

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 

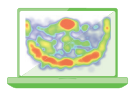
Features



Revolutionary Outdoor Sensor with Inbuilt Wireless Lighting Controller



Advanced Detection Technology



Heatmaps to track occupancy levels and traffic intensity in the area



Integrated Product – Plug & Play Installation



Universal Lamp Compatibility



Energy Monitoring



Inbuilt Astronomical Clock



Full Remote Management & Control via CityManager and 3rd Party Software

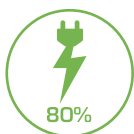


Open Interfaces for Third-Party Software



Fail Proof: 3-Level Back-Up System

Benefits



Up to 80% energy savings



Up to 50% maintenance cost reduction

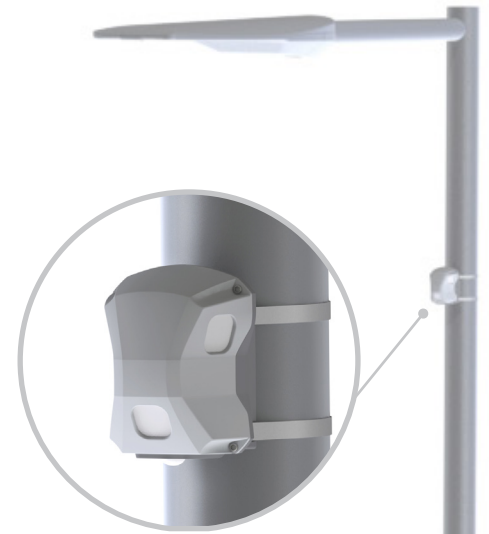


Reduce light pollution and CO₂ emissions



Light on demand

Product	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.
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

Order code	Description
PR150868	230VAC
PR151116	115VAC