

THORN

LIGHTING

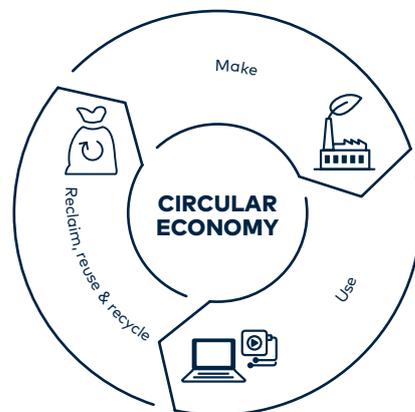
**ESSENTIAL
LIGHTING FOR
CRITICAL SPACES**

DATA CENTRE LIGHTING

ESSENTIAL LIGHTING FOR CRITICAL SPACES

Crucially important spaces need reliable lighting solutions. Lighting is a key support structure for your people, essential spaces and your sustainable business strategy.

At Thorn, we deliver energy saving lighting solutions. Not only do we aim to be your lighting partner, but we also support the project goals for sustainability as well. You need to rely on experts in lighting to supply solutions that work for you and your core business.



KEY FACTORS

ESSENTIAL LIGHTING FOR CRITICAL SPACES



01 SECURITY

Reliable lighting solutions across the data centre campus need to support CCTV visibility, people wayfinding and the access spaces for security personnel and incoming visitors.

02 RELIABILITY

Data centres can be intensive environments. Solutions like our Force LED product offer simple installation, long life and built with reliability as it's core focus. Ideal for installation across the roof plant or data storage areas.

03 CONTROL

Energy management is a major concern in data centres, however, lighting is hardware that should only consume energy when an end user requires illumination. Intelligent use of non-networked controls can have a big impact towards lowering energy use.

04 SUSTAINABILITY

At Thorn we are dedicated to respecting the environment by optimising the reliability and longevity of products, supporting the conservation of energy and delivering increased corporate and social responsibility, protecting delicate ecosystems and making the right material choices, all without reducing the standards of services and solutions we offer.

