

# Blue Line ISM-BLD1-P Pet Friendly TriTech Detectors



The ISM-BLD1-P Pet Friendly® TriTech® Detectors use a combination of passive infrared (PIR) and microwave detection technologies. With advanced signal processing and these detection technologies, the detectors generate alarms for human intruders without generating false alarms for pets. These small unobtrusive detectors are simple to install and do not need field adjustments.

These detectors are available in three frequencies:

| Frequency  | Detector      |
|------------|---------------|
| 9.9 GHz    | ISM-BLD1-P-F3 |
| 10.525 GHz | ISM-BLD1-P-F1 |
| 10.687 GHz | ISM-BLD1-P-F4 |

# **Functions**

# **Advanced Signal Processing**

Adaptive processing adjusts to background disturbances, reducing false alarms without sacrificing the ability to respond to an intruder.

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. Each sensor (PIR and microwave) processes signals individually,

- 11 m x 11 m (35 ft x 35 ft) broad coverage
- ▶ Pet Friendly®
- Dual detection technologies with advanced signal processing
- Flexible mounting height from 2.3 m to 2.7 m (7.5 ft to 9 ft)
- ► No range or height adjustments required
- Supervised microwave; microwave range can be adjusted
- Eight detection layers including optional look-down zone
- Draft and insect immunity
- Temperature compensation
- Combined cover and wall tamper

and both sensors must agree there is an alarm before the alarm relay activates.

# **Test Features**

An externally-visible, tri-color (blue, yellow, green) alarm LED (light-emitting diode) indicates each sensor's status.

# **Supervised Microwave**

The microwave circuit is fully supervised. If the microwave subsystem fails, the PIR subsystem provides single technology coverage.

#### Pet Immunity (not tested by UL)

The detector can distinguish between signals caused by humans and signals caused by pets. It ignores signals caused by one or two pets up to 45 kg (100 lb) or numerous rodents.

# **Draft and Insect Immunity**

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

# **Temperature Compensation**

The detector adjusts its sensitivity to maintain its ability to identify human intruders at critical temperatures.

# **Certifications and Approvals**

# All Models

Country Certification/Listing Number

Europe C€(!)

Complies with EN50131-1 grade 2

Canada UL ANSR7:: Intrusion Detection Units Certified for

Canada (ULC-S306)

Ukraine IEC 60839-1-3-2001, 60839-2-2-2001,

60839-2-6-2001

GOST 26342-84, 27990-88

US UL ANSR: Intrusion Detection Units (UL639)

# ISM-BLD1-P-F1

Country Certification/Listing Number

Belgium INCERT

Canada Industry Canada (1249A-ISMBLD1)
China CCC (2004031901000037)

Czech Republic NBU
Italy IMQ
Poland POL

Russia GOST 12997-84, GOST R 50009-2000,

GOST R 51317.3.2-99, GOST R 51317.3.3-99,

GOST R MEK 60065-2002

Sweden SBSC

US Federal Communications Commission (FCC ESVDI)

# **Installation/Configuration Notes**

# **Application Information**

# **Coverage Patterns**

**Note** An alarm occurs only when an intruder is

detected in areas in which the PIR and

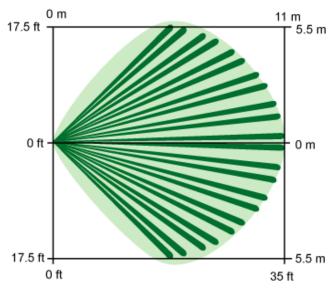
microwave patterns overlap.

# Coverage Pattern Legend

PIR coverage pattern

Look-down zone

Microwave coverage pattern



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



Side Broad: 11 m x 11 m (35 ft x 35 ft)

# Mounting

The recommended mounting height is 2.3 m to 2.7 m (7.5 ft to 9 ft).

The detector can be mounted:

- On a flat wall (surface, semi-flush) with the optional B335 Swivel-mount Bracket, or with the optional B328 Gimbal-mount Bracket,
- In the junction of two perpendicular walls, or
- On the ceiling with the optional B338 Ceiling-mount Bracket.

# **Standby Power**

This detector has no internal standby battery. For UL Listed product installations, 4 hr (60 mAh) of standby power must be supplied by the control unit or by a UL Listed burglary power supply.

