DS935Z and ZX935Z Series PIR Intrusion Detectors

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BOSCH
Invented for life

- Motion Analyzer II processing
- Motion Monitor
- Self-test supervision systems
- Field replaceable, pointable mirrored optics
- Four coverage patterns

The wall mount DS935Z and ZX935Z PIR Detectors use Motion Analyzer II signal processing to reduce false alarms. Several unique test features, including Motion Monitor, provide coverage integrity. The detectors' optics, coverage patterns, and mounting options provide installation flexibility.

Functions

Signal Processing
Motion Analyzer II uses multiple thresholds and timing windows to analyze timing, amplitude, duration, and polarity of signals to make an alarm decision. It will not alarm on extreme levels of thermal or illumination disturbances caused by heaters and air conditioners, hot and cold drafts, sunlight, lightning, and moving headlights. Two sensitivity settings are provided.

Supervision
- PIR supervision: Provides trouble output in the event that PIR circuitry fails.
- Motion Monitor: Switch-selectable four or 30 day Motion Monitor supervision timers provide the detector with the ability to verify that there is a clear view of the protection area and that it has not been blocked.

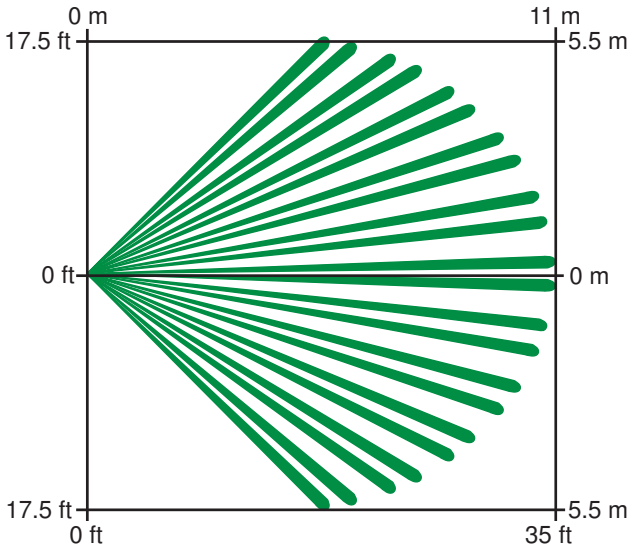
Draft and Insect Immunity
The sealed optical chamber provides immunity to drafts and insects.

Certifications and approvals

Region	Certification	
USA	UL	DS935Z: ANSR: Intrusion Detection Units (UL639)
	UL	ZX935Z: ANSR: Intrusion Detection Units (UL639)

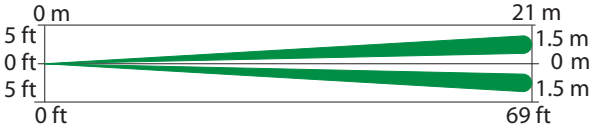
Installation/configuration notes

Mounting
Recommended mounting height is 2.3 m (7.5 ft).



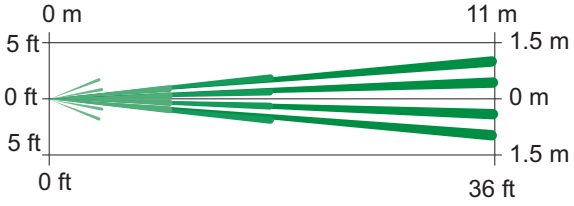
Top View
Standard Broad Coverage: 11 m x 11 m (35 ft x 35 ft)

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



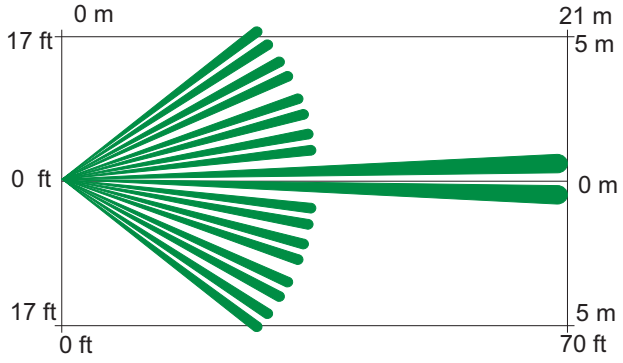
Top View
Optional Long Range Coverage: 21 m x 3 m
(70 ft x 10 ft)

