

SensyCity®



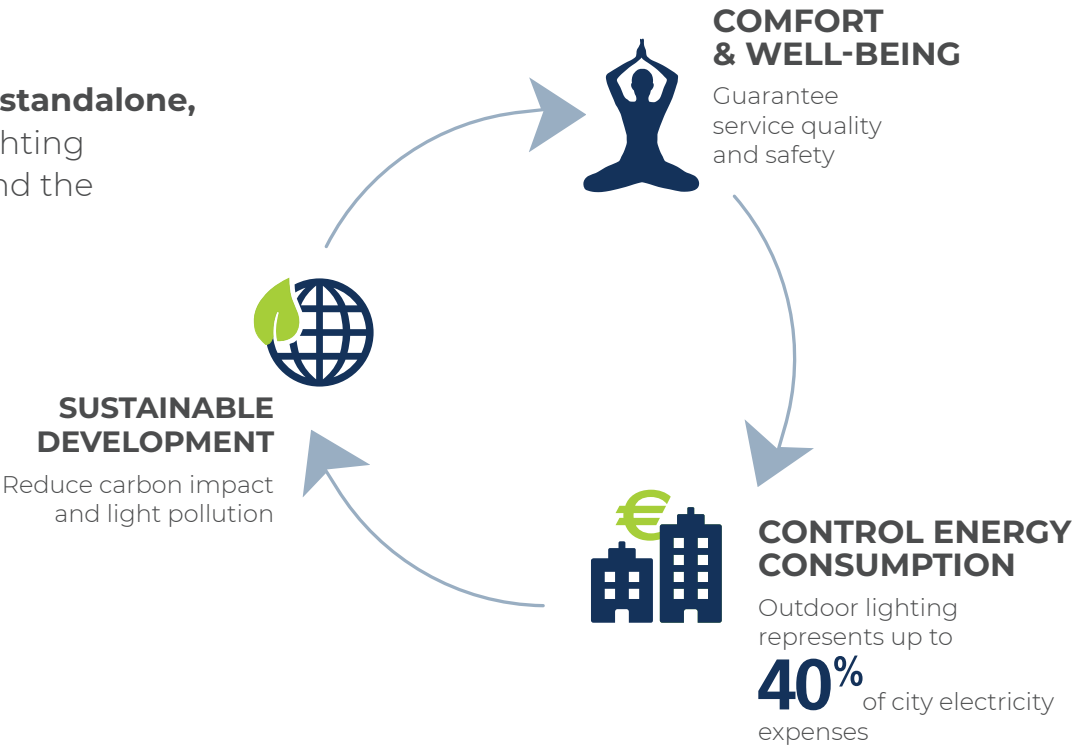
SENSING ECOSYSTEM FOR OUTDOOR LIGHTING

Maximise energy savings while maintaining safety & the nighttime environment

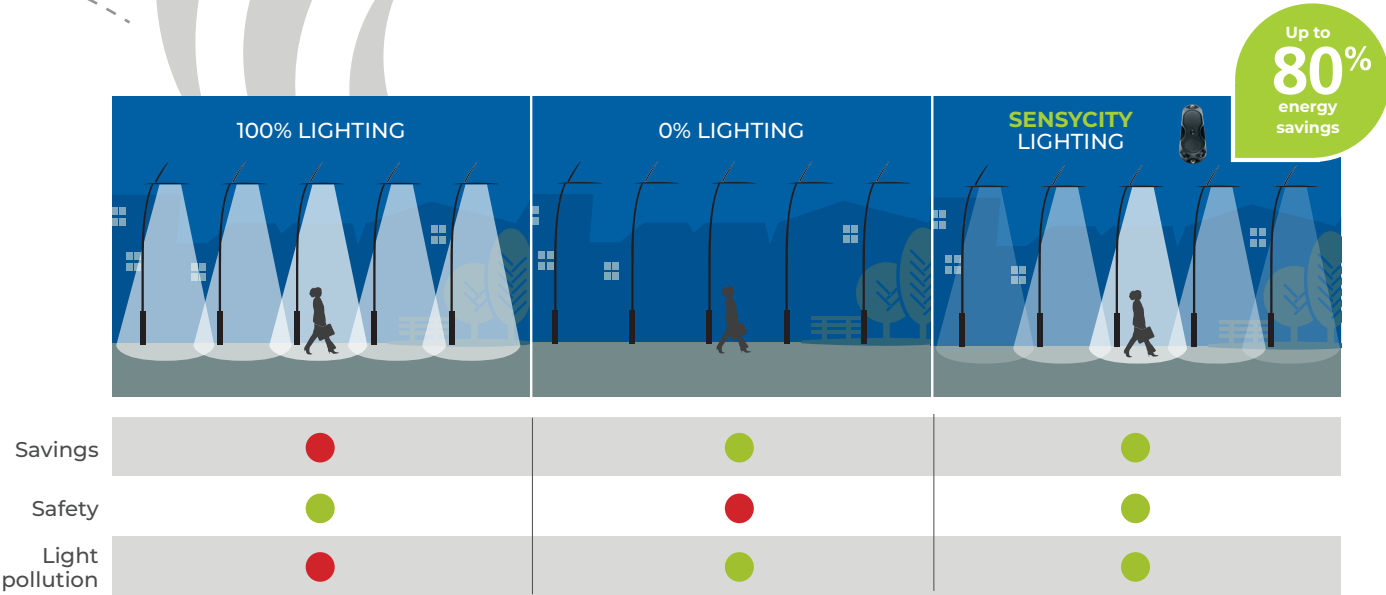


SENSYCITY IS THE 1ST COMMUNICATING SENSING ECOSYSTEM FOR OUTDOOR LIGHTING

Intelligent and **standalone**, it adjusts the lighting to the activity and the user's need.



Lighting comparison on these areas



