader	✔			✔	✔
SX-DRK-XB	13.56MHz/125KHz Card Reader with PIN	✔		✔	✔	✔
SX-RD-XB	13.56MHz Card Reader	✔				✔
SX-RD-XW	13.56MHz Card Reader		✔			✔
SX-RK-XB	13.56MHz Card Reader with PIN	✔		✔		✔
SX-RK-XW	13.56MHz Card Reader with PIN		✔	✔		✔
Mini	84 x 45 x 17mm (3.31 x 1.77 x 0.67")					
SX-RD-MB	13.56MHz Card Reader	✔				✔
SX-RD-MW	13.56MHz Card Reader		✔			✔

Technical Specifications

Operating Voltage	12VDC (9.5 to 14VDC)
Operating Current	130mA (peak, reading)
Card Read Range	Mifare 60mm (2.36")* DESFire EV1 ISO 15mm (0.6")* 125kHz Clamshell 40mm (1.57")†
Tag Read Range	Mifare 35mm (1.18")* DESFire EV1 ISO 6mm (0.23")* 125kHz 25mm (0.98")†
Wiegand Interface	Multiple format 26 or 34 Bit data 0 and data 1, card defined.
Max Cable Distance	150m (492ft)
Frequency	13.56 MHz ISO/IEC 14443 Type A* 125kHz pulse width modulated†
Multi Conductor Cable	22Awg alpha 5196, 5198, 18Awg alpha 5386, 5388
Environment IP Rating	IP65
Operating Temperature	-35˚ to 65˚C (-31˚ to 149˚F)
Storage Temperature	-10˚ to 85˚C (14˚ to 185˚F)
Dimensions (H x W x D)	84 x 45 x 17mm (3.31 x 1.77 x 0.67")
Weight	80g (2.82oz)

* Applies to the Mifare/DESFire model only

† Applies to the 125kHz model only

Regulatory Notices

Federal Communications Commission

FCC Rules and Regulations CFR 47, Part 15, Class A.

This equipment complies with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference. (2) This device must accept any interference received, including interference that may cause undesired operation.

Industry Canada

ICES-003.

This is a Class A digital device that meets all requirements of the Canadian Interference Causing Equipment Regulations.

RCM (Australian Communications and Media Authority (ACMA))

This equipment carries the R-NZ label and complies with EMC and radio communications regulations of the Australian Communications and Media Authority (ACMA), governing the Australian and New Zealand (AS/NZS) communities.

CE – Compliance to European Union (EU)

Conforms to European Union (EU) Low Voltage Directive (LVD) 2014/35/EC, Electro-Magnetic Compatibility (EMC) Directive 2014/30/EU and RoHS Recast (RoHS2) Directive: 2011/65/EU.
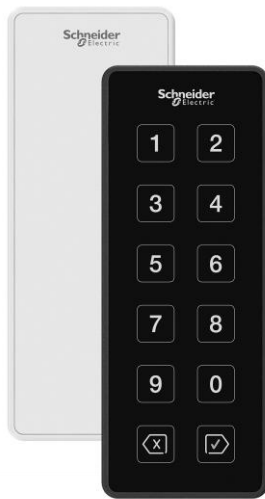
This equipment complies with the rules, of the Official Journal of the European Union, for governing the Self Declaration of the CE Marking for the European Union as specified in the above directive(s) per the provisions of the following standards:

Security Grade 3, Environmental Class IV, EN 50131-1:2006, EN 50131-3:2009, EN 50131-6:2008, Recognition class 2 (readers without a keypad), Recognition class 3 (readers with a keypad).

UL/ULC (Underwriters Laboratories)

- UL 294 for Access Control System Units
- CAN/ULC S319-05 for Electronic Access Control Systems

Security Expert Smartcard Reader Mullion

The Security Expert Smartcard Reader provides a complete multi-technology smart card RFID solution. Compatible with all Wiegand data capable control systems and incorporating RS-485 communication, Smartcard Readers allow rapid deployment of secure technology in any environment.

