

# OXANE

Modern technology meets classic style



## THE CLASSIC AESTHETIC UPDATED FOR THE NEEDS OF TODAY

### OXANE HAS LONG BEEN A POPULAR CHOICE FOR ILLUMINATING ROADS AND STREETS.

With its sleek, elliptical styling, it fits seamlessly into modern cities, major highways, and more traditional towns and villages alike.

The new generation retains the classic aesthetic while incorporating the benefits of upgraded LED technology.

A wide range of optics and connectivity options are available, along with a high-quality driver, all housed in 100 % recycled, corrosion-resistant die-cast aluminium. Designed for the circular economy, Oxane is built to last. The luminaire is designed for simple, straightforward maintenance, and all components can be replaced or upgraded with ease.



Motorways and major roads



Minor and urban roads



Residential streets



Parking



Pedestrian areas



Intersections

Identity, functionality, and vitality were the guiding principles in creating this luminaire. The first generation of Oxane made a statement with its originality and distinctiveness. The new generation will honour these values, not only by reflecting on its origins, but also by looking into the future. The new design is even more dynamic and slim, with crisp feature lines that accentuate the oval theme.

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Hans Philip Zachau, M.Sc. Zachau Design AB



#### **MAINTENANCE AND UPGRADE**

Oxane's tool-less opening and convenient safety stay gives easy access for maintenance and upgrades. Large internal spacing means components can be added, upgraded and replaced with ease.





#### SPIGOT END CAP ACCESSORY

Flexible top and lateral standard spigot with large tilting capabilities. The optional spigot cap accessory ensures a clean, sleek finish for both post-top and lateral mounting.

#### CONNECTIVITY

Smart City ready: Oxane comes future-proofed thanks to two optional Zhaga interfaces for state-of-the-art light control, wireless networking and diverse range of sensors.





UrbaSens ready





#### **ROBUSTNESS AND PERFORMANCE**

Oxane is designed as standard for long-lasting performance, even in coastal or subtropical applications, with high quality (< 0,1% copper) EN AC 44300 die-cast aluminum and stainless steel screws treated with zinc flake Geomet® coating to avoid any galvanic electrochemical reaction, the most critical type of corrosion. C5 corrosion protection – ISO 9223.



#### **DESIGN AESTHETIC**

Inspired by the enduring popularity of the Oxane family, the new generation of the Oxane lantern stays true to its classic aesthetic. Accent creases enhance the lantern's oval theme and streamlined elliptical shape. The opening and locking system of the Oxane lantern is positioned on the top, maintaining its slim, modern appearance as viewed from the ground.

#### **AESTHETIC BRACKETS**

Explore our selection of columns and brackets and create a unique style for your Oxane lighting scheme.







### OPTICAL PERFORMANCE AND DIVERSITY

Oxane has it all: 0 % ULOR, high performing optics from Thorn's renowned R-PEC light engine, optional Zhaga standard compliant LED modules and NightTune capabilities with optimised 2-channel driver.



#### **CIRCULARITY BY DESIGN**

Oxane has been designed with circularity at its core. The 100 % recycled aluminium body uses an alloy grade chosen specifically for its ability to withstand harsh conditions for premium corrosion resistance. All components can be replaced and upgraded, future-proofing Oxane for years to come. Even better, with no glue used in the manufacturing process, it's easy to manage end of life.

## CONNECTIVITY

With its Zhaga D4i (ZD4i) certification, Oxane is ready for the digitalised future, right out of the factory.

#### **URBASENS READY**



#### **URBASENS DETECT**

**APPLICATION:** Urban communities, pedestrianised zones, schools, city landmarks, bus and tram stations, small parking lots

**SCALE:** Single lighting point (standalone) **TECHNOLOGY:** PIR, radar, Zhaqa interface

UrbaSens DETECT is a standalone (i. e. point-to-point level) outdoor lighting control system that utilises dedicated MovU components such as PIR detectors, vehicle radar or a separate Zhaga interface. Designed for targeted lighting control applications, UrbaSens Detect is ideal for urban communities and high pedestrian traffic areas. It is also suitable for areas that require monitoring, such as hazardous intersections or speed regulation zones, and areas where nocturnal wildlife or energy saving are key priorities. UrbaSens Detect is easy to implement and manage, making it an ideal first step in your smart city journey.



