

ISN-AP1-P Pet Friendly® Passive-infrared Detector

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Invented for life



- ▶ 7.5 m x 7.5 m (25 ft x 25 ft) coverage
- ▶ Pet Friendly
- ▶ Temperature compensation
- ▶ Cover tamper switch
- ▶ Embedded microcontroller with First Step Processing (FSP)

The ISN-AP1-P is a conventional stand-alone PIR motion detector that economically delivers reliable performance. The detector distinguishes between human signals and animal signals, making it appropriate for applications with pets and animals. A Fresnel lens produces sharply-focused images throughout the field of view, providing a superior response to intruders.

Functions

Pet Friendly

The detector distinguishes signals caused by humans from signals caused by one or two animals with a combined total weight of 14 kg (30 lb).

Temperature Compensation

The detector adjusts PIR sensitivity to identify human intruders at critical temperatures, detecting human body heat more accurately and avoiding false alarms.

Cover Tamper Switch

A normally-closed contact opens when the cover is removed, alerting the control panel.

Embedded Microcontroller

The microcontroller has sophisticated signal processing, including Bosch proprietary FSP, temperature compensation, and patented pet immunity processing. The microcontroller helps the ISN-AP1-P Detector work more reliably than conventional PIR detectors that compare sequential signals with a fixed threshold level, offering superior false alarm immunity.

Signal Processing

First Step Processing (FSP) almost instantly responds to human targets without producing false alarms from other sources. FSP adjusts the detector's sensitivity based on signal amplitude, polarity, slope, and timing. This eliminates the need for the installer to select the sensitivity level.

Draft and Insect Immunity

The sealed optical chamber prevents drafts and insects from affecting the detector.

Two-piece Design

During installation and mounting, you only need to remove the cover. The circuit board and optics stay intact, increasing installation speed, ease, and effectiveness.

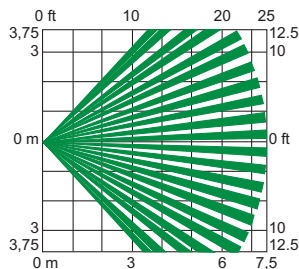
Test Features

A red light emitting diode (LED) indicates alarms and activates during a walk test.

Certifications and approvals

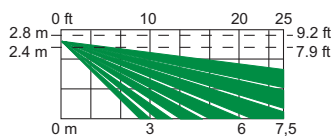
Region	Certification
Europe	CE EC Directive 89/336/EEC and EN55022: 1998 +A1: 2000 +A2: 2003 (ANSI C63.4: 2003), EN50130-4: 1996 +A1: 1998 +A2: 2003, EN61000-3-3: 1995 +A1: 2001, EN61000-4-2: 1995 +A1: 1998 +A2: 2001, EN61000-4-3: 2002 +A1: 2003 +A2: 2005, EN61000-4-4: 1995 +A1: 2000 +A2: 2001, EN61000-4-5: 1995 +A1: 2001, EN61000-4-6: 1996 +A1: 2001 +A2: 2001 +A3: 2005, EN61000-4-11: 1994 +A1: 2004

Installation/configuration notes



Top View

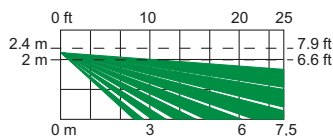
Broad Coverage: 7.5 m x 7.5 m (25 ft x 25 ft)



Side View

Upper Mounting Height Range

Broad Coverage: 7.5 m x 7.5 m (25 ft x 25 ft)



Side View

Lower Mounting Height Range

Broad Coverage: 7.5 m x 7.5 m (25 ft x 25 ft)

Power Considerations

- Use an approved limited power source. Connect all outputs to safety extra-low voltage (SELV) circuits only.
- This detector has no internal standby battery.

Mounting Considerations

To adjust the mounting height, slide the detector's printed circuit board (PCB) up or down before installation. Select one of these height ranges:

- 2.0 m to 2.4 m (6.6 ft to 7.9 ft)
- 2.4 m to 2.8 m (7.9 ft to 9.2 ft)

The default height is 2.4 m to 2.8 m (7.9 ft to 9.2 ft). Mount the detector in an indoor area where an intruder must cross the coverage pattern. To minimize false alarms, mount the detector in an area where an animal cannot climb to or pass within the field of view. You can mount the detector in a corner or on a flat wall (surface, semi-flush) using the optional B335-3 Low-profile Swivel-mount Bracket.



Notice

An optional mounting bracket can reduce the detector's range and increase the dead zone areas.

Do not mount the detector outdoors, on or near windows, directly in sunlight or air currents, near air conditioning outlets, or heat sources. Do not mount the detector above furniture or stairs where an animal is likely to climb.

Compatibility Information

The detector works with all conventional control panels.

Parts included

Quantity	Component
1	Detector
2	Flat-head screws
2	Screw anchors

Technical specifications

Enclosure Design

Color:	White
Dimensions:	93 mm x 52 mm x 44 mm (3.7 in. x 2.1 in. x 1.7 in.)
Material:	High-impact ABS plastic

Environmental Considerations

Relative Humidity:	0 to 95%, non-condensing
Temperature (Operating):	0°C to +49°C (+32°F to +120°F)
Temperature (Storage):	-29°C to +49°C (-20°F to +120°F)

Indicators

Alarm Indicator:	Red LED. Enable or disable using the LED jumper.
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Outputs

Relay:	Supervised Form A normally-closed (NC) contacts rated for 125 mA, 28 VDC, 3 W.
Tamper:	Normally-closed (NC) contacts (with cover on) rated at 28 VDC, 125 mA maximum. Connect tamper circuit to 24-hour protection circuit.

Power Requirements

Current (Alarm):	< 25 mA
Current (Standby):	< 15 mA at 12 VDC
Voltage (Operating):	9 VDC to 15 VDC

Trademarks

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

Ordering information

ISN-AP1-P Pet Friendly® Passive-infrared Detector

Pet Friendly, cover tamper switch, temperature compensation, 7.5 m x 7.5 m (25 ft x 25 ft) coverage, and microcontroller with FSP.

Order number **ISN-AP1-P**

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**

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