SensyCity, the outdoor lighting solution best suited to meet the needs of municipalities.

Savings: energy savings at night (mainly during low activity periods).
Safety: for people and goods in the street at night.
Light pollution: citizens, plants and animals that could be disturbed by light pollution.

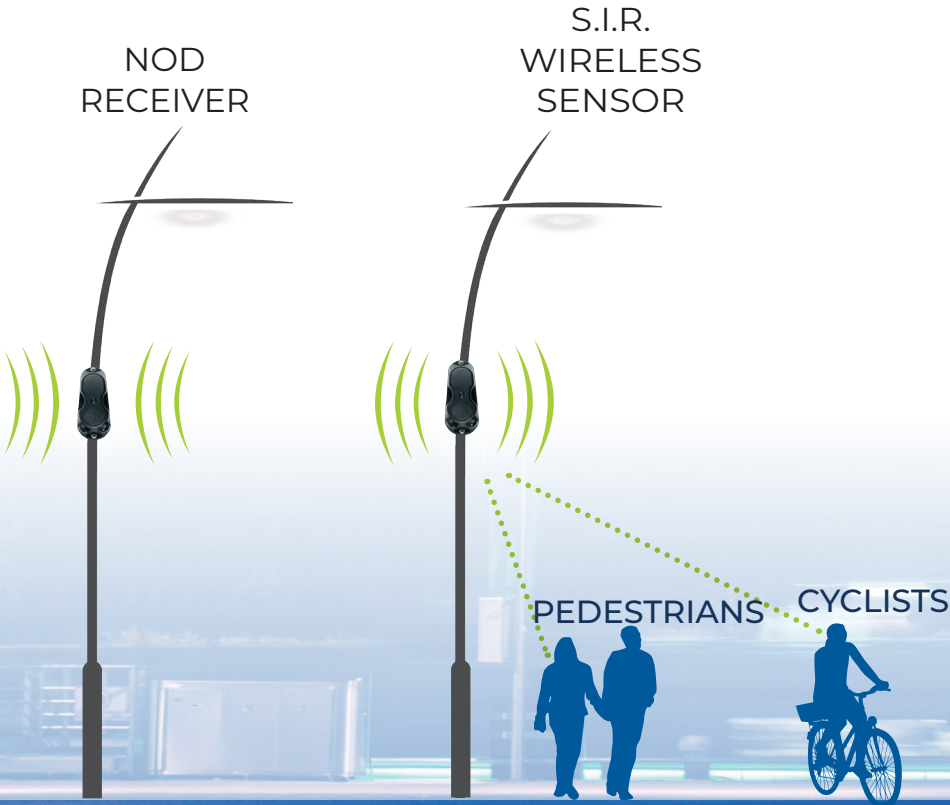
SensyCity, communicating ecosystem to adjust light

