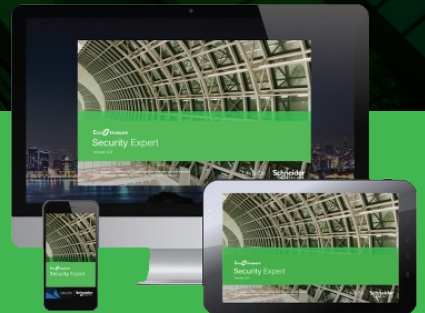# Your First Defense in Building Security

EcoStruxure Security Expert

Life Is On | **Schneider Electric**

EcoStruxure Security Expert

Protect your building occupants and assets with EcoStruxure Security Expert, an integrated role-based physical access control and intrusion detection solution that unifies your building's security infrastructure and management systems into an easy to manage, single platform that enables faster, more efficient, and potentially life-saving decision making.

A full portfolio of best-in-class hardware devices are purpose built with your needs in mind, allowing for easy installation and future expansion. The ability to easily integrate to related security services and building systems with Security Expert is as important as ensuring the IP-based infrastructure is secured and hardened against attacks. The Security Expert interface is intuitive, flexible, and supports the needs of administrators and operators, providing an enhanced experience to the end user, and true benefit to any organization.

Why
Secure workplaces are paramount to enhancing occupant productivity and safety.

How
A scalable end-to-end software and hardware solution designed for integration.

What
Security Expert is an easy to operate access control platform for integration with security infrastructure throughout a building.

Your security expert in building defensible systems

EcoStruxure Security Expert

Building Security and Communication Infrastructure

VoIP communications | Video surveillance | Other IT systems | Elevator control

Building Management System

Building analytics | Building automation | Lighting control | Power management | Fire safety | Energy management

Open and integration ready with both BMS and IT systems

Access control | Intrusion detection | ID badging + image certification | Visitor security | Alarm management

The Right Solution for Today's Connected Buildings

Hyperefficient

Gain hyper-efficiency through end-to-end digital architecture. With Security Expert you can efficiently utilize your existing access control infrastructure and migrate it to the modern Security Expert platform.

Scalable and Resilient

Make your buildings less vulnerable to natural and man-made threats. With the ability to manage multiple sites with one cybersecure platform, Security Expert protects facilities and helps to ensure business continuity.
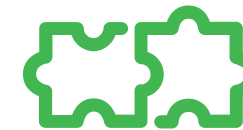
Flexible and Interconnected

Bring your entire building security infrastructure together using standard industry protocols or an extensive library of integrations. Security Expert is ready for integration with third-party systems through a variety of industry standard practices from SOAP to SIP.

Human Centric

As an integrated access control and intrusion detection system, Security Expert makes buildings, and their occupants, safer.

User Journey

Security Expert provides users….

Productivity

- Provides the right information at the right time
- Simplifies your job by integrating with the security related systems in your building
- Generates the reports you need to meet all your corporate compliance requirements

Simplicity

- Ensures cyber security and data privacy requirements
- Combines access control and intrusion detection on a single network, this removes the need for a separate network to manage
- Reduces complexity and the time spent managing access control components within IT systems

Service Excellence

- Remotely connect 24/7 to check on the status of the access control system
- Easily customize the solution and be confident that it will integrate with the systems in the rest of the building
- Access the tools you need to determine the best way to scale the system as your needs evolve

EcoStruxure™ Security Expert architecture
Powered by EcoStruxure™ Building Operation
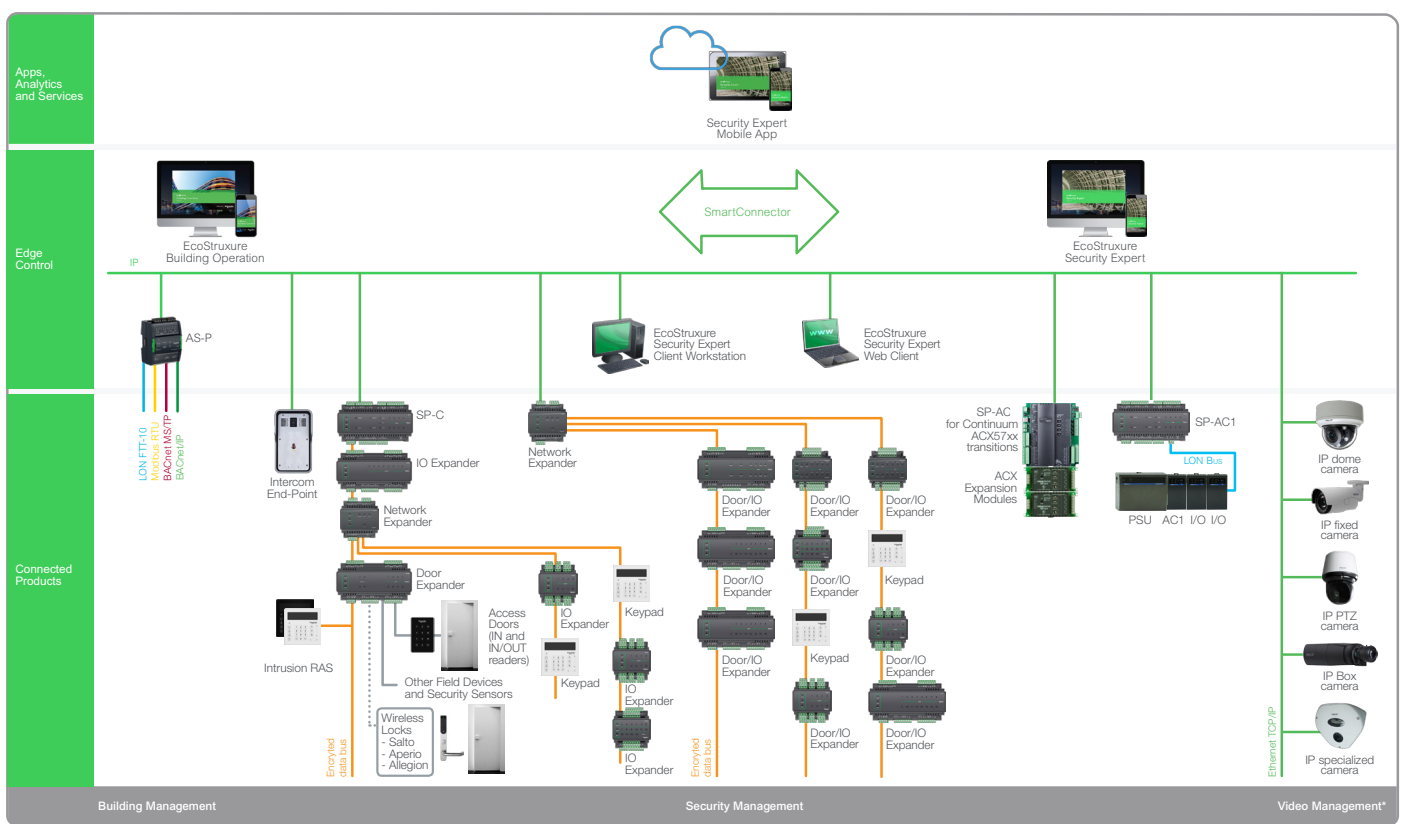
*IP CCTV video management system utilizes dedicated video recording servers

The Best Solution For You

System Integrators

System Integrators face strong pricing pressure and a market saturated with competition. Their labor and installation costs can be the make or break in a winning bid. They must support their existing customer base through evolving product lifecycles and are asked to provide customized solutions for new customers, requiring a platform that can be customized and integrate with existing building systems.

Security Expert is the best choice in access control systems for Integrators that seek to deliver an efficient, yet flexible, solution that enables integrations with existing building systems.

Facility Managers

Facility and Security Managers are facing constant demands for their time and attention across a wide variety of responsibilities. They are often moving from issue to issue around the building, reacting to urgent situations as they arise. They're asked to provide reports on demand to highlight the value and security of their facilities.

Security Expert is the best choice in access control systems for Facility and Security Managers that need a tool to oversee their building security while saving them time and enhancing the building value and experience.

IT Managers

Physical and digital security are no longer distinct silos. IT Managers are facing increased responsibility in a world with escalating risk and higher stakes. They must manage these emerging concerns while still addressing day to day organizational needs.

Security Expert is the best choice in access control systems for IT Managers concerned with physical and cyber security, interconnectivity, and scalability.

Security Expert is the best choice in access control systems for

Healthcare	Hotels	Data Center	Real Estate	Design Firms	Life Sciences	Education	Public Infrastructure	Retail

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Software

EcoStruxure Security Expert
SX-SRVR

EcoStruxure Security Expert is an enterprise level integrated access control, intrusion detection and building automation solution with a feature set that is easy to operate, simple to integrate and effortless to extend. Designed around the end user's needs with an intuitive and user-friendly interface, Security Expert is loaded with features that enhance the system further and provide true benefit to any organization.

Integrated Access Control, Intrusion Detection and Building Automation: Using a single system for access control, intrusion detection and building automation not only saves money on the installation, the features it unlocks can lead to improved staff safety, a more user friendly system that is more efficient to operate, and of course a higher level of security.

Flexible System Architecture: The server based architecture makes Security Expert a truly global system, enabling you to securely manage, control and monitor a scalable number of users, doors, areas, and other devices in real time regardless of geographical location. A centralized database improves efficiency and keeps your valuable sensitive data secure - not tucked away on a laptop in the back of a company vehicle.

Targeted Information: Customizable alarm and event filters enable you to sort and filter what and how information is displayed to an operator. Filtering the noise and showing only what is relevant improves efficiency and ensures an accurate response to incidents.

Floor Plans: Graphical floor plans provide a visual representation of your site and are a quick and efficient way to control and monitor your Security Expert system. You can quickly arm and disarm areas, control doors and outputs, and view input status and live variable information.

Status Pages: Fully customizable status pages provide an intuitive graphical interface that minimizes the learning curve, allowing new users to get up to speed quickly. The flexible design enables you to include the content relevant to your site, providing a site-wide overview or allowing you to drill down to show more detail. Include any combination of:

Easy to Operate: Designed with the end user in mind, Security Expert offers an intuitive and user friendly interface for controlling and monitoring your system. Customizable alarm and event filters enable you to sort and categorize event and alarm data to display information relevant to your unique site and setup.

Comprehensive Reporting: The information you need has never been more accessible. With comprehensive, built-in reports and the ability to create uniquely defined custom reports, Security Expert offers a commanding range of reporting capabilities, including scheduling reports to be generated automatically and sent to defined users via email. Report types include:

Report Filtering: Powerful filtering and flexible reporting options enable you to quickly and easily obtain detailed and relevant event information. The grid view reporting tool makes generation of custom reports a fast and efficient process:

Integrations: An impressive array of 'off the shelf' integrated third party systems ensures Security Expert products add value to the existing technology and infrastructure investments already on site. Custom integration tools are also available, allowing you to utilize your own experts to tailor a solution that meets your exact unique needs.

Licensing

Software Licensing Structure

1) Base Software License	2) Software Extensions	3) Integration Licenses
Includes most functions generally needed for a security system to function.	Based on specific project requirements i.e. number of doors, database integrations, reporting tools etc…	Where Security Expert system integration is needed with external systems i.e. CCTV, lifts, wireless locks, intercoms etc.

Security Expert offers two distinct base licenses and a flexible licensing model that reduces barriers to entry and scales as sites expand.

Both license packs include powerful reporting capabilities, CCTV integration, customizable status pages, graphical floor plans, and no restrictions on the number of users, events, schedules, areas, or hardware expansion.

Functionality	Starter License	Standard License (SX-SRVR-ST-UG)
Concurrent Client Connections	1	1
Doors *	32	50
Sites	Unlimited	Unlimited
Controllers	Unlimited	Unlimited
Users	Unlimited	Unlimited
Third-party RS-485 readers	Unlimited	Unlimited
Cameras	1	1
Calendar Actions Feature	Not Enabled	Enabled
Email on Event Feature	Not Enabled	Enabled
SOAP Web Service Feature	Enabled	Enabled
Web Client Feature	Enabled	Enabled
Web Operators	3	3

*wireless locks are considered doors and are included in the doors total.

License Caps:

License caps protect enterprise customers from runaway licensing costs. Doors are capped at 1,000. Once your system exceeds 1,000 doors you do not need to purchase additional door licenses. Cameras are capped at 500. Once your system exceeds 500 cameras you do not need to purchase additional camera licenses.

Site Example	License Requirements
3 concurrent operator logins 40 doors 10 cameras	Starter license 2 additional client connection licenses 1 Security Expert 10 door license 1 Security Expert 10 camera license
5 concurrent operator logins 125 doors 501 cameras	Standard license 4 additional client connection licenses 2 Security Expert 50 door licenses 10 Security Expert 50 camera licenses

Basic License Extensions

Optional features and a flexible licensing model mean that you can add functionality as your needs change. For more detail on additional extensions, see the "Software Extensions" section.

