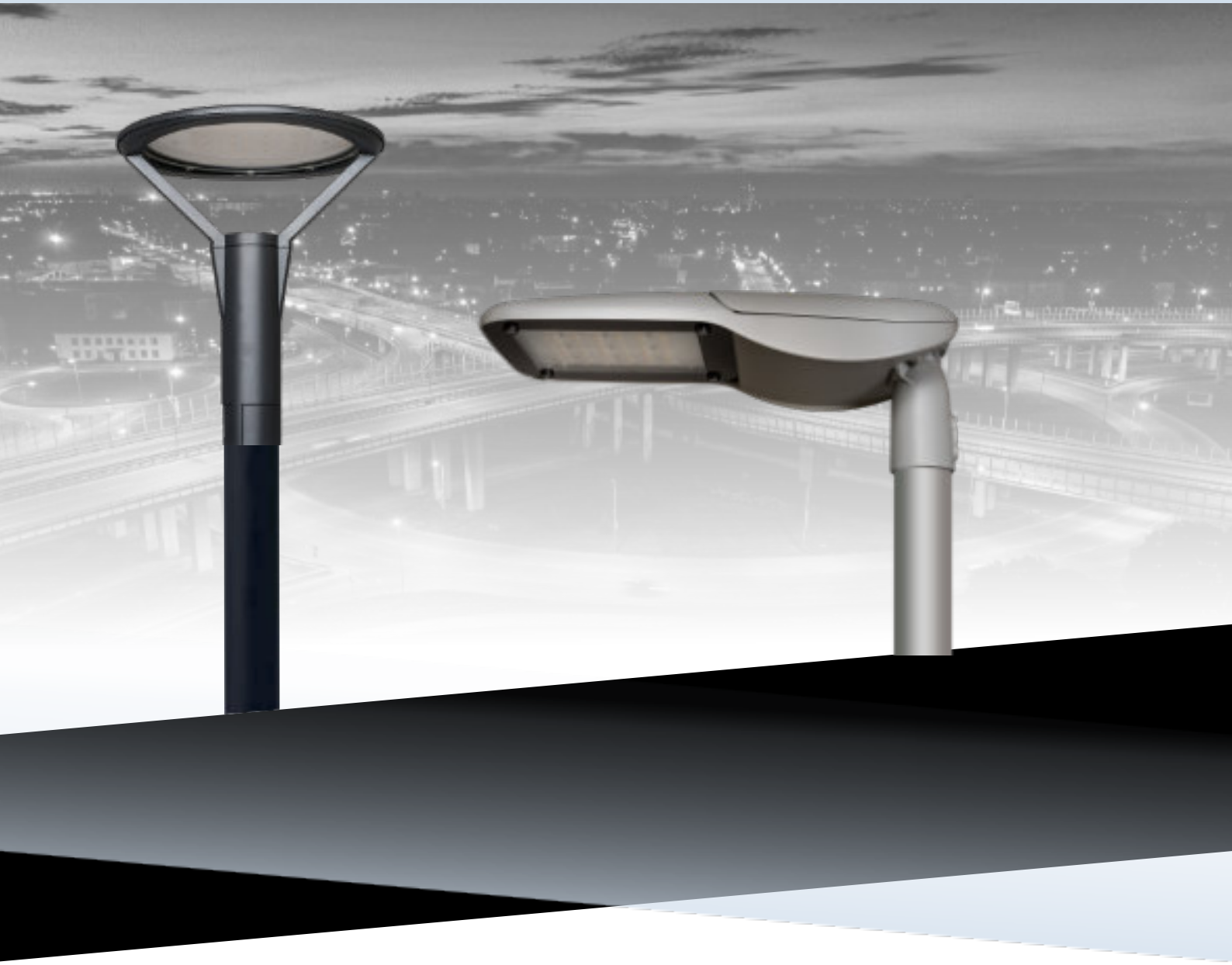
ELKOSUN road



URBAN ROAD LIGHTS COMBINED WITH EMERGING TECHNOLOGIES

LED CE IK09 IP66 100% EU RoHS ENEC

EN PRIME S®

LED | CE | IK09 | IP66 | Class I | Class II | RoHS | ENEC

Specifications

EN PRIME S 8 W to 70 W

Colour temperature:
3.000 - 4.000 K

Voltage:
220 - 240 V
50 - 60 Hz

eCLO – Enhanced constant light

Overvoltage protection: 10 kV
SPD with functionality LED

Temperature operating range:
from -40 to 50 °C

Lifespan:
100.000 hours

Housing:
injection-molded aluminium housing,
powder coated per RAL 9006,
covered with safety glass

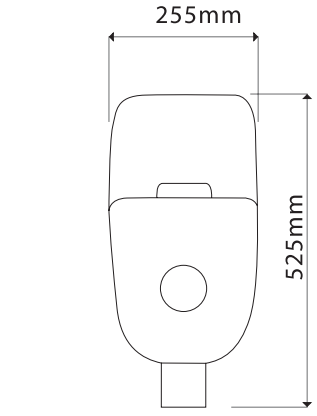
GEOX filter against moisture condensation