INNOVATIVE SOLUTION

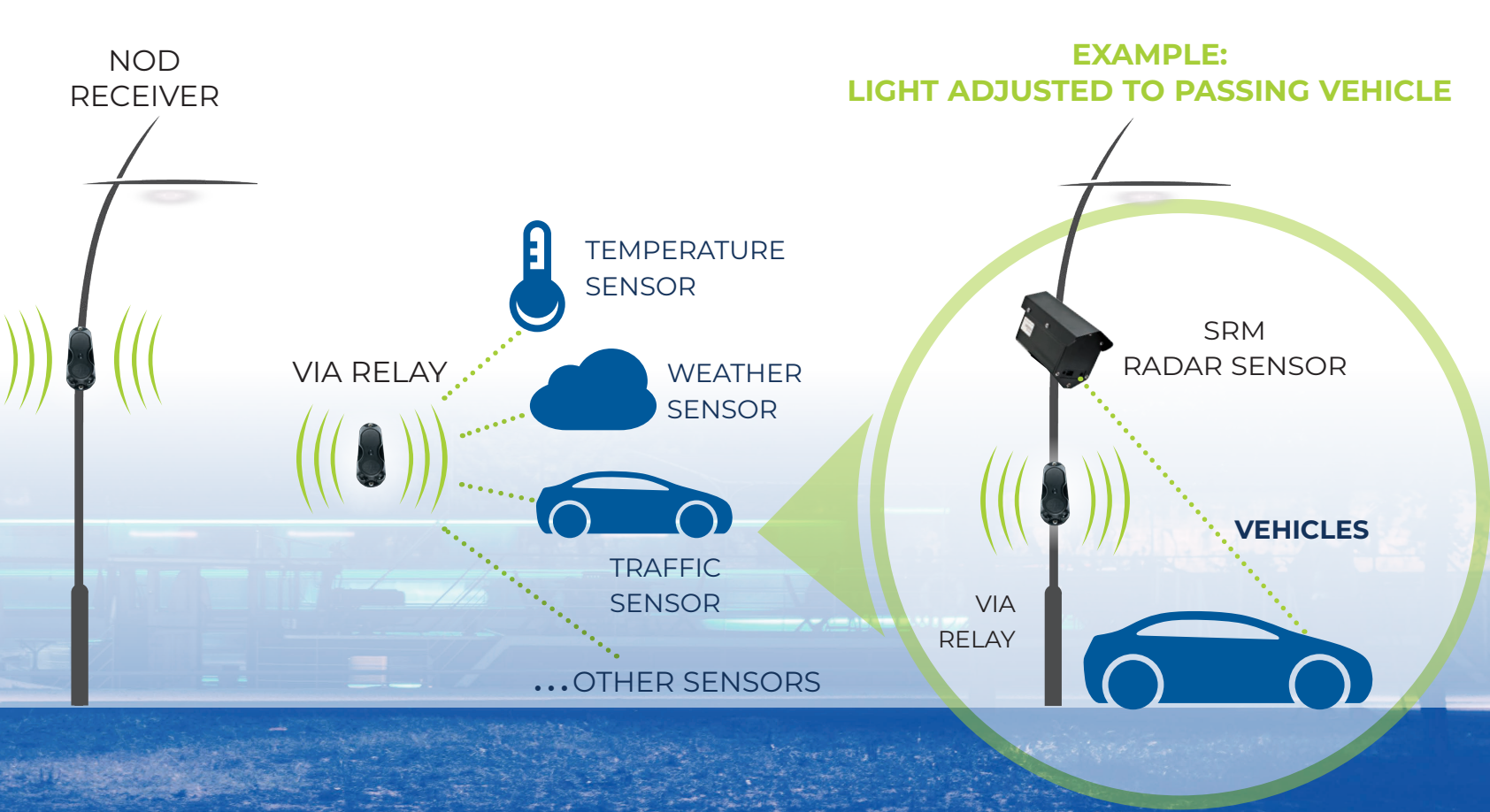
SensyCity allows light to be adjusted thanks to local, **real time wireless** communication between lighting points. Open to the various sensors of the city, SensyCity is highly **interoperable**.



