CitySense Plus is a revolutionary integrated wireless motion sensor for the presence-based monitoring and control of outdoor lighting. The product is compatible with both conventional and new luminaires (such as LED).

CitySense Plus delivers on-demand dynamic lighting, making the lights adjust their brightness based on the presence of pedestrians, bicycles, and cars. As a result, the lights automatically dim down during the off-peak hours when there is nobody in the vicinity. Upon detection of the human presence, all lights in the surrounding area return to the brightness levels previously defined by the user. Dynamic lighting reduces energy consumption by up to 80% without compromising public safety and citizen comfort.

The in-built monitoring tools notify users (via CityManager) about the lighting-related faults such as a lamp or ballast failures. This greatly reduces the need for expensive visual inspections and enables a reduction of operation and maintenance costs.

Designed in the Netherlands  Made in Europe

**Features**

- Revolutionary Outdoor Sensor with Inbuilt Wireless Lighting Controller
- Energy Monitoring
- Advanced Detection Technology
- Inbuilt Astronomical Clock
- Heatmaps to track occupancy levels and traffic intensity in the area
- Full Remote Management & Control via CityManager and 3rd Party Software
- Integrated Product – Plug & Play Installation
- Open Interfaces for Third-Party Software
- Universal Lamp Compatibility
- Fail Proof: 3-Level Back-Up System

**Benefits**

- Up to 80% energy savings
- Up to 50% maintenance cost reduction
- Reduce light pollution and CO₂ emissions
- Light on demand
## TECHNICAL SPECIFICATIONS

<table>
<thead>
<tr>
<th><strong>Product</strong></th>
<th>Motion detection sensor; wireless communication and lighting control integrated into one product for a simple plug-and-play installation. Includes a 5.5m pre-connected power and control cable.</th>
</tr>
</thead>
</table>
| **Motion detection** | Detects pedestrians, cyclists, and cars (range: 4-120 km/h)  
  Range: up to 15 m on each side, 9 m in front, 3 m behind  
  Detection angle: >270° (depending on pole diameter)  
  Triggering of 1-10 neighboring lamps upon detection (user configurable) |
| **Input voltage** | 230 VAC or 115 VAC, 50/ 60 Hz (depending on variant) |
| **Power consumption** | <3W |
| **DALI loads** | Max. 1 |
| **Dimming control** | 0-10 V or DALI |
| **Surge protection** | 125 joules (6 Ka), 2 kV combination wave |
| **Controller** | ARM Cortex-M3 CPU |
| **Electrical protection** | Class II (Overload and short-circuit protection) |
| **Electrical safety** | Galvanic isolation between high-voltage and low-voltage terminals  
  External circuit breaker at power input of the product is mandatory |
| **Operating conditions** | -20°C to +60°C operating; -40°C to +85°C storage; 20% to 90%, Rh non-condensing |
| **Product mounting** | On the pole. Recommended mounting height 5m above the road surface |
| **Housing** | IP65, UL94V0. Black and Grey models available. |
| **Antenna** | Integrated internally |
| **Dimensions** | 100 mm x 125 mm x 95 mm  
  +/- 10° adjustable mounting plate to accommodate for pole tilts |
| **Product compatibility** | Plug-and-play compatibility with SkyLite family, CitySense, Gateway and CityManager. Compatible with conventional (PLL, HID, HPS) and LED luminaires. |

### Wireless communication
2.4 GHz IEEE 802.15.4 self-forming, self-healing wireless network. Transmit power: +9.5 dBm max; -96 dBm receiver sensitivity. Up to 150 meter open field range.

### Network security
128 AES Multi-layer security

### Over-the-air update
Configuration, software as well as firmware can be updated remotely ensuring up-to-date network infrastructure

### Server communication
via Gateway

### Device to Gateway ratio
200:1

### Remote monitoring
Via CityManager or similar third-party management software. CityManager enables remote management, monitoring, control, and configuration of lamps on individual and group level.

### Safety mode
Auto-safe: in a case of network loss, brightness will go to a pre-defined level depending on the settings. Astro clock based scheduling is still possible.

### Certification
CE, CB, EN61547, EN55015, EN60950-1, EN61347-1/2-11, EN 301 489-1/17, EN 300 328, RoHS. RF transceiver compliant with US (FCC), Canadian (IC), European (ETSI), and Japanese (Telec) standards

### Manufacturing
ISO 9001:2008, Made in Europe

### Nominal Failure Rate
0.2%/1,000h

### Lamp switching capacity
1400 VA (Relay), 6A max. current.

### AstroClock
Battery-backed real-time clock; AstroClock function. Able to switch on/off the lamps at sunset/sunrise and adjust them seasonally (summer-winter time). Eliminates the need for conventional photocell

### Warranty
Standard 2 years limited warranty. Extended warranty available. Warranty subject to proper use of installation- and application manuals

### Application
Outdoor street lighting, Area lighting

### AVAILABLE VARIANTS

<table>
<thead>
<tr>
<th><strong>Order code</strong></th>
<th><strong>Description</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>PR150868</td>
<td>230VAC</td>
</tr>
<tr>
<td>PR1511116</td>
<td>115VAC</td>
</tr>
</tbody>
</table>

Keywords: Wireless iSLC, iOLC Radio Frequency (Intelligent Street /Outdoor Lighting Controller RF), Outdoor Wireless Sensor