#### **URBASENS CIVIC CONNECT**

APPLICATION: Towns, suburban areas, car parks and transportation hubs

**SCALE:** Small to medium size lighting networks

**TECHNOLOGY:** M2M (Machine to Machine) network. Communication without direct human intervention.

UrbaSens CIVIC CONNECT is the cutting-edge outdoor lighting control system that utilises state-of-the art M2M (machine-to-machine) network technology such as NB-IoT (narrowband internet of things) or Cat-M1 (low power wide area network). Specifically designed for towns and suburban areas, our system seamlessly integrates with these networks to deliver unparalleled connectivity, allowing you to effortlessly manage and optimise your lighting infrastructure. Experience the power of easy deployment of UrbaSens CIVIC CONNECT and unlock a new era of smart and efficient outdoor lighting, powered by the latest M2M innovations.



#### **URBASENS CITY CONNECT**

APPLICATION: Cities and city centres, large car parks, major transportation hubs

**SCALE:** Medium to large size lighting networks

TECHNOLOGY: Mobile network, internet, ethernet, mesh network

UrbaSens CITY CONNECT is the ultimate outdoor lighting control system, tailored for cities and areas with high pedestrian or vehicle traffic. With a single point of internet connection and advanced 2.4 GHz mesh technology, our system effortlessly connects up to 200 devices to a gateway, ensuring seamless control and unmatched efficiency. Experience the future of urban lighting with UrbaSens CITY CONNECT, where advanced motion sensor scenarios like the captivating 'Train of Light' add a touch of magic to your cityscape, creating an enchanting ambiance that captivates both residents and visitors alike.



## URBASENS CIVIC CONNECT

LIGHTING CONTROL FOR TOWNS



#### FEATURES CIVIC CONNECT



#### **NIGHTTUNE**

Advanced technologies are now further optimised through DALI Addressing.



#### **AUTOMATIC LOCALISATION**

Integrated GPS for easier commissioning and precise management.



#### INTEGRATED CONNECTIVITY

10 years of network connectivity included with IoT network (NB-IOT, CAT-M1).



#### **INTEGRATED SIM**

Sim is preloaded in the node ready for commissioning.

### SHARED FEATURES



#### **WEEKLY CALENDAR**

7 day week calendar to best reflect site specific behaviours.



#### **OVER THE AIR UPDATE**

The system can be updated wirelessly once installed.



#### **REALTIME CONNECTIVITY**

With UrbaSens CIVIC CONNECT and CITY CONNECT you can send commands and retrieve information almost instantly.



#### **LIGHT SENSOR**

Advanced lux level based switching.

## URBASENS CITY CONNECT

LIGHTING CONTROL FOR CITIES



#### FEATURES CITY CONNECT



#### **MOTION SENSING**

Precision based presence detection via a D4i motion sensor.



#### **ASTRO CLOCK**

Switching local sunset and sunrise.



#### **ENERGY REPORTING**

Get exact energy saving reports.



#### **FAULT NOTIFICATION**

Alerts are available on the UrbaSens platform and a daily notification emailcan be configured.



#### **MESH AND GROUPING**

The system uses 2.4 GHz mesh and manages the network.
Up to 200 nodes per gateway.



### ADVANCED MOTION SCENARIOS

Acting as a group sensor, UrbaSens CITY CONNECT can deliver a train of light, ensuring that neighbouring luminaires are gradually triggered.

## THE URBASENS **ECOSYSTEM FOR OXANE**

**URBASENS DETECT HARDWARE** 

**CIVIC CONNECT HARDWARE** 

**URBASENS PLATFORM** 

CENTRAL **MANAGEMENT** SYSTEM (CMS)