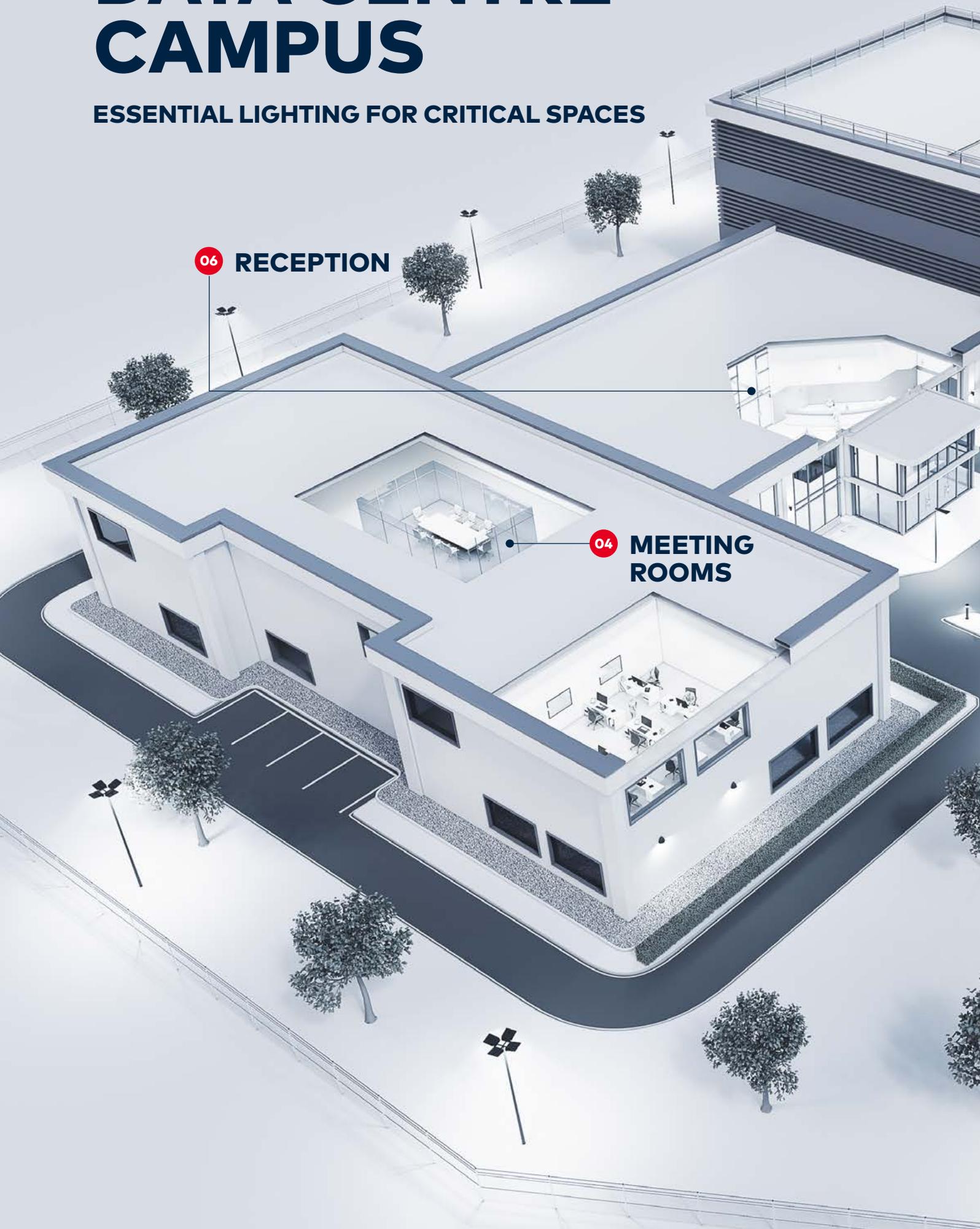


DATA CENTRE CAMPUS

ESSENTIAL LIGHTING FOR CRITICAL SPACES

06 RECEPTION

04 MEETING ROOMS



02 CONTROL ROOMS

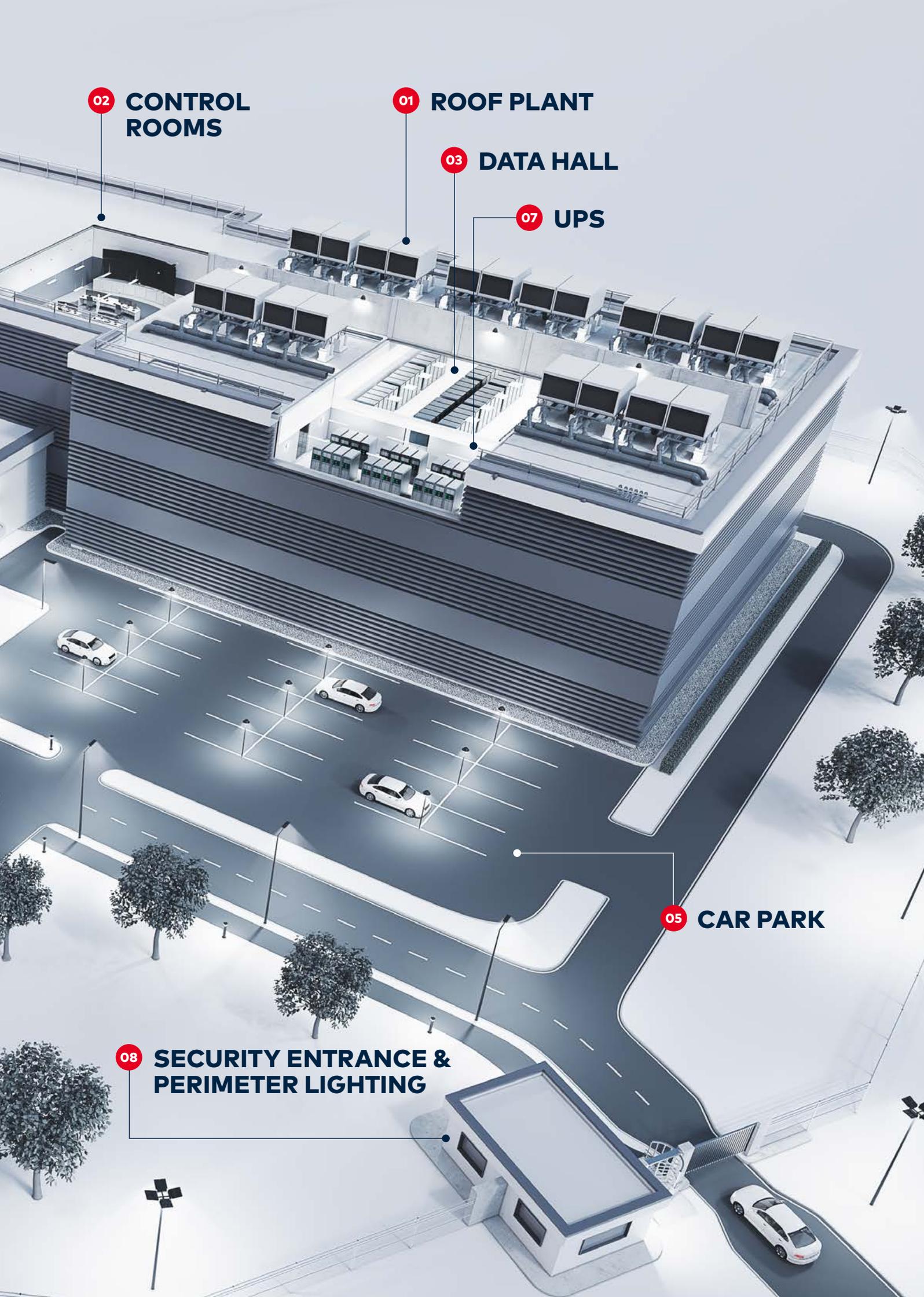
01 ROOF PLANT

03 DATA HALL

07 UPS

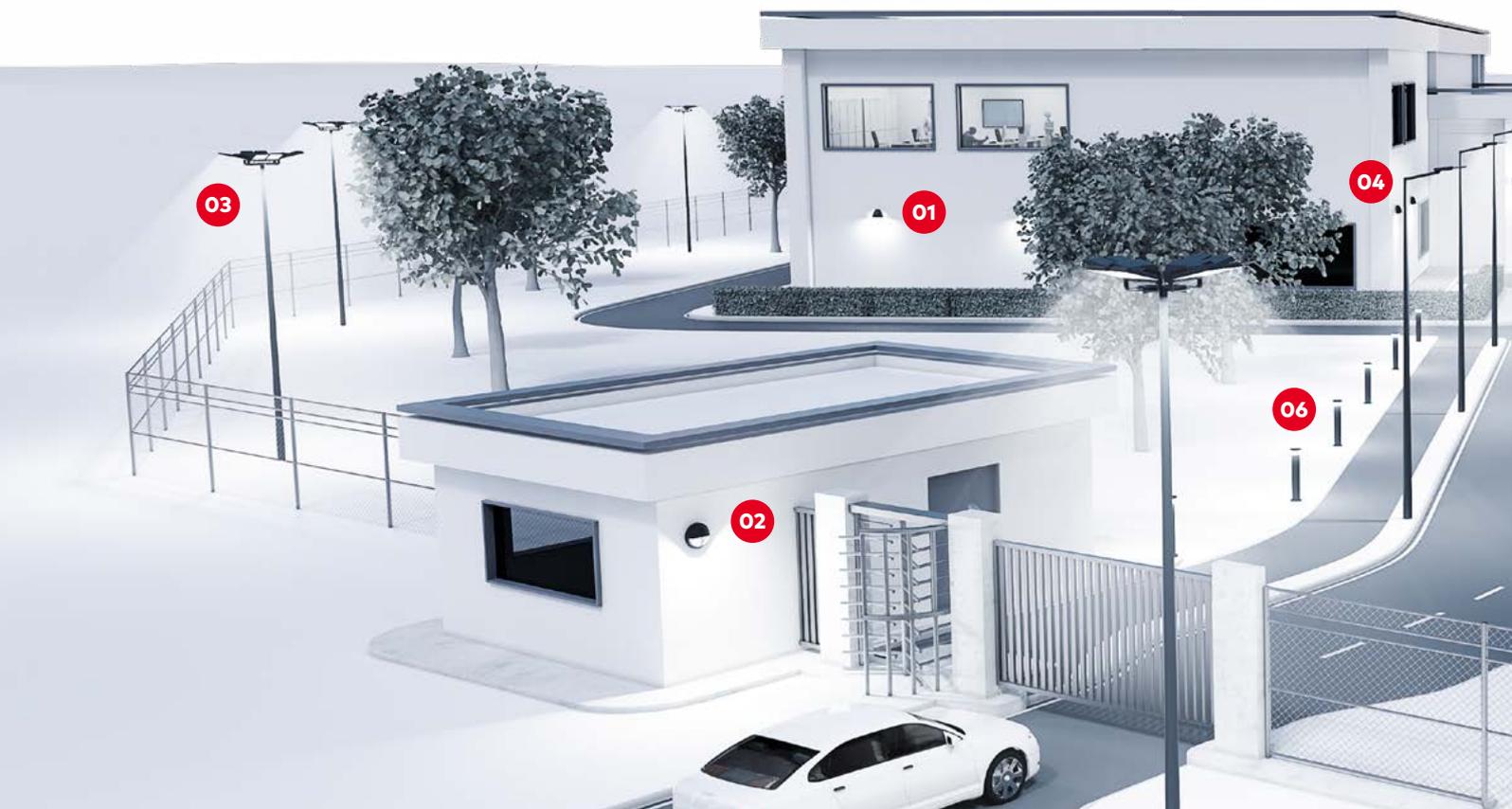
05 CAR PARK

08 SECURITY ENTRANCE & PERIMETER LIGHTING



SECURITY ENTRANCE AND PERIMETER AREAS

LIGHTING WITH ENHANCED SECURITY IN MIND



01 PIAZZA



02 EYEKON



03 AREAFLOOD PRO



04 ISARO PRO



05 PLURIO



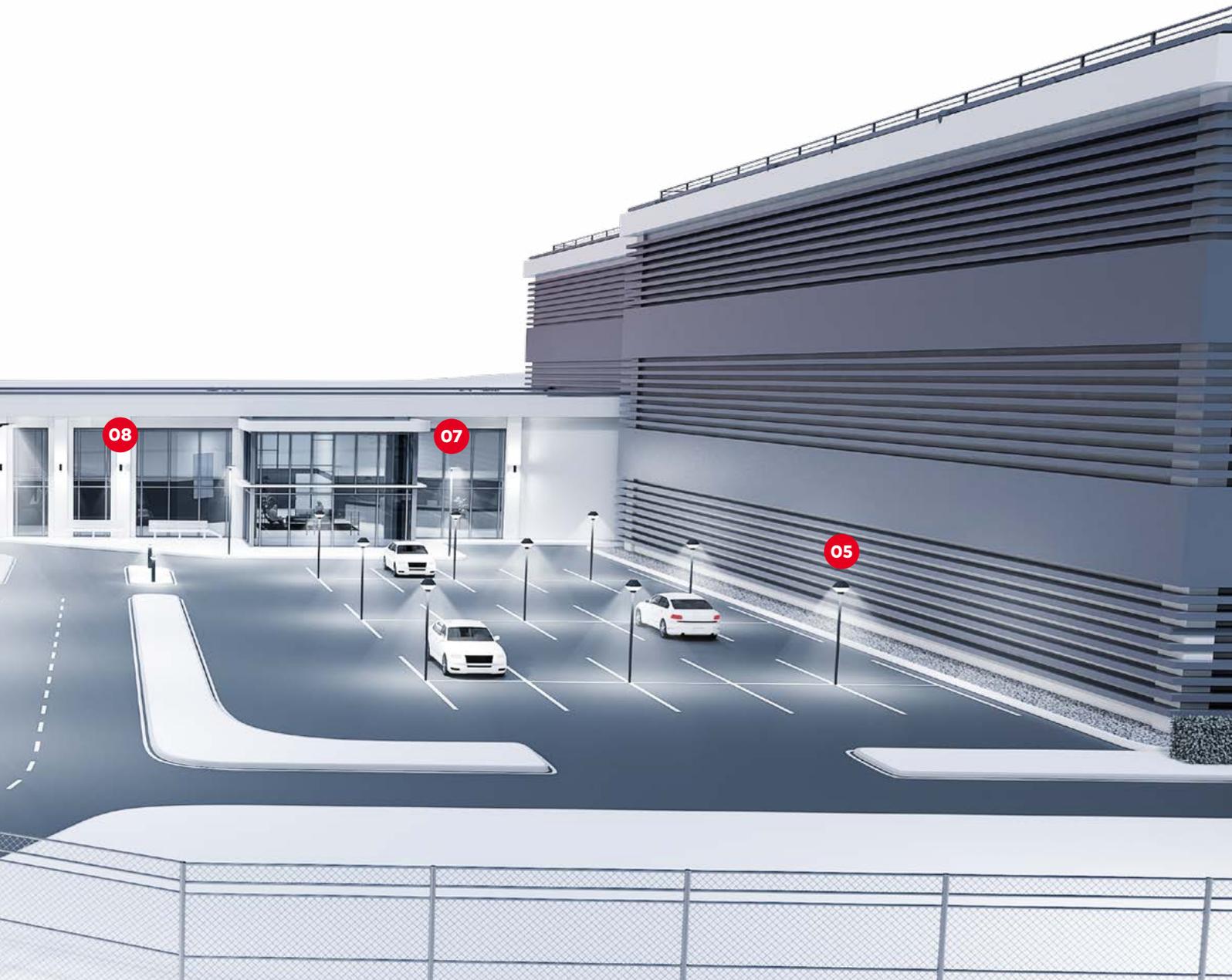
06 THOR