Available in multiple card capabilities (13.56MHz and 125kHz cards), with an optional keypad, and in a choice of black or white, you can select the model to fit your needs and your decor.

Feature Highlights

- Multi card technology provides support for DESFire, Mifare, and 125kHz cards from a single reader

- Encrypted RS-485 or standard Wiegand connection

- Fully encapsulated design with environment IP Rating of IP65 for outdoor and indoor operation

- Bi color LED (blue and green) with independent or single LED control

- Read range up to 60mm (2.36") with proximity ISO cards

Multi Card Technology

Available with either 13.56MHz smart card capability, or as a multi technology reader that combines both capabilities in a single unit delivering maximum compatibility while providing a path forward to the latest technology.

The Multi Technology Reader is ideal for organizations that wish to transition to smart technology at their own pace, as it means they don't need to replace all their cards upfront.

Flexible Communication

Choose between the intelligent RS-485 connection for fast, flexible, secure communication, or Wiegand for compatibility with all standard access control systems. RS-485 provides the added benefits of being easier and more cost effective to wire and deploy.

IP65 Protection

The IP65 environmental rating provides a high degree of protection from the elements, making the Security Expert Smartcard Reader suitable for harsh environments. Readers can be mounted indoors or outdoors, located anywhere from the car park gate to the office door.

Optional Features

A range of optional features means there is a model to suit everyone.

- Available with or without capacitive touch keypad

- Choose from the 125kHz or Mifare/DESFire models, or the Multi-Technology model that supports all formats

- Opt for either black or white according to your decor

Available Models and Optional Features

The Smartcard Reader comes in three sizes (Mullion, Wall Plate, and Mini) and with a range of optional features. Each model is available with support for 13.56MHz (Mifare/DESFire) cards, or as a Multi Technology model combining support for Mifare, DESFire, and 125kHz cards from a single reader. The Mullion and Wall Plate are also available with an optional capacitive touch keypad, and some models are available in either black or white.

Product Code		Black	White	Keypad	125kHz	13.56MHz
Mullion Mount	115 x 45 x 18mm (4.53 x 1.77 x 0.71")					
SX-DRD-SB	13.56MHz/125KHz Card Reader	✔			✔	✔
SX-DRK-SB	13.56MHz/125KHz Card Reader with PIN	✔		✔	✔	✔
SX-RD-SB	13.56MHz Card Reader	✔				✔
SX-RD-SW	13.56MHz Card Reader		✔			✔
SX-RK-SB	13.56MHz Card Reader with PIN	✔		✔		✔
SX-RK-SW	13.56MHz Card Reader with PIN		✔	✔		✔
Wall Plate	115 x 73 x 18mm (4.53 x 2.87 x 0.71")					
SX-DRD-XB	13.56MHz/125KHz Card Reader	✔			✔	✔
SX-DRK-XB	13.56MHz/125KHz Card Reader with PIN	✔		✔	✔	✔
SX-RD-XB	13.56MHz Card Reader	✔				✔
SX-RD-XW	13.56MHz Card Reader		✔			✔
SX-RK-XB	13.56MHz Card Reader with PIN	✔		✔		✔
SX-RK-XW	13.56MHz Card Reader with PIN		✔	✔		✔
Mini	84 x 45 x 17mm (3.31 x 1.77 x 0.67")					
SX-RD-MB	13.56MHz Card Reader	✔				✔
SX-RD-MW	13.56MHz Card Reader		✔			✔

Technical Specifications

Operating Voltage	12VDC (9.5 to 14VDC)
Operating Current	130mA (peak, reading)
Card Read Range	Mifare 60mm (2.36")* DESFire EV1 ISO 15mm (0.6")* 125kHz Clamshell 40mm (1.57")†
Tag Read Range	Mifare 35mm (1.18")* DESFire EV1 ISO 6mm (0.23")* 125kHz 25mm (0.98")†
Wiegand Interface	Multiple format 26 or 34 Bit data 0 and data 1, card defined.
Max Cable Distance	150m (492ft)
Frequency	13.56 MHz ISO/IEC 14443 Type A* 125kHz pulse width modulated†
Multi Conductor Cable	22Awg alpha 5196, 5198, 18Awg alpha 5386, 5388
Environment IP Rating	IP65
Operating Temperature	-35˚ to 65˚C (-31˚ to 149˚F)
Storage Temperature	-10˚ to 85˚C (14˚ to 185˚F)
Reader Dimensions (H x W x D)	115 x 45 x 18mm (4.53 x 1.77 x 0.71")
Weight	110g (3.89oz)

