

APPLICATIONS

- Long - range passive motion detectors, for use in alarm systems inside buildings and outdoors
- Used as passive "light barrier" as an alternative to active IR light barrier systems

FEATURES

- Very small horizontal and vertical detection area of 1° the detection area is designed with an exactly geometric limitation
- Detects even extremely slow movement (0.2 m/s) at right angles to the detection axis..
- Unobtrusive because of very small dimensions

Passive IR detection is based on the recording of changes in the continuously measured background temperature.

The high-quality precision optical system with an integrated system of mirrors picks up the thermal radiation and focuses it on a dual pyro-electrical sensor.

Temperature changes caused by objects moving across the detection axis

or towards the detector are evaluated and used for triggering an alarm.

The evaluation electronics provide a high degree of safety against false alarms due to changing weather conditions, such as sudden temperature changes, the onset of precipitation or gusts of wind.

The telescopes are designed for indoor or outdoor use.

Passive Infrared Telescope SPI 100



TECHNICAL DATA SPI 100

| | |
|---|--|
| Nominal range | 150 m |
| Recommended range | 100 m (1) |
| Monitored spatial angle | vertical 1° horizontal 1° |
| Spectral sensitivity: | 8 - 14 µm |
| Supply voltage: | 12 V DC +/- 25 % |
| Power consumption: | 0,25 W |
| - with heater: | 1,25 W |
| Alarm output: | potential-free relay contact (normally open/normally closed) serial resistor 10 Ohm |
| Delay between power-on and ready for operation: | approx. 50 s |
| Connection: | permanently mounted cable, length 6 m (7 x 0.34 mm ²) |
| Ambient temperature: | - 30 up to + 65°C |
| Case: | degree of protection IP 66, anodised aluminium |
| Dimensions - Length: | 185 mm |
| - Diameter: | 50 mm |
| Weight: | 0,7 kg |

- (1) The outside detection range depends on the thermal background noise, the contrast of the target, its size and velocity. Therefore it is recommended to reduce the nominal detection range by about 25 to 35% for an outside use. We look forward to support you with our comprehensive experience and consulting competence at your project planning.

BESTELLANGABEN

| | |
|-------------|---|
| SPI 100 | Passive-IR-Telescope; vertical aperture 1° |
| SPI V - 102 | Aiming device for SPI 100 - 102 |
| SPI W | Wall mounting |

PASSIVE INFRARED TELESCOPES

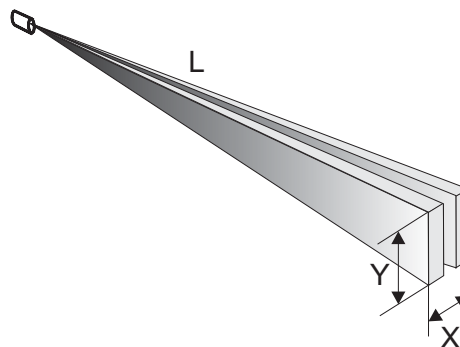
Brief descriptions and data sheets



DETECTION AREA

Persons

| L (m) | X (m) | Y (m) |
|-------|-------|-------|
| 25 | 0,5 | 0,5 |
| 50 | 1,0 | 1,0 |
| 100 | 2,0 | 2,0 |

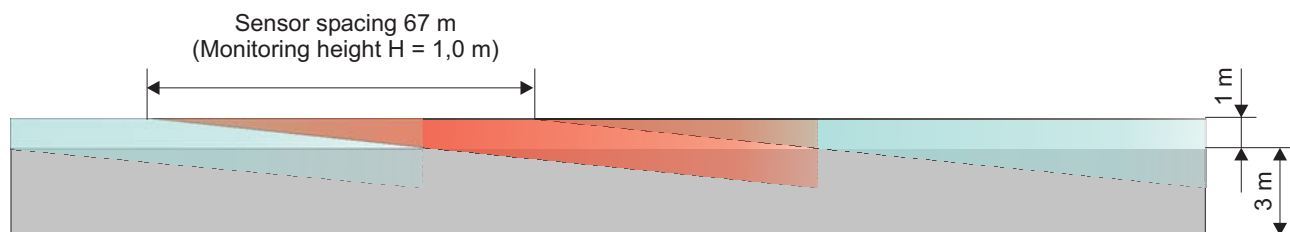


EXAMPLE OF APPLICATION



When using the SPI 100 as climb-over protection, the sensor spacing will be determined by the monitoring height, so as to avoid gaps in the monitoring system by overlapping the detection areas.

| Monitoring height | Sensor spacing |
|-------------------|----------------|
| 0,5 m | 75,0 m |
| 1,0 m | 67,0 m |



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