Product Code	Product Name	Description
SX-CLNT	Security Expert Client License	Provides an additional concurrent operator (thick client) connection
SX-WEB-OPR	Security Expert Operator License	Provides an additional web operator connection
SX-DOR-10	Security Expert 10 Door License	Increases the number of licensed doors on the Security Expert server by an additional 10 doors
SX-DOR-50	Security Expert 50 Door License	Increases the number of licensed doors on the Security Expert server by an additional 50 doors
SX-SIP-10	Security Expert 10 SIP Station License	Licensing for 10 Security Expert VoIP intercom stations per SX-SRVR instance. Each licensed VoIP station is able to make calls to Security Expert client workstations, and operate as master intercom through the workstation user interface
SX-SOAP-SDK	Security Expert SOAP Web Service Software Development Kit	Provides a simple way to access Security Expert via a web platform. Build your own application with a customized interface, or integrate with a physical device to unlock doors and disarm areas. Compatible across multiple platforms/operating systems. Use of the SOAP SDK requires signing a non-disclosure agreement.

Software Extensions

Data Sync Service

Security Expert Data Sync License

Product Code: SX-DB-SYNC

The Data Sync Service combines the power of Security Expert's enterprise level integrated access control, intrusion detection, and building automation system with external data sources. Ideally suited for a variety of applications, including 24-hour fitness centers, sports facilities, student databases, human resource systems and much more, the service provides a flexible approach to importing data from external systems, reducing management time and administration while providing a single point of data entry and enhancing efficiency.

Single Record Download Service

Installed separately

The Security Expert Single Record Download Service downloads specific records and fields that have changed in the Security Expert software. This service runs in parallel to the existing download service, providing an independent path for single-record changes that need to be downloaded to the controller in a timely fashion. Record changes downloaded by this service are typically received by a controller in under 30 seconds. This reduces download times considerably, especially on large sites with many controllers.

Visitor Integration Module

Security Expert Visitor Integration Module License

Product Code: SX-VIM

The Security Expert Visitor Management System (VMS) is a licensed feature which allows you to manage visitor sign in, identity labels, access, notification, and sign out - all without a separate piece of software. Security Expert enables you to register and track your visitors directly from the interface, effectively eliminating the need for a separate visitor management system. Visitor sign in is designed to be quick and efficient, and most visitors can be processed in 20 seconds or less. Sign out is just as easy, visitors simply badge their card at the exit reader or scan their label at the front desk and they are automatically signed out. With all events logged in Security Expert, you have a complete audit trail of who's in your building and where they are at all times.

Time and attendance

Security Expert Time and Attendance License

Product Code: SX-TNA

Security Expert provides advanced and highly customizable time and attendance monitoring and reporting functionality. This includes the ability to display sign in and sign out times on Security Expert keypads, configure shift times to report attendance, breaks and hours worked, and create the specific output you need with selectable report templates and configurable user field selections. Time and Attendance reports eliminate the need for a separate timekeeping system by using the access data to provide information on the in and out movements of staff, thereby assisting with payroll and HR management for ultimate efficiency.

Muster Report

Security Expert Muster Report License

Product Code: SX-MUST

Security Expert muster reports allow you to keep track of which users are currently in a room, building or site. By monitoring the external (entry and exit) doors for a specific zone the muster report can generate a list of all users who have been active within a specified time and whether they currently are inside or outside that zone. In addition to manually running the muster report you can also include it on a status page, providing regularly updated information about user status within the system.

Active Directory Operators and/or Users

Security Expert Active Directory User Integration License/ Security Expert Active Directory Operator Integration License

Product Code: SX-AD-USR/ SX-AD-OPR

Security Expert's Active Directory integrations provide synchronization and authentication for Active Directory users, enabling organizations to leverage the user management and security policies that AD provides.

For Operators: Active Directory integration enables operators to log in to Security Expert automatically using their Windows credentials, providing centralized authentication and the convenience of single sign-on. Operators have one less password to remember, yet receive all the same password restrictions and security policies for that password as provided by Active Directory. Active Directory details are configured under each operator record, and once defined the operator can select the option to use Windows Authentication. Security Expert then uses the operator's Windows network domain and username automatically as authentication.

For Users: Active Directory integration enables you to leverage the user data already contained in your Microsoft Windows Domain to create and maintain Security Expert users. This integration works by obtaining a list of users based on the defined Active Directory security group, importing the user names and current AD status (active or disabled), then synchronizing them as frequently as desired.

Integrations

EcoStruxure Security Expert SmartConnector

SmartConnector Deployment License
Product Code: SW-SMART-CONNECT

The EcoStruxure Security Expert SmartConnector provides integration with EcoStruxure Building Operation software. The SmartConnector allows you host Security Expert objects and alarms within EcoStruxure Building Operation This allows for a fully integrated building management system, enabling a userfriendly system that is more efficient to operate.
For More Information See: Security Expert - Smart Connector Extension - Specification Sheet

Wireless and Offline Locking Integrations

Allegion
Product Codes:

SX-DOR-ALG	Enables the connection of a supported Allegion wireless door to a system controller. A license is required for each connected wireless door.
SP-C-WEB-ALG-1	Security Expert WEB Allegion Door license [Enables ONE (1) Allegion wireless lock integration with SP-C-WEB controller.]
SP-C-WEB-ALG-10	Security Expert WEB Allegion Door license [Enables TEN (10) Allegion wireless lock integration with SP-C-WEB controller.]

Allegion integration is a licensed feature that allows you to utilize Allegion locks within Security Expert. Users and access control are configured within Security Expert, while the Allegion locks act as credential readers as well as locking devices. Lock control is programmed through the Security Expert door control functionality. The Allegion integration enables Security Expert to communicate with the locks whether directly through the controller reader ports or via Allegion interface device connected to the controller.

Aperio
Aperio Wireless Door License
Product Codes:

SX-DOR-AP	Enables the connection of a supported Aperio wireless door to a system controller. A license is required for each connected wireless door
SP-C-WEB-AP-1	Security Expert WEB Aperio Door license [Enables ONE (1) Aperio wireless lock integration with SP-C-WEB controller.]
SP-C-WEB-AP-10	Security Expert WEB Aperio Door license [Enables TEN (10) Aperio wireless lock integration with SP-C-WEB controller.]
SX-DOR-AP-IP	Security Expert Aperio IP Hub Door License. [Enables the connection of (1) supported Aperio wireless door lock from an Aperio IP Hub to a system controller.]

Integrating your Security Expert system with an Aperio wireless locking solution offers the same real-time communication as traditional access control, without the inconvenience of wiring the door. The Aperio technology is embedded in the locking devices and then fitted into the door, allowing the door to be wirelessly linked to your Security Expert or SP-C-WEB system to provide increased security for your premises.

ASSA ABLOY

- ASSA ABLOY DSR Door License
  Product Code: SX-DOR-DSR

Security Expert integration with ASSA ABLOY DSR (Door Service Router) software systems and IP-enabled locks combines wireless or PoE locking system technology with integrated electronic access control; intruder detection and building automation. In this integration a single Security Expert controller communicates with the ASSA ABLOY DSR server, which in turn communicates with the IP-enabled locks.

- ASSA ABLOY VingCard Integration License
  Product Code: SX-VING-HLI

Integration between Security Expert and the VingCard VisiOnline system provides a simple and seamless way to manage back of house staff access to electronic hotel locks directly from the Security Expert interface.

Salto

- Salto SALLIS Door License
  Product Codes:

SX-DOR-SL	Enables the connection of a supported Salto SALLIS wireless door to a system controller. A license is required for each connected wireless door.
SP-C-WEB-SL-1	Security Expert WEB Salto SALLIS Door license [Enables ONE (1) Salto SALLIS wireless lock integration with SP-C-WEB controller.]
SP-C-WEB-SL-10	Security Expert WEB Salto SALLIS Door license [Enables TEN (10) Salto SALLIS wireless lock integration with SP-C-WEB controller.]

Integrating your Security Expert system with a SALLIS wireless locking solution offers the same real-time communication as traditional access control, without the inconvenience of wiring the door. The SALLIS technology allows virtually any door to be wirelessly linked to your Security Expert or SP-C-WEB system, extending control capability and providing increased security for your premises.

- Security Expert Salto SHIP Door License
  Product Code: SX-DOR-IP

High level integration between Security Expert and Salto SHIP enables you to seamlessly combine the real-time power of online doors with the versatility and cost effectiveness of offline doors to give your access control system true flexibility.

DVR/NVR Integrations

Security Expert has a variety of DVR/NVR integrations providing a seamless integration between Security Expert and an existing VMS (video management system) enabling you to control cameras and view live and historical video footage from a single, easy-to-use interface.

Cameras can be linked to doors, inputs, outputs and areas, allowing you to easily retrieve footage based on any change of status, such as when a PIR is triggered or a door is opened. An automatic popup can display a live video stream on any door event, allowing you to see when someone is at the door or when a door has been forced open.

The included high level interface (HLI) enables the communication of PTZ triggers and alarm interfaces back to the DVR, providing bi-directional exchange of information. If desired, VMS events such as Motion Detected can be monitored directly in Security Expert.

DVR/NVR System	DVR/NVR software installation services	Application Note*
Arkiv	Security Expert Arkiv Video Service	AN-238
Avigilon V6	The Security Expert Avigilon Video Service	AN-284
DW Spectrum	Security Expert Nx Witness Video Service	AN-266
FLIR Latitude	Security Expert DVTel Video Service	AN-267
Genetec Security Center	Security Expert Genetec Video Service	AN-293
Geutebruck GeViScope	Security Expert GeViScope Video Service	AN-216
Geutebruck G-Core (with license plate recognition)	Security Expert G-Core Video Service	AN-200
Hikvision	Security Expert Hikvision Video Service	AN-190
Milestone	Security Expert Milestone Video Service	AN-242
Nx Witness	Security Expert Nx Witness Video Service	AN-265
Qognify Ocularis	Security Expert Qognify Video Service	AN-238
Pelco	Security Expert Pelco Video Service	AN-187

*See application notes for detailed functionality of each integration

Licensing Requirements for DVR/NVR Integration

SX-CAM-10	Security Expert 10 Camera License	Additional 10 cameras, standalone or for use with supported DVR/NVR systems.
SX-CAM-50	Security Expert 50 Camera License	Additional 50 cameras, standalone or for use with supported DVR/NVR systems.
SX-CAM-UN	Security Expert Unlimited Camera License	Unlimited cameras, standalone or for use with supported DVR/NVR systems
SP-C-WEB-CAM	SecurityExpert WEB 10 camera License	Additional Licensing for SPC-WEB Controller

Elevator HLI Integrations

Integrating Security Expert with various elevator systems provides a complete multi-floor access control solution, increasing building security and improving the flow of people within the building.

High level integration significantly reduces your overall installation and running costs, with no need to wire relays and inputs between the two systems and minimal additional hardware required.

Modern elevator systems provide a destination-based dispatch solution where a passenger presents their card to a display panel inside or outside the elevator and selects their desired destination floor. Security Expert verifies that the cardholder has the required permissions to access the floor (through access levels and schedules) and grants or denies the request.

When a cardholder's request is verified by Security Expert, the elevator system manages their journey to provide them with the shortest travel time to their requested floor.

By grouping passengers in specific elevators, the number of floor stops for each passenger is minimized and overall congestion is reduced, especially during peak traffic.

