

# ZX835 TriTech PIR Detector (10.525 GHz)

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Invented for life



- ▶ Point of protection intrusion transponder (POPIT)
- ▶ Tamper switch
- ▶ Two PIR sensitivity settings
- ▶ Four mounting options
- ▶ Immunity to certain animals, insects, and drafts

The ZX835 TriTech® Microwave Passive Infrared (PIR) Intrusion Detector only sends an alarm signal when criteria activates the PIR and the microwave technologies.

## Functions

### Tamper Switch

The ZX835 sends a tamper condition signal through the POPEX data bus if the cover is removed.

### Supervised Microwave and PIR Technologies

- **PIR and microwave:** The detector regularly performs an internal self-test to check the microwave and PIR subsystems. If the microwave or PIR subsystem fails, the detector performs another test. If either subsystem fails the second test, the light emitting diodes (LEDs) flash red, indicating that you should replace the detector. The ZX835 sends a trouble signal through the POPEX data bus.
- **Default:** The PIR circuitry provides single technology coverage if the microwave subsystem fails.

### PIR Sensitivity Settings

**Standard sensitivity:** Minimizes false alarms and tolerates temperature extremes.

**Intermediate sensitivity:** Appropriate for applications where an intruder moves through a small portion of the protected area. This setting tolerates normal environments and is appropriate to use when the ZX835 is mounted higher than 2 m (6.5 ft). Do not use this setting in areas with pets or animals.

### Temperature Compensation

The PIR sensitivity increases and decreases according to ambient temperature to detect human body heat and avoid false alarms.

### False Alarm Immunity

The ZX835 does not detect the following animals:

- One dog up to 45 kg (100 lb)
- Two 27 kg (60 lb) dogs
- Multiple small rodents, such as rats
- Up to ten cats
- Randomly flying birds

The sealed optical chamber provides immunity to drafts or in-sects. The microwave processing identifies and ignores repetitive false alarm sources and adjusts to background noise, such as the vibration from fluorescent lights.

## Certifications and approvals

FCC

For UL Certified installations, 0°C to +49°C (+32°F to +120°F).

Region	Certification
USA	UL ANSR: Intrusion Detection Units (UL639)

Radio Frequency Interference (RFI) Immunity:

No alarm or setup on critical frequencies in the range from 26 MHz to 950 MHz at 50 V/m.

## Installation/configuration notes

### Mounting Considerations

The mounting height range is 1.8 m to 2.4 m (6 ft to 8 ft). The recommended height is 2 m (6.5 ft). Surface or corner mount the ZX835 to a standard single-gang electrical box or use the B328, B335, or B800 Brackets.

The ZX835 tolerates changes in temperature and light from heaters, air conditioners, drafts, sunlight, lightning, and moving headlights. However, the ZX835 can respond to movement in its field-of-view or rapid temperature changes. Point the ZX835 away from windows, ceiling fans, and high-traffic roads.

### Compatibility Information

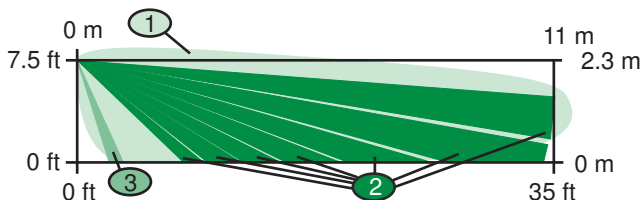
**Control Panels** D7212, D7212B1, D8112, D9112, D9112B1, D9412, and G Series

The control panel must have a D8125 POPEX Zone Expansion Module.



Top View Broad: 11 m x 11 m (35 ft x 35 ft)

- 1 Microwave coverage area      2 PIR coverage pattern



Side View Broad: 11 m x 11 m (35 ft x 35 ft)

- 1 Microwave coverage area      2 PIR coverage pattern  
3 Look-down zone

## Technical specifications

### Enclosure Design

Dimensions:	12.7 cm x 7.1 cm x 5.6 cm (5 in. x 2.8 in. x 2.2 in.)
Material:	High impact ABS plastic enclosure.

### Environmental Considerations

Storage and Operating Temperature:	-40°C to +49°C (-40°F to +120°F)
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## Mounting Considerations

Internal Lens Pointability:

+2° to -10° vertical, ±10° horizontal

## Outputs

Alarm:	Sends the alarm signal through the POPEX data bus.
Tamper:	Sends a tamper signal through the POPEX data bus.
Trouble:	Sends a trouble signal through the POPEX data bus.

## Power Requirements

Current Draw:	16 mA nominal at 12 VDC, 35 mA with LEDs on
Voltage:	9 VDC to 15 VDC

## Trademarks

TriTech® is a registered trademark of Bosch Security Systems in the United States.

## Ordering information

### ZX835 TriTech PIR Detector (10.525 GHz)

Provides 11 m x 11 m (35 ft x 35 ft) coverage, POPIT, tamper switch, two PIR sensitivity settings, four mounting options.

Order number **ZX835**

### Accessories

#### B335-3 Swiveling low-profile mount

Swiveling, low-profile, universal bracket for wall mounting. The vertical swivel range is +10° to -20°, while the horizontal swivel range is ±25°.

Order number **B335-3**

#### B338 Universal Ceiling-mount Bracket

Swiveling universal bracket for ceiling mounting. The vertical swivel range is +7° to -16°, while the horizontal swivel range is ±45°.

Order number **B338**

#### B800 Ceiling-mount Bracket

Surface mounts detectors to the ceiling. The vertical pivot range is +7° to -16°; the horizontal pivot range is ±45°. Do not use for pet applications.

Order number **B800**

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