* Applies to the Mifare/DESFire and Multi-Technology models only

† Applies to the 125kHz and Multi-Technology models only

Regulatory Notices

Federal Communications Commission

FCC Rules and Regulations CFR 47, Part 15, Class A.

This equipment complies with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference. (2) This device must accept any interference received, including interference that may cause undesired operation.

Industry Canada

ICES-003.

This is a Class A digital device that meets all requirements of the Canadian Interference Causing Equipment Regulations.

RCM (Australian Communications and Media Authority (ACMA))

This equipment carries the R-NZ label and complies with EMC and radio communications regulations of the Australian Communications and Media Authority (ACMA), governing the Australian and New Zealand (AS/NZS) communities.

CE – Compliance to European Union (EU)

Conforms to European Union (EU) Low Voltage Directive (LVD) 2014/35/EC, Electro-Magnetic Compatibility (EMC) Directive 2014/30/EU and RoHS Recast (RoHS2) Directive: 2011/65/EU.

This equipment complies with the rules, of the Official Journal of the European Union, for governing the Self Declaration of the CE Marking for the European Union as specified in the above directive(s) per the provisions of the following standards:

Security Grade 3, Environmental Class IV, EN 50131-1:2006, EN 50131-3:2009, EN 50131-6:2008, Recognition class 2 (readers without a keypad), Recognition class 3 (readers with a keypad).

UL/ULC (Underwriters Laboratories)

- UL 294 for Access Control System Units
- CAN/ULC S319-05 for Electronic Access Control Systems

Security Expert Smartcard Reader Wall Plate

The Security Expert Smartcard Reader provides a complete multi-technology smart card RFID solution. Compatible with all Wiegand data capable control systems and incorporating RS-485 communication, Smartcard Readers allow rapid deployment of secure technology in any environment.

Available in multiple card capabilities (13.56MHz and 125kHz cards), with an optional keypad, and in a choice of black or white, you can select the model to fit your needs and your decor.

Feature Highlights

- Multi card technology provides support for DESFire, Mifare, and 125kHz cards from a single reader

- Encrypted RS-485 or standard Wiegand connection

- Fully encapsulated design with environment IP Rating of IP65 for outdoor and indoor operation

- Bi color LED (blue and green) with independent or single LED control

- Read range up to 60mm (2.36") with proximity ISO cards

Multi Card Technology

Available with either 13.56MHz smart card capability, or as a multi technology reader that combines both capabilities in a single unit delivering maximum compatibility while providing a path forward to the latest technology.

The Multi Technology Reader is ideal for organizations that wish to transition to smart technology at their own pace, as it means they don't need to replace all their cards upfront.

Flexible Communication

Choose between the intelligent RS-485 connection for fast, flexible, secure communication, or Wiegand for compatibility with all standard access control systems. RS-485 provides the added benefits of being easier and more cost effective to wire and deploy.

IP65 Protection

The IP65 environmental rating provides a high degree of protection from the elements, making the Security Expert Smartcard Reader suitable for harsh environments. Readers can be mounted indoors or outdoors, located anywhere from the car park gate to the office door.

Optional Features

A range of optional features means there is a model to suit everyone.

- Available with or without capacitive touch keypad

- Choose from the 125kHz or Mifare/DESFire models, or the Multi-Technology model that supports all formats

- Opt for either black or white according to your decor

Available Models and Optional Features

The Smartcard Reader comes in three sizes (Mullion, Wall Plate, and Mini) and with a range of optional features. Each model is available with support for 13.56MHz (Mifare/DESFire) cards, or as a Multi Technology model combining support for Mifare, DESFire, and 125kHz cards from a

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single reader. The Mullion and Wall Plate are also available with an optional capacitive touch keypad, and some models are available in either black or white.

