## THORN LIGHTING

## URBASENS MOVE

THE SIMPLE SOLUTION FOR INTELLIGENT LIGHTING CONTROL

## URBASENS MOVE

#### INTELLIGENT WIRELESS LOCAL LIGHTING CONTROL

The right light in the right place at the right time has many benefits in the urban environment: helping people to reach their destinations safely and improving wayfinding, creating feelings of safety and security, and encouraging use of outdoor public spaces for social and leisure purposes, commuting and more.

With the right control solution, lighting can move beyond basic daily schedules to more intelligent, intuitive ways of operating. Use presence detection to trigger an increase in lux levels, lighting the way for users of a space only when needed. Configure light settings to reflect use patterns throughout the day and night cycle. Make automatic adjustments based on levels of ambient light to be more responsive to day-to-day and seasonal changes. Not only is this a more intuitive, people-focused method of lighting a space, but can also help reduce energy usage and respect the nighttime ecology of an area.

For building surrounds and urban spaces, UrbaSens Move provides a lighting control solution where simplicity meets intelligent lighting.



Building surrounds



Parks & plazas



Car parks



**Residential areas** 



Cycle paths



Pathways & pedestrian areas



## URBASENS MOVE

#### **ADVANCED CONNECTIVITY OFFERING**



#### SAFETY AND COMFORT

Responsive, dynamic lighting enhances visibility and sense of security for users of car parks, building surrounds and pedestrian areas.

Advanced motion scenarios ensure paths are well lit when in use for safe movement.



#### **ENERGY EFFICIENCY**

Reduce energy consumption by dimming lights when areas are unoccupied.

Features such as NightTune and Variable Light Distribution can be implemented to further optimize energy usage.



#### SIMPLE COMMISSIONING

Commissioning is quick and easy to carry out via Bluetooth using a free mobile app. Controllers are delivered with preset profiles for efficient commissioning.



#### **NO RECURRING FEES**

A free local mesh network means no recurring costs, license or service fee.



#### INTEGRATION WITH INDOOR SYSTEMS

Luminaires inside and outside the building, all with centralised control, monitoring and synchronization.



## URBASENS MOVE

#### LITECOM INTEGRATION

UrbaSens Move integrates with LITECOM indoor DALI systems via a gateway, for smooth outdoor-indoor control integration.

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#### AMBIENT LIGHT SWITCHING

When the installation is not automatically switched on and off from the cabinet, UrbaSens Move integrates a light sensor which can be used to switch on/off based on ambient light conditions.

#### MULTIPLE LUMINAIRE GROUPS PER INSTALLATION

Group luminaires in any combination required for customised scenes and settings to be applied.



#### SECURE SYSTEM

UrbaSens Move uses a Bluetooth connection with secure authentication mechanisms to prevent unauthorized access. The system complies with relevant data protection and privacy regulations.

#### NIGHTTUNE

Enhance NightTune with motion detection and advanced scenarios. Have the path brighter ahead of you while preserving ecological needs when not needed.

#### VARIABLE LIGHT DISTRIBUTION

Change light distribution patterns depending on usage and requirements throughout the evening and night.

#### ADVANCED MOTION SCENARIOS

Utilise grouping and neighbour triggering of light to create advanced motion scenarios for dynamic illumination.

#### PRESENCE DETECTION

During night time hours, there may be little sense in lighting a space at 100 % output. Presence detection can trigger lights only when people are passing through the space, then dim back down to the preferred ambient level once they have left the area.

## PRESENCE DETECTION AND ADVANCED MOTION SCENARIOS

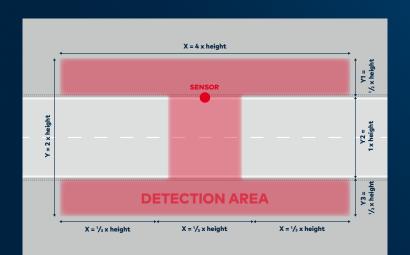
Lighting scenes are highly customisable to create the ideal configuration for a range of applications. Select one of the UrbaSens Move default scenes to edit or start from scratch to configure to your exact requirements, including brightness levels, colour temperatures, timing and speed of dimming, and apply them to all luminaires in a lighting scheme, or selected groups or individual fixtures.

