

## FoxSec access door controller

FoxSec® products provide a complete and fully featured hardware/firmware infrastructure for access control and intruder alarm systems.

The hardware/firmware infrastructure for access control and intruder alarm systems.







The FS8302 Door controller connects 4 card readers via Wiegand or clock-and-data (magnetic card) interface controlling either one or two doors. The FS8302 features on-board memory, allowing changes to be downloaded via the RS485 network. On-board dataline has optical isolation and on-board 24VDC power output can be ordered separately.

The FS8302 is compatible with FS9131 and/or FS9000/FS9002 hardware through a RS-485 network. The FS9131 and FS9000/FS9002, in turn, communicates with the system server (FoxSec 1850, FoxSec Net+ or FoxSec WEB) via industry standard TCP/IP protocol over 10Mbps Ethernet or the Internet.

Internal memory stores up to 7600 users and last 2000 events. This architecture minimizes the impact on corporate LANs by using only one IP address for FS9131 doors panel or FS9000/FS9002 main panel and by handling low-level transactions on the RS485 network.

The access door controller was developed in a way that it is very durable and has many different and flexible functions.

## FS8302 Features

-  RS-485 data-line
-  Dedicated tamper input
-  Wiegand and magnetic stripe card reader support
-  Optional 24V lock power output
-  Metal case 251 x 292 x 90
-  Battery control and capacity test

## Features

Metal enclosure protects components from damage and tampering the device. Mount to any wall surface.

The unit should be installed indoors, inside a secure area, such as in IT or telecommunications room, utility closet or on a wall above suspended ceiling.

All screw terminal connectors  
One RS-485 connection to dataline

4 card reader inputs  
2 door status switch inputs  
2 REX button inputs

2 power outputs for electric locks (rated 1.5A @ 12 or 1A@ 24 VDC) (Optional 3A @ 12VDC, 0A @ 24VDC) \*\*  
(Optional 2A @ 12VDC and 1A @ 24VDC)\*\*  
4 non-latching output relays (2 for electric locks and 2 for other devices)  
(rated 2 x 5A (max500W) and 2 x 1A (max50W) @ 48 VDC)  
1 electronic fuse protected 1A 12VDC Power output for elevator module or other device

AC Power input  
1 Tamper switch input  
Door opened by key or door opened too long output\*  
\*Additional relay (1 and 2) outputs can be configured as a fail output  
\*\*Higher current power MUST be ordered separately

The user should supply 12 VDC to connected interfaces. Separate supervised DC supplies with battery back-up are recommended for door locking or relay activated devices if consumption is exceeded

16-bit CPU Microcontroller, 16 MHz

2A output power (electric lock, external device etc) electronic fuse  
1.1A card readers electronic fuse  
100mA input protection electronic fuse (each input has separate fuse)  
Transformer inside thermal fuse 130°C 2.2A@16VAC

32 k Flash memory inside microcontroller  
128k EEPROM memory non-volatile  
32k FRAM memory non-volatile

## Specifications

### Dimensions

251W x 292H x 90D mm without lid  
(10.0" x 11.5" x 3.54")

### Weight

2.70kg (95 oz) without battery

### Casing Material

Metal

### Power Supply Requirements

100-240VAC 50/60Hz power transformer  
Main fuse 500mA  
Power transformer output supply 16V  
Power transformer max output current 2.2A  
Controller current 120mA @ 12VDC  
PWM (Pulse-width modulation) regulator on-board  
Recommended: Factory installed power transformer.  
Battery backup input surge protection and AC Fail is fully monitored in controller. Separate supervised DC supply with battery back-up recommended if power supply max consumption exceeds

### Operatin Environment

Indoors or customer-supplied NEMA-4 Enclosure

### Temperature

-10° to 40° C (-14° to 104° F)

### Humidity

0% to 80% relative, non condensing

### Materials

RoHS compliant 2002/95/EC

### Communication Ports

1x RS-485- two wire with optical isolation

### Cable Distance

RS-485- 1500m (4900 feet), using shielded twisted pair cable (Cat5e, Cat6e)  
Input Circuits- 300m (500 feet), using 4 x 0.22 cable  
Output Circuits- 300m (500 feet)  
Card reader- 50m (165 feet) 2 x 0.5+4 x 0.22+S  
Minimum wire gauge depends on cable length and current requirements

### Protection

4000 - VPEAK Isolation  
2500- VRMS isolation up to 60sec  
Human Body Model Up to 16kV (ESD)  
Charged Device Model Up to 1kV (ESD)  
Machine Model Up to 200V (ESD)  
Thermal Shutdown Protection  
Onboard DC-DC converter isolation Up to 3kVDC