Elevator Integration Matrix

Elevator System	Product Code	Application N ote*
KONE	SX-ELV-HLI-KN	AN-170
KONE Destination 880		AN-274
Motion Control Engineering	SX-ELV-HLI-MCE	AN-241
OTIS Compass HLI	SX-ELV-HLI-OT	AN-174
OTIS MLI	SX-ELV-MLI-OT	AN-296
OTIS EMS	SX-ELV-EMS-OT	AN-298
Schindler	SX-ELV-HLI-SC	AN-196
ThyssenKrupp	SX-ELV-HLI-TK	AN-169

*See application notes for detailed functionality of each integration
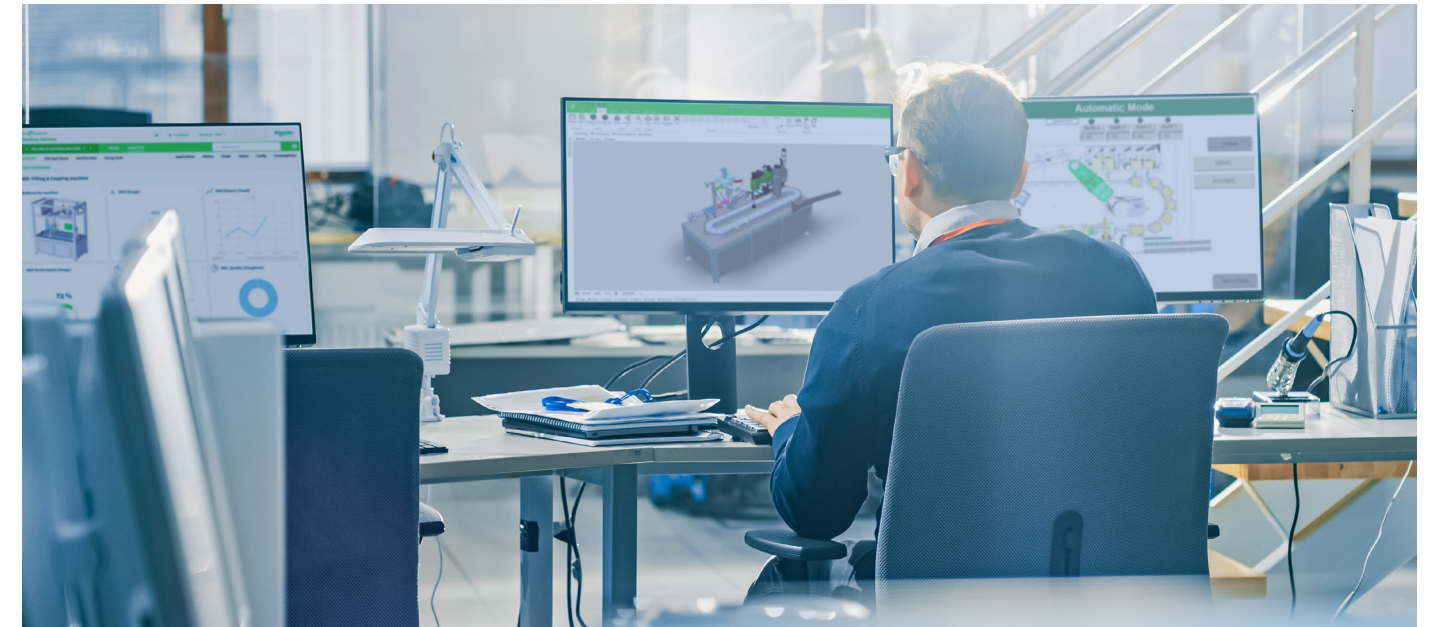
Biometric Integrations

- Idemia Biometric Integration License
  Product Code: Please contact local sales team for licensing

Security Expert integration with IDEMIA biometric and multi-form reader devices helps simplify operations by enabling the ability to centrally monitor biometric and access control events/alarms through a single interface.

- Princeton Identity Biometric Integration License
  Product Code: SX-BIO-PR

Princeton Identity is a biometric identification system that allows facilities to identify registered users through iris and facial recognition software. The system allows a site to provide access to users solely via their biometric data (single factor identification), or for added security a biometric reader can be combined with an access control reader (dual factor identification). Security Expert integrates with Princeton Identity enrollment and identity devices, turning every user's face into the world's most unique access credential.

- Suprema Biometric Integration License
  Product Code: SX-BIO-SP

Security Expert integrates with Suprema BioEntry, BioEntry Plus and FaceStation devices, putting security literally at your fingertips (or right in your face). Users simply scan their fingerprint or face at an enrollment reader to create their biometric record. The reader uses the scanned data to create a credential template, which it sends to the Security Expert server. Security Expert stores this data in the database and then sends the template over IP to all other Suprema readers attached to the system.

Other Integrations

Third-Party Reader Interface

Security Expert Third Party Reader Interface Licenses
Product Codes:

SX-TPR-IF	Enables configuration of a smart reader in Security Expert to link credential type functionality to door operation, most commonly to connect third party readers. A license is required for each smart reader configured.
SP-C-WEB-TPR-IF	Security Expert WEB Third Party Reader Interface [Enables configuration of a smart reader in SP-C-WEB to link credential type functionality to door operation, most commonly to connect third party readers over ethernet. A license is required for each smart reader configured.]

The Security Expert Third-Party Reader Interface License enables you to integrate your Security Expert system with a wide range of non-standard reader devices. Any component that can send identification data to the controller over an ethernet connection can be used in place of a card reader – such as IP cameras in a license plate recognition system. They also allow you to connect with some third-party card readers, saving the time and expense of replacing cards and readers when transitioning from legacy systems to Security Expert.

Visitor Management Systems

Cloudgate
Product Code: Please contact local sales team for licensing

CloudGate is a modular Physical Identity and Access Management platform designed to manage physical and logical identities and credentials of employees & visitors. The integration enables barcoded badges, proximity cards, smartphones and biometric templates to be used to open/ activate doors, turnstiles, and elevators. This integration provides mapping of Security Expert Access levels to CloudGate zones and provides real time event activity in CloudGate Activity Stream.

License Plate Recognition

PlateSmart
Product Code: Please contact local sales team for licensing

Security Expert offers integration with the PlateSmart system, combining automatic license plate recognition (LPR) with Security Expert's powerful and flexible access control system. This enables you to use cameras at carpark entry and exit points to grant access, providing enhanced convenience and security for your users.

Key Management Systems

- Keywatcher Touch Integration
  Product Code: SX-KW-TOUCH

This integration allows KeyWatcher Touch system operation to be synchronized with Security Expert users, access levels and schedules. Integration between systems also allows the extensive reporting functionality available within Security Expert to be used with the events and alarms available with KeyWatcher Touch.

- CIC Keysafe
  Product Code: SX-CIC-KEYSECURE

The KeySecure system by CIC Technology enables centralized management of C.Q.R.iT electronic lockers and key cabinets, providing high levels of security, accountability and convenience. Their range of cabinets offers secure storage for a variety of items, with options for both high and low security situations. Security Expert integration with KeySecure enables you to control access to KeySecure items and cabinets using Security Expert users, access levels and schedules. Integration between the two systems also allows the extensive reporting and alarm functionality available in Security Expert to be used with KeySecure events.

Intercom Systems

Product Code: SX-SIP-10 for any VoIP intercom integration

- Siedle
This integration allows KeyWatcher Touch system operation to be synchronized with Security Expert users, access levels and schedules. Integration between systems also allows the extensive reporting functionality available within Security Expert to be used with the events and alarms available with KeyWatcher Touch.
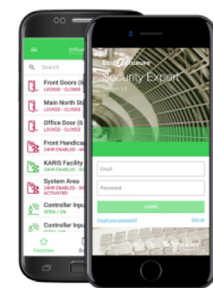
- Zenitel
Security Expert and Zenitel intercom integration coming soon, contact your local sales team for more information.

Mobile App

Security Expert Mobile App

SX-MOB-IF

The EcoStruxure Security Expert Mobile App accesses the power of the SP-C-WEB and Security Expert systems, enabling you to monitor and control your building while on the go, with the ease and convenience of your smartphone or mobile device. As long as you have an internet connection, you can connect to any of your SP-C-WEB or Security Expert sites and check the status, arm or disarm, control lights, locks, signage, heating – even cameras – from anywhere, anytime.

Features

One Touch Control: View and control the state of doors, areas, sensors (inputs), controls (outputs) and cameras (selected stream types) with a simple tap or a long press for advanced functions.

Instant Awareness: No more second guessing whether you set the alarm before leaving the office, the app provides instant awareness of system status, and enables you to arm or disarm with a simple tap. Searching for a key to unlock the office becomes a thing of the past as you can use your phone to open the door. And forget about coming into a cold, dark unwelcoming office. A few more taps and you can have the heating and lights turned on.

Mobile Credentials: Use your smartphone or mobile device as your access credential for maximum convenience using Bluetooth®, NFC, or Shake to Unlock. With support for most modern iOS and Android devices, you can present a mobile credential to a reader to unlock the door. The mobile credential is associated to a user record in SP-C-WEB or Security Expert, and authenticated by a secure cloud based server. Product Code: SX-MCR.

Live Event View: View the live events that you would usually see in your SP-C-WEB or Security Expert system. This enables you to easily identify which areas are being armed or disarmed, who is passing through the doors, and which inputs have raised an alarm. If you're looking for specific events, you can use the search function. Events are filtered as you type,

so more specific descriptions will help to easily find the events that you're looking for.

Push Notifications: Subscribe to push notifications to receive alerts of system or sensor activity. As a parent, enjoy the peace of mind of seeing the system disarmed when the kids return home from school. As a business owner, you can see that the system is disarmed at the start of the day, and rearmed when everyone goes home. And of course, you're alerted promptly of any alarms.

Live Camera Feed: The mobile app supports monitoring of IP cameras that allow direct URL access to either a static JPG image feed or a streaming MJPG video feed. If you can paste a URL into your browser and view the raw camera image, you can view the feed from the Security Expert Mobile App.

Customizable Layout: Add and remove items from the home page. This allows you to customize the layout of your home page to ensure that records that you don't want to see are removed, and ones that you want to easily monitor are readily available. Reorder records on each of the control pages. Doing this enables you to rearrange them in alphabetical order, in order of importance, or based on what the record controls. Search for specific records on any of the control pages, or on the home page. Results are filtered as you type, and the more specific your descriptions are the more quickly you will find the event or record that you're looking for.

IP Controllers & Power Supply Modules

Security Expert Security Purpose Controller
Product Code: SP-C

The Security Expert Security Purpose Controller is the central processing unit responsible for the control of security, access control and building automation in the Security Expert system. It communicates with all system modules, stores all configuration and transaction information, processes all system communication, and reports alarms and system activity to a monitoring station or remote computer.

Technical Specifications

Power Supply	
Operating Voltage	11-14V DC
Operating Current	120mA (Typical)
DC Output (Auxiliary)	10.45-13.85VDC 0.7A (Typical) Electronic shutdown at 1.1A
Bell DC Output (Continuous)	10.4-13.45VDC 8 ohm 30W Siren or 1.1A (Typical) Electronic Shutdown at 1.6A.
Bell DC Output (Inrush)	1500mA
Total Combined Current*	3.4A (max)
Electronic Disconnection	9.0VDC
Communication	
Communication (Ethernet)	10/100Mbps Ethernet communication link
Communication (RS-485)	3 RS-485 communication interface ports – 1 for module communication, 2 for reader communication
Communication (Modem)	2400bps modem communication
Readers	
Readers	2 reader ports that can be independently configured for either Wiegand (up to 1024 bits configurable) or RS-485, allowing connection of up to 4 readers providing entry/exit control for two doors **
	RS-485 reader port connections support configuration for OSDP protocol
Inputs	
Inputs (System Inputs)	8 high security monitored inputs
Outputs	4 50mA (max) open collector outputs for reader LED and beeper or general functions
Outputs	
Relay Outputs	2 Form C relays – 7A N.O/N.C. at 30 VAC/DC resistive/inductive
Dimensions	
Dimensions (L x W x H)	156 x 90 x 60mm (6.14 x 3.54 x 2.36")
Net Weight	360g (12.7oz)
Gross Weight	430g (15.2oz)
Operating Conditions and Certifications	
Operating Temperature	UL/ULC 0° to 49°C (32° to 120°F) : EU EN -10° to 55°C (14° to 131°F)
Storage Temperature	-10˚ to 85˚C (14˚ to 185˚F)
Humidity	0%-93% non-condensing, indoor use only (relative humidity)
Mean Time Between Failures (MTBF)	560,421 hours (calculated using RFD 2000 (UTE C 80-810) Standard)
Certifications	RCM, AS/NZS 2201.1 Class 5, CE, UK PD 6662:2017and BS 8243, UL/ULC, Industry Canada, FCC

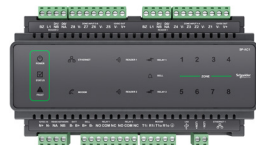## Security Expert Security Purpose LON Controller
Product Code: SP-AC1

The Security Expert Security Purpose LON Controller is the central processing unit responsible for the control of security, access control and building automation in the Security Expert system. The two wire LON interface connects to the Schneider Electric Continuum range of I/O modules and provides high speed secure communication with up to 32 modules simultaneously. FTT-10, RS-485 and OSDP are supported, and the mode of operation can be switched programmatically.

Technical Specifications

Power Supply	
Operating Voltage	11-14V DC
Operating Current	120mA (Typical)
DC Output (Auxiliary)	10.45-13.85VDC 0.7A (typical) electronic shutdown at 1.1A
Bell DC Output (Continuous)	10.4-13.45VDC 8 ohm 30W Siren or 1.1A (Typical) Electronic Shutdown at 1.6A
Bell DC Output (Inrush)	1500mA
Total Combined Current*	3.4A (max)
Electronic Disconnection	9.0VDC

Communication	
Communication (Ethernet)	10/100Mbps Ethernet communication link
Communication (RS-485)	3 RS-485 communication interface ports, 1 for module communication and 2 for reader communication
Communication (Modem)	2400bps modem communication

LON Interface	
LON Interface	The two wire LON interface connects to the Schneider Electric Continuum range of I/O modules and provides high speed secure communication with up to 32 modules simultaneously. FTT-10, RS-485 and OSDP are supported

Readers	
Readers	2 reader ports that can be independently configured for either Wiegand (up to 1024 bits configurable) or RS-485, allowing connection of up to 4 readers providing entry/exit control for two doors **
	RS-485 reader port connections support configuration for OSDP protocol

Inputs	
Inputs (System Inputs)	8 high security monitored inputs
Outputs	4 50mA (max) open collector outputs for reader LED and beeper or general functions

Outputs	
Relay Outputs	2 Form C relays – 7A N.O/N.C. at 30 VAC/DC resistive/inductive

Dimensions	
Dimensions (L x W x H)	156 x 90 x 60mm (6.14 x 3.54 x 2.36")
Net Weight	370g (13.1oz)
Gross Weight	440g (15.5oz)

Operating Conditions and Certifications	
Operating Temperature	UL/ULC 0° to 49°C (32° to 120°F) : EU EN -10° to 55°C (14° to 131°F)
Storage Temperature	-10˚ to 85˚C (14˚ to 185˚F)
Humidity	0%-93% non-condensing, indoor use only (relative humidity)
Mean Time Between Failures (MTBF)	560,421 hours (calculated using RFD 2000 (UTE C 80-810) Standard)
Certifications	RCM, CE, UK PD 6662:2017and BS 8243, UL/ULC, Industry Canada, FCC

Security Expert Security Purpose ACX Controller
Product Code: SP-ACX-V2

The Security Expert Security Purpose ACX Controller is a powerful IP enabled controller designed to provide access control for up to eight doors and transition of Andover Continuum ACX57xx series controllers to EcoStruxure Security Expert.