Scenes can be configured based on ambient light levels or amount of activity through an area. They are triggered by motion detection – whenever someone moves within a certain range of the luminaires. For example, all luminaires could be dimmed to 50 % output, then triggered to instantly ramp up to 100 % for 5 minutes following any movement detected, then to smoothly dim again over the course of 2 minutes, preventing a sudden drop in light levels.



UrbaSens Move includes a passive infrared sensor with a unique detection zone. This sensor lenses are designed to detect along the path of motion, stretching up the whole area between two luminaires in typical lighting design topology. Directly detected by the system and corresponding luminaire profile, commissioning is further simplified.

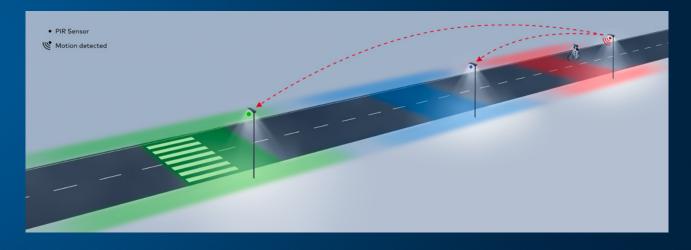
- FITTED ON ZHAGA DOWN SOCKET
- ✓ INSTALLATION UP TO 8 M HEIGHT
- FRONT/BACK DETECTION: 1.5 X / 0.5 X HEIGHT
- SIDE DETECTION: 2 X HEIGHT IN BOTH DIRECTION



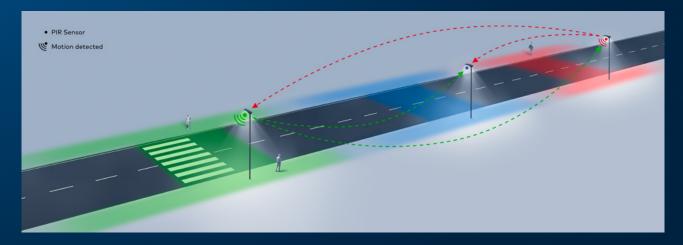
Using the neighbour lights functionality, fixtures can be illuminated as a pedestrian or cyclist moves through a space. The light follows the users, illuminating fixtures in front of them whilst dimming the ones behind once they are safely past. It includes the ability to create a smooth transition between light and dimming points to avoid a 'spotlight' effect. For example, on a path or cycleway, the light level may increase on 5 luminaires either side of the motion trigger node, or, in a car park, 30 luminaires could be activated when motion is detected at an entry point.



#### **ONE SENSOR TO MANY LUMINAIRES**



#### **MULTIPLE SENSORS TO ONE LUMINAIRE**



## INSTALLATION & COMMISSIONING

UrbaSens Move is easily configured in a single visit via a free mobile app, compatible with both Apple iOS and Android, using a secure Bluetooth connection. The app provides intuitive, step-by-step instructions to configure functions including motion sensors and luminaire grouping, as well as the setup of advanced scenarios. Multiple groups can be created and controlled using just one app and device.

WIRELESS NETWORK OF UP TO



## MAINTENANCE & UPDATES

SYSTEM DIAGNOSTICS AND FIRMWARE UPDATES CARRIED OUT VIA BLUETOOTH USING THE MOBILE APP.

UPDATE SINGLE LUMINAIRES OR GROUPS AS REQUIRED.

BLUETOOTH CONNECTION UP TO 40 METERS



- WIRELESS NODES CAN EASILY BE EXCHANGED AND INTEGRATED INTO AN EXISTING NETWORK.
- LUMINAIRES CAN EASILY BE REMOVED FROM THE NETWORK. REMOVAL IS LOGGED AND TIMESTAMPED AND THE SYSTEM WILL UPDATE CONFIGURATIONS TO REFLECT THIS CHANGE.