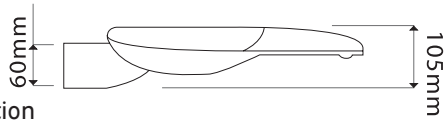
LED luminaire compatible with Smart city system

Montage:
holder Ø 42 – 60 mm
adjustable luminary angle

Weight:
5,30 kg

Dimensions





EN PRIME M®

LED | CE | IK09 | IP66 | Class I | Class II | RoHS

Specifications

EN PRIME M 40 W to 125 W

Colour temperature:
3.000 - 4.000 K

Voltage:
220 - 240 V
50 - 60 Hz

eCLO – Enhanced constant light

Overvoltage protection: 10 kV
SPD with functionality LED

Temperature operating range:
from -40 to 50 °C

Lifespan:
100.000 hours

Housing:
injection-molded aluminium housing,
powder coated per RAL 9006,
covered with safety glass

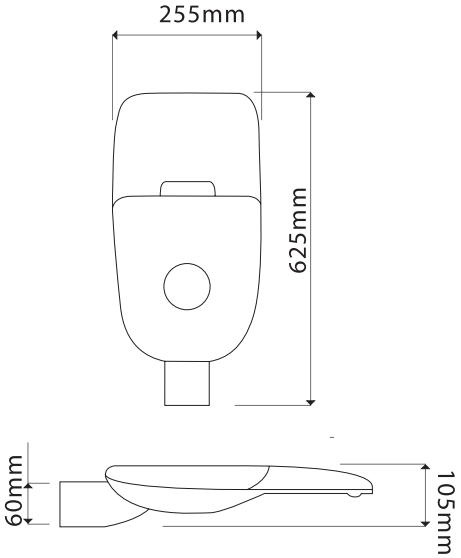
GEOX filter against moisture condensation

LED luminaire compatible with Smart city system

Montage:
holder Ø 42 – 60 mm
adjustable luminary angle

Weight:
7,20 kg

Dimensions



EN PRIME L®

LED | CE | IK09 | IP66 | Class I | Class II | RoHS

Specifications

EN PRIME L 100 W to 200 W

Colour temperature:
3.000 - 4.000 K

Voltage:
220 - 240 V
50 - 60 Hz

eCLO – Enhanced constant light

Overvoltage protection: 10 kV
SPD with functionality LED

Temperature operating range:
from -40 to 50 °C

Lifespan:
100.000 hours

Housing:
injection-molded aluminium housing,
powder coated per RAL 9006,
covered with safety glass

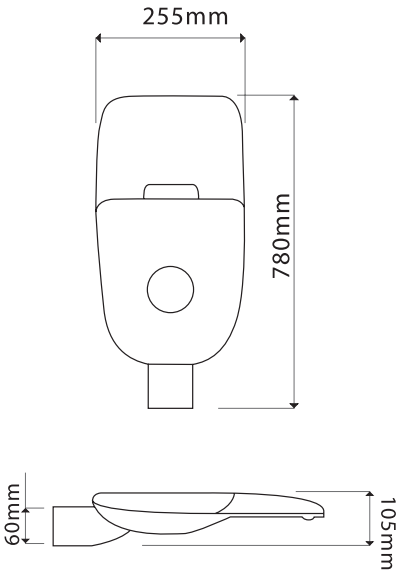
GEOX filter against moisture condensation

LED luminaire compatible with Smart city system

Montage:
holder Ø 42 – 60 mm
adjustable luminary angle

Weight:
8,40 kg

Dimensions



LOTUS®

LED | CE | IK08 | IP66 | Class I | Class II | RoHS

Specifications

LOTUS 20 W to 100 W

Colour temperature:
3.000 - 4.000 K

Operating voltage:
110 - 277 V AC
50 - 60 Hz

Overvoltage protection:
10 kV

Temperature operating range:
from -30 to 50 °C

Lifespan:
100.000 hours

Housing:
injection-molded aluminium housing, powder coated per RAL 9017, covered with safety glass

iF design award 2020

LED luminaire compatible with Smart city system

Montage:
holder Ø 42 – 60 mm

Weight:
8,00 kg

Dimensions

SATURN®

LED | CE | IK08 | IP66 | Class II | RoHS

Specifications

SATURN 40 W to 100 W

Colour temperature:
3.000 - 5.000 K

Operating voltage:
100 - 240 V
50 - 60 Hz

eCLO – Enhanced constant light

LED luminaire compatible with
Smart city system

Overvoltage protection:
10 kV

Temperature operating range:
from -30 to 50 °C

Lifespan:
100.000 hours

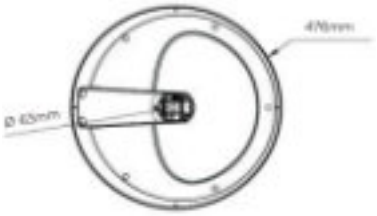
Housing:
injection-molded aluminium housing,
powder coated per RAL 9006,
covered with safety glass

