

DS939 Series Panoramic Detectors



The ceiling mount DS939 PIR Detectors provide up to 16.4 m (54 ft) panoramic coverage pattern and can be mounted on ceilings as high as 6.1 m (20 ft). With three separate PIR sections that are fully adjustable, the DS939 detectors provide coverage integrity at all mounting heights, plus the ability to customize the coverage for specific areas. The DS939 detectors use several processing techniques to provide excellent catch performance with freedom from false alarms.

Functions

Signal Processing

The DS939 detectors use 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.

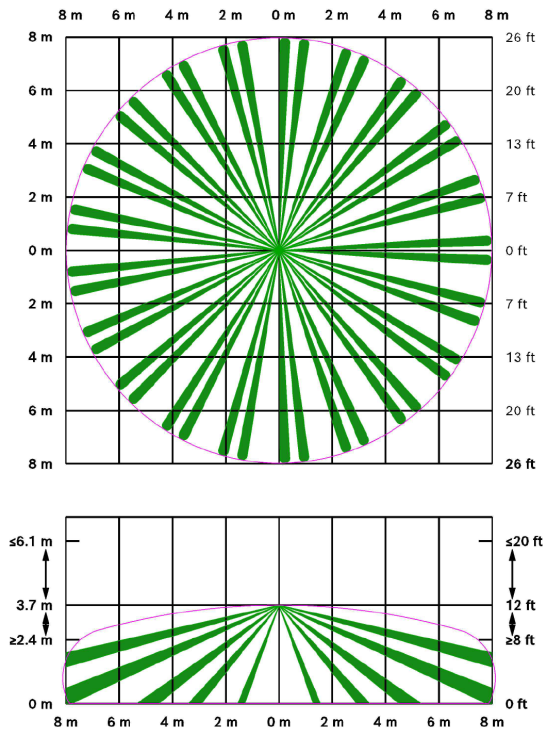
- ▶ Up to 6.1 m (20 ft) mounting height
- ▶ Fully adjustable optics for coverage integrity and customization
- ▶ Hinged chassis and base plate for easy installation
- ▶ High efficiency LED and light pipe system for easy walk testing
- ▶ First Step Processing (FSP)

- Remote LED walk-test control allows the LED to be enabled or disabled using a switched input without accessing the detector.

Certifications and approvals

Region	Regulatory compliance/quality marks	
Europe	CE	[DS939]
	EN50131	EN 50131-2-2 [DS939]
	EN50131	2620200007A1 [DS939]
Belgium	INCERT	B-B09-1005 DS939
Sweden	SBSC	470 3 008 20 0007 [DS939]
USA	UL	20190115; UL639 – Standard for Intrusion-Detection Units
France	AFNOR	2620200007A1 [DS939]
China	CCC	2009031901000548 [DS939-CHI]
Sweden	INTYG	19-457 Alarm Class 2

Installation/configuration notes



Coverage Information

For UL, ULC applications, provides up to 7.0 m (23 ft) radius, 14.0 m (46 ft) diameter 360° coverage when mounted up to 6.1 m (20 ft).

For EN50131 applications, provides up to 7.0 m (23 ft) radius, 14.0 m (46 ft) diameter 360° coverage when mounted up to 5.2 m (17 ft).

For CCC applications, provides up to 8.2 m (27 ft) radius, 16.4 m (54 ft) diameter 360° coverage when mounted up to 4.9 m (16 ft).

Pattern consists of 69 zones in 21 barriers. The barriers are grouped into three groups of seven barriers each. Each group has vertical adjustment for customized coverage.

Mounting Considerations

The mounting height range is from 2.4 m to 6.1 m (8 ft to 20 ft).

These detectors can be mounted directly on the ceiling or on a standard 9 cm (3.5 in.) rectangular electrical box.

The maximum range of the detector depends on the mounting height and the vertical adjustment of the PIR coverage pattern. In areas where part of the area needs a targeted coverage, the optical modules can be adjusted for the correct coverage.

A masking kit containing two 120° and two 90° masks is included to allow masking unwanted areas. Apply the masks to the outside of the detector. With the supplied masks, you can mask 90°, 120°, 180°, 210°, 240°, or 330°.

Technical specifications

Electrical

Current: 12 mA standby; 20 mA in alarm with LEDs enabled

Voltage: 9 VDC to 15 VDC

Environmental

Operating Temperature: -40 °C to +49 °C (-40 °F to +120 °F)
 UL: 0 °C to +49 °C (+32 °F to +120 °F)
 EN/NFA2P: -10 °C to +55 °C (+14 °F to +131 °F)

Sensitivity: Low/High gain settings

Complies with Environmental Class II (EN50130-5)

Mechanical

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.)

Outputs

Alarm Relay: Silent-operating form C relay. Contacts rated <100 mA, 25 VDC, 2.5 W maximum, < 20 Ohm closed 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.

Ordering information

DS939-CHI Motion detector 360° ceiling mount, CN
 Classic Line PIR CM Motion detector 360° ceiling mount.
 For use in China.

Order number **DS939-CHI | F.01U.002.821**
F.01U.381.799

DS939 Motion detector 360° ceiling mount
 Classic Line PIR CM Motion detector 360° ceiling mount.

Order number **DS939 | F.01U.381.615 4.998.800.703**

Represented by:

Europe, Middle East, Africa:
 Bosch Security Systems B.V.
 P.O. Box 80002
 5600 JB Eindhoven, The Netherlands
 Phone: +31 40 2577 284
 emea.securitysystems@bosch.com
 emea.boschsecurity.com

Germany:
 Bosch Sicherheitssysteme GmbH
 Robert-Bosch-Ring 5
 85630 Grasbrunn
 Germany
 www.boschsecurity.com

North America:
 Bosch Security Systems, LLC
 130 Perinton Parkway
 Fairport, New York, 14450, USA
 Phone: +1 800 289 0096
 Fax: +1 585 223 9180
 onlinehelp@us.bosch.com
 www.boschsecurity.us

Asia-Pacific:
 Robert Bosch (SEA) Pte Ltd, Security Systems
 11 Bishan Street 21
 Singapore 573943
 Phone: +65 6571 2808
 Fax: +65 6571 2699
 apr.securitysystems@bosch.com
 www.boschsecurity.asia