

## BSP-PIR90x

**Passive infrared detector (PIR)**

**For outdoor and indoor applications (see type selection)**

**Detects movement by e.g. a person**

**Smart-house output**

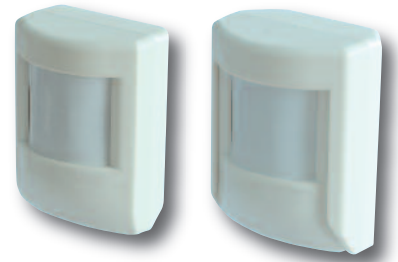
**Operating distance: 15 m**

**Operating angle: 90°**

**Walk test: LED indication**

**Channel coding by BGP-COD-BAT**

**Supplied by smart-house**



### GENERAL SPECIFICATIONS

<b>Power ON delay</b>	Typ. 1 min. It is therefore advisable to keep the unit connected to smart-house
<b>Environment</b>	IP 54 outdoor version IP 20 indoor version
Operating temperature	-20° to +50°C (+4° to +122°F)
Storage temperature	-30° to +70°C (-22° to +158°F)
<b>Connection</b>	Screw terminals
Terminal D+.	smart-house signal
Terminal D-	GND

<b>Material</b>			
Housing	Colour	White	
	Lens	Polyethylene	
<b>Dimensions (WxHxD)</b>	67 x 52 x 34 mm		
<b>Weight</b>	Approx. 110 g		
<b>Cable connection</b>	2 x 1.5 mm <sup>2</sup>		

### INPUT SPECIFICATIONS

<b>Inputs</b>	PIR on I/O 1
Lens	Dual detecting zones
Segments	24
Levels	3
Angle	90°
Operating distance	0.5 - 15 m (see radiation diagram)
Wave length	7 to 14 μm
Input detection speed	0.5 to 5 pulses/s

<b>Output</b>	
LED output	red LED on I/O 5

### TYPE SELECTION

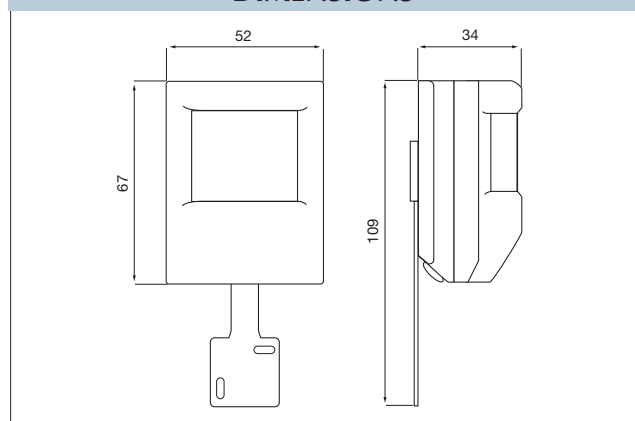
<b>Supply</b>	<b>Ordering no.</b>	
	<b>1 channel</b>	
	<b>PIR detector</b>	
By smart-house	BSP-PIR90	Outdoor version
	BSP-PIR90A	Indoor version

**Note:** The only difference between the two versions, is the cover shown on the picture.

### SUPPLY SPECIFICATIONS

<b>Power supply</b>	Supplied by smart-house
Rated operational current	< 1.5 mA with walktest on < 1.1 mA with walktest off

### DIMENSIONS



**MODE OF OPERATION**

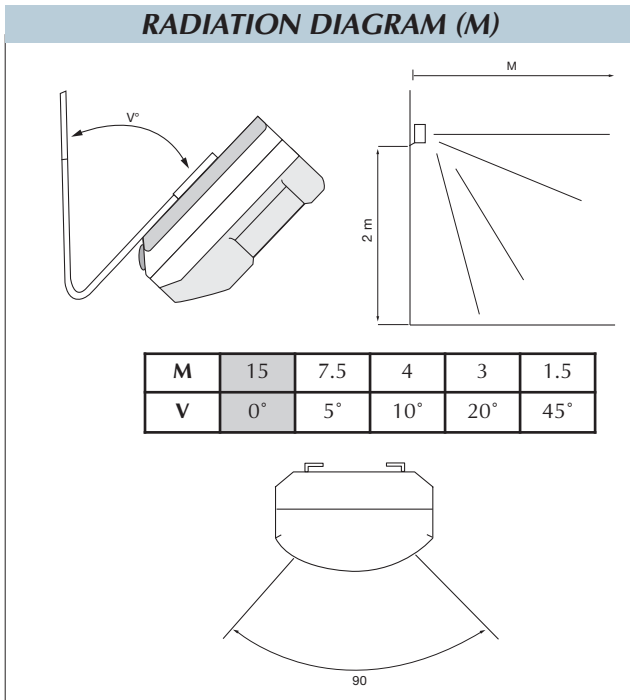
BSP-PIR90/BSP-PIR90A is a 1-channel monostable transmitter with a PIR detector, which operates by means of a dual-element detector.

The transmitter is activated if the temperature suddenly changes (most often it will be heat radiation from a person) in relation to the background radiation. Consequently, the transmitter can be used for ON/OFF switching of lighting, air conditioning, etc. If a person moves within a detection zone, BSP-PIR90/BSP-PIR90A is activated. Slow movements between zones resulting in a detection speed of less than 0.5 pulses/sec will not be detected. Nor will rapid movements resulting in a detection speed of more than 5 pulses/sec be detected. As BSP-PIR90/BSP-PIR90A is a passive device, several detectors can be placed in the same room without interfering with each other.

The module should not be installed in the following places:

- a) In places exposed either to sunlight or to motor vehicle headlights pointing directly at the sensor.
- b) In places exposed to direct air flow from a heater or air conditioner.
- c) In places where rapid temperature changes occur.
- d) In places exposed to severe vibration.
- e) Close to glass or other objects which might reflect the infrared radiation.

**RADIATION DIAGRAM (M)**



**WIRING DIAGRAM**