GEOX filter against moisture condensation

Montage:
holder Ø 63 mm

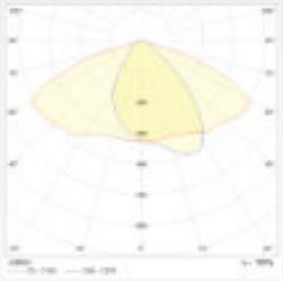
Weight:
7,10 kg

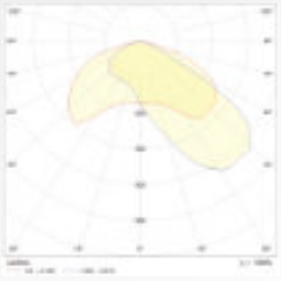
Dimensions



Photometric diagrams

EN PRIME


O1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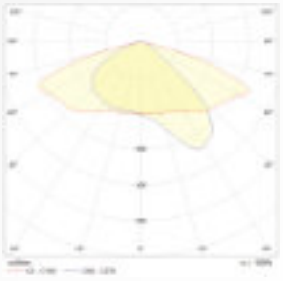
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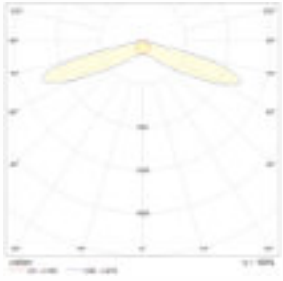
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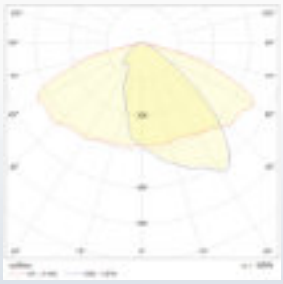
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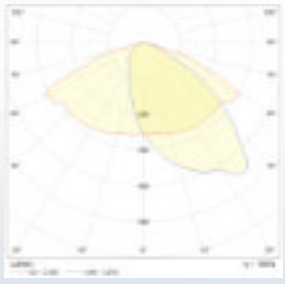
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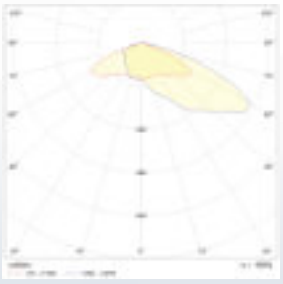
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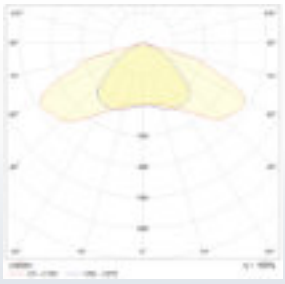
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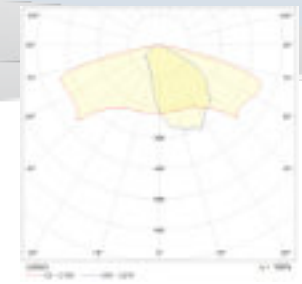
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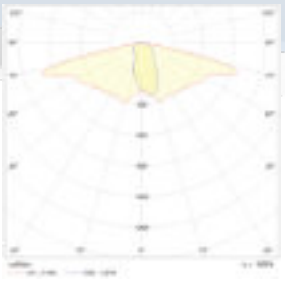
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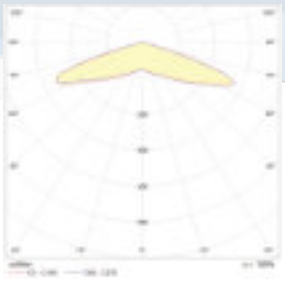
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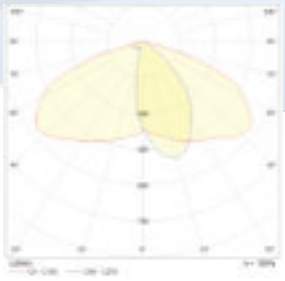
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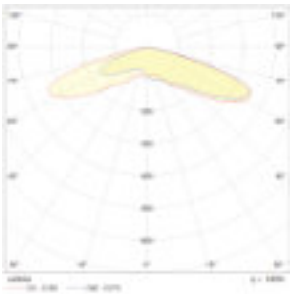
LOTUS, SATURN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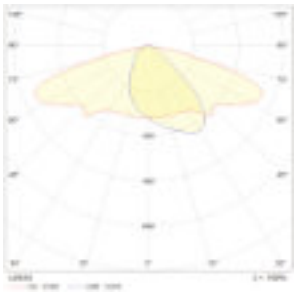
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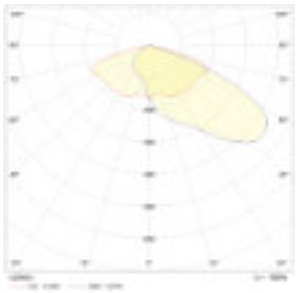
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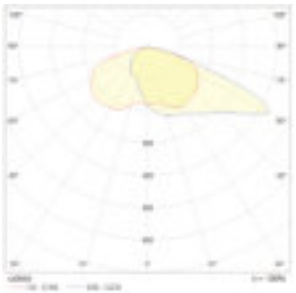
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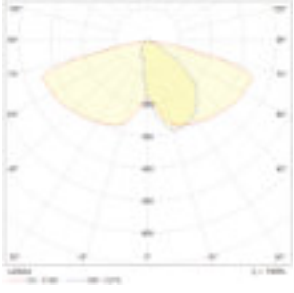
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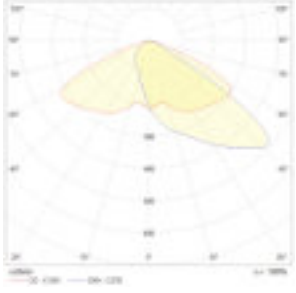
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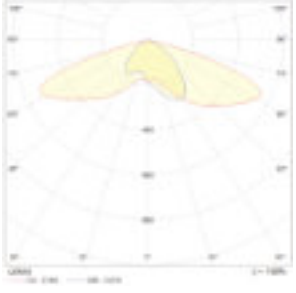
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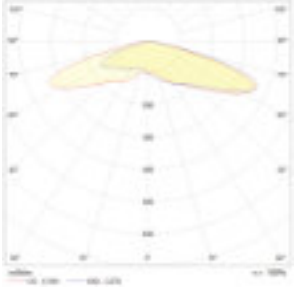