**MOVU PIR MOTION SENSOR** 



**ZHAGA DOWN MOTION SENSOR** 

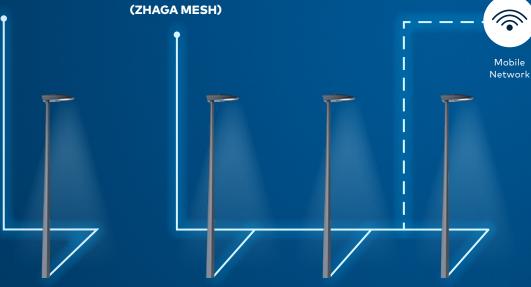


**MOVU VEHICLE** RADAR

DETECT

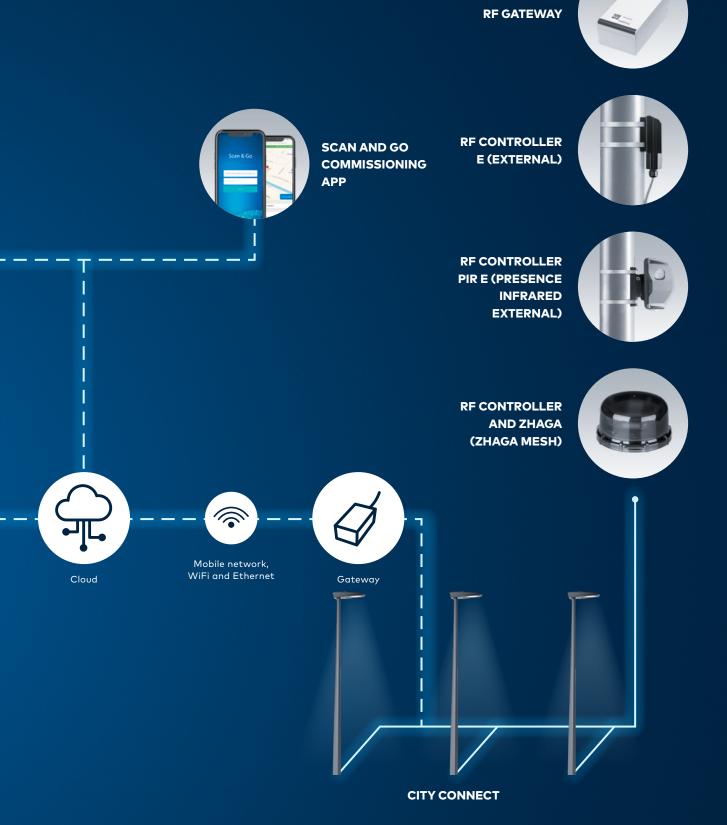


**RF CONTROLLER** ZG SIM AND ZHAGA (ZHAGA MESH)



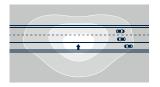
**CIVIC CONNECT** 

### CITY CONNECT HARDWARE



## OPTICAL PLATFORM

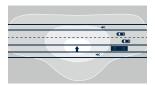
Because every application is different, Oxane uses Thorn's unique R-PEC® optic to offer unprecedented optical flexibility. A choice of several precise light distributions is available for highly efficient and comfortable light, exactly where it is needed, whether lighting a residential street, a busy road, a cycle path, or a pedestrian crossing.



NARROW ROAD (NR)



WIDE ROAD (WR)



WIDE STREET COMFORT (WSC)



EXTRA WIDE STREET (EWS)

## BACKLIGHT CONTROL

Where obtrusive light spill is a concern, internal louvres are available for reduced backlight.



#### **ROBUSTNESS AND PERFORMANCE**

Oxane's LEDs offer an extremely low depreciation rate (up to L98 – 100,000 hours) meaning Oxane will still provide 98 % of its initial flux more than 20 years after its installation.

# NIGHTTUNE TECHNOLOGY



NightTune creates the perfect balance in lighting at night. It gives a sense of security and wellbeing for people whilst conserving energy and protecting ecosystems. NightTune automatically adjusts the level of light emitted from a light fitting, mixing dimmable light from warm and cool LEDs. Cooler LEDs dim when night falls and increase when traffic levels rise in the morning, leaving warmer LEDs on throughout the night.

The result is a lighting scheme that meets the demands of a range of project stakeholders and shows consideration towards all living beings: human activity and safety during peak use times and, as human activity reduces during night hours, nocturnal wildlife.

Equipped with the latest two channel driver technology, Oxane proudly offers NightTune technology to decision makers in search of the ideal balance for more responsible lighting replacement schemes.



## CORROSION: A SERIOUS MATTER



Over the years, outdoor lighting fixtures are subject to severe atmospheric constraints. ISO 9223: 2012 established a classification system (C1 to C5) for the corrosivity of various environments by specifying the key factors of atmospheric corrosion of metals and alloys: temperature-humidity relationship, pollution by sulfur dioxide and salts in the air.

Oxane, like the majority of the Thorn outdoor portfolio, is rated at Category 5 (C5 – very high corrosion resistance) and can therefore be installed on coastal and tropical applications.