Technical Specifications

Input Power	
Input Power	12-28VDC @ 50W 24VAC @ 90VA, 50/60 Hz
Universal Input Voltage Range	0-5 V

Interface	
Real Time Clock	Maintained by an internal super-cap. Retention 2 days.
Ethernet LAN Interface	10/100 Ethernet: Ethernet cable with RJ-45 connector
Serial Comm Interface	RS-485, 3-Pin connector (Not used) RS-485, 4-Pin connector (Not used) USB Port

Connections	
Input Connections	ACX controller input types include: cabinet tamper, universal inputs, and card reader/keypad. Cabinet tamper: 2-pin connector for cabinet tamper switches located on the cabinet door and wall. Universal inputs: 12 universal inputs that can be operated as a supervised or general purpose UI. Alarm Inputs: 12 supervised inputs. Single or double resistor supervision, series or parallel. Input Protection: Transient voltage suppressor (TVS) on each input. Card Reader/Keypad: 8 inputs. Each input can be connected to a card reader, dedicated keypad, or reader/keypad combination.
Card Reader/Keypad	Card Reader Type: Wiegand, ABA, RS-485 Max Number of bits/Card: Up to 120 bits/card for FIPS (UL evaluated for up to 37 bits - Wiegand only) Reader LED Output: 2 each, open collector; up to 100 mA Card Reader Power: +5 VDC @ 120 mA or +12 VDC @ 180 mA max power (jumper selectable) Wiring Distance (Card Reader to Controller): 500 ft. (152.4 m) max. using 18 AWG; 200 ft. (60.96 m) max. using 22 AWG
Door Output Connections	ACX controller output types include 4 Form C relays with a manual override switch. Door Outputs: Up to 4 Form C relays Output Rating: 24 VAC/30 VDC @ 7 Amp Overrides: 3-position manual override switch on each output for manual control of relay. LED override status indicator.
Power and Communications Connections	Power: 3-position connector on left side of module for connection to a power supply. xP Power: 6-pin connector, 24 VDC 360 mA Ethernet: RJ-45 connector for 10/100 Ethernet. Service port: 4-pin connector for ROAM I/O2 or Wireless Adapter (disabled under normal operation). RS-485: 3-pin connector for Infinet field bus (disabled under normal operation).

LED Indicators	
Status Indicator LEDs	System: CPU RS-485: TX, RX Ethernet: ACT/LINK, 10/100 Mbps xP Pwr: Expansion module 24 VDC power
Switches	
Push Button Switches	Clear Memory: RESET/Clear Memory
DIP Switches	Universal Inputs, 10 KOhm pull-up disable/enable
Dimensions	
Dimensions (L x W x H)	241.3 x 209.6 x 57.2mm (2.25" x 9.5" x 8.25")
Net Weight	530g (18.7oz)
Gross Weight	660g (23.3oz)
Operating Conditions and Certifications	
Enclosure Type	UL open class, flammability rating of UL94-5V, IP 10
Operating Temperature	0˚ to 50˚C (32˚ to 122˚F)
Humidity	10%-90% relative humidity, non-condensing
Certifications	RCM, CE, UKCA, UK PD 6662:2017and BS 8243, UL/ULC, FCC, Industry Canada

Security Expert Security Purpose Web Enabled Controller
Product Code: SP-C-WEB

The Security Expert Security Purpose Web Enabled Controller is the central processing unit responsible for the control of security, access control and building automation in the SP-C-WEB system. It communicates with all system modules, stores all configuration and transaction information, processes all system communication, and reports alarms and system activity to a monitoring station or remote computer. SP-C-WEB's flexible licensing model allows you to extend your system with additional features and integrations, as and when you need them.

Technical Specifications

Power Supply	
Operating Voltage	11-14V DC
Operating Current	120mA (Typical)
DC Output (Auxiliary)	10.45-13.85VDC 0.7A (Typical) Electronic shutdown at 1.1A
Bell DC Output (Continuous)	10.4-13.45VDC 8 ohm 30W Siren or 1.1A (Typical) Electronic Shutdown at 1.6A.
Bell DC Output (Inrush)	1500mA
Total Combined Current*	3.4A (max)
Electronic Disconnection	9.0VDC
Communication	
Communication (Ethernet)	10/100Mbps Ethernet communication link
Communication (RS-485)	3 RS-485 communication interface ports – 1 for module communication, 2 for reader communication
Communication (Modem)	2400bps modem communication
Readers	
Readers	2 reader ports that can be independently configured for either Wiegand (up to 1024 bits configurable) or RS-485, allowing connection of up to 4 readers providing entry/exit control for two doors **
	RS-485 reader port connections support configuration for OSDP protocol
Inputs	
Inputs (System Inputs)	8 high security monitored inputs
Outputs	
Outputs	4 50mA (max) open collector outputs for reader LED and beeper or general functions
Relay Outputs	2 Form C relays – 7A N.O/N.C. at 30 VAC/DC resistive/inductive
Dimensions	
Dimensions (L x W x H)	156 x 90 x 60mm (6.14 x 3.54 x 2.36")
Net Weight	360g (12.7oz)
Gross Weight	430g (15.2oz)
Operating Conditions and Certifications	
Operating Temperature	UL/ULC 0° to 49°C (32° to 120°F) : EU EN -10° to 55°C (14° to 131°F)
Storage Temperature	-10˚ to 85˚C (14˚ to 185˚F)
Humidity	0%-93% non-condensing, indoor use only (relative humidity)
Mean Time Between Failures (MTBF)	560,421 hours (calculated using RFD 2000 (UTE C 80-810) Standard)
Certifications	RCM, AS/NZS 2201.1 Class 5, CE, UK PD 6662:2017and BS 8243, UL/ULC, Industry Canada, FCC

Security Expert 4A Security Purpose Power Module

Product Code: SP-PSU-4A

The Security Expert 4A Security Purpose Power Module provides the Security Expert system with 12VDC power, ideal for running security, access control or automation devices along with large numbers of Security Expert network powered modules in the same installation. The power supply includes intelligent charging for optimum performance and allows for simple and powerful monitoring of supply currents and voltages.

Technical Specifications

Power Supply	
Mains Input Voltage	120VAC (90-264VAC, 47-63Hz)
Mains Input Operating Current	120VAC 1.5A (Full Load)
DC Output (Combined)	12.64VDC 4.0A Max (V1 Out + V2 Out Total)
DC Output (Single)	12.2VDC 3A Max
Battery Charging	500mA (Typical) *Additional to the 4A Combined DC Output
Battery Low	11.75VDC
Battery Restore	12.5VDC
Communication	
RS-485	Isolated Module Network
Outputs	
Outputs	2 Solid-State Relay Outputs, 50mA 12V Max each
Inputs	
Tamper	Dedicated Hardware Tamper Input
Trouble Inputs	8 (internal)
Dimensions	
Dimensions (L x W x H)	156.8 x 90 x 60mm (6.17 x 3.54 x 2.36")
Net Weight	470g (16.6oz)
Gross Weight	580g (20.5oz)
Operating Conditions and Certifications	
Operating Temperature	UL/ULC 0° to 49°C (32° to 120°F) : EU EN -10° to 55°C (14° to 131°F)
Storage Temperature	-10˚ to 85˚C (14˚ to 185˚F)
Humidity	0%-93% non-condensing, indoor use only (relative humidity)
Mean Time Between Failures (MTBF)	242,266 hours (calculated using RFD 2000 (UTE C 80-810) Standard)
Certifications	RCM, AS/NZS 2201.1 Class 5, CE, UL/ULC, FCC, Industry Canada

Security Expert 8A Security Purpose Power Module

Product Code: SP-PSU-8A*

The Security Expert 8A Security Purpose Power Module provides the Security Expert system with 12VDC power, ideal for running security, access control or automation devices along with large numbers of Security Expert network powered modules in the same installation. The power supply includes intelligent charging for optimum performance and allows for simple and powerful monitoring of supply currents and voltages.

Technical Specifications

Power Supply	
Mains Input Voltage	120VAC (90-264VAC, 47-63Hz)
Mains Input Operating Current	120VAC 2.5A (Full Load)
DC Output (Combined)	12.64VDC 7.5A Max (V1 Out + V2 Out Total)
DC Output (Single)	12.2VDC 5A Max
Battery Charging	500mA (Typical) *Additional to the 7.5A Combined DC Output
Battery Low	11.75VDC
Battery Restore	12.5VDC
Communication	
RS-485	Isolated Module Network
Outputs	
Outputs	2 Solid-State Relay Outputs, 50mA 12V Max each
Inputs	
Tamper	Dedicated Hardware Tamper Input
Trouble Inputs	8 (internal)
Dimensions	
Dimensions (L x W x H)	156.8 x 90 x 60mm (6.17 x 3.54 x 2.36")
Net Weight	460g (16.2oz)
Gross Weight	570g (20.1oz)
Operating Conditions and Certifications	
Operating Temperature	-10° to 55°C (14° to 131°F)
Storage Temperature	-10˚ to 85˚C (14˚ to 185˚F)
Humidity	0%-93% non-condensing, indoor use only (relative humidity)
Mean Time Between Failures (MTBF)	217,030 hours (calculated using RFD 2000 (UTE C 80-810) Standard)
Certifications	RCM, AS/NZS 2201.1 Class 5, CE, UL/ULC, FCC, Industry Canada

*UL certified for communications, not electrical safety

Door Controllers & I/O Modules

Security Expert Security Purpose Door Expansion
Product Code: SP-RDM2

The Security Expert Security Purpose Door Expansion delivers up to 4 reader inputs and 2 locking device outputs for access management in the Security Expert system. With 8 inputs that can be used for extended monitoring functionality, and 6 open collector outputs available for management of controllable devices, the Security Purpose Door Expansion features extensive hardware advancements that support flexible security and access control, alarm monitoring and building automation.

Technical Specifications

Power Supply	
DC Input Voltage	11-14VDC
DC Output Voltage (DC IN Pass Through)	10.83-14.0VDC 0.7A (Typical) Electronic Shutdown at 1.1A Reader 1&2 10.45-13.85VDC Pass Through share 0.7A (Typical) Electronic Shutdown at 1.1A
Operating Current	80mA (Typical)
Total Combined Current*	1.56A (Max)
Low Voltage Cutout	8.7VDC
Low Voltage Restore	10.5VDC
Communication	
RS-485	Module network
Offline Operation	
Offline Access Modes	All Users, First 10 Users plus 150 Card Cache, No Users
Readers	
Reader Configurations	2 reader ports that can be independently configured for either Wiegand (up to 1024 bits configurable) or RS-485, allowing connection of up to 4 readers providing entry/exit control for two doors **
	RS-485 reader port connections support configuration for OSDP protocol
Outputs	
Lock Outputs	2 Form C Relay Outputs - 7A N.O/N.C. at 30 VAC/DC resistive/inductive
Outputs	6 (50mA Max) Open Collector
Inputs	
Inputs	8 High Security Monitored Inputs (10ms to 1hr Input Speed Programmable)
Trouble Inputs	16
Dimensions	
Dimensions (L x W x H)	156.8 x 90 x 60mm (6.17 x 3.54 x 2.36")
Net Weight	300g (10.6oz)
Gross Weight	370g (13.1oz)
Operating Conditions and Certifications	
Operating Temperature	UL/ULC 0° to 49°C (32° to 120°F) : EU EN -10° to 55°C (14° to 131°F)
Storage Temperature	-10˚ to 85˚C (14˚ to 185˚F)
Humidity	0%-93% non-condensing, indoor use only (relative humidity)
Mean Time Between Failures (MTBF)	622,997 hours (calculated using RFD 2000 (UTE C 80-810) Standard)
Certifications	RCM, AS/NZS 2201.1 Class 5, CE, UL/ULC, Industry Canada, FCC

Security Expert 2 Door Mini Expander

Product Code: SP-MRDM2

The Security Expert 2 Door Mini Expander delivers up to 4 reader inputs and 2 locking device outputs, in a compact two-tier half DIN rail design. With 8 inputs that can be used for extended monitoring functionality, and 6 open collector outputs available for management of controllable devices, the 2 Door Mini Expander features extensive hardware advancements that support flexible security and access control, alarm monitoring and building automation.

