Security Expert 2 Door Mini Expander

The Security Expert 2 Door Mini Expander provides the interface of up to 4 reader inputs and 2 locking device outputs to the Security Expert system, an advanced technology security product providing seamless and powerful integration of access, security and building automation. The Door Expansion provides extensive hardware advancements that provide flexible access control, area control and alarm monitoring, and is designed for use with industry standard DIN Rail mounting or wall mounting.

Feature Highlights

- 2 reader ports configurable for either Wiegand or RS-485 reader operation

- Compact two-tier half DIN rail module design

- Connect 2 readers using the independent reader inputs or use the 2 reader operation to connect 4 readers providing dual entry and exit door connection

- Control up to 3 outputs per reader input with predefined configurations for instant connection (red LED, green LED and buzzer control)

- Support for intelligent reader tamper operation - the system will monitor the reader for reader keep-alive transmissions using the programmed protocol

- Offline functions including All Users, First 10 Users plus 150 Card Cache and No Users

- Fused and monitored reader power supply

- Over 40 Card Reader formats predefined for simple configuration, with additional formats added using the format builder or implemented directly using the firmware update function

- Designed for use with industry standard DIN Rail mounting and additional wall mounting feature

Card Reader Connection

The Door Expansion provides 2 reader ports, each of which can be independently configured for either Wiegand or RS-485 reader operation, allowing the connection of up to 4 devices controlling 2 doors.

Choose RS-485 readers for fast, flexible, secure communication, or Wiegand for compatibility with all standard access control systems. RS-485 readers provide the added benefits of being easier and more cost effective to wire and deploy and allow for direct integration with Security Expert systems enabling you to make changes on the fly once readers are installed. RS-485 also allows for longer cable runs and offers a simpler firmware update process.

Power Supply

Device power is supplied from a 12VDC input. Ultra low current requirements ensure cost effective power distribution.

Smaller Footprint

The compact module design takes up less valuable real estate to provide more control in less space.

Communication

Single RS-485 communication interface port used for all network communication functions and interconnection to other modules.

Upgradable Firmware

Utilizing the latest flash technology and high performance communication mediums, the firmware can be updated using the Loadit utility over the system module network.

Arming/Disarming

The Door Expansion allows a user to arm and disarm an area from an input when associated with a door:

- Deny access to a user based on the status of the area, thus reducing false alarms.

- Multi presentation of an access card can arm an area associated with the entry or exit direction of the door being accessed.

- Fail to arm programmable outputs can be configured to provide feedback in the event areas fail to arm when using card reading functions.

- Prevent access to a keypad using a card and PIN function, or allow card presentation to automatically login the user at the associated keypad.

Connectivity and System Expansion

Expanding the Security Expert system with local input and output from the Door Expansion allows for a convenient, cost effective expansion and the added benefit of dual functionality on door monitoring zones:

- 8 inputs can be used to perform any system alarm and automation functions. All 8 inputs are assigned functions that are processed by the Door Expansion for door control. Each function can be enabled individually.

- Address configuration of the Door Expansion is achieved using the address programming feature of the Security Expert System Controller.

- Unused reader control outputs can be used within the system as normal outputs to control relays, lighting and automation.

Technical Specifications

The following specifications are important and vital to the correct operation of this product. Failure to adhere to the specifications will result in any warranty or guarantee that was provided becoming null and void.

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	
Standard Mode	2 Wiegand or clock data readers providing one entry/exit door or two entry/exit only doors
Multiplex Mode	4 Wiegand readers (connected in multiplex mode) providing any combination of entry or exit for two doors
RS-485 Standard Mode **	Up to 4 RS-485 capable readers (2 per port) providing either entry/exit on 2 doors or a combination of entry or exit on 4 doors.
Outputs	
Lock Outputs	2 FORM C Relay Outputs - 7A N.O/N.C. at 30 VAC/DC resistive/inductive
PGM Outputs	6 (50mA Max) Open Collector
Inputs	
Zone 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")
Weight	207g (7.3oz)
Temperature	
Operating	UL/ULc 0˚ to 49˚C (32˚ to 120˚F) : EU EN -10˚ to 55˚C (14˚ to 131˚F)
Storage	-10˚- 85˚C (14˚ - 185˚F)
Humidity	0%-93% non-condensing, indoor use only (relative humidity)

* The Total Combined Current refers to the current that will be drawn from the external power supply to supply the Reader Expander and any devices connected to the Expander's outputs. The Auxiliary outputs are directly connected via thermal resettable fuses to the N+ N- input terminals, and the maximum current is governed by the trip level of these fuses.

** Each reader port supports either Wiegand or RS485 operation but not both at the same time. If combining Wiegand and RS-485 technologies, they must be connected on separate ports.

It is important that the unit is installed in a dry cool location that is not affected by humidity. Do not locate the unit in air conditioning or a boiler room that can exceed the temperature or humidity specifications. Schneider Electric continually strives to increase the performance of its products. As a result these specifications may change without notice. We recommend consulting our website for the latest documentation and product information.

Ordering Information

SP-MRDM2	Security Expert 2 Door Mini Expander

Schneider Electric | Building Business   www.schneider-electric.com/buildings

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Regulatory Notices

Federal Communications Commission (FCC)

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

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

Industry Canada

ICES-003

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

CAN ICES-3 (A)/NMB-3(A)

RCM (Australian Communications and Media Authority (ACMA))

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

CE – Compliance with European Union (EU)

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

This equipment complies with the rules of the Official Journal of the European Union for governing the Self Declaration of the CE Marking for the European Union as specified in the above directive(s).

UL/ULC (Underwriters Laboratories)

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