BOSCH

Invented for life

ISM-BLD1-P Blue Line Pet Friendly TriTech Detectors

- ▸ **11 m x 11 m (35 ft x 35 ft) broad coverage**
- ▸ **EN50131-2-4 Grade 2 compliant**
- ▸ **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**

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, 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.
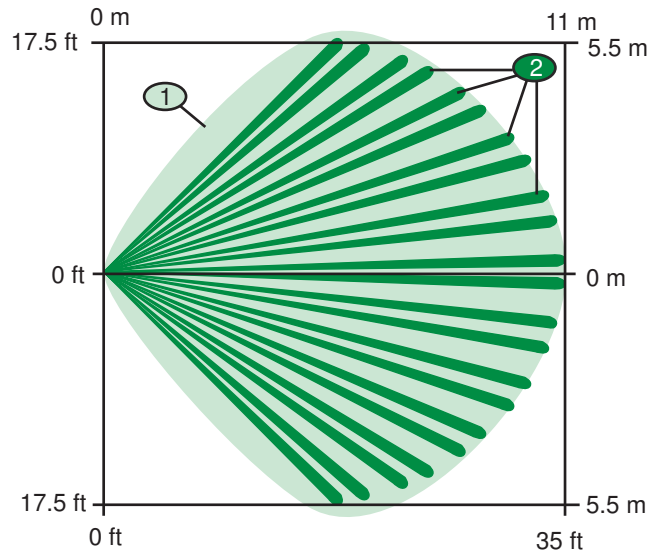
Certifications and Approvals

Region	Certification	
Europe	CE	89/336/EEC, EN55022: 1998 +A1: 2000 +A2: 2003 (ANSI C63.4: 2001), 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: 2002, EN61000-4-4: 1995 +A1: 2000 +A2: 2001, EN61000-4-5: 1995 +A1: 2001, EN61000-4-6: 1996 +A1: 2001, EN61000-4-11:1994 +A1: 2001, EN300440: 1996, TS 50131-2-2:2004 (Version 1)
Belgium	INCERT	ISM-BLD1-P-F1: B-509-0014/c
Poland	CNBOP	ISM-BLD1-P-F1: 82/04
Russia	GOST	ISM-BLD1-P-F1: IEC 60839-1-3-2001, IEC 60839-2-2-2001, IEC 60839-2-6-2001, GOST 26342-84, GOST 27990-88
		ISM-BLD1-P-F1: GOST 12997-84, GOST R 50009-2000, GOST R 51317.3.2-99, GOST R 51317.3.3-99, GOST R MEK 60065-2002
USA	UL	ANSR: Intrusion Detection Units (UL639), ANSR7: Intrusion Detection Units Certified for Canada (cULus)
	FCC	ISM-BLD1-P-F1: ESVD1
Italy	IMQ	
Canada	IC	ISM-BLD1-P-F1: 1249A-ISMBLD1
Czech Republic	NBU	SIM-BLD1-P-F1: T1209/2004
France	AFNOR	ISM-BLD1-P-F3: NF, A2P (282111-00)
Sweden	INTYG	ISM-BLD1-P-F1 only: Nr05-270
Brazil	ANATEL	ISM-BLD1-P-F1: 0251-06-1855
Australia	C-tick	F1 model only
Ukraine		IEC 60839-1-3-2001, IEC 60839-2-2-2001, IEC 60839-2-6-2001, GOST 26342-84, GOST 27990-88
Europe		Complies with EN50131-2-4 Grade 2

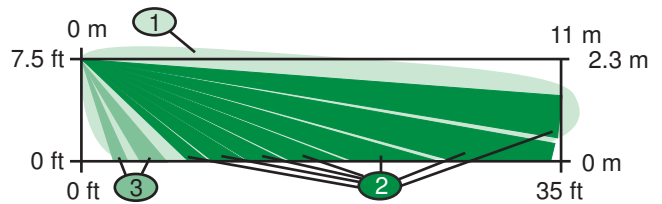## Installation/Configuration Notes

Application Information

Coverage Patterns

Note An alarm occurs only when an intruder is detected in areas in which the PIR and microwave patterns overlap.

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

1	Microwave coverage area	2	PIR coverage pattern

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

1	Microwave coverage area	2	PIR coverage pattern
3	Two look-down zones		

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 EN50131-2-4 Environmental Class II, Security Grade 2

Relative Humidity:	0 to 85%, non-condensing
Temperature (operating):	-29℃ to +49℃ (-20℉ to +120℉) *For UL Listed product installations,* *0℃ to +49℃ (+32℉ to +120℉)*

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 Interference (RFI) Immunity:	No alarm or setup on critical frequencies in the range from 26 MHz to 950 MHz at field strengths less than 50 V/m.

Outputs

Digital Alarm:	5 V normally, ground for 4 sec during alarm.
Relay:	Solid state, 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):	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

ISM-BLD1-P Blue Line TriTech Detector (10.525 GHz) 10.525 GHz	**ISM-BLD1-P-F1**
ISM-BLD1-P Blue Line TriTech Detector (9.9 GHz) 9.9 GHz	**ISM-BLD1-P-F3**
ISM-BLD1-P Blue Line TriTech Detector (10.687 GHz) 10.687 GHz	**ISM-BLD1-P-F4**
Accessories	
ISM-BLA1-CC Blue Line Color Camera Module (NTSC format) NTSC format	**ISM-BLA1-CC-N**
ISM-BLA1-CC Blue Line Color Camera Module (PAL format) PAL format	**ISM-BLA1-CC-P**
ISM-BLA1-LM Blue Line Nightlight Module Fits all Blue Line detectors	**ISM-BLA1-LM**
ISM-BLA1-SM Blue Line Sounder Module Fits all Blue Line detectors	**ISM-BLA1-SM**
B328 Gimbal-mount Bracket Mounts on a single-gang box and allows rotation of a detector. Wires are hidden inside.	**B328**
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.	**B335-3**
B338 universal ceiling mount Swiveling plastic mount for ceiling mounting. The vertical swivel range is +7° to -16°, while the horizontal swivel range is ±45°.	**B338**