#### **URBASENS MOVE**

## NETWORK

UrbaSens Move operates on Bluetooth, enabling best in class performance thanks to Tridonic BasicDIM Wireless technology. The system is entirely locally managed via Bluetooth app, meaning there is no need for ongoing internet or cloud connectivity and remote management is not required. Cloud connection is only necessary for synchronizing project settings and is done automatically. The BasicDim Wireless network is accessed via any single node (fixture) in the network using the mobile app, removing the hassle of connecting to every luminaire.

#### LOW OPERATIONAL COSTS

- Free Bluetooth network
- No recurring costs or service fees
- All necessary software and updates are provided free of charge

#### SECURE AND PRIVATE

- Only authorized personnel can change system settings
- 🕙 Access and change logs are maintained for commissioning and maintenance activities
- No personal data collected or stored
- Operational data is anonymized and stored securely
- System complies with local and international data protection laws.
- App stores data locally when offline and automatically syncs when connectivity is restored

#### **RELIABLE COMMUNICATION**



- ✓ 40 m distance recommended to avoid single point of network failure
- Neighbour triggering (train of light) with no visible delay in a range of 200 m



## NIGHTTUNE TECHNOLOGY

#### LET'S SET THE SCENE!

Put simply, NightTune is a system that automatically adjusts the level of light emitted by a light fitting, and its colour temperature, to suit the exact time of night, level of traffic and is commissioned to suit specific project and application needs.

Imagine a normal night. In the evening, pedestrians and cyclists are still using footpaths and walkways. Here NightTune can provide a moderate colour temperature. Then, during the middle of the night when there are fewer people using those same footpaths and walkways, the output of the neutral LEDs is reduced so that the light becomes dimmer and warmer. As morning approaches and pedestrian and cycle traffic returns to the streets, the output of the neutral LEDs increases once again, to provide brighter, cooler light that meets the higher safety demands.



NightTune works by dimming and mixing light from 2200 K to a moderate 3000 K via two independent groups of LEDs.



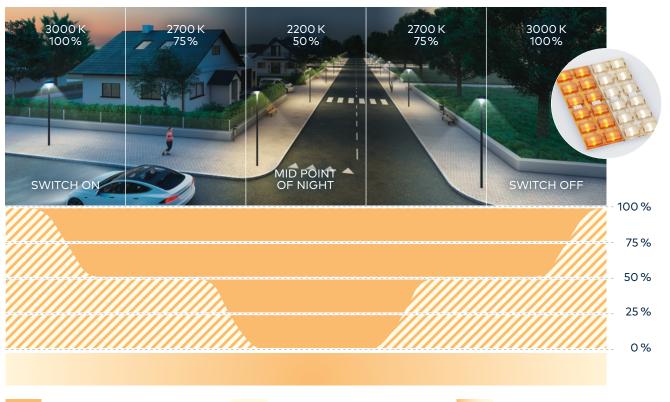
NightTune intelligently balances the nocturnal lighting needs for humans as well as local flora and fauna.



UrbaSens Move & NightTune combined means that you can apply a biodiversity mindful technology along with presence detection and ambient light scheduling.



By combining advanced technologies, you're able to balance the night time illumination needs of a community.



Channel 1: Always at 100 %

Channel 2: Dimming

Result: Changing colour temp and luminous flux adj

## VARIABLE LIGHT DISTRIBUTION

#### WHEN PERFORMANCE MEETS AMBIENCE

Thorn Variable Light Distribution adapts both its performance and ambience to each project configuration. By mixing two lighting distributions and two colour temperatures into one luminaire, Variable Light Distribution optimizes the comfort and security for each user in one common area.

It delivers the most appropriate lighting level and colour depending on where the user actually needs it. Adding a sensor into the luminaire also enables optimisation of energy use as it will then only light the required area when necessary.