R01209

SOLAR KIT
ELKOSUN LED SOLAR

LED | CE | IK08 | IP66 | Class I | Class II | RoHS

Features:

It does not need an electrical connection - it draws energy from the sun - 100% energy savings

The LED lamp is from the EN Prime S series - the optical system is the same as with other EN Prime S lamps

It operates 365 days a year

Energy-saving and high performance

Long service life

Minimum maintenance costs

Modular assembly - easily replaceable parts

Stylistic perfection and good functionality

Resistant to all weather conditions

The solar panel can be rotated

Warranty 2 years

The solar kit consists of:

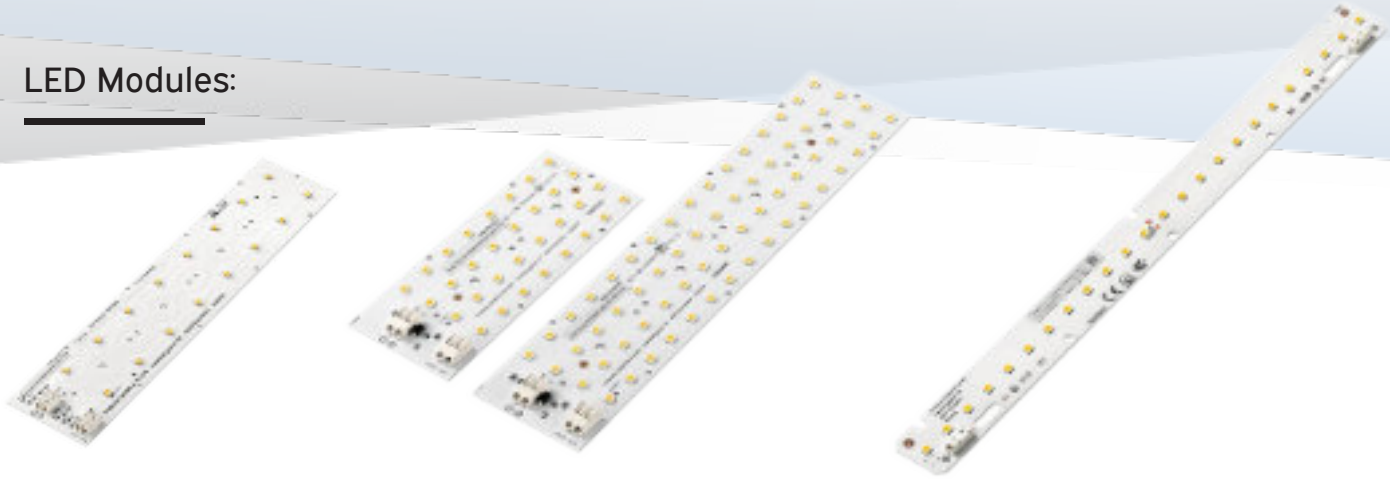
1 piece	- LED road luminaire Elkosun EN Prime Solar 30W (optional 25W, 35W) with Virtual Midnight function (programmable)
1 piece	- Solar module 330W
2 pcs	- Cyclic AGM battery 120Ah
1 piece	- Battery housing
1 set	- Brackets, screws, cables, other material
1 piece	- Galvanized pole 6m with anchor