07 URBA



08 CESAR



✓ BEST PRACTICE

ILLUMINATION

Facial recognition is key for anyone working at the main entrance security gate. Data centre spaces are high security areas so wall mount solutions along with post top illumination helps improve vertical and horizontal illumination.

SAFETY

Light illuminates hazards and makes wayfinding easy, keeping people safe and reassured. Higher light levels here help support security teams spot any potential security breaches before people reach the building entrance.

RELIABILITY

As the primary security check point, it's essential that the lighting solutions in this space "just work". This is why our Isaro Pro solution was designed for 100k hr lifetime with premium spec optics.

ECOLOGY

The new NightTune technology delivers the perfect lighting solution for people and their safety, while respecting nocturnal biodiversity. NightTune 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 the people and creatures that inhabit the lit environment.

ENTRANCE & CIRCULATION AREAS

CLEAR AND EFFICIENT LIGHTING FOR EASY WAYFINDING

01 SAFETY

At the building entrance, the importance of security increases further. With the facial recognition software utilised in these spaces, cylindrical illumination has never been more important.

02 COMFORT

Vertical and horizontal illuminance is essential for building a welcome entrance space. Especially when the entrance spreads across multiple floors. Often these spaces are used to deliver a wow factor. For more architectural solutions, we can recommend a range of solutions from our sister company, Zumtobel.