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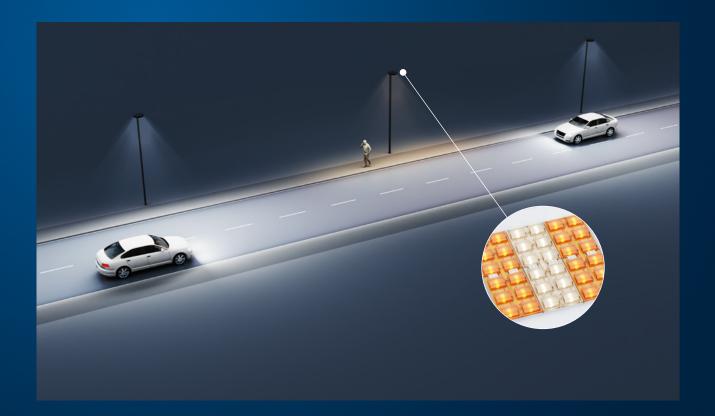
From a single luminaire, Variable Light Distribution (VLD) offers a unique lighting distribution for pedestrian movement, whilst offering a separate luminance level for road traffic. VLD helps to balance the need to protect pedestrians, road traffic and the night sky.



Paired with UrbaSens Move control system, VLD now comes with enhanced intelligence to ensure it reliably reflects the needs of the community.



In places like car parks, not only can you control when and how much light is emitted, you can also detect whether the light levels need to reflect pedestrian needs or automotive requirements.



## **PARKS & PLAZAS**

#### THE RIGHT LIGHT, WHEN AND WHERE IT'S NEEDED

Parks, plazas and promenades are spaces often used for many different functions throughout the day and night, including commuting, meeting socially and for leisure and exercise. However, they can also be spaces that act as a home to a varied ecosystems of plants and wildlife. UrbaSens Move can help to reduce the negative impact of lighting while providing the comfort to people.



#### **AUTOMATED CONTROL**

Using ambient light or levels of activity within an area, UrbaSens Move can autonomously switch on and off and adjust lumen levels in line with predetermined settings and rules.



#### BIODIVERSITY

UrbaSens Move delivers dynamic scheduling to ensure that human needs are balanced with the needs of local wildlife, helping to reduce unnecessary disruption to the area's biodiversity.



#### SIMPLE GROUPING

Via a simple commissioning app, you're able to efficiently group fixtures to ensure that the luminaires dynamically respond to realtime use of the park or plaza.



#### **NEIGHBOUR LIGHT**

As people pass through a space, neighbouring luminaires can be gradually triggered to turn on or increase output, illuminating the route for users of the space without causing unnecessary light spill.



## **CAR PARKS**

#### SAFETY, SECURITY AND EASE OF WAYFINDING

In spaces where both vehicles and pedestrians are moving around, often in close proximity of one another, it's essential that safety is prioritised. Lighting control can help reduce energy consumption and provide lighting solutions that are mindful of the effect of artificial light at night on both people and nature, all without compromising on safety and security.



#### **PRIORITISING SAFETY**

Safety comes in two parts: perception and reality. Car park users not only should be able to use a space where hazards are minimised, but they should feel safe whilst making their way to and from their vehicles as well. With the right lighting and controls, both of these aspects of safety can be supported.



#### ADVANCED MOTION SCENARIOS

Combine motion detection with advance motion scenarios, illuminating clear paths to payment points and exits via designated routes for safe and efficient movement.



#### **PROTECTING DARK SKIES**

Outdoor car parks are often spread across sizeable areas, and keeping the light points switched on at full output throughout the night increases energy consumption and can lead to excessive light spill and unnecessary light pollution. UrbaSens Move, paired with NightTune technology is the ideal balance between human needs and night sky protection.



#### SIMPLE COMMISSIONING

When commissioning UrbaSens Move, an intuitive mobile app comes as part of the package. A number of predefined options are available to help get you started, and settings and configurations are backed up to the cloud – just in case.



## BUILDING SURROUNDS

#### VISUAL COMFORT AND CLEAR VISIBILITY

Help pedestrians and cyclists move easily and safely around exterior spaces and pathways surrounding buildings, triggering light only when needed, but ensuring sufficient illumination for individuals visiting public, commercial or residential buildings. In residential areas, light pollution and intrusive light can be minimised by adjusting lumen output and colour temperature or utilising Variable Light Distribution.



#### **COMING 2025**

#### INDOOR CONTROL INTEGRATION

UrbaSens Move integrates with LITECOM indoor DALI systems via a gateway, giving complete control of indoor and outdoor lighting schemes, all in one place.