Components for lighting applications

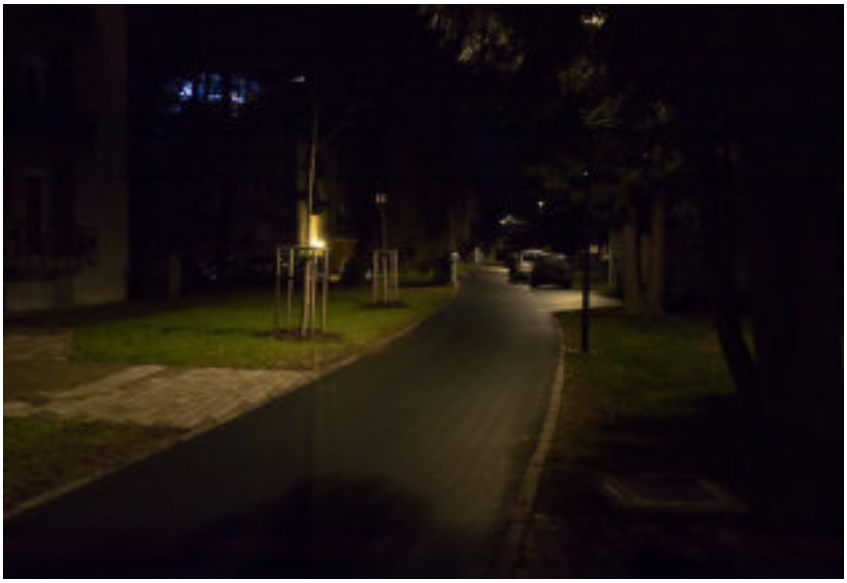
Elkosun offers wordwide well-known high-quality components.

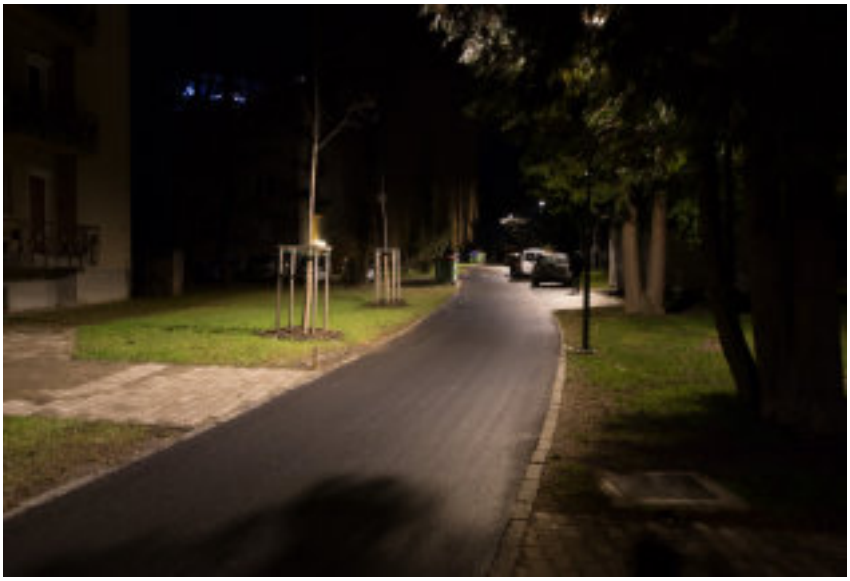
LED Drivers:

LED Modules:



LED Lens:

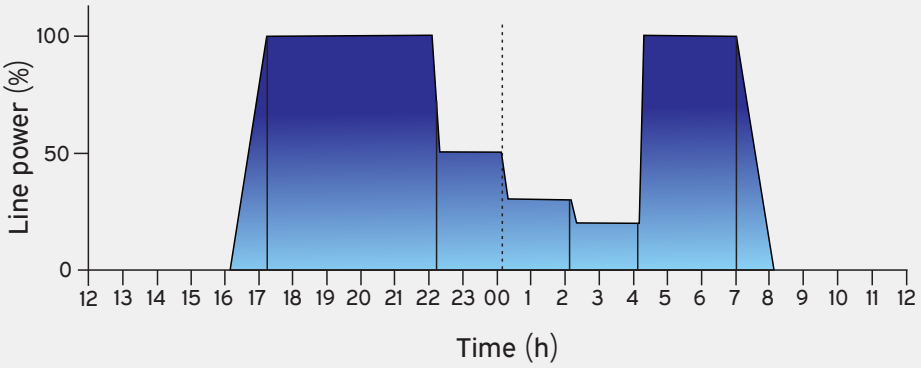




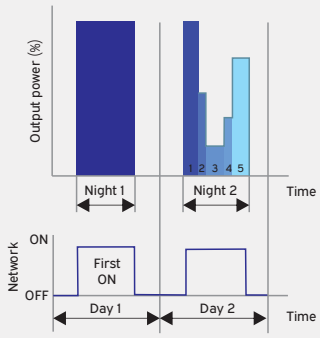
Latest LED controllers with power-saving features

