

## FoxSec 16-zone expansion module

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







The FS9216 zone expansion module has up to 16 supervised inputs and 2 or 8 output relays.

Each input monitors and reports normal, off-normal and alarm states.

The FS9216 connects to FS9000/FS9002, and FS9010 main panels via CANbus.

FS9216 features backup battery capacity test, LED indicators for various statuses of onboard systems and easy to use screw terminals for all PCB connections.

### FS9216 Features

-  16 supervised zone inputs  
All zone input EOL resistors are freely programmable
-  2 or 8 relay outputs  
Relay outputs are programmable
-  Status LED's for easy visual diagnostics of troubles, zone states etc.
-  Metal case 250 x 290 x 80
-  Power supply unit 16VAC, 1.4A
-  Battery control and capacity test

## Features

The unit should be installed indoors, near secured area such as in the IT or telecommunications room, utility closet or server room

One CANbus connection to dataline

16 supervised zone inputs  
2 or 8 relay outputs onboard  
1 enclosure door tamper input

1 electrical fuse protected 1A 12VDC Power output for sensors power

AC Power input  
One Tamper input

16-bit CPU Microcontroller, 16 MHz  
500mA output power (for sensors) electronic fuse  
100mA input protection electronic fuse (each input has separate fuse)  
Transformer inside thermal fuse 130° C 2.2A@16VAC  
16 k Flash memory inside microcontroller

## Specifications

### Dimensions

250W x 290H x 80D mm without lid  
(10.0" x 11.5" 3.54")

### Weight

2.70kg (95 oz) without battery

### Casing Material

Metal

### Power Supply Requirements 1

240V AC 50/60Hz power transformer  
Main fuse 315 mA  
Power transformer output supply 16V AC  
Power transformer max output current 40VA  
Expansion module current 400mA @ 13.7VDC  
PWM (Pulse-width modulation) regulator on-board  
PCB power consumption 80mA  
PCB relay power consumption 10mA (1 relay)

### Operating 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

1 x CANbus- two wire

### Cable Distance

CANbus- 1500m (4900 feet), using shielded twisted pair cable (Cat5e, Cat6e)  
Input Circuits- 150m (500 feet), using 4 x 0.22 cable  
Output Circuits- 150m (500 feet), using 2 x 0.5 + 2 x 0.22 cable  
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