



DS304 PIR Detector with Replaceable Mirrors



The DS304 Passive Infrared (PIR) Detector uses first step processing to reduce false alarms. The detector's mirrors, coverage patterns, and mounting options provide installation flexibility.

Functions

First Step Processing

First step processing (FSP) responds to human intruders while ignoring other sources of motion, minimizing false alarms. You do not need to select the sensitivity levels for the application because FSP adjusts the detector's sensitivity based on signal amplitude, polarity, slope, and timing.

Adjustable and Replaceable Mirrors

You can remove and replace the mirrors. You can also adjust the vertical angle of the mirror to a recommended angle according to the mounting height of the detector and the type of mirror.

Test Features

The DS304 Detector has an external alarm LED (light emitting diode). Walk test remote control means that you can enter a command at the control panel to activate the walk test LED.

- ▶ **First step processing**
- ▶ **Temperature compensation**
- ▶ **Adjustable and replaceable mirrors**
- ▶ **Two coverage patterns**
- ▶ **Three mounting options**
- ▶ **Solid state relay output**
- ▶ **Alarm memory**
- ▶ **Walk test remote control**

Alarm Memory

Provides indication of stored alarms. Controlled by a switched voltage from the control panel.

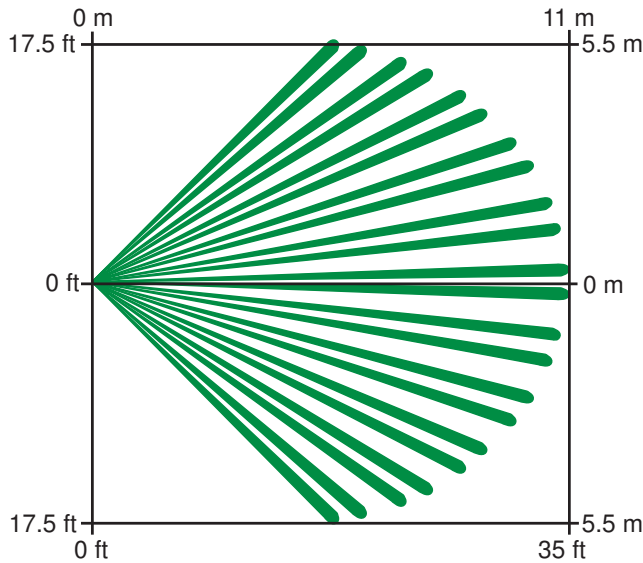
Certifications and Approvals

Region	Certification	
Europe	CE	89/336/EEC, EN55022: 1998, EN50130-4: 1996, IEC 1000-4-2: 1995, IEC 1000-4-3: 1997, IEC 1000-4-4: 1995, IEC 1000-4-5: 1995, IEC 1000-4-6: 1996 73/23/EEC, 73/23/EEC Annex 1, EN60950-1, EN60825
Belgium	INCERT	B-509-0023
Poland	CNBOP	103/03
France	AFNOR	NF, A2P (262252-00)
Sweden	INTYG	05-135
Europe		Complies with EN50131-1 grade 2

Installation/Configuration Notes

Mounting Considerations

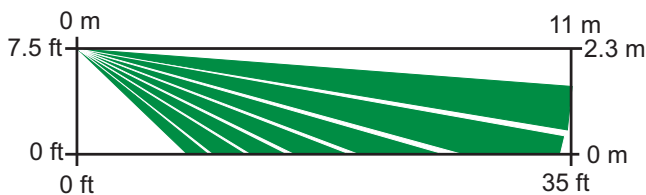
- Mount the detector in an area where an intruder must move across the coverage pattern.
- Mount the detector within the height range of 2 m to 2.6 m; the recommended height is 2.3 m.
- Mount multiple detectors so that the coverage pattern from each detector intersects with another coverage pattern.
- Do not mount the detector on or near windows.
- Do not mount the detector directly in sunlight, in hot air, or in cold air.
- Do not mount the detector near air conditioning outlets, heat sources, or animals.



Top View

Standard Broad Coverage 11 m x 11 m

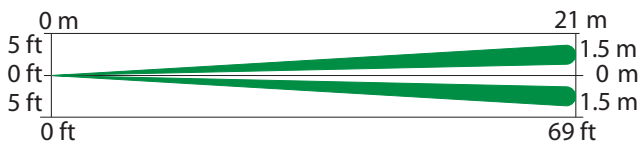
Walking speed range is 0.2 m/s to 3.0 m/s



Side View

Standard Broad Coverage 11 m x 11 m

Walking speed range is 0.2 m/s to 3.0 m/s



Top View

Optional Long Range Coverage 21 m x 3 m

Requires OMLR93-3 Long Range Mirror. Walking speed

range is 0.2 m/s to 4.0 m/s.



Side View

Optional Long Range Coverage 21 m x 3 m

Requires OMLR93-3 Long Range Mirror. Walking speed range is 0.2 m/s to 4.0 m/s.

Technical Specifications

Enclosure Design

Dimensions: 10.8 cm x 7 cm x 4.6 cm

Material: High impact ABS plastic enclosure

Environmental Considerations

Operating Temperature: -10°C to +55°C

Relative Humidity: <95%, non-condensing

Storage Temperature: -20°C to +60°C

Radio Frequency Interference (RFI) Immunity: No alarm or setup on critical frequencies in the range from 10 MHz to 1 GHz at 30 V/m.

Complies with Environmental Class II (EN50130-5)

Mounting

Height Range: 2 m to 2.6 m

Location: Wall, corner, and ceiling*

*with B338-3 Ceiling Mount Bracket

Outputs

Relay Contact: Normally-closed solid state relay 100 mA at 30 VDC maximum.

Tamper: Normally-closed (with cover in place) tamper switch. Contacts rated at 28 VDC, 125 mA maximum.

Pattern: Coverage is adjustable -18° to +2° vertically

Power Requirements

Input Power: Use only an approved limited power source.

Standby Power: No internal standby battery. Standby power must be provided by an approved limited power source. For each hour of standby time needed, 22 mAh is required.

Supply Voltage Range: 8.0 VDC to 16.0 VDC

Supply Voltage Nominal: 12.0 VDC nominal

Supply Voltage Maximum Ripple (0 to 100 Hz): 2.0 Vpp

Supply Voltage Monitoring: Alarm at less than 4.0 V

Ordering Information**DS304 PIR Detector with Replaceable Mirrors** **DS304**

Provides first step processing, two coverage patterns, temperature compensation and three mounting options.

Accessories**Swiveling B335-3 low-profile mount** **B335-3**

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.

B338 Universal Ceiling-mount Bracket **B338**

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

OMLR93-3 Long-range Mirror **OMLR93-3**

Provides long-range coverage with a 21 m x 3 m (70 ft x 10 ft) pattern. Shipped in packages of three.

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