#### DATA PROTECTION

UrbaSens Move does not collect or store personal data and any operational data is anonymised and stored securely, giving confidence that the lighting schemes complies with any relevant data protection regulations.



#### **EASY TO MODIFY**

Adding, changing or removing fixtures is seamless, thanks to the commissioning app. It can detect new fixtures within range that have not been commissioned, which can then be easily integrated without disrupting current system operations.



#### ENERGY EFFICIENCY

Some buildings, such as hotels, bars and restaurants, are likely to see significant amounts of foot traffic during the night hours. In contrast, some commercial and residential buildings may have relatively little activity after night falls. UrbaSens Move helps optimise energy usage whilst adapting real-time based on activity levels.



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#### SUSTAINABLE CONNECTIVITY

Lighting connectivity in outdoor environments do not have to be overly complex. Thanks to Zhaga connectivity, our solutions enable a full range of lighting control options so that we don't simply turn the lights on when it's dark and switch them off when daylight levels are sufficient.

Specifying a dark skies sensitive luminaire is only one part of the solution. UrbaSens Move brings outdoor lighting control to the masses whilst prioritising a lower carbon future. As a result, balancing the needs of people, wildlife and the planet has never been easier.







### SUSTAINABLE G ALS

#### UNITED NATIONS SUSTAINABLE DEVELOPMENT ALIGNMENT



#### PARTNERSHIP FOR THE GOALS

So often, it's the right partnerships that most effectively advance targeted sustainability aspirations. Our collaboration with International Dark Skies has helped us innovate technologies such as NightTune. UrbaSens Move enhances this by enabling advanced controls for our NightTune technology resulting in advanced energy savings whilst helping protect local biodiversity.



#### SUSTAINABLE CITIES & COMMUNITIES

The responsible application of light often directly affects the local community. This is why lighting optics are key and ensures that illumination stays exactly where it's needed. Additionally when paired with UrbaSens Move, you can further control light levels in a way that is sympathetic to the night sky whilst minimising obtrusive light.



#### **CLIMATE ACTION**

There is more to managing energy consumption than switching lighting off. With UrbaSens Move, balance is offered between the usage of the space and the lighting needs and up to 80 % energy reduction.

With UrbaSens Move, we can embed presence detection and light sensors within the same luminaire whilst enabling dynamic lighting schedules. **URBASENS MOVE** 

## PRODUCT COMPATIBILITY

**URBASENS READY – ENHANCING NIGHTTUNE AND VLD** 



#### DISCOVER

## URBASENS MOVE

#### AS TECHNOLOGY INNOVATORS, THORN LIGHTING HAS A VARIETY OF APPLICATION SPECIFIC CONNECTIVITY SOLUTIONS.

Uniform standards, such as Zhaga, enable interoperability and upgradability for light points over time. UrbaSens Move has been designed to maximise the opportunity to responsibly and dynamically control the lit environment.

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SWITCHING	Day-Night cycle	-	-	-	-	-
	Ambient light	-	-	-	•	•
SCHEDULING	Real time				•	•
	Weekly calendar				-	•
ΜΟΤΙΟΝ	Standalone		-	•	•	•
	Group	-	-	-	-	-
ADDRESSING	NightTune	-		•	•	
	Variable light distribution	-	-	•	-	-
ANALYTICS	Fault reporting				-	•
	Energy monitoring	-	-	-	-	-
COMMISSIONING	On-site commissioning			•	•	•
	Remote commissioning				•	•
	GPS				•	

## THE BENEFITS

#### **OF WORKING WITH THORN**

#### **01** OVER 95 YEARS' EXPERIENCE

Yes, we really have passed the 95-year mark! Thorn has had nearly a century to develop its unique knowledge and expertise. And the best part is that we can build on this knowhow to make sure that we are always ahead of the game with the latest technology, the most reliable services and a price that works for everyone.





#### **02** CONSTANT RESEARCH AND INNOVATION

Thorn has been at the forefront of lighting technology for decades, and continues to push the boundaries. Our investment in R&D and innovation aims to bring customers the very best performance, thanks to the latest advanced engineering in light and electronics, with in-house development.