Detection of pedestrians and bicycles



Detection through various sensors



SensyCity, dedicated sensing system for outdoor lighting

SensyCity®

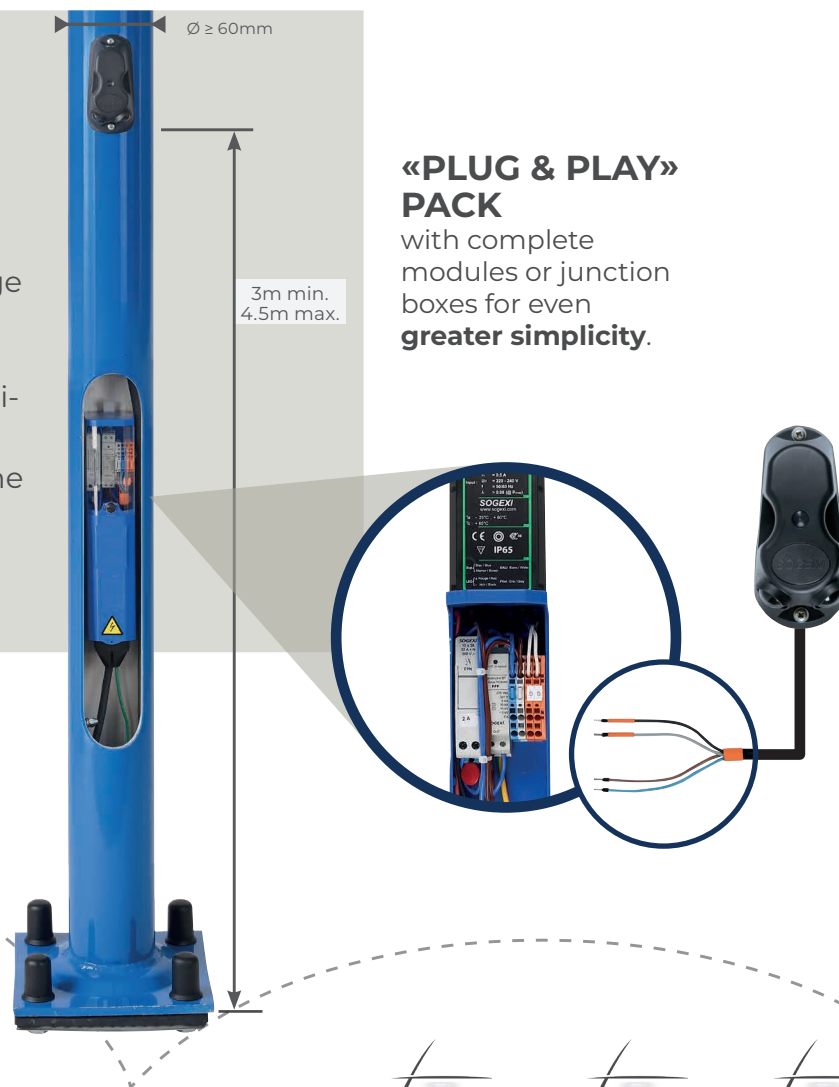
EASY to install

Easy to implement: wireless long-range communication avoids complex wiring on all existing installations.

Mounting on any shape of pole, any diameter $\geq 60\text{mm}$, or on facade.

Simple connection at the bottom of the pole, pre-cabled (5 metres).

