# Communicating sensor: SIR Wireless



A smart system based on motion sensors for pedestrians and cyclists.

Wireless and instantaneous communication between light points by secure LoRa radio (local protocol).

Floor detection zone: 180° with a radius of 10 m around the sensor.

IK08 casing and protective shutters for the 2 sensors.

Power supply built into the detection module for simplified installation into lamppost bases.

## **ADVANTAGES**

Easy to install on all kinds of lampposts.

Designed for an urban environment with its two PIR sensors and discrete styling.

The adaptable installations can be re-configured and extended.

# **TECHNICAL CHARACTERISTICS**

#### Mechanical characteristics:

- Mechanical strength: IK08 casing.
- IP54 protection rating.
- Material: polypropylene casing and protective skirt in thermoplastic elastomer.
- Colour: Black.

#### Electrical specifications:

- Main power supply:
- 220-240 Vac / 50-60 Hz.
- Power consumption: < 1 W.
- Electrical class: Class 2.
- Overvoltage resistance: 4 kV.
- Also available in 9-30 Vpc battery version, LED driver control only on the dry contact output.

#### Communication:

- Between light points: Secure LoRa radio.
- LED driver control: DALI or dry contact output.

- Installation:
- Operating temperature: -20°C to +60°C.
- Min. difference in temperature with target: +/- 4°C.
- Wiring: 5 metres of cable included (4 conductors).
- Mounting: 3 holes / 2 M4 self-tapping screws.
- Recommended height: 3 m to 4.5 m.
- Floor detection zone:
- 180° with a radius of 10 m around the sensor.

#### On-site configuration:

- On-site configuration interface: SensyCity application.
- On-site configuration tools: USB radio dongle.
- Many functions can be adjusted on-site.

#### Standards and certifications:

- Product standard: NF EN 60529.
- Product standard: NF EN 61347-2-12 (street lighting).
- EC Certifications.



Complies with the RES-EC-103 Energy Saving Certificate requirements.



#### **OPERATION**

If no activity is detected in the area, the lighting is dimmed, leaving only guidance lighting.

At the slightest movement:

- the lighting intensity is resumed by a priority instruction sent to the LED driver (the level and the duration can be adjusted),
- the detection information is sent by radio to the light points fitted with SIR Wireless sensors, NOD receivers or VIA relays.

Grading scenarios can be programmed in the SIR Wireless device using the SensyCity application, with up to 5 time phases per night.











# DETECTION SOLUTIONS

#### **DETECTION ZONES**

The expertise we have developed from the hundreds of SensyCity installations that we have created has led us to design a range of "Detection Zone" accessories, in order to adapt the detection zone to all the configurations we have encountered in the field.

When positioned directly on the SIR sensor, the accessories make it possible to adjust the detection area of the PIR sensors to best meet the desired detection needs.

They can be installed when the detection system is commissioned or later if a more limited zoning need is identified.



### **STANDARD DETECTION ZONE:**



**ZONE 1:** for applications requiring a reduction at the front of the detection zone.

**ZONE 2:** for applications requiring a reduction at the sides of the detection zone.



**ZONE 3:** for applications requiring a reduction of the entire detection zone.



\* Distance given for information. It may very depending on the configuration of the site.