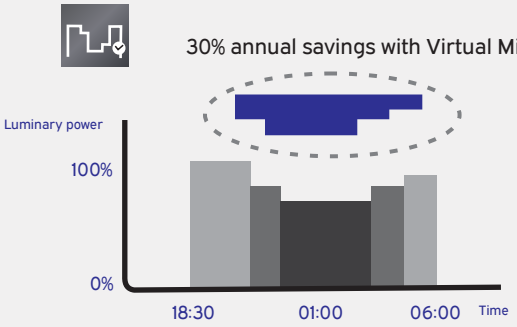
Virtual Midnight

Virtual Midnight (VM) allows a multi-stage energy consumption reduction at night time with the help of an internal processor, that takes into account light on/off time, therefore it does not require an external infrastructure-reduction control. The unit automatically performs dimming based on pre-programming, taking into account the middle of the night, which is calculated daily based on the on/off time cycle.



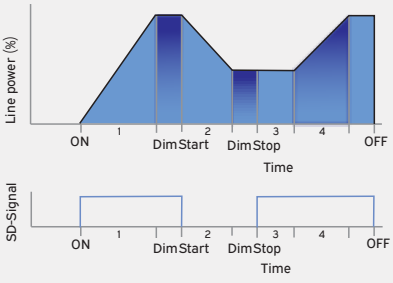
The LED controller itself cannot detect summer and winter time because it does not have an internal real-time clock. Virtual Midnight function is based on an intelligent algorithm. It starts after the first effective night and reaches maximum accuracy after the first week of use. Validity is determined if the duration of the operation is more than 4 hours and less than 24 hours.

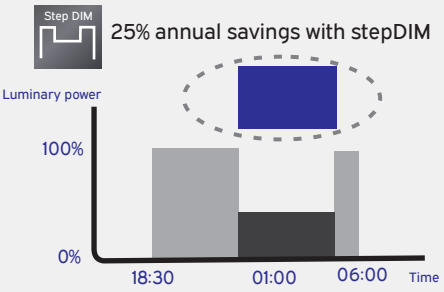




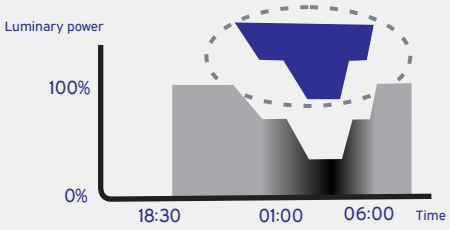
StepDIM

StepDIM mode allows switching between two output levels "normal" mode and "reduced load" with the help of phase switching. In the "load reduction" mode, the controller reduces the illumination level and thus the power consumption. Light levels can be dynamically adjusted to the needs of illumination and power saving.





DALI provides flexibile and planned savings in smart cities



DALI

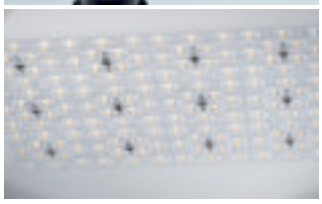
The DALI interface (Digital Addressable Lighting Interface protocol) replaces a wide-range interface with the old lighting control system. Due to open protocol, the DALI system is accessible to all manufacturers of electrical components, which is why they upgrade their products with DALI protocol. In this way, they offer the market to a wide range of electrical components that enable efficient energy savings, cloud-based software connectivity for smart cities, and a variety of integrations.

Experience – knowledge – quality – professional approach

Projects are undertaken comprehensively: from lighting engineering to lighting production and final illumination measurements.

· Minimum order quantity is not required
· Only components from world-renowned manufacturers are used
· Production and service in Slovenia
· Years of experience in outdoor and indoor lighting

Based on lighting calculations optimal luminary is selected.

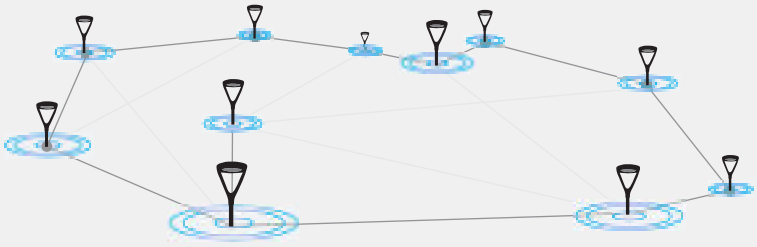


We are the future of street lighting – smart street

Technological usage:

