

BSP-PIR90x

Passive infrared detector (PIR)

For outdoor and indoor applications (see type selection)

Detects movement by e.g. a person

Smart-house output

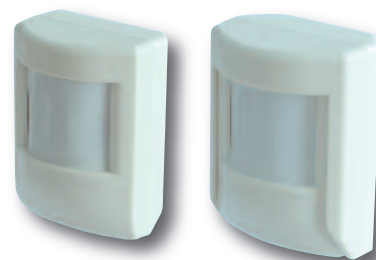
Operating distance: 15 m

Operating angle: 90°

Walk test: LED indication

Channel coding by BGP-COD-BAT

Supplied by smart-house



GENERAL SPECIFICATIONS

Power ON delay	Typ. 1 min. It is therefore advisable to keep the unit connected to smart-house
Environment	
Degree of protection	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)
Connection	Screw terminals
Terminal D+.	smart-house signal
Terminal D-	GND

Material	
Housing	Colour White
Lens	Polyethylene
Dimensions (WxHxD)	67 x 52 x 34 mm
Weight	Approx. 110 g
Cable connection	2 x Ø5 mm

INPUT SPECIFICATIONS

Inputs	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

Output	
LED output	red LED on I/O 5

TYPE SELECTION

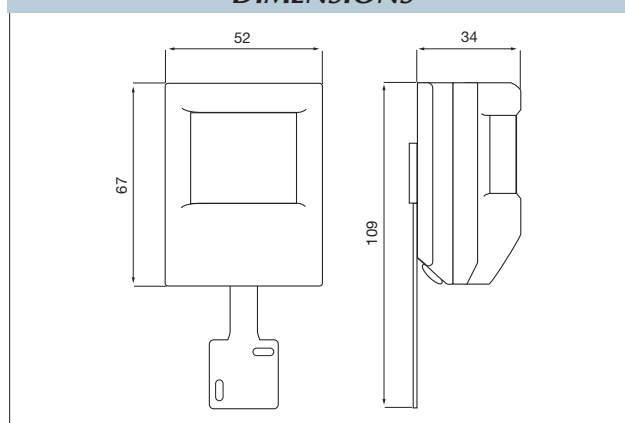
Supply	Ordering no.
	1 channel
	PIR detector
By smart-house	BSP-PIR90 Outdoor version
	BSP-PIR90A Indoor version

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

SUPPLY SPECIFICATIONS

Power supply	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.

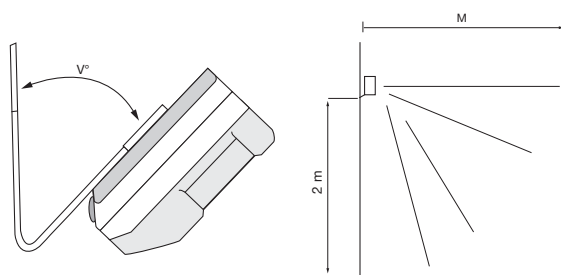
The transmitter is activated if the temperature suddenly changes (most often it will be heat radiation from a person) in relation to the background radiation. Consequently, the transmitter can be used for ON/OFF switching of lighting, air conditioning, etc. If a person moves within a detection zone, 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.

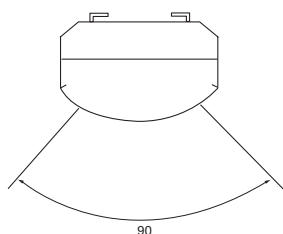
The module should not be installed in the following places:

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

RADIATION DIAGRAM (M)



M	15	7.5	4	3	1.5
V	0°	5°	10°	20°	45°



WIRING DIAGRAM