ELECTROMAGNETIC COMPATIBILITY (EMC) TESTING LABORATORY

#### **03** EXTENSIVE TESTING AND CERTIFICATION

Thorn's products undergo demanding tests for compliance, safety and performance. With Thorn, you can be sure that your lighting product does what it says it will do, meets all relevant standards and regulations, and comes with a guarantee of quality and safety.



#### 04 ENVIRONMENTAL PRODUCT DECLARATION (EPD)

At Thorn we provide EPDs as a standard service. The EPD for each specific product details its impact on the environment throughout its lifecycle. The EPDs are based on EN ISO 14025 and EN 15804. The information given by an EPD is relevant not only for environmental certifications such as LEED, BREEAM or ÖGNI. EPDs form the data basis for an environmental building assessment.

#### 05 BEST-IN-CLASS OPTICS

Thorn's product range benefits from our class-leading optical systems. They offer several precision light distributions to fulfil various requirements, with excellent uniformity and glare control.



#### 06

#### QUALITY FROM THORN'S SPENNYMOOR FACTORY

Thorn's products go through intensive quality manufacturing, assuring the best processes to develop better products all the way. In addition, we are one of the first companies in the UK to be certified to ISO 14001 – the standard for environmental management. In addition, we have successfully been recommended for certification to ISO 50001:2018 for energy management. Our factory at Spennymoor in the UK has achieved a reduction of approximately 25 % in significant energy uses and 14 % in electricity use compared to the previous year.

#### **07** FIVE YEAR GUARANTEE

All Thorn products carry a five year guarantee.



#### 08 ZUMTOBEL GROUP MEMBER

The Zumtobel Group is an international lighting group and a leading supplier of innovative lighting solutions, lighting components and associated services. With its core brands, Zumtobel, Thorn and Tridonic, the Group offers its customers around the world a comprehensive portfolio of products and services.

#### LET'S SUMMARISE

## URBASENS MOVE



#### SIMPLE COMMISSIONING

Bluetooth commissioning is carried out quickly and easily using a free mobile app, intuitively designed and complete with preprogrammed options to get you started.



#### **ADVANCED MOTION SCENARIOS**

Use advanced motion scenarios to trigger sequences for all luminaires, groups or individual luminaires, based on levels of activity. Switch on and off, adjust lumen levels, colour temperature and timing using predefined rules for different scenarios.



#### **NIGHTTUNE / VLD READY**

Combine UrbaSens Move with Thorn's NightTune and Variable Light Distribution technology for even more intelligent, adaptive lighting.



#### **BUDGET-FRIENDLY**

No recurring licences fees, no subscriptions, no network fees – UrbaSens Move is a great control solution for minimising future costs.



#### LITECOM INTEGRATION

(Coming 2025) Integrates outdoor and indoor together as one single lighting system controlled via LITECOM.



#### AMBIENT LIGHT SWITCHING

UrbaSens Move detects ambient light conditions and can be used to switch on/off if automatic cabinet switching is not provided

#### **HOW TO SPECIFY**

## URBASENS MOVE

URBASENS READY



URBASENS MOVE

Wireless Zhaga Controller RF-Controller ZG bDW – 96800093 Up to 60 luminaires in a network / 40 m reliable communication
Zhaga PIR sensor Sensor TypeB ZG18 PIR – 22171802 Up to 8 m height

#### SERVICES



Commissioning via your UrbaSens Move specialist



www.thornlighting.com/contact



As a globally leading luminaire manufacturer, Thorn Lighting provides a five-year warranty for its complete product range within all European Countries. thornlighting.com/guarantee Thorn Lighting is constantly developing and improving its products. All descriptions, illustrations, drawings and specifications in this publication present only general particulars and shall not form part of any contract. The right is reserved to change specifications without prior notification or public announcement. All goods supplied by the company are supplied subject to the company's General Conditions of Sale, a copy of which is available on request. All measurements are in millimetres and weights in kilograms unless otherwise stated. 04/2025 (INT)