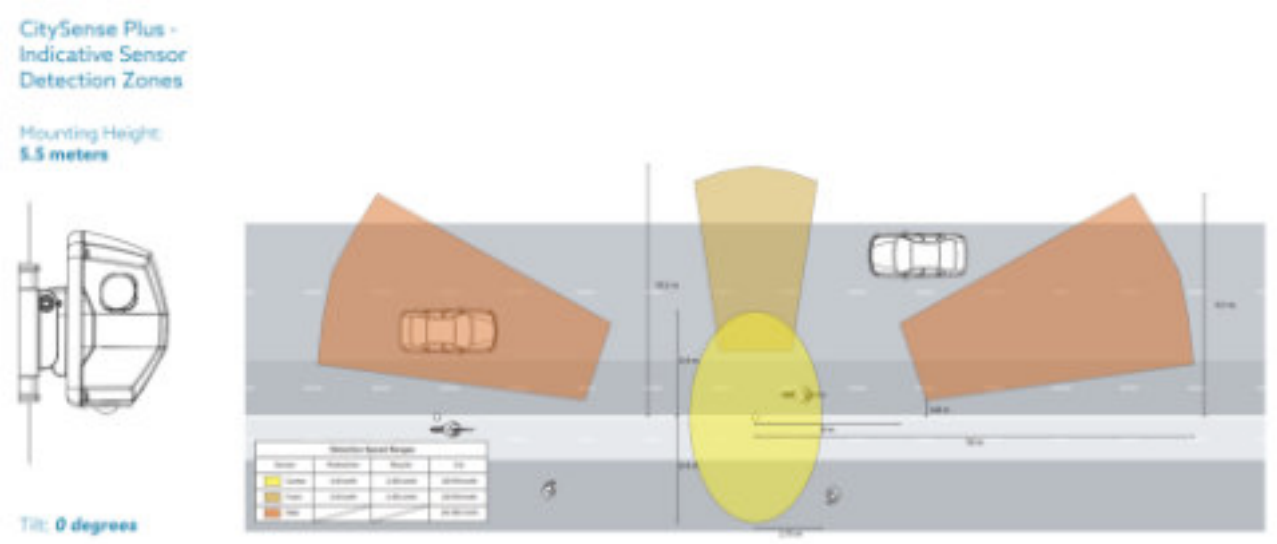
· Access point LTE
· Access point for WLAN
· Charging point for electromobility
· Gateway/router/motion sensor
· Easy communication point LCP
· Camera

· DALI regulation
· Access to energy
· Infrastructural backbone (sensor/network activator)
· Communication point (high-speed multimedia)



SmartCity

SmartCity 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).



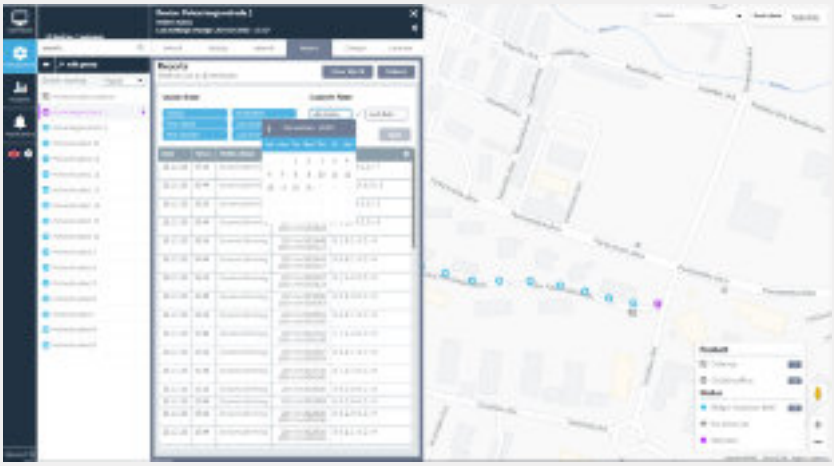
SmartCity delivers on-demand dynamic lighting, making the lights adjust their brightness based on the presence of pedestrians, cyclists, and cars. As a result, the lights automatically dim down during the off-peak hours when there is nobody in the vicinity. Upon detection of the human presence, all lights 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 driver failures.

This greatly reduces the need for expensive visual inspections and enables a reduction of operation and maintenance costs.

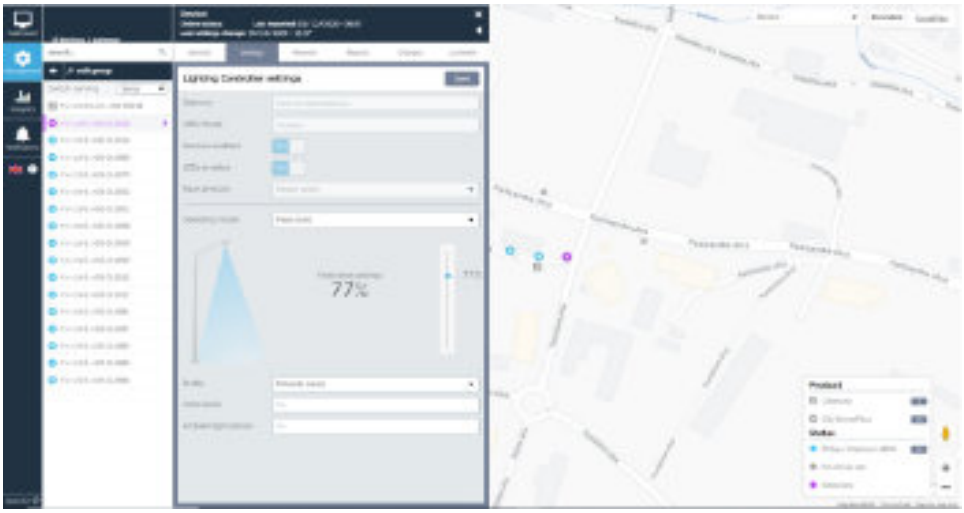
· Each city is different with unique needs. We offer a complete range of in-house and 3rd party solutions to meet diverse citywide lighting infrastructure needs

· Our team can help you choose the right solution to meet your needs



CityManager

Our CMS platform is designed to manage, monitor and control citywide lighting, providing you near real-time insight and analysis on the behaviour of your lighting infrastructure.