Product used in the scene:



OFFICE & MEETING ROOMS

DIVERSE ILLUMINATION FOR MULTIUSE SPACES

01 COMFORT

The office areas are busy spaces that require comfortable and controllable lighting solutions. These spaces should adhere to BS EN 12464-1:2021, so an intelligent control system may be a valuable addition to these spaces.

02 COMMUNICATION

Meeting rooms and offices have become multi-function spaces. From a global corporate presentation to a sales pitch to a new customer meeting. These spaces need to be flexible and lighting plays an important part. With that in mind strong horizontal illumination is key in order to enhance facial recognition and comfort.

Product used in the scene:



Other recommended products:



ROOF TOP PLANT AREAS

STRONG SOLUTIONS IN ESSENTIAL SPACES

01 DURABILITY

Computer controlled air conditioning will be utilised to cool the air that's fed into the data hall. As such we need to consider extreme fluctuations in air temperature as well as potential ingress challenges.

02 LIGHT LEVELS

Plant rooms, both internal and external, require a unique range of solutions to ensure the illumination levels are high. Lighting here needs to effectively aid maintenance requirements for this space and the solution needs to withstand the elements.

Product used in the scene:



Other recommended products:



UPS & BATTERY ROOMS

RELIABLE LIGHTING, ENSURING SAFETY

01 ESSENTIAL

Challenging areas and access to the area for maintenance or emergency purposes requires reliable solutions. The lighting here needs to provide the perfect light levels at the right time to simplify and streamline maintenance processes.

Product used in the scene:



KATONA

AQUAFORCE PRO

02 RELIABLE

Continuous operation of the data centre is critical and backup generators maintain the power in a critical situation. When lighting this area we must consider the location and use high IP & IK rated luminaries for the solution. Our industrial range of lighting solutions, such as the Aquaforce Pro is a tried and tested product for these environments.

Other recommended products:



COLLEGE



NETWORK OPERATIONS CENTRE (NOC)

ILLUMINATING PEOPLE

01 COMFORT

Security teams work long hours in these spaces and the right lighting solution needs to be in place to support the comfort of the team. Products designed for low glare and visual comfort are essential and direct/indirect solutions should be considered in order to optimise comfort levels.

02 CONTROL

As well as ensuring these spaces are correctly illuminated to BS EN 12464-1:2021 – it's also important to consider how people interact with the lighting here. Automatic dimming in line with natural light levels as well as increasing light levels here may be a simple solution to the variety of lighting requirements through simple scene select options.

Product used in the scene:



Other recommended products:



DATA HALL

LIGHT AT THE HEART OF THE DATA CENTRE

01 STRONG

The ambient temperature in these spaces will be high as the priority here is to keep the servers in an optimal environmental condition.

02 CONTROL

A data centre campus is energy hungry by default. CRAC & CRAH units utilize a lot of energy and reducing their load is not a simple task. This is why standalone, non-networked controls are key.

03 SPECIALIST SOLUTIONS

The demands that come from the main technical suite are intense and many "off the shelf" solutions may not meet the technical demands of a server room. This is where a custom solution may be the best option, please contact us for further details.

Product used in the scene:



Other recommended products:



EMERGENCY LIGHTING

A SAFE WAY OUT WHEN NEEDED



Our intelligent utilisation of LiFePO_4 technology also significantly reduces parasitic load as LiFePO_4 technology means fewer charge cycles once installed.

For data centres, quite often a central battery system is preferred. In these instances, we can offer an ingenious solution called nBox, a 48 V low voltage compact group battery system.

Thorn only offer products that are designed, manufactured and tested to meet the latest European standards regarding safety and electromagnetic compatibility.

EN 60598-1
EN 60598-2-2
EN 62471
EN 55015
ISO7010

LED emergency luminaires
Photobiological standard
Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment
Graphical symbols. Safety colours and safety signs. Registered safety signs.