Technical Specifications

Power Supply	
DC Input Voltage	11-14VDC
DC Output Voltage (DC IN Pass Through)	10.83-14.0VDC 0.7A (Typical) Electronic Shutdown at 1.1A Reader 1&2 10.45-13.85VDC Pass Through share 0.7A (Typical) Electronic Shutdown at 1.1A
Operating Current	80mA (Normal Standby)
Total Combined Current*	1.6A (Max)
Low Voltage Cutout	8.7VDC
Low Voltage Restore	10.5VDC
Communication	
RS-485	Module network
Offline Operation	
Offline Access Modes	All Users, First 10 Users plus 150 Card Cache, No Users
Readers	
Reader Configurations	2 reader ports that can be independently configured for either Wiegand (up to 1024 bits configurable) or RS-485, allowing connection of up to 4 readers providing entry/exit control for two doors **
	RS-485 reader port connections support configuration for OSDP protocol
Outputs	
Lock Outputs	2 Form C Relay Outputs - 7A N.O/N.C. at 30 VAC/DC resistive/inductive
Outputs	6 (50mA Max) Open Collector
Inputs	
Inputs	8 High Security Monitored Inputs (10ms to 1hr Input Speed Programmable)
Trouble Inputs	16
Dimensions	
Dimensions (L x W x H)	78 x 90 x 60mm (3.07 x 3.54 x 2.36")
Net Weight	210g (7.4oz)
Gross Weight	270g (9.5oz)
Operating Conditions and Certifications	
Operating Temperature	UL/ULC 0° to 49°C (32° to 120°F) : EU EN -10° to 55°C (14° to 131°F)
Storage Temperature	-10˚ to 85˚C (14˚ to 185˚F)
Humidity	0%-93% non-condensing, indoor use only (relative humidity)
Mean Time Between Failures (MTBF)	622,997 hours (calculated using RFD 2000 (UTE C 80-810) Standard)
Certifications	RCM, AS/NZS 2201.1 Class 5, CE, UL/ULC, Industry Canada, FCC

Security Expert Security Purpose Door Control Unit*

Product Code: SP-DCU

The Security Expert Security Purpose Door Control Unit delivers up to 4 reader inputs and 6 locking device outputs for access management in the Security Expert system.

With 8 inputs that can be used for extended monitoring functionality, and 6 open collector outputs available for management of controllable devices, the Security Purpose Door Control Unit features extensive hardware advancements that support flexible security and access control, alarm monitoring and building automation.

Technical Specifications

Power Supply	
DC Input Voltage	20-28VDC
DC Output Voltage (DC IN Pass Through)	20-28VDC Pass Through Reader 1&2 12VDC Pass Through 1.0A (Max
Operating Current	130mA @24VDC (without external devices) 410mA @24VDC (4 standard Smart Card Readers connected)
Communication	
RS-485	Module network
Offline Operation	
Offline Access Modes	All Users, First 10 Users plus 150 Card Cache, No Users
Readers	
Reader Configurations	2 reader ports that can be independently configured for either Wiegand (up to 1024 bits configurable) or RS-485, allowing connection of up to 4 readers providing entry/exit control for two doors **
	RS-485 reader port connections support configuration for OSDP protocol
Outputs	
Lock Outputs	6 Form C Relay Outputs - 7A N.O/N.C. at 30 VAC/DC resistive/inductive (Relay 1 can be configured to provide 24V on output contacts using on-board jumpers)
Programmable Outputs	6 (50mA Max) Open Collector
Inputs	
Inputs	8 High Security Monitored Inputs (10ms to 1hr Input Speed Programmable)
Trouble Inputs	16
Dimensions	
Dimensions (L x W x H)	210 x 160 x 55mm (8.26 x 6.29 x 2.16")
Weight	440g (15.5oz)
Operating Conditions and Certifications	
Operating Temperature	UL/ULC 0° to 49°C (32° to 120°F) : EU EN -10° to 55°C (14° to 131°F)
Storage Temperature	-10˚ to 85˚C (14˚ to 185˚F)
Humidity	0%-93% non-condensing, indoor use only (relative humidity)
Mean Time Between Failures (MTBF)	622,997 hours (calculated using RFD 2000 (UTE C 80-810) Standard)
Certifications	RCM, CE, Industry Canada, FCC

*Available in Non-UL countries only

Security Expert Security Purpose IO Expansion
Product Code: SP-IO84

The Security Expert Security Purpose IO Expansion extends the number of inputs by 8, allowing monitoring of a wide range of EOL capable or open contact sensors; and extends the number of outputs by 4, featuring high current Form C relays for controlled automation of building systems including lighting and HVAC. The Security Purpose IO Expansion provides extensive hardware advancements that allow flexible input programming and configuration, and structured intelligent control of building and automation systems.

Technical Specifications

Power Supply	
DC Input Voltage	11-14VDC
DC Output Voltage (DC IN Pass-Through)	10.45-13.85VDC 0.7A (Typical) Electronic Shutdown at 1.1A
Operating Current	80mA (Typical)
Low Voltage Cutout	8.7VDC
Low Voltage Restore	10.5VDC
Communication	
RS-485	Isolated Module Network
Outputs	
Outputs	4 Form C Relays - 7A N.O./N.C. at 30 VAC/DC resistive/inductive
Inputs	
Inputs	8 (10ms to 1hr Input Speed Programmable)
Trouble Inputs	16
Dimensions	
Dimensions (L x W x H)	156.8 x 90 x 60mm (6.17 x 3.54 x 2.36")
Net Weight	310g (10.9oz)
Gross Weight	380g (13.4oz)
Operating Conditions and Certifications	
Operating Temperature	-10° to 55°C (14° to 131°F)
Storage Temperature	-10˚ to 85˚C (14˚ to 185˚F)
Humidity	0%-93% non-condensing, indoor use only (relative humidity)
Mean Time Between Failures (MTBF)	587,177 hours (calculated using RFD 2000 (UTE C 80-810) Standard)
Certifications	RCM, CE, FCC, Industry Canada

Security Expert Security Purpose Single Input Expander
Product Code: SP-I01

The Security Expert Security Purpose Single Input Expander provides the interface of an additional input for monitoring and automation in the Security Expert integrated access control, security and building automation system. With an input which can be used for extended monitoring functionality, the Security Purpose Single Input Expander provides extensive hardware advancements that allow flexible input programming and configuration.

Technical Specifications

Power Supply	
Operating Voltage	11 - 14VDC
Operating Current	20mA (typical)
Communication	
RS-485	Isolated Module Network
Inputs	
Inputs	1
Dimensions	
Dimensions (L x W x H)	7 x 18 x 20mm (0.28 x 0.71 x 0.79")
Operating Conditions and Certifications	
Operating Temperature	-10° to 55°C (14° to 131°F)
Humidity	0%-93% non-condensing, indoor use only (relative humidity)
Mean Time Between Failures (MTBF)	784,316 hours (calculated using RFD 2000 (UTE C 80-810) Standard)
Certifications	RCM, AS/NZS 2201.1 Class 5, CE, FCC, Industry Canada

Security Expert Security Purpose 16 Input Expansion

Product Code: SP-I16

Designed for use with industry standard DIN rail mounting, the Security Expert Security Purpose 16 Input Expansion provides the interface of up to 16 inputs for monitoring and automation in the Security Expert system.

With 16 inputs that can be used for extended monitoring functionality, the Security Purpose 16 Input Expansion provides extensive hardware advancements that allow flexible input programming and configuration.

Technical Specifications

Power Supply	
DC Input Voltage	11-14VDC
DC Output Voltage (DC IN Pass-Through)	10.83-14.0VDC 0.7A (Typical) Electronic Shutdown at 1.1A
Operating Current	80mA (Typical)
Total Combined Current*	3A (Max)
Low Voltage Cutout	8.7VDC
Low Voltage Restore	10.5VDC
Communication	
RS-485	Module Network
Inputs	
Inputs	16 High Security Monitored Inputs (10ms to 1hr Input Speed Programmable)
Trouble Inputs	16
Dimensions	
Dimensions (L x W x H)	156.8 x 90 x 60mm (6.17 x 3.54 x 2.36")
Net Weight	280g (9.9oz)
Gross Weight	350g (12.3oz)
Operating Conditions and Certifications	
Operating Temperature	UL/ULC 0° to 49°C (32° to 120°F) : EU EN -10° to 55°C (14° to 131°F)
Storage Temperature	-10˚ to 85˚C (14˚ to 185˚F)
Humidity	0%-93% non-condensing, indoor use only (relative humidity)
Mean Time Between Failures (MTBF)	784,316 hours (calculated using RFD 2000 (UTE C 80-810) Standard)
Certifications	RCM, CE, UL/ULC, FCC, Industry Canada

Security Expert Security Purpose Mini Input Expansion

Product Code: SP-MI16

Designed for use with industry standard DIN rail mounting, the Security Expert Security Purpose Mini Input Expansion provides the interface of up to 16 inputs for monitoring and automation in the Security Expert system.

With 16 inputs that can be used for extended monitoring functionality, the Security Purpose Mini Input Expansion provides extensive hardware advancements that allow flexible input programming and configuration.

Technical Specifications

Power Supply	
DC Input Voltage	11-14VDC
DC Output Voltage (DC IN Pass Through)	10.83-14.0VDC 0.7A (Typical) Electronic Shutdown at 1.1A
Operating Current	80mA (Normal Standby)
Total Combined Current*	3A (Max)
Low Voltage Cutout	8.7VDC
Low Voltage Restore	10.5VDC
Communication	
RS-485	Module Network
Inputs	
Inputs	16 High Security Monitored Inputs (10ms to 1hr Input Speed Programmable)
Trouble Inputs	16
Dimensions	
Dimensions (L x W x H)	78 x 90 x 60mm (3.07 x 3.54 x 2.36")
Net Weight	180g (6.3oz)
Gross Weight	240g (8.5oz)
Operating Conditions and Certifications	
Operating Temperature	UL/ULC 0° to 49°C (32° to 120°F) : EU EN -10° to 55°C (14° to 131°F)
Storage Temperature	-10˚ to 85˚C (14˚ to 185˚F)
Humidity	0%-93% non-condensing, indoor use only (relative humidity)
Mean Time Between Failures (MTBF)	784,316 hours (calculated using RFD 2000 (UTE C 80-810) Standard)
Certifications	RCM, CE, UL/ULC, FCC, Industry Canada

Security Expert Security Purpose Output Expansion
Product Code: SP-O8

The Security Expert Security Purpose Output Expansion extends the Security Expert integrated access control, security and building automation system with an additional 8 outputs for automation. Featuring high current Form C relays, the output expander provides extensive hardware advancements that allow flexible and structured control of building systems including lighting and HVAC.

Technical Specifications

Power Supply	
DC Input Voltage	11-14VDC
DC Output Voltage (DC IN Pass-Through)	10.83-14.0VDC 0.7A (Typical) Electronic Shutdown at 1.1A
Operating Current	80mA (Typical)
Total Combined Current*	3.25A (Max)
Low Voltage Cutout	8.7VDC
Low Voltage Restore	10.5VDC
Communication	
RS-485	Module Network
Outputs	
Programmable Outputs	8 Form C relays - 7A N.O./N.C. at 30 VAC/DC resistive/inductive
Dimensions	
Dimensions (L x W x H)	156.8 x 90 x 60mm (6.17 x 3.54 x 2.36")
Net Weight	340g (12oz)
Gross Weight	410g (14.5oz)
Operating Conditions and Certifications	
Operating Temperature	UL/ULC 0° to 49°C (32° to 120°F) : EU EN -10° to 55°C (14° to 131°F)
Storage Temperature	-10˚ to 85˚C (14˚ to 185˚F)
Humidity	0%-93% non-condensing, indoor use only (relative humidity)
Mean Time Between Failures (MTBF)	587,177 hours (calculated using RFD 2000 (UTE C 80-810) Standard)
Certifications	RCM, AS/NZS 2201.1 Class 5, CE, UL/ULC, FCC, Industry Canada

Security Expert Security Purpose Mini Output Expansion
Product Code: SP-MO8

The Security Expert Security Purpose Mini Output Expansion extends the Security Expert integrated access control, security and building automation system with an additional 8 outputs for automation. Featuring high current Form C relays, the output expander provides extensive hardware advancements that allow flexible and structured control of building systems including lighting and HVAC.