Lightning Control

We offer a full range of hardware control products and outdoor motion sensors to connect your streetlight on an individual (OLC) or a group level (feeder pillar).

DigiHub

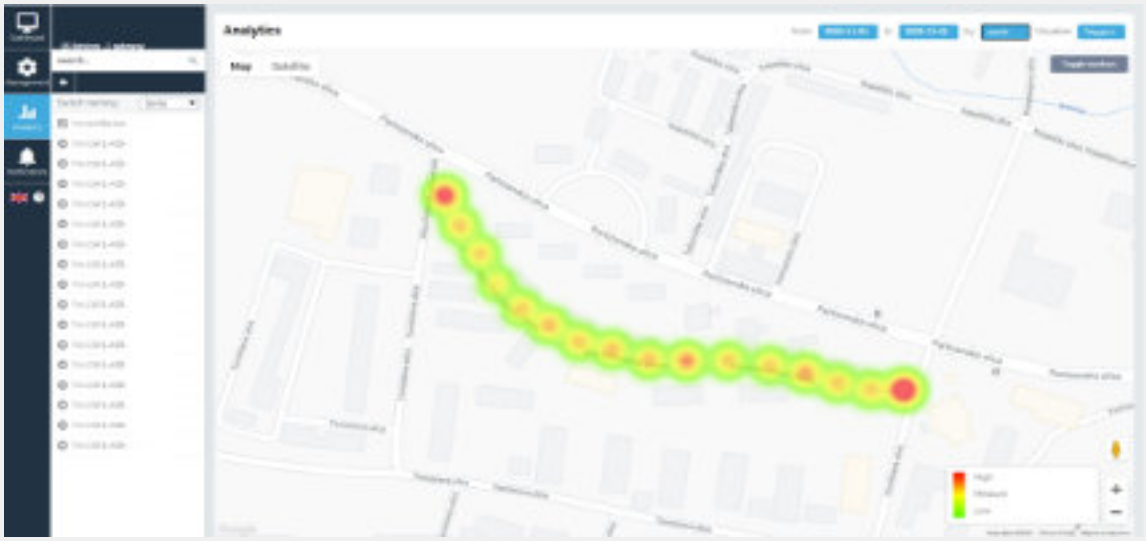
Our IoT cloud platform (DigiHub) collects data from all the devices and gateways, analyses it in real-time and makes it available to CityManager as well as third-parties via open APIs.

Services

You do not need to be an expert on connected lighting. We offer optional managed services from pre-installation planning, training, engineering and commissioning to postinstallation service desk.

Workflow Optimisation with Heatmap

CityManager allows you to improve your city's lighting management further, by integrating with your preferred asset management application. Seamlessly integrated, it provides detailed insights about your lighting infrastructure, traffic, helping you to manage repairs better and improve the effciency of all lighting related workflows and traffic jams.



Elkosun outdoor street luminaries

Solutions in the field of street lighting are taken scientifically and are based on sketches, technical ideas and legal regulations. Accurate lighting calculation, which serves as a basis for a project documentation, is done.

LED outdoor luminaries are manufactured for the following areas:

- roads: local, highways, junctions, roundabouts, tunnels, pedestrian crossings
- urban environment: markets, parks, driveways, parking lots
- industrial environment: illumination of large areas, walls of industrial buildings
- areas without electricity: solar lighting

Modular composition:

- the LED luminaries are custom made, so they can have different colour temperatures (K) and luminous flux (Lm) on request
- different optical lenses - simetric and asimetric
- power from 8 W to 300 W
- available in six housings sizes

Production, service and warranty:

- They are assembled modularly, made for easy replacement of parts
- Made of high- strength corrosion-proof powder-coated diecast aluminum and flat tempered glass
- The latest generation of components from world-renowned manufacturers are built-in to ensure the high efficiency of luminaries
- LED modules have a lifetime of at least 100.000 hours
- The products have a 5-year warranty, service guaranteed

Technical specifications:

- UV resistant
- pressure equalizer installed
- IP 66
- IK 09
- CE
- RoHS
- Class I or Class II electrical protection
- the glitter limit is according to EN 13201:2015
- operating voltage range from 200 V to 260 V
- temperature range from -30 °C to +50 °C.

Operating modes:

- without reduction
- Virtual Midnight with 50 % and multi-stage light reduction without control cable
- implemented with DALI control
- in combination with a photocell
- SmartCity

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