BOSCH
Invented for life

DS939 Panoramic Detector

▸ **Up to 7.6 m (25 ft) mounting height**

▸ **Fully adjustable optics for coverage integrity and customization**

▸ **Hinged chassis and base plate for easy installation**

▸ **High efficiency LED and light pipe system for easy walk testing**

▸ **First Step Processing (FSP)**

▸ **360° x 21 m (70 ft) diameter pattern**

The ceiling mount DS939 PIR Detector provides a 21 m (70 ft) panoramic coverage pattern and can be used on ceilings as high as 7.6 m (25 ft). With three separate PIR sections that are fully adjustable, the DS939 provides coverage integrity at all mounting heights, plus the ability to customize the coverage for specific areas. The DS939 uses several patented processing techniques to provide excellent catch performance with freedom from false alarms.

Functions

Signal Processing

Uses passive infrared technologies to provide an alarm condition when the field of protection is activated. Alarm signals must meet the signaling requirements to activate an alarm.
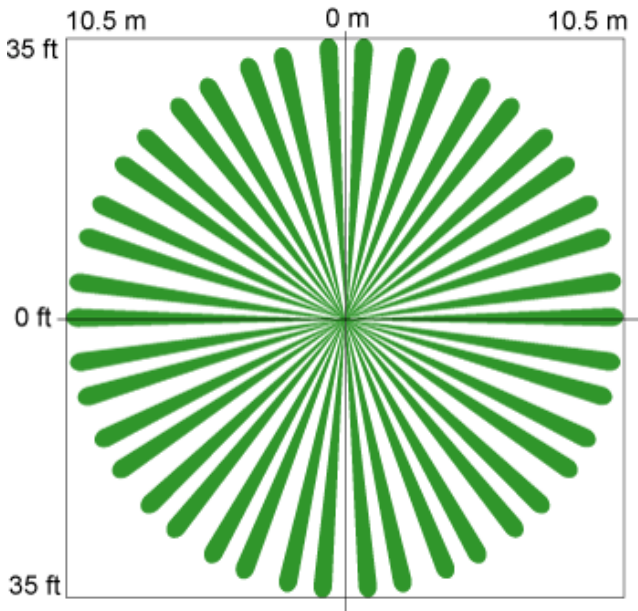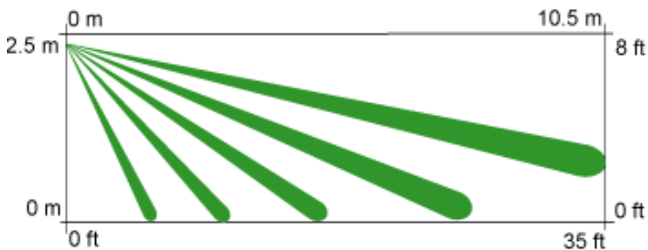
First Step Processing

First Step Processing (FSP) allows virtually instant response to human targets without sacrificing false alarm immunity to other sources. By adjusting its sensitivity based upon signal amplitude, polarity, slope and timing, FSP eliminates the need for the installer to select the sensitivity level for the application. Each sensor is processed individually and both must agree there is an alarm before the alarm relay is activated.

Test Features

- High efficiency LED and light-pipe system provide walk test indication that is easily viewable from any angle and at any mounting height.
- Alarm memory feature allows detector to latch the alarm LED to aid in response.
- Remote LED walk-test control allows the LED to be enabled or disabled using a switched input without accessing the detector.

Certifications and Approvals

Country	Certificate/Listing Number
Canada	ULC-S306, Intrusion Detection Units Certified for Canada
Europe	CE Complies with EN50131-1 grade 2
USA	UL 639, Intrusion Detection Units c-UL-us

Installation/Configuration Notes

Top View

Side View

Coverage Information

Coverage is 360° x 21 m (70 ft) diameter when the detector is mounted 3.7 to 7.6 m (12 ft to 25 ft).

Coverage is 15 m (50 ft) diameter when the detector is mounted at 3 m (10 ft).

Coverage is 12 m (40 ft) when the detector is mounted at 2.4 m (8 ft).

Pattern consists of 69 zones in 21 barriers. Each barrier is 11 m (35 ft) long and 1.5 m (5 ft) wide at 11 m (35 ft). The barriers are grouped into three groups of seven barriers each. Each group has vertical adjustment for customized coverage.

Technical Specifications

Enclosure Design

Properties:	Modular chassis and hinged mounting base design provide easy access to field setup switches and wiring.
Dimensions:	8.9 cm x 17.8 cm (3.5 in. x 7 in.)

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)*
Sensitivity:	Low/High gain settings

Complies with Environmental Class II (EN50130-5)

Mounting

Height Range:	3 m to 7.6 m (8 ft to 25 ft) recommended
Location:	Mounts directly to ceiling or to standard 10.2 cm (4 in.) octagonal electrical box.
Internal Pointability:	Coverage is adjustable ±10° horizontally, +2° to -18° vertically.

Outputs

Alarm Relay:	Silent-operating form C relay. Contacts rated 125 mA, 28 VDC, 3 W maximum for DC resistive loads.
Tamper:	Normally-closed (with cover in place) tamper switch. A wall (base) tamper is included. Contacts rated at 28 VDC, 125 mA, 3 W maximum.

Power Requirements

Current:	12 mA standby; 39 mA in alarm with LEDs enabled
Voltage:	9 VDC to 15 VDC

Ordering Information

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