Technical Specifications

Power Supply	
DC Input Voltage	11-14VDC
DC Output Voltage (DC IN Pass-Through)	10.83-14.0VDC 0.7A (Typical) Electronic Shutdown at 1.1A
Operating Current	80mA (Normal Standby)
Total Combined Current*	3.25A (Max)
Low Voltage Cutout	8.7VDC
Low Voltage Restore	10.5VDC
Communication	
RS-485	Module Network
Outputs	
Programmable Outputs	8 Form C relays - 7A N.O/N.C. at 30 VAC/DC resistive/inductive
Dimensions	
Dimensions (L x W x H)	78 x 90 x 60mm (3.07 x 3.54 x 2.36")
Net Weight	240g (8.5oz)
Gross Weight	300g (10.6oz)
Operating Conditions	
Operating Temperature	UL/ULC 0° to 49°C (32° to 120°F) : EU EN -10° to 55°C (14° to 131°F)
Storage Temperature	-10˚ to 85˚C (14˚ to 185˚F)
Humidity	0%-93% non-condensing, indoor use only (relative humidity)
Mean Time Between Failures (MTBF)	587,177 hours (calculated using RFD 2000 (UTE C 80-810) Standard)
Certifications	RCM, AS/NZS 2201.1 Class 5, CE, UL/ULC, FCC, Industry Canada

Security Expert Security Purpose COMMS Expander
Product Code: SP-MNR2

The Security Expert Security Purpose COMMS Expander is designed to extend the network capabilities of the Security Expert system, allowing network access where distance or physical structures may make cabling difficult. The comms expander is added to the system via RS-485 or ethernet and provides optical isolation between up to three branches of the module network.

Technical Specifications

Power Supply	
Operating Voltage	12V DC
Operating Current	65mA (Typical)
Communication	
RS-485	3 isolated RS-485 communication interface ports
Ethernet	1 10/100Mbps Ethernet Communication Link
Ports	Port 80 TCP/IP HTTP (Controller Web Interface) Fixed Port 9450 UDP/IP (Comms Expander to Controller)
Dimensions	
Dimensions (L x W x H)	78 x 90 x 60mm (3.07 x 3.54 x 2.36")
Net Weight	150g (5.3oz)
Gross Weight	220g (7.8oz)
Operating Conditions and Certifications	
Operating Temperature	-10° to 55°C (14° to 131°F)
Storage Temperature	-10˚ to 85˚C (14˚ to 185˚F)
Humidity	0%-93% non-condensing, indoor use only (relative humidity)
Certifications	RCM, AS/NZS 2201.1 Class 5, CE, Industry Canada, FCC

Readers and Credentials

Schneider Electric Readers and Credentials

Security Expert Readers

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

Sleek and stylish, and with a range of optional features, the Multi-Technology Reader series has a solution for everyone. Available in three sizes, multiple card capabilities, with an optional keypad, and in your choice of black or white, you can select the model to fit your needs and decor.

The OSDP protocol improves interoperability and adds scalability, flexibility, and ease of implementation. OSDP with Secure Channel offers additional security with AES-128 encryption and predefined key management and authentication.

Security Expert Readers have gone through extensive third party testing to ensure proven interoperability and are SIA OSDP Verified.

Mullion Reader

Mullion Reader	117 x 46 x 18mm (4.61 x 1.81 x 0.71")			
	Keypad	125kHz	MIFARE/ DESFire/ NFC	Bluetooth® Technology
SX-DRD-SB Black Smart Card Reader		✓	✓	
SX-DRK-SB Black Smart Card Reader with Keypad	✓	✓	✓	
SX-DRK-SB-BT Black Smart Card Reader with Keypad and Bluetooth® Wireless Technology	✓	✓	✓	✓
SX-DRK-SW-BT White Smart Card Reader with Keypad and Bluetooth® Wireless Technology	✓	✓	✓	✓
SX-RD-SB Black 13.56MHz Smart Card Reader			✓	
SX-RD-SB-BT Black Smart Card Reader with Bluetooth Technology			✓	✓
SX-RD-SW White 13.56MHz Smart Card Reader			✓	
SX-RK-SB Black 13.56MHz Smart Card Reader with Keypad	✓		✓	
SX-RK-SW White 13.56MHz Smart Card Reader with Keypad	✓		✓	

Wallplate Readers

Wallplate Reader	117 x 75x 18mm (4.61 x 2.95 x 0.71")			
	Keypad	125kHz	MIFARE/ DESFire/ NFC	Bluetooth® Technology
SX-DRD-XB Black Smart Card Reader		✓	✓	
SX-DRK-XB Black Smart Card Reader with Keypad	✓	✓	✓	
SX-DRK-XB-BT Black Smart Card Reader with Keypad and Bluetooth® Wireless Technology	✓	✓	✓	✓
SX-DRK-XW-BT White Smart Card Reader with Keypad and Bluetooth® Wireless Technology	✓	✓	✓	✓
SX-RD-XB Black 13.56MHz Smart Card Reader			✓	
SX-RD-XW White 13.56MHz Smart Card Reader			✓	
SX-RK-XB Black 13.56MHz Smart Card Reader with Keypad	✓		✓	
SX-RK-XW White 13.56MHz Smart Card Reader with Keypad	✓		✓	

Mini Readers

Mini Reader	85 x 46 x 17mm (3.35 x 1.81 x 0.67")			
	Keypad	125kHz	MIFARE/ DESFire/ NFC	Bluetooth® Technology
SX-RD-MB Black 13.56MHz Smart Card Reader			✓	
SX-RD-MW White 13.56MHz Smart Card Reader			✓	
SX-RD-MB-BT Black 13.56MHz Smart Card Reader with Bluetooth® Wireless Technology			✓	✓
SX-RD-MW-BT White 13.56MHz Smart Card Reader with Bluetooth® Wireless Technology			✓	✓
SX-DRD-MB-BT Black Smart Card Reader with Bluetooth® Wireless Technology		✓	✓	✓

Multitechnology reader with 3.5 m Pigtail*

Sleek and stylish, and with a range of optional features, the Schneider Electric Multi-Technology Reader with 3.5m Pigtail series has a solution for everyone. With a long 3.5m (11.5') connector cable for quicker installation, this series is available in three sizes, with keypad options and multiple card capabilities, so you can select the model to fit your needs.

Mullion Reader with 3.5m Pigtail

	Keypad	125kHz	MIFARE/ DESFire/ NFC	Bluetooth® Technology
SX-DRK-SB-BT-L Black Mullion Smart Card Reader with Keypad and Bluetooth® Wireless Technology	✓	✓	✓	✓
SX-RD-SB-BT-L Black 13.56MHz Mullion Smart Card Reader with Bluetooth® Wireless Technology			✓	✓
SX-RK-SB-L Black 13.56MHz Mullion Smart Card Reader with Keypad	✓		✓	
SX-RD-SB-L Black 13.56MHz Mullion Smart Card Reader			✓	

Wallplate Reader with 3.5m Pigtail

SX-DRK-XB-BT-L Black Wallplate Smart Card Reader with Keypad and Bluetooth® Wireless Technology	✓	✓	✓	✓

Mini Reader with 3.5m Pigtail

SX-RD-MB-BT-L Black 13.56MHz Mini Smart Card Reader with Bluetooth® Wireless Technology			✓	✓

Technical Specifications

Power Supply

Operating Voltage	12VDC (9.5 to 14VDC)
Operating Current	Mullion Reader: 254mA (Peak, Reading) Wallplate Reader: 298mA (Peak, Reading) Mini Reader: 203mA (Peak, Reading)

*Available in Non-UL countries only

Technical Specifications

Communications

Card Read Range	MIFARE 60mm (2.36") * DESFire EV1 ISO 15mm (0.6") * 125kHz Clamshell 40mm (1.57") †
Tag Read Range	MIFARE 30mm (1.2") * DESFire EV1 6mm (0.23") * 125kHz 25mm (0.98") †
Wiegand Interface	Multiple format 26 or 34 Bit data 0 and data 1, card defined
Frequency	13.56 MHz ISO/IEC 14443 Type A * 125KHz pulse width modulated †
Multi Conductor Cable	Wiegand: 22Awg alpha 5196, 5198, 18Awg alpha 5386, 5388. Max Distance 150m (492ft) Module comms/RS485: Belden 9842 or equivalent. Max distance 900m (3000ft)
OSDP Communication	OSDP standard 2.1.5 with Secure Channel Protocol ** / ***

Bluetooth® Wireless Technology

Bluetooth® Read Range	Proximity mode: up to 0.5m (1.6ft) Configurable ** Action unlock (shake): up to 5m (16.4ft) Configurable **
Bluetooth® Electronic Credential Transmission Technology	NRF8001 Bluetooth® version 4.0 compliant Proprietary data exchange protocol. AES128 Encrypted Reader App Version: 1.04.175 and above Credentials can be distinguished by unique site code and card number
Bluetooth® Wireless Device	Security Expert Mobile 1.0.x

NFC

NFC Read Range	Up to 60mm ***
NFC (Near-field communication) electronic credential transmission technology	Android 4.4 or above, with phones which support ISO7816-4 Proprietary Secured DESFire credential Credential is AES-256 (NIST certified AES algorithm) Reader App Version: 1.04.175 and above Credentials can be distinguished by unique site code and card number
NFC Wireless Device	Security Expert Mobile 1.0.x

Operating Conditions

Environment IP Rating	IP65
Operating Temperature	UL/ULC -35° to 66°C (-31° to 151°F) : EU EN -40° to 70°C (-40° to 158°F)
Storage Temperature	-10˚ to 85˚C (14˚ to 185˚F)
Mean Time Between Failures (MTBF)	520,834 hours (calculated using RFD 2000 (UTE C 80-810) Standard)

Dimensions

Reader Dimensions (H x W x D)	Mullion Reader: 117 x 46 x 18mm (4.61 x 1.81 x 0.71") Wallplate Reader: 117 x 75x 18mm (4.61 x 2.95 x 0.71") Mini Reader: 85 x 46 x 17mm (3.35 x 1.81 x 0.67")

Reader Weights

Reader Weights	Net Weight	Gross Weight
Mullion Reader	110g (3.9oz)	130g (4.6oz)
Mullion Reader 3.5m	270g (9.5oz)	350g (12.3oz)
Wallplate Reader	160g (5.6oz)	190g (6.7oz)
Wallplate Reader 3.5m	320g (11.3oz)	390g (13.8oz)
Mini Reader	80g (2.8oz)	100g (3.5oz)
Mini Reader 3.5m	240g (8.5oz)	300g (10.6oz)

* Applies to MIFARE/DESFire and MultiTechnology models only
† Applies to 125kHz and MultiTechnology models only
** Applies to Bluetooth® wireless technology enabled models only
*** Applies to NFC capable models only

Security Expert Credentials

Mobile Credentials	Fast Track Credentials	Made-to-Order Credentials	Encoder Client
Virtual Credentials	Plug & Play Credentials	Customer/Site Specific Credentials	Credentials On-Demand
• **Peace of Mind** with end-to-end encryption • **Streamline** credential management with a simple and more cost-effective approach with our mobile credential portal • **Convenient** user experience by enabling card-free mobile access	• **Peace of Mind** with end-to-end encryption • **Save Time** with simplified ordering process without tracking card info • **Plug & Play** preprogrammed credentials for most common applications	• **Peace of Mind** with end-to-end encryption • **Simplified Reordering** process with CP# laveling on credentials • **Custom Programming** to meet site specific application and security needs	• **Peace of Mind** with end-to-end encryption • **Locally Encode** credentials to quickly replenish low stock • **Custom Programming** to meet site specific application and security needs
Factory Managed	Factory Managed	Factory Managed	Customer Managed

Mobile Credentials
Product Code: SX-MCR

Use your smartphone or mobile device as your access credential for maximum convenience using Bluetooth®, NFC, or Shake to Unlock. With support for most modern iOS and Android devices, you can present a mobile credential to a reader to unlock the door. The mobile credential is associated to a user record in SP-C-WEB or Security Expert and authenticated by a secure cloud based server.

Fast Track Credentials

As part of the ISO card offering from Security Expert, we also offer a simple and convenient smart card RFID solution. EcoStruxure Security Expert Fast Track Credentials help system integrators who want to save time ordering cards by removing order complexity and providing faster delivery times with Made-to-Stock cards. Communications and other technical specifications are the same as listed above.

Dimensions	EcoStruxure Security Expert Fast Track Credentials (MIFARE DESFire EV2)
Ordering Code	SX-ISO-FT-2K (2KB memory) SX-ISO-FT-4K (4KB memory)
Technology	
MIFARE DESFire (13.56MHz)	✓
MIFARE (13.56MHz)	✗
125kHz	✗

Schneider Electric ISO Graphic Printable Card
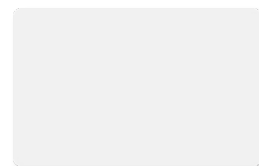
The ISO Graphic Printable Card provides a complete multi-technology smart card RFID solution. Available with either 125kHz or 13.56MHz technology, or as a multi technology card that combines both capabilities, delivering maximum compatibility while providing a path forward to the latest technology. Generic Wiegand output provides flexibility and seamless integration with any access control solution.