Product Code		Black	White	Keypad	125kHz	13.56MHz
Mullion Mount	115 x 45 x 18mm (4.53 x 1.77 x 0.71")					
SX-DRD-SB	13.56MHz/125KHz Card Reader	✔			✔	✔
SX-DRK-SB	13.56MHz/125KHz Card Reader with PIN	✔		✔	✔	✔
SX-RD-SB	13.56MHz Card Reader	✔				✔
SX-RD-SW	13.56MHz Card Reader		✔			✔
SX-RK-SB	13.56MHz Card Reader with PIN	✔		✔		✔
SX-RK-SW	13.56MHz Card Reader with PIN		✔	✔		✔
Wall Plate	115 x 73 x 18mm (4.53 x 2.87 x 0.71")					
SX-DRD-XB	13.56MHz/125KHz Card Reader	✔			✔	✔
SX-DRK-XB	13.56MHz/125KHz Card Reader with PIN	✔		✔	✔	✔
SX-RD-XB	13.56MHz Card Reader	✔				✔
SX-RD-XW	13.56MHz Card Reader		✔			✔
SX-RK-XB	13.56MHz Card Reader with PIN	✔		✔		✔
SX-RK-XW	13.56MHz Card Reader with PIN		✔	✔		✔
Mini	84 x 45 x 17mm (3.31 x 1.77 x 0.67")					
SX-RD-MB	13.56MHz Card Reader	✔				✔
SX-RD-MW	13.56MHz Card Reader		✔			✔

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Technical Specifications

Operating Voltage	12VDC (9.5 to 14VDC)
Operating Current	130mA (peak, reading)
Card Read Range	Mifare 60mm (2.36")* DESFire EV1 ISO 15mm (0.6")* 125kHz Clamshell 40mm (1.57")†
Tag Read Range	Mifare 35mm (1.18")* DESFire EV1 ISO 6mm (0.23")* 125kHz 25mm (0.98")†
Wiegand Interface	Multiple format 26 or 34 Bit data 0 and data 1, card defined.
Max Cable Distance	150m (492ft)
Frequency	13.56 MHz ISO/IEC 14443 Type A* 125kHz pulse width modulated†
Multi Conductor Cable	22Awg alpha 5196, 5198, 18Awg alpha 5386, 5388
Environment IP Rating	IP65
Operating Temperature	-35˚ to 65˚C (-31˚ to 149˚F)
Storage Temperature	-10˚ to 85˚C (14˚ to 185˚F)
Reader Dimensions (H x W x D)	115 x 73 x 18mm (4.53 x 2.87 x 0.71")
Weight	155.8g (5.5oz)

* Applies to the Mifare/DESFire and Multi-Technology models only

† Applies to the 125kHz and Multi-Technology models only

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Regulatory Notices

Federal Communications Commission

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This equipment complies with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference. (2) This device must accept any interference received, including interference that may cause undesired operation.

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RCM (Australian Communications and Media Authority (ACMA))

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CE – Compliance to European Union (EU)

Conforms to European Union (EU) Low Voltage Directive (LVD) 2014/35/EC, Electro-Magnetic Compatibility (EMC) Directive 2014/30/EU and RoHS Recast (RoHS2) Directive: 2011/65/EU.

This equipment complies with the rules, of the Official Journal of the European Union, for governing the Self Declaration of the CE Marking for the European Union as specified in the above directive(s) per the provisions of the following standards:

Security Grade 3, Environmental Class IV, EN 50131-1:2006, EN 50131-3:2009, EN 50131-6:2008, Recognition class 2 (readers without a keypad), Recognition class 3 (readers with a keypad).

UL/ULC (Underwriters Laboratories)

- UL 294 for Access Control System Units
- CAN/ULC S319-05 for Electronic Access Control Systems