# FoxSec access door controller

FoxSec<sup>®</sup> 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 FS7301 Door controller connects 2 card readers via Wiegand or clock-and-data (magnetic card) interface controlling either one or two doors. The FS7301 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 FS7301 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 1850 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.

## FS7301 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 s hould 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

2 card reader inputs

1 door status switch inputs

1 REX button inputs

1 power outputs for electric locks (rated 1.5A @ 12 or 1A@ 24 VDC) (Optional 3A @ 12VDC, OA @ 24VDC) \*\* (Optional 2A @ 12VDC and 1A @ 24VDC)\*\* 2 non-latching output relays (1 for electric locks and 1 for other devices) (rated 1 x 5A (max500W) and 1 x 1A (max50W) @ 48 VDC)

1 electronical 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 sepparately

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-with 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