Technical Specifications

	ISO Graphic Printable MIFARE DESFire EV2	ISO Graphic Printable MIFARE DESFire / 125kHz	ISO Graphic Printable MIFARE	ISO Graphic Printable MIFARE / 125kHz HID	ISO Graphic Printable 125kHz
Ordering Code	SX-ISO-DF-2K SX-ISO-DF-4K SX-ISO-DF-8K	SX-ISO-DF-LF	SX-ISO-MF	SX-ISO-MF-HID	SX-ISO-LF
Technology					
MIFARE DESFire	✓	✓	✗	✗	✗
MIFARE	✗	✗	✓	✓	✗
125kHz	✗	✓	✗	✓	✓
Operating Frequency					
13.56MHz	✓	✓	✓	✓	✗
125kHz	✗	✓	✗	✓	✓
EEPROM Memory Conditions					
Memory	2KB / 4KB / 8KB	2KB	1KB	1KB	363 Bits
Number of Applications	Unlimited	28	N/A	N/A	N/A
Files per Application	32	32	N/A	N/A	N/A
Number of Sectors	N/A	N/A	16	16	N/A
Write Endurance	500,000	500,000	200,000	200,000	100,000
Communications					
RF Interface	ISO/IEC 14443A-4	ISO/IEC 14443A-4	ISO/IEC 14443A-3	ISO/IEC 14443A-3	ISO/IEC 11784/11785
Baud Rate	848 kbit/s	848 kbit/s	106 kbit/s	106 kbit/s	106 kbit/s
Typical Maximum Read Range *	15mm (0.6")	40mm (1.57")	60mm (2.36")	60mm (2.36")	40mm (1.57")
Common Criteria Certification					
Compliance	EAL5+	EAL4+	✗	✗	✗
Write Endurance	500,000	500,000	200,000	200,000	100,000
Features					
Card Construction	Thin, flexible white high gloss polyvinyl chloride (PVC) laminate				
Card Marking	Laser engraving (optional)				
Programming	Factory or field				
Dimensions					
Dimensions	85.7 x 54.0 x 0.76 mm (3.375 x 2.125 x 0.3")				
Weight	6g (0.20oz)				
Operating Conditions					
Operating Temperature	-40° to 50°C (-40° to 122°F)				
Operating Humidity	5%-95% Non-condensing				

Schneider Electric Proximity Key Tag

The Schneider Electric Proximity Key Tag provides a complete multi technology smart RFID solution. Available with 125kHz or 13.56MHz technology, or as a multi technology tag combining both, it delivers maximum compatibility while providing a path forward to the latest technology.

An extremely durable compact design offers the ultimate in reliability and convenience, while the IP68 rating means these tags are resistant to heat, pressure and chemicals, making them suitable for the harshest environments.

Technical Specifications

	MIFARE DESFire EV2	MIFARE	MIFARE / 125kHz HID	125kHz
Ordering Code	SX-TAG-DF-B	SX-TAG-MF-B SX-TAG-MF-W	SX-TAG-MF-HID	SX-TAG-LF
Technology				
MIFARE DESFire	✓	✕	✕	✕
MIFARE	✕	✓	✓	✕
125kHz	✕	✕	✓	✓
Operating Frequency				
13.56MHz	✓	✓	✓	✕
125kHz	✕	✕	✓	✓
EEPROM Memory				
Memory	2KB	1KB	1KB	363 Bits
Number of Applications	Unlimited	N/A	N/A	N/A
Files per Application	32	N/A	N/A	N/A
Number of Sectors	N/A	16	16	N/A
Write Endurance	500,000	200,000	200,000	100,000

Technical Specifications

	MIFARE DESFire EV2	MIFARE	MIFARE / 125kHz HID	125kHz
Communications				
RF Interface	ISO/IEC 14443A-4	ISO/IEC 14443A-3	ISO/IEC 14443A-3	ISO/IEC 11784/11785
Baud Rate	848 kbit/s	106 kbit/s	106 kbit/s	106 kbit/s
Typical Maximum Read Range *	6mm (0.23")	30mm (1.2")	30mm (1.2")	25mm (0.98")
Common Criteria Certification				
Compliance	EAL5+	✕	✕	✕
Features				
Tag Construction	Thin PA6 overmolded plastic			
Tag Marking	Laser engraving (optional)			
Programming	Factory or field			
Dimensions				
Dimensions	45 x 30 x 2.4 mm (1.77 x 1.18 x 0.093")			
Weight	3g (0.10oz)			
Operating Conditions				
Operating Temperature	-40˚ to 85˚C (-40˚ to 185˚F)			
Storage Temperature	-35˚ to 85˚C (-31˚ to 185˚F)			
Environmental Rating	IP68			

Encoder Client

Product Code: Please contact local sales team for the software package

The Encoder Client is a free software application that allows users to encode unprogrammed credentials for use with their Schneider Electric Multi-Technology Readers. For more information regarding the Encoder Client software please refer to the User Guide available on The Schneider Electric Exchange.

Desktop Encoder with USB Connection

Product Code: PRX-ENC-DT

Featuring 13.56MHz contactless technology and NFC, the Proximity Card Encoder enables on-site encoding of MIFARE/DESFire proximity cards and tags. With its compact design, the smart card encoder connects to a computer via USB port and installs as a plug-and-play device making it versatile and easy to use.

Technical Specifications

Supported Cards	MIFARE (Classic, Ultralight, Ultralight C, MIFARE PLUS, DESFire, DESFire EV1 2/4/8k), CD21, NFC Forum Tag types 1/2/3/4
Data Transfer Rate	106, 212, 424, or 848 kbps, depending on card IC
Antenna	Integrated
PC/SC Driver	PC/SC specification ver. 2.01.14 for: Windows 7/8/ 8.1/10 (32 and 64 Bit) Windows Server 2003/2008/2012 MacOS 10.10.x,10.11.x, 10.12.x Linux 2.6.x (32 and 64 bit) Android 4.0 and higher
Software	PC/SC API
Power Supply	Bus-powered USB
Power Consumption	50mA, excluding card
Dimensions (H x W x D)	91 x 75 x 12mm (3.583 x 2.953 x 0.472")

Weight	44g (1.5oz)
Operating Temperature	0 ° to 50 °C (32 ° to 122 °F)
Storage Temperature	-25 ° to 85 °C (-4 ° to 140 °F)
Humidity	Up to 95% RH (non condensing))
MTBF	~10M hours
Connector	1.5m USB cable with USB type A connector
Status Indicator	LED
Firmware	SmartOS
Firmware In-Field Up-gradable	Yes
Systems/ Standards	USB 2.0 Full Speed, CCID, Microsoft, WHQL
Regulatory/ Environmental	CE, FCC, UL94, UL60950, VCCI, RFLJ, RoHS2, REACH, WEEE

Encoder Credits

Product Code: PRX- ENC-100 Encoder Credits (100 units)

You will need sufficient encoding credits for the number of credentials you intend to encode. When ordering additional credits please ensure to fill out and attach the Encoder Client Software Form available on The Schneider Electric Exchange.

Blank Credentials

The following unprogrammed cards can be encoded with the Encoder Client:

SX-ISO-DF-2K-BLANK	ISO Card DESFire EV2 (EV2/2K) no programming
SX-ISO-DF-4K-BLANK	ISO Card DESFire EV2 (EV2/4K) no programming
SX_ISO-DF-8K-BLANK	ISO Card DESFire EV2 (EV2/8K) no programming
SX-ISO-MF-BLANK	ISO Card Mifare (S50/1K) no programming
SX-TAG-MF-B-BLANK	Key Tag Mifare (S50/1K) no programming
SX-TAG-DF-B-BLANK	Key Tag Mifare DESfire EV2/2K no programing

Schneider Electric HID Range

| 20 | 20K | 40 | 40K |

Schneider Electric HID® Signo™ Readers

HIDSigno™is the new signature line of physical access control readers from HID Global that are brand labeled specifically for Schneider Electric.

The OSDP protocol improves interoperability and adds scalability, flexibility, and ease of implementation. OSDP with Secure Channel offers additional security with AES-128 encryption and predefined key management and authentication.

Out-of-the-box support for OSDP Secure Channel Protocol for encrypted bidirectional communication between the reader and door controller. Delivering proven interoperability through rigorous third-party testing, HID Signo Readers are SIA OSDP Verified.

	Application	Connection	Upgrade/Transition (Seos +iClass+Prox)	Greenfield (Seos Only)
	Signo 20 - Ideal for mounting on narrow door frames, turn-stiles, elevators or anywhere a small footprint is desired	Pigtail	20NKS00000000SE01	20NKS0100001HSE01
		Terminal Strip	20TKS00000000SE01	20TKS0100001HSE01
	Signo 20K–Ideal for mounting on narrow door frames, turn-stiles, elevators or anywhere a small footprint is desired, supports keypad	Pigtail	20KNKS00000000SE01	20KNKS0100001HSE01
		Terminal Strip	20KTKS00000000SE01	20KTKS0100001HSE01
	Signo 40–Ideal for mounting on classic single gang back boxes	Pigtail	40NKS00000000SE01	40NKS0100001HSE01
		Terminal Strip	40TKS00000000SE01	40TKS0100001HSE01
	Signo 40K–Ideal for mounting on classic single gang back boxes, supports keypad	Pigtail	40KNKS00000000SE01	40KNKS0100001HSE01
		Terminal Strip	40KTKS00000000SE01	40KTKS0100001HSE01

Additional HID Signo Reader Models

Schneider Electric Format/ MOB	Signo Part #	Signo part Description
Andover 37-Bit Indala Readers	40NKS0000038ASE01	HID Signo 40, pigtail, Standard profile, Andover 37 format
	20NKS0000038ASE01	HID Signo 20, pigtail, Standard profile, Andover 37 format
	40KNKS0000038BSE01	HID Signo 40K, keypad & pigtail, Standard profile Andover 37 format
	40KNKS0000038CSE01	HID Signo 40K, keypad & pigtail, Standard profile Andover 37 format, 8 Bit, CSN 32 Bit
	40KNKS0000038DSE01	HID Signo 40K, keypad & pigtail, Standard profile Andover 37 format, 26 Bit
CSI Indala Readers	40KNKS0000038FSE01	HID Signo 40K, keypad & pigtail, Standard profile, CSI format
	20NKS0000038ESE01	HID Signo 20, pigtail, Standard profile, CSI format
	40NKS0000038ESE01	HID Signo 40, pigtail, Standard profile, CSI format
ESMI 27-Bit Indala Readers	20KNKS0000039WSE01	HID Signo 20K, keypad & pigtail, Standard profile, ESMI 27 format
	20NKS0000039WSE01	HID Signo 20, pigtail, Standard profile, ESMI 27 format
Norway Mobile Enabled Readers	40KTKS0000041PSE01	HID Signo 40K, terminal, Standard profile ESMI format, mobile enabled MOB0145
	40KTKS0000041RSE01	HID Signo 40K, keypad & terminal, Standard profile Security Expert format, mobile enabled MOB0145
	20NKS000003A0SE01	HID Signo 20, pigtail, Standard profile, mobile enabled MOB0145
	20KNKS000003A0SE01	HID Signo 20K, keypad & pigtail, Standard profile, mobile enabled MOB0145
Finland Mobile Enabled Readers	20NKS000008M2SE01	HID Signo 20, pigtail, Standard profile, ESMI 27 format, mobile enabled MOB00028
	40KNKS000008M2SE01	HID Signo 40K, keypad & pigtail, Standard profile, ESMI 27 format, mobile enabled MOB00028
	20TKS000008M2SE01	HID Signo 20, terminal, Standard profile, ESMI 27 format, mobile enabled MOB00028
	40KNKS0000099FSE01	HID Signo 40K, keypad & pigtail, Standard profile, ESMI 29 format, mobile enabled MOB00028
	20NKS0000099FSE01	HID Signo 20, pigtail, Standard profile, ESMI 29 format, mobile enabled MOB00028

HID Credentials

To go along with HID Signo readers Schneider Electric offers the latest credential technology from HID with both iClass high frequency credentials and Seos top-tier security credentials for both greenfield (13.56MHz only) and migration projects (13.56MHz +125kHz)

|	Seos™	Seos + Prox	iClass	iClass + Prox
Base Part Number	5005 for 16K card 5006 for 8K card	5105 for 16K card 5106 for 8K card	200 Standard PVC 210 40% Polyester / PVC	212 40% Polyester / PVC
Frequently Ordered Part Number	5006PGGMN 5006PGGNN	5106RGGMNM 5105RGGMNN	2100PGGMN 2000PGGMN	2120BGGMNM 2120BGGMNM
Application				
Security Level	Top-Tier Security Multi-Application Credentials	Top-Tier Security Multi-Application Credentials	High Security contactless smart card credentials	High-frequency contactless smart card credentials
Project Type (Greenfield or Transition)	Single technology Cards good for new installations	Multi technology Cards to Support Secure Migrations	Single technology Cards for new installations	Multi technology Cards to Support Secure Migrations
Operating Frequency				
13.56MHz	✓	✓	✓	✓
125kHz	✗	✓	✗	✓
EEPROM Memory				
Memory	2KB	1KB	1KB	363 Bits
Number of Applications	Unlimited	N/A	N/A	N/A
Files per Application	32	N/A	N/A	N/A
Number of Sectors	N/A	16	16	N/A
Write Endurance	500,000	200,000	200,000	100,000

Above table is not the complete list of HID credential part numbers offered by Schneider Electric. Please contact local sales for additional references availability.