Integrated 230V mains.



«PLUG & PLAY» PACK
with complete modules or junction boxes for even greater simplicity.

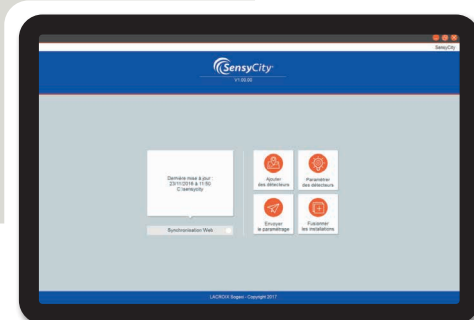
EASY to program

SensyCity intuitive client interface: group light points and configure them in just a few clicks.

Wireless setup of the entire installation.

Quick and easy implementation of dynamic detection.

Web backup: shared and secure access to every SensyCity installation setup.



DESIGNED for urban environments

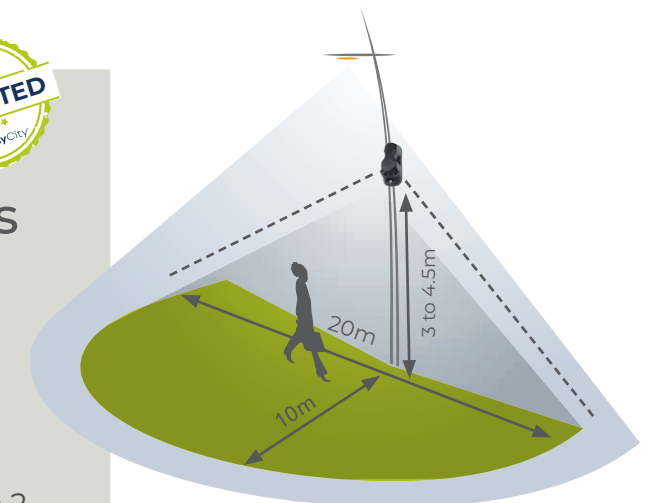


Efficient: detection area perfectly adapted for street lighting with its 2 PIR sensors.

Standards: compliant with lighting standard EN 61347-2-11.

Robust: IK08 housing and protective flange for the 2 sensors.

Discreet: compact, it integrates perfectly into the urban landscape.



FUTURE-PROOF towards tomorrow's city

Open on the smart city: VIA wireless relay is the link to adjust and optimise outdoor lighting with various sensors.

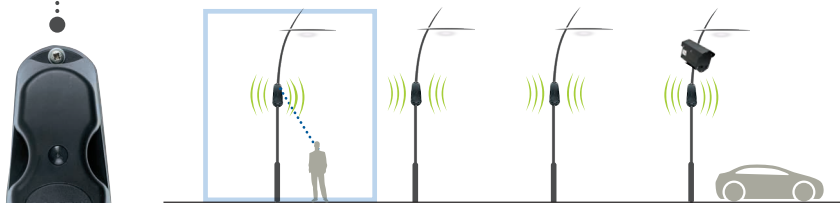
Interoperable with any new or existing LED lights as it is installed on the pole.

Future-proof, installations could be reconfigured and extended to meet your needs.



Enables an Energy Efficiency Certificate to be obtained RES-EC-03.

S.I.R. WIRELESS: communicating motion sensor



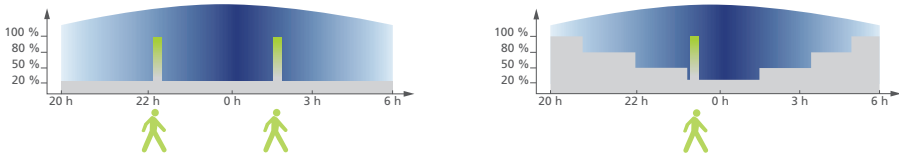
Intelligent system based on motion sensors for pedestrians and cyclists.

When no activity is detected in the area, light is dimmed down to a minimum level, offering only guidance.