Side View
Optional Long Range Coverage: 21 m x 3 m
(70 ft x 10 ft)

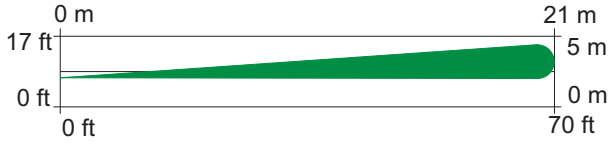


Top View
Optional Barrier Coverage: 11 m x 3 m (35 ft x 10 ft)

Side View
Optional Barrier Coverage: 11 m x 3 m (35 ft x 10 ft)



Top View
Optional Pet Coverage: 11 m x 11 m (35 ft x 35 ft) with 21 m (70 ft.) Long Range Coverage



Side View
Optional Pet Coverage: 11 m x 11 m (35 ft x 35 ft) with 21 m (70 ft.) Long Range Coverage

Technical specifications

Enclosure Design

Dimensions:	10.8 cm x 7 cm x 4.6 cm (4.25 in. x 2.75 in. x 1.8 in.)
Material:	High impact ABS plastic enclosure

Environmental Considerations

Operating Temperature:	-40°C to +49°C (-40°F to +120°F) *For UL Certificated installations, 0°C to +49°C (+32°F to +120°F)*
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.

Mounting

Height (recommended):	2 m to 3 m (6 ft to 10 ft)
Location:	Wall or corner
Internal and Pattern Pointability:	Coverage is adjustable -18° to +2° vertically.

Outputs

Alarm:	DS935Z: Form reed relay rated at 3.0 W, 125 mA at 28 VDC for resistive loads and protected by a 4.7 Ω resistor in the common C leg.
	ZX935Z: Signal through POPIT data bus.
Tamper:	DS935Z: Normally-closed (with cover in place) tamper switch. Maximum current load is 25 mA.
	ZX935Z: Signal through POPIT data bus. Signaled as Missing.
Trouble:	DS935Z: Solid state output shorts to auxiliary power negative when activated. Tamper contacts rated at 28 VDC, 125 mA maximum.
	ZX935Z: Signal through POPIT data bus.

Power Requirements

Current Draw:	DS935Z: 20 mA at 12 VDC
	ZX935Z: <0.5 mA nominal, 2 mA in alarm with LEDs enabled. Do not leave Walk Test LEDs enabled.
Voltage (Input):	DS935Z: 9 VDC to 15 VDC
	ZX935Z: Power comes from two-wire Zonex Bus.

Ordering information

DS935Z PIR Intrusion Detector
Provides Motion Analyzer II processing, Motion Monitor, self-test supervision systems, movable mirrors, four coverage patterns, three mounting options, and draft and insect immunity.
Order number **DS935Z**

ZX935Z PIR Intrusion Detector with POPIT
Alarm output signal through POPIT data bus. Provides Motion Analyzer II processing, Motion Monitor, self-test supervision systems, movable mirrors, four coverage patterns, three mounting options, and draft and insect immunity.
Order number **ZX935Z**

Accessories

Swiveling B335-3 low-profile mount
Swiveling, low-profile, plastic mount for wall mounting. The vertical swivel range is +10° to -20°, while the horizontal swivel range is ±25°. Available in triple packs.
Order number **B335-3**

B338 Universal Ceiling-mount Bracket
Swiveling plastic mount for ceiling mounting. The vertical swivel range is +7° to -16°, while the horizontal swivel range is ±45°.
Order number **B338**

OMB93-3 Barrier Mirror
Provides barrier coverage with an 11 m x 3 m (35 ft x 10 ft) pattern. Shipped in packages of three.
Order number **OMB93-3**

OMLR93-3 Long-range Mirror
Provides long-range coverage with a 21 m x 3 m (70 ft x 10 ft) pattern. Shipped in packages of three.
Order number **OMLR93-3**

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