


BOSCH

Invented for life

ISM-BLD1 Blue Line TriTech Detectors



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

The ISM-BLD1 TriTech Detectors use a combination of passive infrared (PIR) and microwave detection technologies with advanced signal processing. These 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- F3
10.525 GHz	ISM-BLD1- F1

Functions

Advanced Signal Processing

Adaptive processing adjusts to background disturbances, reducing false alarms without sacrificing intruder detection.

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, tricolor (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.

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	
Belgium	INCERT	B-509-0014/d
Russia	GOST	ISM-BLD1-F1: GOST 12997-84, GOST R 50009-2000, GOST R 51317.3.2-99, GOST 51317.3.3-99, GOST R MEK 60065-2002

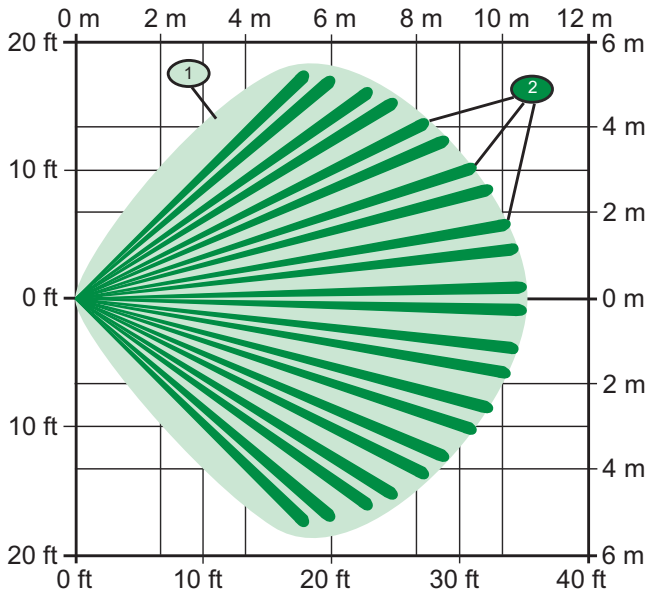
Region	Certification	
France	AFNOR	ISM-BLD1-F3: NF, A2P (282112-00)
Brazil	ANATEL	ISM-BLD1-F1: 0251-06-1855
Europe	ISM-BLD1-F1 complies with EN50131-2-4 Grade 2	

Installation/Configuration Notes

Application Information

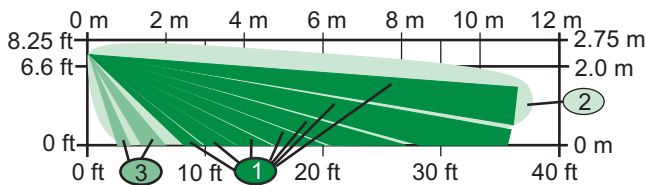
Coverage Patterns

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.
- At the junction of two perpendicular walls.
- On the ceiling with the optional B338 Ceiling-mount Bracket.

Standby Power

This detector has no internal standby battery.

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°C to +49°C (-20°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 Interference (RFI) Immunity: No alarm or setup on critical frequencies in the range from 26 MHz to 950 MHz for field strengths less than 50 V/m.

Outputs

Digital Alarm: 5 V normally, grounded 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

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Ordering Information

ISM-BLD1 Blue Line TriTech Detector (10.525 GHz) 10.525 GHz	ISM-BLD1-F1
ISM-BLD1 Blue Line TriTech Detector (9.9 GHz) 9.9 GHz	ISM-BLD1-F3
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 Bracket Swiveling plastic mount for ceiling mounting. The vertical swivel range is +7° to -16°, while the horizontal swivel range is ±45°.	B338

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