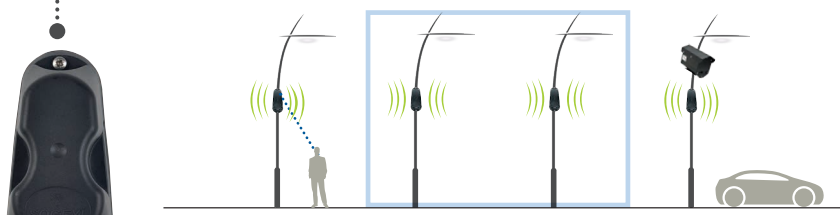
The slightest movement:

- immediately restores brightness thanks to priority instructions to the LED driver (level and time adjustable).
- sends wireless information to surrounding light points equipped with S.I.R. Wireless sensors, NOD receivers or VIA relays.

Dimming scenarios configurable in the S.I.R. Wireless with the SensyCity application.



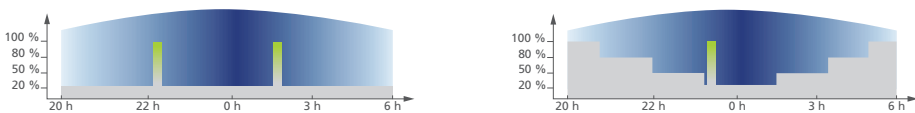
NOD: receiver



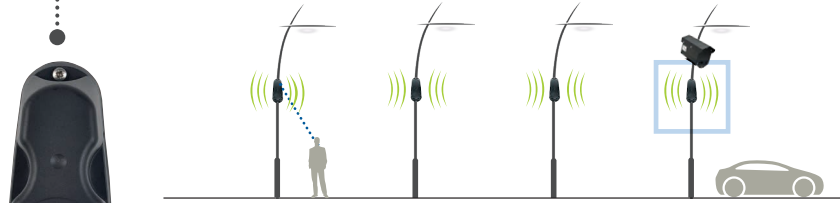
Device receiving the radio information coming from a S.I.R. Wireless sensor or a VIA relay.

The NOD immediately restores the light level when receiving the radio information through a priority instruction sent to the LED driver (level and time adjustable).

Dimming scenarios configurable in the NOD using the SensyCity application.



VIA: relay



Device allowing the city's various professions to link with the SensyCity ecosystem to adjust and optimise light based on a variety of information.

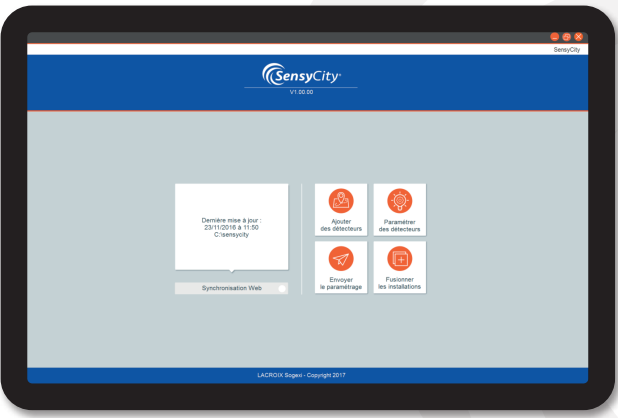
The VIA relay receives the information as soon as a sensor is activated (vehicle radar sensor, traffic sensor, weather sensor, etc.) and sends it immediately via radio to the light points equipped with NOD receivers or S.I.R. Wireless.

CONFIGURATION APP

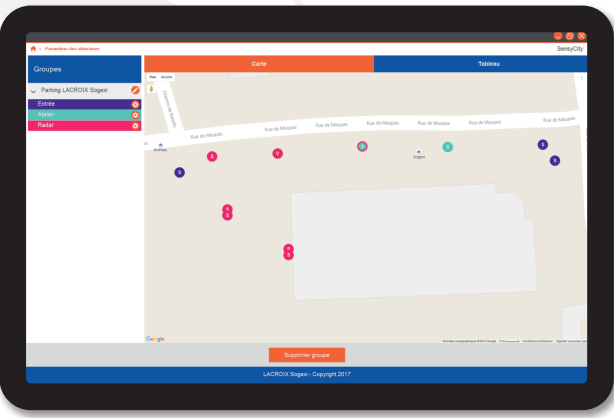
The SensyCity configuration application enables highly intuitive use of the sensing ecosystem and allows you to upgrade your installations easily.