Additional Products

Keypads
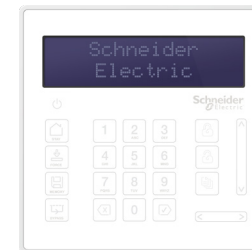
Security Expert Touch Sense LCD Keypad
Product Code: SX-KLCS-B (Black), SX-KLCS-W (White)

The Security Expert Touch Sense LCD Keypad provides a sleek, user friendly human interface to the Security Expert integrated system, providing seamless and powerful integration of access control, security and building automation.

In addition to sophisticated access features the keypad incorporates system monitoring and control. Authorized users are able to perform arming and disarming, monitor inputs, control outputs and manage user access, all from the convenience of the keypad.

Technical Specifications

Power Supply	
Operating Voltage	11.0VDC to 14VDC
Operating Current	60mA (95mA Max)
User Interface	
User Interface Display	Energy smart backlit LCD 16 x 2 alphanumeric display with enhanced viewing angle
User Interface Keypad	Combined 23 key capacitive touch keypad with 3 system status LEDs
Inputs and Outputs	
Inputs	2 standard or 4 using Input Duplex mode
Outputs	1 open collector (50mA Max) output. Programmable for all output functions. 3 system status LEDs 1 system beeper
Dimensions	
Dimensions	125 x 125 x 20mm (4.92 x 4.92 x 0.79")
Weight	192g (6.77oz)
Dimensions with Back Box Accessory	125 x 125 x 44mm (4.92 x 4.92 x 1.7")
Operating Conditions	
Operating Temperature	UL/ULC 0° to 49°C (32° to 120°F) : EU EN -10° to 55°C (14° to 131°F)
Storage Temperature	-10˚ to 85˚C (14˚ to 185˚F)
Humidity	0%-93% non-condensing, indoor use only (relative humidity)

Intercoms
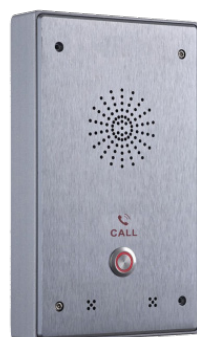
Security Expert Vandal Resistant VoIP Intercom with PoE
Product Code: SX-IPI

Tough, durable, and extremely robust, the Security Expert Vandal Resistant VoIP Intercom is designed to meet the harshest of environments. VoIP capability allows the Intercom to communicate with any VoIP enabled device, including smartphones, providing the ability to grant entry from virtually anywhere.

Technical Specifications

| Power Supply		
Operating Voltage		12VDC (9 -16VDC)
Operating Current		1A
Power over Ethernet		IEEE 802.3af Class 3
Communication		
Communication protocol		SIP 2.0(RFC-3261)
Speech flow	Protocols	RTP/SRTP
	Decoding	G.729 G.723 G.711 G.722 G.726 Codecs
	Audio Amplifier	2.5W
	Volume Control	Adjustable
	Full duplex speakerphone	Support (AEC)
Port	Recording output	One (3.5mm terminal block)
	Short circuit input	Two (3.5mm terminal block)
	Short circuit output	Two Form C relays (3.5mm terminal block) 24V DC 1A
	WAN port	10/100BASE-TX s Auto-MDIX, RJ-45
	LAN port	10/100BASE-TX s Auto-MDIX, RJ-45
Cables		CAT5 or better
Audio		
Microphone		Omnidirectional
Speaker		TY 4 ohm 3W
Environment		
Environmental IP Rating		IP65
Working temperature		-40° to 70° Celsius (-40° to 158° Fahrenheit)
Working humidity		10% to 95%
Storage temperature		-40° to 70° Celsius (-40° to 158° Fahrenheit)
Dimensions		
Overall dimensions		195 x 120 x 39mm (7.67 x 4.72 x 1.53")
Weight		960g (33.86oz)

Security Expert Vandal Resistant VoIP Intercom with Camera
Product Code: SX-IPI-C

Tough, durable, and extremely robust, the Security Expert Vandal Resistant VoIP Intercom is designed to meet the harshest of environments. VoIP capability allows the Intercom to communicate with any VoIP enabled device, including mobile phones, workstations and other intercoms, providing the ability to grant entry from virtually anywhere. Provides a live video feed that can be viewed from a remote monitoring station, from a web browser or from within a Security Expert or SP-C- WEB system.

Technical Specifications

Power Supply		
Operating Voltage		12VDC (9 -16VDC)
Operating Current		1A
Power over Ethernet		IEEE 802.3af Class 3
Communication		
Communication protocol		SIP 2.0(RFC-3261)
Speech flow	Protocols	RTP/SRTP
	Decoding	G.722 G.711U G.711A G.723.1 G.726-32 G.729AB Codecs
	Audio Amplifier	3W
	Volume Control	Adjustable
	Full duplex speakerphone	Support (AEC)
Port	Recording output	One (3.5mm terminal block)
	Short circuit input	One (3.5mm terminal block)
	Short circuit output	One Form C relay (3.5mm terminal block) 24V DC 1A
	WAN port	10/100BASE-TX s Auto-MDIX, RJ-45
Cables		CAT5 or better
Camera		
Resolution		960p (1280x960 pixels)
Viewing Angle		115° horizontal / 87° vertical
Frame Rate		30 fps
Audio		
Microphone		Omnidirectional
Speaker		TY 4 ohm 3W
Dimensions		
Wall-Mounted		223 x 130 x 74mm (8.77 x 5.11 x 2.91")
In-Wall		270 x 150 x 61mm (10.6 x 5.9 x 2.4")
Weight		960g (33.86oz)
Environment		
Environmental IP Rating		IP65
Working Temperature		-40° to 70° Celsius (-40° to 158° Fahrenheit)
Storage Temperature		-40° to 70° Celsius (-40° to 158° Fahrenheit)
Working Humidity		10% to 90%
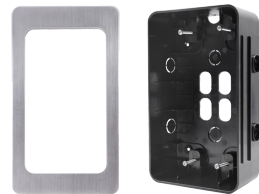
Security Expert Optional Flush Mount for SP-IPI-C Intercom
Product Code: SX-IPI-C-EF

The Security Expert Vandal Resistant VoIP Intercom with Camera comes as a standard surface mounted product. An optional flush mount kit is available for flush mounted installations. The mount kit includes a décor frame and brick box.

Technical Specifications

Model	SX-IPI-C-EF
Compatible Models	SX-IPI-C
Dimensions	Frame Panel: 280x170x6mm Brick: 243x147x68mm
Materials	Frame Panel: Aluminum alloy Brick Box: ABS
Weight	Frame Panel: 389.5g Brick Box: 268.9g Screw: 36.7g

Receivers/transmitters
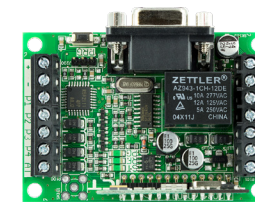
Wireless 433MHz Receiver
Product Code: RF-RCVR-433

The Wireless 433MHz Receiver provides a fast and simple integration of Security Expert 4 or 2 button remote transmitters into any alarm or access control system. The standalone functionality allows for easy, secure operation of gates or other access areas where convenience is required.

Technical Specifications

Model	RF-RCVR-433
Operating Voltage	12VDC
Operating Current	55mA
Receiver Type	Synthesized PLL
Demodulation	AM/ASK
Frequency	433.92MHz
Sensitivity	-121dBm
Input Impedance	50Ω
Output Code Combinations	10
Modulation	AM/ASK
Rated E.R.P	58 to 100mW
Range in Free Space	100-200m (328 to 656ft)
Operating Temperature	-20˚ to 70˚C (-4˚ to 158˚F)
Dimensions (L x W x H)	73 x 50 x 26.5mm (2.87 x 1.96 x 1.04")
Weight	56g (1.97oz)

Schneider Electric Wireless 433MHz Transmitter
Product Code: RF-REM2-433 / RF-REM4-433

The Schneider Electric Wireless 433MHz Transmitter is designed for long range wireless access control of garage doors or sliding gates. Each transmitter is compatible with most electronic access control systems, can function as a personal alarm device, and optionally comes with built-in proximity tag for standard door access. This high quality transmitter is hermetically sealed to protect against water and foreign substances. Delivering an impressive read range up to 200m (656ft) in open environments, it offers convenience and security with unmatched performance.

Technical Specifications

	Wireless 433MHz Schneider Electric Transmitter	Wireless 433MHz DESFire Transmitter	Wireless 433MHz MIFARE Transmitter	Wireless 433MHz HID26 Transmitter	Wireless 433MHz Transmitter
Ordering Information	RF-REM2-433-ICT RF-REM4-433-ICT	RF-REM2-433-DF RF-REM4-433-DF	RF-REM2-433-MF RF-REM4-433-MF	RF-REM2-433-HID26 RF-REM4-433-HID26	RF-REM2-433 RF-REM4-433
Technology					
Schneider Electric Format	✓	✗	✗	✗	✗
MIFARE DESFire	✗	✓	✗	✗	✗
MIFARE	✗	✗	✓	✗	✗
125kHz	✗	✗	✗	✓	✗
433.92MHz	✓	✓	✓	✓	✓
Features					
Buttons	2 or 4				
Supply	CR2032 3V				
Battery Life	12 to 24 months				
Current Consumption	15mA				
Frequency	433.92MHz				
Output Code Combinations	10				
Rated E.R.P	58 to 100mW				
Read Range in Free Space*	100 to 200m (328 to 656ft)				
Dimensions					
Dimensions	60 x 40 x 16 mm (2.36 x 1.57 x 0.62")				
Weight	24g (0.84oz)				
Operating Conditions					
Operating Temperature	-20˚ to 55˚C (-4˚ to 131˚F)				

Din rail enclosures

Schneider Electric's range of DIN rail enclosures combine simplicity and robust design to provide a flexible installation solution that is effortless to mount and maintain. The lockable multi-tier enclosure is ideal for multiple mounting configurations, and features two full sized product bays. The DIN rail enclosures not only look great, it also enable you to get the most out of your Security Expert DIN rail hardware.

Din Rail 1x2 Enclosure

Ordering Information	
SX-DIN-12	DIN Rail Enclosure 1 x 2 Wall-Mount Metal Cabinet
Communication	
Cable Knockouts	2 conduit cable knockouts 1 knockout for IEC mains voltage connector
Cable Tie Points	12 points for field wiring
Cables	Supports the Fused Panel Mount IEC C14 Socket and the Quick Connect RS-485 Daisy Chain Cable
Earthing	
Wire Looms	Bond wire looms included for earth connection to the enclosure
Accessories	
Tamper	Dedicated hardware tamper input
Lock	Cam lock
Environmental IP Rating	
IP Rating	IP50
Dimensions	
Finger Trunking Space	25mm
Dimensions (H x W x D)	400 x 280 x 102mm (15.7 x 11 x 4")
Weight	4.8kg (8.8lb)

Din Rail 2 x 4 Enclosure

Ordering Information	
SX-DIN-24	DIN Rail Enclosure 2 x 4 Wall-Mount Metal Cabinet
Communication	
Cable Knockouts	13 conduit cable knockouts 1 knockout for IEC mains voltage connector
Cable Tie Points	26 points for field wiring
Cables	Supports the Fused Panel Mount IEC C14 Socket and the Quick Connect RS-485 Daisy Chain Cable
Earthing	
Wire Looms	Bond wire looms included for earth connection to the enclosure
Accessories	
Tamper	Dedicated hardware tamper input
Lock	Cam lock
Environmental IP Rating	
IP Rating	IP50
Dimensions	
Finger Trunking Space	25mm
Dimensions (H x W x D)	712 x 433 x 100.3mm (28 x 17 x 3.94")
Weight	10.5kg (23.1lb)

Training Kit

Security Expert Training Kit
Product Code: SX-KIT-TRN

The Security Expert Training Kit includes everything you need to run through a facilitated training course, conduct a demonstration, or set up controlled testing.

All modules are mounted on a compact self-contained desktop console, providing clear visibility and access. The sturdy steel frame keeps wiring contained within the base while allowing convenient access to module connections, and integrated switches provide effortless control over the closing and opening of inputs.

What's Included?

- SP-C Security Expert Security Purpose Controller
- SP-PSU-4A Security Expert 4A Security Purpose Power Module
- SX-KLCS Security Expert Touch Sense LCD Keypad
- DESFire Mini Reader
- DESFire Mullion Reader with Keypad and NFC/Bluetooth
- 5 x DESFire EV1/2K ISO Proximity Cards
- 5 x MIFARE S50/1K ISO Proximity Cards

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