Its die-cast body and cover are manufactured using an alloy specifically chosen for its low amount of embedded copper (< 0.1%), the main element responsible of the harshest type of corrosion. Oxane's fixing system is carefully treated to avoid direct metal to alloy contact and further reduce risk of corrosion.

Once corrosion begins there is little that can be done to stop it: it will only worsen until the product begins to leak and, ultimately, fails. When selecting a replacement, ensuring sufficient corrosion protection is a decision that will protect the luminaire for decades to come.





### **BRACKETS**

Continue the theme of Oxane's stylish looks and select from a range of brackets to complement Oxane's aesthetic and add create a sense of identity in any area. Welded mechanical assembly in galvanized steel (according to NF EN ISO 1461), composed of a tubular extension with dedicated arms (60 mm end fitting).





### **CONFIGURATION GUIDE**

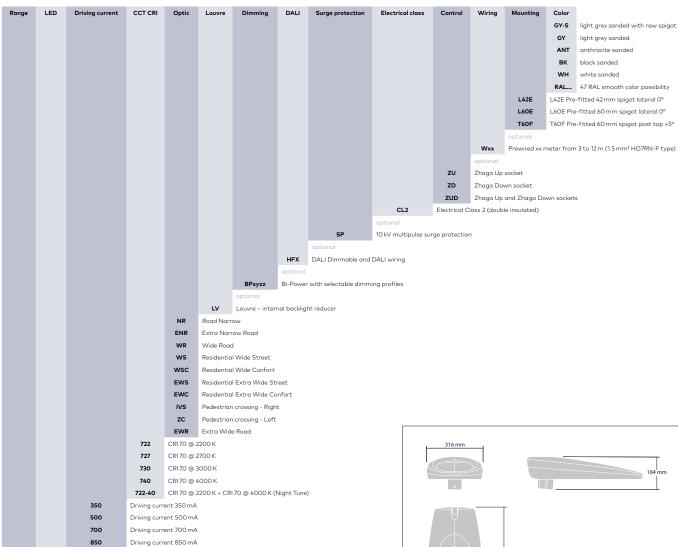
12L

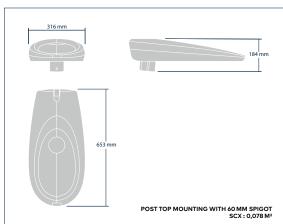
24L

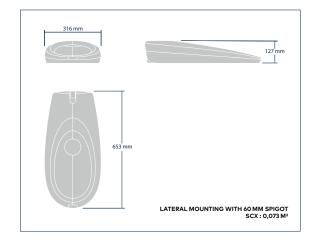
36L OXANE 2nd Generation

12 LEDs

24 LEDs 36 LEDs







Configure the ideal product solution with myProduct. The myProduct configurator  $\,$ allows you to easily configure a luminaire according to your needs. Try it now at www.thornlighting.com/myproduct



### **DISCOVER**

# **OXANE**

- S	12 LEDs / 24 LEDs / 36 LEDs
	2200 K / 2700 K / 3000 K / 4000 K / NightTune
	Up to 10,500 lm (2200 K) / Up to 11,250 lm (2700 K) / Up to 13,000 lm (3000 K) / Up to 13,500 lm (4000 K)
Ø	Up to 173 lm/W
CRI	70
ULOR	<1%
00	IP66
	ІКО8
	Tool-less with holder for convenience
<b>Ø</b>	C5 corrosion resistance ISO 9223 – suitable for coastal and tropical installation
	-35°C to 50°C*
	100,000 h B10L98 @ 25 °C (L95 if > 700 mA)
	R-PEC or Zhaga standard (book 15)
<b>%</b>	L42 / L60 / T60 (T76 optional)
	Anthracite grey (ANT), light grey (GY) and 50 RAL options
<b>3</b>	10 kV (3 pulses) as standard. Option for 10 kV (multi pulse) and 20 kV (single pulse)
	DALI-2, Bi-Power, Zhaga interface up & down – ZD4i compliant
	Lateral (-15°* / -10° / -5° / 0°), Post top (0° / 5° / 10°* / 15°* / 20°)**

\*Not all variants can reach 50 °C. Please contact us for more information. \*\*Without spigot end cap accessory only







# GET IN TOUCH

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