# **Parts Included**

| Quant. | Component       |
|--------|-----------------|
| 1      | Detector        |
| 1      | Hardware pack   |
| 1      | Literature pack |

# **Technical Specifications**

# **Environmental Considerations**

Complies with EN50131 Environmental Class II, Security Grade 2

Relative Humidity: 0 to 85%, non-condensing

Temperature (operating): -29°C to +49°C (-20°F to +120°F) For UL Listed product installations, 0°

C to +49°C (+32°F to +120°F)

# **Mechanical Properties**

| Color:   | White   |
|--|---|
| Dimensions:  | 13.2 cm x 6.1 cm x 4.8 cm (5.2 in. x 2.4 in. x 1.9 in.)   |
| Material:  | High-impact ABS plastic   |
| Radio Frequency<br>Interference (RFI)<br>Immunity: | No alarm or setup on critical frequencies in the range from 26 MHz to 950 MHz at field strengths less than $50 \text{ V/m}$ . |

# **Outputs**

Digital Alarm: 5 V normally, ground for 4 sec during alarm.

Solid state, supervised Form A normally-closed (NC) con-Relay:

tacts rated for 125 mA, 28 VDC, 3 W.

Normally-closed (NC) contacts (with cover on) rated at Tamper:

28 VDC, 125 mA maximum.

Connect tamper circuit to 24-hour protection circuit.

# **Power Requirements**

| Current (Alarm):     | 22 mA                   |
|----------------------|-------------------------|
| Current (Standby):   | 15 mA maximum at 12 VDC |
| Voltage (Operating): | 10 VDC to 14 VDC        |

#### **Trademarks**

Pet Friendly® and TriTech® are registered trademarks of Bosch Security Systems in the United States.

| Ordering Information   |               |  |
|--|---------------|--|
| Blue Line ISM-BLD1-P TriTech Detector (10.525 GHz)                   | ISM-BLD1-P-F1 |  |
| Blue Line ISM-BLD1-P TriTech Detector (9.9 GHz)                      | ISM-BLD1-P-F3 |  |
| Blue Line ISM-BLD1-PTriTech Detector (10.687 GHz)                    | ISM-BLD1-P-F4 |  |
|  |               |  |
| Accessories  |               |  |
| Accessories  Blue Line ISM-BLA1-CC Color Camera Module (NTSC format) | ISM-BLA1-CC-N |  |
| Blue Line ISM-BLA1-CC Color Camera Module                            | ISM-BLA1-CC-P |  |

| Ordering Information  |               |
|---|---------------|
| Blue Line ISM-BLA1-CM Monochrome Camera<br>Module (EIA format)  | ISM-BLA1-CM-E |
| Blue Line ISM-BLA1-LM Nightlight Module   | ISM-BLA1-LM   |
| Blue Line ISM-BLA1-SM Sounder Module  | ISM-BLA1-SM   |
| B328 Gimbal-mount Bracket<br>Mounts on a single-gang box and allows ro-<br>tation of a detector. Wires are hidden inside.   | B328          |
| B335-3 Low-profile Swivel-mount Bracket<br>Plastic, swivel, low profile bracket for walls.<br>The vertical pivot range is ±10° to -20°; the<br>horizontal pivot range is ±25°. Shipped in<br>packages of three. | B335-3        |
| B338 Universal Ceiling Bracket Plastic swivel bracket for ceilings. The vertical pivot range is +7° to -16°; the horizontal pivot range is ±45°.  | B338          |

# Europe, Middle East, Africa:

Bosch Security Systems B.V. P.O. Box 80002 F.O. BOX 80002 5600 JB Eindhoven, The Netherlands Phone: + 31 40 2577 284 Fax: +31 40 2577 330 emea.securitysystems@bosch.com www.boschsecurity.com

Americas:
Bosch Security Systems, Inc.
130 Perinton Parkway
Fairport, New York, 14450, USA
Phone: +1 800 289 0096
Fax: +1 585 223 9180 security.sales@us.bosch.com www.boschsecurity.us

# Asia-Pacific:

Asia-Pacific:
Bosch Security Systems Pte Ltd
38C Jalan Pemimpin
Singapore 577180
Phone: +65 6319 3450
Fax: +65 6319 3499 apr.securitysystems@bosch.com www.boschsecurity.com