THE VOYAGER FAMILY

Emergency luminaires

Architectural



VOYAGER STAR

Cutting-edge technology, flexible mounting and hassle-free connectivity.



VOYAGER FIT

A super-compact new LED emergency luminaire for ceilings.

Emergency exit signs



VOYAGER STYLE

Stylish yet strong.



VOYAGER BLADE 2

Fast. Simple. Affordable.

Industrial IP65



VOYAGER ONE

Combining the best of 2 worlds: safety luminaire & safety sign luminaire in one.



VOYAGER TWIN SPOT

Flexible. Durable. Strong.



VOYAGER SOLID

A flexible LED emergency bulkhead.

Our **VOYAGER** family comprises of a wide offer of escape luminaires, safety signs and networked systems to manage and monitor all the components, from self-contained to centrally supplied systems.

INTELLIGENT LIGHTING CONTROL

INDOOR OR OUTDOOR, SINGLE ROOMS OR WHOLE BUILDINGS. NO TWO INSTALLATIONS ARE THE SAME, SO OUR CONTROLS SOLUTIONS ADAPT TO YOUR NEEDS.

INDOOR: FROM INDIVIDUAL ROOMS TO THE WHOLE BUILDING

Whether it is a small installation or a large building, a central system or a room based solution, via Zumtobel we have controls that adapt to your needs. DIMLITE provides the solutions for individual room control systems and LITECOM manages smaller to larger spaces up to the whole building, working with any DALI fitting. For some installations, there's an additional option for wireless controls. BasicDIM Wireless and bmLINK solutions let you control lights via a mobile app. Powered by Bluetooth, these wireless solutions are particularly suited to spaces where it would be a challenge to add new control wiring.



DIMLITE: control individual rooms.



LITECOM: manage from small to large scale spaces.

OUTDOOR: GROUP CONTROLS

Groups of luminaires can be controlled using a variety of wired and wireless solutions, which are easy to commission and can enable significant energy savings. Whether using a local control cabinet, power line communication, DALI, DMX or a radio frequency (RF) wireless system, multiple lights can be adjusted together, according to predefined profiles or in response to the presence of people and vehicles.



basicDIM Wireless: Control luminaire individually to easily change colour temperature and light intensity (also applicable for outdoor luminaires).



bmLINK: refurbishment without DALI cables.

Qualified Bluetooth® Mesh



Bluetooth® mesh. Completely secure – now and in the future.

OUTDOOR: SINGLE LUMINAIRE

Individual luminaires can be controlled by time switches, photocells and motion detectors, for reliable savings with minimal effort. Thorn's bi-power switch (BPS) solutions enable dimming to 50% for eight hours at night. Dimming can also be made directly on the product with our switchDIM technology to better adjust to users specific needs.



Bi-power switch (BPS): requires no external control wiring, and can be easily customised or turned off.



switchDIM: Manually dim the light directly at the fitting.



MovU lateral or Post top: External motion sensor with Radio Frequency (RF) and with Master / Slave possibility.



Integrated motion sensor in the luminaire with Radio Frequency (RF) technology and with Master / Slave possibility.

THE BENEFITS

OF WORKING WITH THORN

01

OVER 90 YEARS EXPERIENCE

Yes, we really have passed the 90-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.



ELECTROMAGNETIC COMPATIBILITY (EMC) TESTING LABORATORY

02

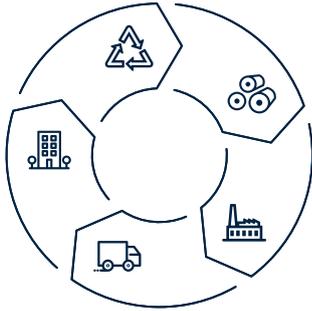
CONSTANT RESEARCH AND INNOVATION

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.

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 for 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.



**5 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.

GET IN TOUCH

www.thornlighting.com/contacts

WE
MAKE
LIGHT
WORK