

The Outdoor Passive Infrared and Motion Detector is a motion detector designed for outdoor perimeter protection. Two models offer coverage options and use the same reliable passive infrared technology to detect intrusions.

It uses Passive Infrared (PIR) technology to detect intrusions along with telescope-like precision mirror-glass optics. The detectors react to the slightest temperature (infrared radiation) change between a moving object and a stationary background. When an intruder moves into or through a detector's field of view (detection zone), the sudden change in infrared radiation is sensed and an alarm is triggered.

The detectors are engineered to provide unparalleled reliability and accuracy in the harshest environments. The detectors are single-ended, non-emitting devices. As such, not only are they easy to install but they also cannot be detected by electronic means.

### Features

- Double optical filtering which restricts infrared radiation to the 8-14 micrometer band, the atmospheric window where snow, rain, humidity and fog least affect the transmission of infrared radiation
- Digital signal processing, adaptive threshold decoding (ATD), and signal shape analysis reduce the nuisance/alarm ratio to the lowest levels found in the industry today
- Automatic temperature compensation ensure consistent sensitivity across the entire operating temperature range
- Advanced anti-vandal feature sends a tamper alarm when the cover is opened and when the detector's alignment is altered
- Heavy-duty front window and a heater enabling operation at -40°F

### Applications

- Conditional triggering of CCTV, Pan/Tilt/Zoom and dome cameras to focus on areas where an intrusion is underway
- Notifying central monitoring stations that an intrusion is occurring and further attention is needed
- Turning on lights or playing pre-recorded verbal messages

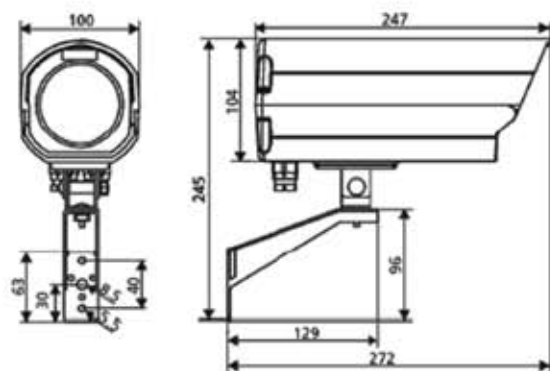


### Models

- Standard - a three-zone, continuous, "narrow-curtain" detection area with a range of 500' (150 m)
- Wide Angle - a 100'-wide (30 m), "fan-out" detection area with a range of 90' (27 m)

## Technical Specifications

- Nominal Optical Range - Standard: 500' (150 m)  
- Wide Angle: 90' (27 m)
- Width at Nominal Range - Standard: 11' (3.3 m)  
- Wide Angle: 100' (30 m)
- Optics - Sensor: Pyroelectric differential triple channel
  - Spectral Response: 8 to 14  $\mu\text{m}$
  - Optics: Precision mirror glass
  - Window: Silicon wafer
  - Detection Speed: 0.7 to 17 ft/s (0.2 to 5 m/s)
  - Sensitivity Adjustment: DIP switches and RS485
- Materials - Case Material: Heavy duty plastic  
- Color: White
- Environmental - Operating Temperature: -40 to 140°F (-40 to 60°C)  
- Humidity: 95% RH max  
- Sealing: IR 64 splash proof
- Dimensions - Height: 4.1" (104 mm) w/o mounting bracket  
- Length: 9.72" (247 mm)  
- Width: 3.94" (100 mm)  
- Weight: approx. 2 lbs (900 g) including mounting bracket  
- Cable Feed: 2 off M 16 with cable clamp  
- Cable Diameter: 0.16" to 0.4" (4 to 10mm)  
- Mounting Height: 8' to 13' (2.5 to 4 m)
- Electrical - Supply Voltage: 10.5 to 30 V DC and 24V AC ( $\pm 15\%$ )  
- Current (not activated): 18 mA (at 12 VDC), 10 mA (at 24 V AC)  
- Alarm Relay Output: 1 SPST 30 VDC, 100 mA max  
- Transistor Open Collector Output: 1 NPN, 30 V DC, 50 mA  
- Cover Switch: 30 V DC, 100 mA  
- Heating: 12 V DC / 24 V DC  
- Heating Power at -40°F (-40°C): typical 2 W  
- Turn-on Time: typical 60 seconds from power on  
- Communication: Bidirectional RS485 @ 9,600 baud  
- LED Alarm Indicator: included  
- Test Socket: included



## Accessories

- **Data Bus** - Both models feature RS485 data bus connectivity. The SB-485B is a USB / RS232 to RS485 interface. This interface connects via the test socket located inside the detector on the terminal board. No external power supply is required



- **Software** - The Windows-based Smarter Beam software application is designed to assist during the installation phase. The easy-to-use Scope View allows real-time signal strength for accurate data analysis and characterization. Users can optimize performance, adjust sensitivity, observe signal strength, and create alarm log files with event time-stamps for all detectors sharing an RS485 data bus.

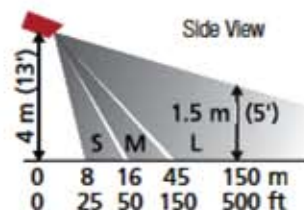
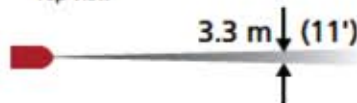


- **Pole Mounting Bracket** - A stainless steel pole mounting bracket with two strap bands for poles from 1.6 to 6.25 inches (4 to 16 cm) in diameter.
- **Walk Tester** - A cordless walk tester consists of transmitter and hand-held receiver component. The receiver signals power and alarm status via LED and buzzer. It makes a single-person walk test quick and easy.

## Detection Coverage:

### Standard

Top View



### Wide Angle

Top View