Here are some illustrated examples of the SensyCity application's functions:

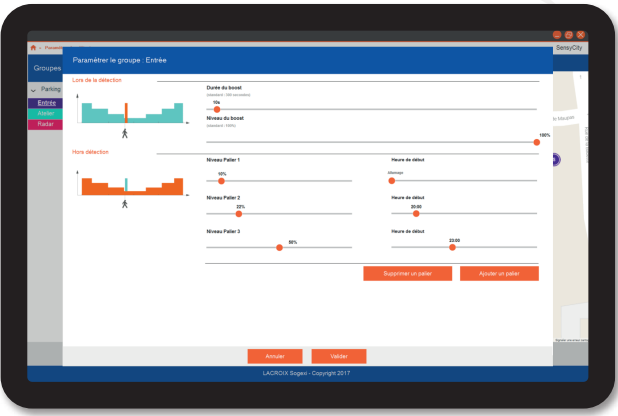
MAIN MENU



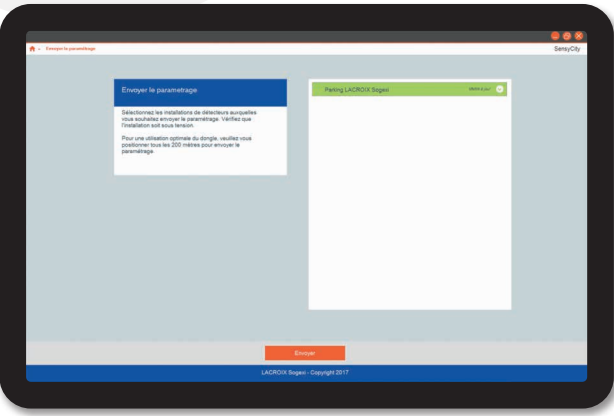
CREATE GROUPS ON GOOGLE MAPS



CONFIGURE LEVELS, TIME AND NIGHT PROFILES



SEND THE SETTINGS TO THE INSTALLATION



DONGLE




Plugged into the USB port of a laptop or a tablet, it allows the ecosystem's devices (S.I.R., NOD, VIA) installed on the light points to be localised and registered. The dongle enables configuration or wireless re-configuration of all your SensyCity installations.

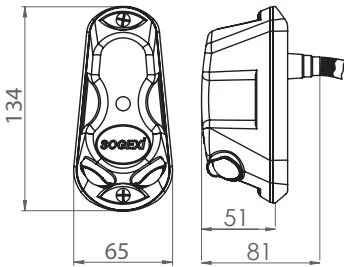
Technical specifications

Technical specifications

SIR Wireless



| Communication | | |
|--|--|---------------------------|
| Communication between light points | Secured LoRa wireless | |
| Output (driver control) | DALI | Dry contact |
| Input | na | |
| Electrical specifications | | |
| Mains (integrated) | 220-240VAc / 50-60 Hz | |
| Power consumption | < 1W | |
| Electrical class | Class 2 | |
| Overvoltage resistance | 4kV | |
| Mechanical specifications | | |
| Mechanical resistance | IK08 casing | |
| IP level | IP54 | |
| Material | Housing: Polypropylene IP gasket: Thermoplastic elastomer | |
| Colour | Black | |
| Installation | | |
| Operating temperature | -20°C to +60°C | |
| Min. difference of temperature with the target | +/- 4 °C | |
| Cabling | Pre-cabled 5m (4 conductors) | |
| | Mains: 2 conductors | Mains: 2 conductors |
| | DALI: 2 conductors | Dry contact: 2 conductors |
| Mounting | 3 holes / 2 M4 screws | |
| Advised mounting height | From 3m to 4.5m | |
| Detection area | On the ground: 180° with 10m around the sensor | |
| Installation setting on the field | | |
| Configuring software on-site | SensyCity App | |
| On-site tool configuration | Wireless dongle | |
| Settings that can be adjusted on-site | Setting light point group(s) | |
| | Light level when sensing activity (≤ 100%) | na |
| | Boost duration (≥ 3 sec.) | |
| | Light level when no activity (≥ 10%) | na |
| | Dimming scenario (1 to 5 steps) | na |
| Standards & certifications | | |
| Product standards | NF EN 60529 | |
| | NF EN 61347-2-11 (outdoor lighting) | |
| Certifications | CE | |



