



# Blue Line ISM-BLQ1 Quad Passive-infrared Detector



- ▶ 11 m x 11 m (35 ft x 35 ft) broad coverage
- ▶ Dual sensor, quad element design (two separate pyroelectric elements)
- ▶ Flexible mounting height from 2.3 m to 2.7 m (7.5 ft to 9 ft)
- ▶ No range or height adjustments required
- ▶ Installation-friendly two-piece design
- ▶ Easy wiring access with plug-in terminals
- ▶ Eight detection layers including optional look-down zone
- ▶ Draft and insect immunity
- ▶ Cover tamper
- ▶ Optional camera, nightlight, and sounder modules

The ISM-BLQ1 Quad PIR Detector uses two individual sensors that operate like two PIRs in one. Each sensor processes signals separately. Both must activate to cause an alarm. This increases reliability, because false alarm sources such as noise spikes and small animals are ignored.

Quad detectors combine an unsurpassed level of catch performance with the highest level of false alarm immunity. Therefore, they are particularly well suited for challenging installation situations; for example, cases where cross catch of intruders cannot be guaranteed or where intruders are able to cross the detection pattern very quickly.

## Functions

### First Step Processing (FSP)

*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 of the two PIR sensors processes signals individually, and both sensors must agree there is an alarm before the alarm relay activates.

## Test Features

Externally visible alarm LED can be disabled after installation.

## Tamper

The switch opens when the cover is removed.

## Draft and Insect Immunity

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

## Certifications and Approvals

Country	Certification/Listing Number
Europe	CE Complies with EN50131-1 grade 2
Belgium	INCERT
Canada	UL ANSR7: Intrusion Detection Units Certified for Canada (ULCS306)
Czech Republic	NBU
Italy	IMQ
Poland	POL
Sweden	SBSC
Ukraine	IEC 60839-1-3-2001, 60839-2-2-2001, 60839-2-6-2001

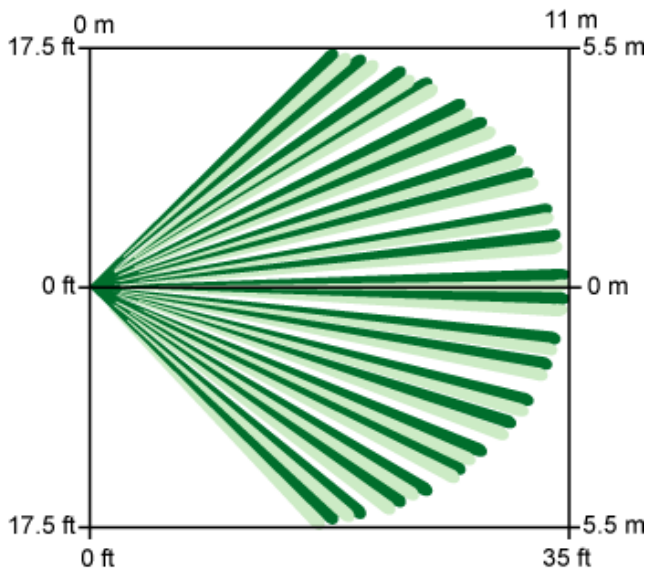
US GOST 26342-84, 27990-88  
 UL ANSR: Intrusion Detection Units (UL639)

**Installation/Configuration Notes**

**Coverage Patterns**

**Coverage Pattern Legend**

- PIR pattern 1
- Look-down zone
- PIR pattern 2



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



**Side View 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 a corner (the junction of two perpendicular walls).

- On the ceiling with the optional B338 Ceiling-mount Bracket.

**Note** The use of optional mounting brackets can reduce the detector's range and increase the dead zone areas.

**Power Considerations**

**Power Limits**

Input power must be provided by an approved limited power source. All outputs must be connected to SELV (safety extra-low voltage) circuits only.

**Standby Power**

This detector has no internal standby battery. *For UL Listed product installations, 4 hr (40 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) <i>For UL Listed product installations, 0°C to +49°C (+32°F to +120°F)</i>

### 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 2 GHz at field strengths less than 30 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):	18 mA
Current (standby):	10 mA maximum at 12 VDC
Voltage (operating):	10 VDC to 14 VDC

## Ordering Information

Blue Line ISM-BLQ1 Quad Passive-infrared Detector ISM-BLQ1

### Hardware Accessories

Blue Line ISM-BLA1-CC Color Camera Module (NTSC ISM-BLA1-CC-N format)

Blue Line ISM-BLA1-CC Color Camera Module (PAL ISM-BLA1-CC-P format)

Blue Line ISM-BLA1-CM Monochrome Camera Module (CCIR Format) ISM-BLA1-CM-C

Blue Line ISM-BLA1-CM Monochrome Camera 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 B328  
Mounts on a single-gang box and allows rotation of a detector. Wires are hidden inside.

## Ordering Information

B335-3 Low-profile Swivel-mount Bracket	B335-3
Plastic, swivel, low profile bracket for walls. The vertical pivot range is +10° to -20°; the horizontal pivot range is ±25°. Shipped in packages of three.	
B338 Universal Ceiling Bracket	B338
Plastic swivel bracket for ceilings. The vertical pivot range is +7° to -16°; the horizontal pivot range is ±45°.	

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