BOSCH
Invented for life

Blue Line ISM-BLA1-CM Monochrome Camera Modules

▸ **Pinhole charge-coupled device (CCD) camera with 3 lx light sensitivity**

▸ **380 TV lines of horizontal resolution**

▸ **The camera can be left on or controlled by the detector alarm.**

▸ **Selectable (Form A or Form B) alarm relay outputs**

▸ **Includes video cable with BNC connector**

▸ **Available in EIA or CCIR format**

The ISM-BLA1-CM monochrome camera modules attach to the Blue Line detectors. These camera modules, available in either EIA or CCIR format, are small, easy-to-mount, and attractive. Set the camera to run continuously, or to run for either 15 sec or 90 sec when activated by the detector alarm.

The ISM-BLA1-CM-C provides a video output of CCIR Standard 625 lines interlaced. Includes video output cable with BNC connector. It has shutter speeds from 1/50 sec to 1/100000 sec.

The ISM-BLA1-CM-E camera module provides a 1 V p-p standard composite video signal, EIA Standard 525 lines interlaced, into 75 Ω. It has shutter speeds from 1/60 sec to 1/100000 sec.

Installation/Configuration Notes

Camera Viewable Area

The camera's field of view is 66° horizontal and 53° vertical. The resulting viewable area depends on the installation height. An example for a 2.3 m (7.5 ft) installation height is shown below:

Viewable Area Legend

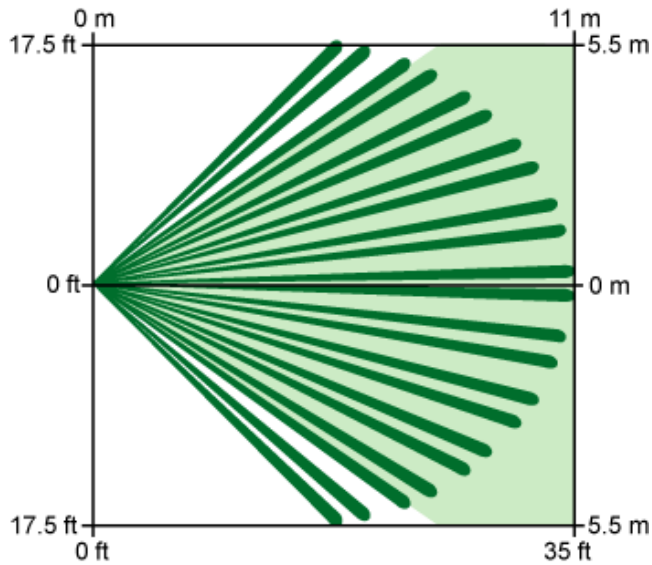PIR coverage pattern

Look-down zone

Camera's viewable area

Certifications and Approvals

ISM-BLA1-CM-E

Country	Certification/Listing Number
US	UL ANSR: Intrusion Detection Units (UL639)

ISM-BLA1-CM-C

Country	Certification/Listing Number
Europe	C€
	Complies with EN50131-1 grade 2
Czech Republic	NBU

Top View

Side View

Note The passive-infrared (PIR) coverage patterns and look-down zone depend on the specific detector used. Refer to the detector's datasheet.

Note A pair of masks are provided to reduce the detector's PIR coverage area since that area is larger than the camera's field of view.

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 (20 mAh with camera off, 460 mAh with camera on) of standby power must be supplied by the control unit or by a UL Listed burglary power supply.*

Video Connection

A video cable with a BNC connector at one end is supplied. Connect this cable to up to 152 m (500 ft) of 75 Ω RG59/U or similar coaxial cable.

Parts Included

Quant.	Component
1	Camera module
1	Mask
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):	-10°C to +49°C (+14°F to +120°F) *For UL Listed product installations, 0°C to +49°C (+32°F to +120°F)*

Input

Alarm:	5 V normally from sensor digital alarm output, ground for 4 sec during alarm.

Mechanical Properties

Color:	White
Dimensions:	5.6 cm x 6.1 cm x 4.8 cm (2.2 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

Relay Timer:	Selectable latch time of 15 sec or 90 sec
Timed Relay:	Solid state, selectable supervised Form A normally-closed (NC) or unsupervised Form B normally-open (NO) 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 to detector tamper circuit.

Power Requirements

Current (Alarm):	115 mA when camera is on.
Current (Standby):	5 mA maximum at 12 VDC
Voltage (Operating):	12 VDC nominal

Video

CCD:	8.5 mm (1/3-inch) color with an electronic shutter
Field of view:	66° horizontal, 53° vertical
Lens:	Pinhole lens with a 75° field of view
Resolution (horizontal):	380 lines minimum at center of picture
Scanning System:	2:1 interlaced
Sensitivity:	<3 lx
Signal:	75 Ω (CCIR or EIA)
Signal to Noise Ratio:	48 dB minimum

Ordering Information

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