Dongle



Dimensions

- 63 x 50 x 25mm

Connection specifications

- Connection on PC or tablet: USB plug
- Communication with S.I.R., NOD & VIA: Wireless

Software setup

- 'SensyCity' App
- Hard drive space required: 50 MB
- Operating systems: Windows 7 or higher
- User guide can be downloaded from LACROIX City website

| NOD | | VIA | |
|---|---------------------------|---|--|
|  | |  | |
| Secured LoRa wireless | | Secured LoRa wireless | |
| DALI | Dry contact | na | DALI |
| na | | Dry contact | |
| 220-240VAc / 50-60 Hz | | 220-240VAc / 50-60 Hz | |
| < 1W | | < 1W | |
| Class 2 | | Class 2 | |
| 4kV | | 4kV | |
| IK08 casing | | IK08 casing | |
| IP54 | | IP54 | |
| Housing: Polypropylene IP gasket: Thermoplastic elastomer | | Housing: Polypropylene IP gasket: Thermoplastic elastomer | |
| Black | | Black | |
| -20°C to +60°C | | -20°C to +60°C | |
| na | | na | |
| Pre-cabled 5m (4 conductors) | | Pre-cabled 5m (4 conductors) | Pre-cabled 5m (5 conductors) |
| Mains: 2 conductors | Mains: 2 conductors | Mains: 2 conductors | Mains: 2 conductors |
| DALI: 2 conductors | Dry contact: 2 conductors | Dry contact: 2 conductors | Dry contact & DALI: 3 cond. |
| 3 holes / 2 M4 screws | | 3 holes / 2 M4 screws | |
| From 3m to 4.5m | | From 3m to 4.5m | |
| na | | na | |
| SensyCity App | | SensyCity App | |
| Wireless dongle | | Wireless dongle | |
| Setting light point group(s) | | Setting light point group(s) | |
| Light level when sensing activity (≤ 100%) | na | na | Light level when sensing activity (≤ 100%) |
| Boost duration (≥ 3 sec.) | | na | Boost duration (≥ 3 sec.) |
| Light level when no activity (≥ 10%) | na | na | Light level when no activity (≥ 10%) |
| Dimming scenario (1 to 5 steps) | na | na | Dimming scenario (1 to 5 steps) |
| NF EN 60529 | | NF EN 60529 | |
| NF EN 61347-2-11 (outdoor lighting) | | NF EN 61347-2-11 (outdoor lighting) | |
| CE | | CE | |

Radar SRM



Technology

- Ultra high frequency 24.125Ghz

Mechanical characteristics

- Dimensions: 180 x 100 x 70mm
- Weight: 1.2kg
- Housing: IP65 with thermal protection / Painting & anodising

Electrical characteristics

- Switched power
Resistive load: 110 VAc 0.3A - 24 Vdc 0.3A
Inductive load: 110 VAc 0.2A - 24 Vdc 0.3A
- Supply voltage: 220 VAc +/- 10%
48/62 Hz - fuse protection
- Consumption < 1.5 VA

Installation

- Radar range: 150m for light vehicles
- Operating temperature: - 40°C to +75°C
- Connecting: 1 IP68 7-pin connector pre-wired 5m

Settings

- Mode: One-way incoming flow / Two way
- Configured using the switch on the front panel
- Display: High-performance red LED on front panel

Standards

- Compliant with CE standards
- Fulfils the requirements of directive R/TTE 1999/5/EG



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