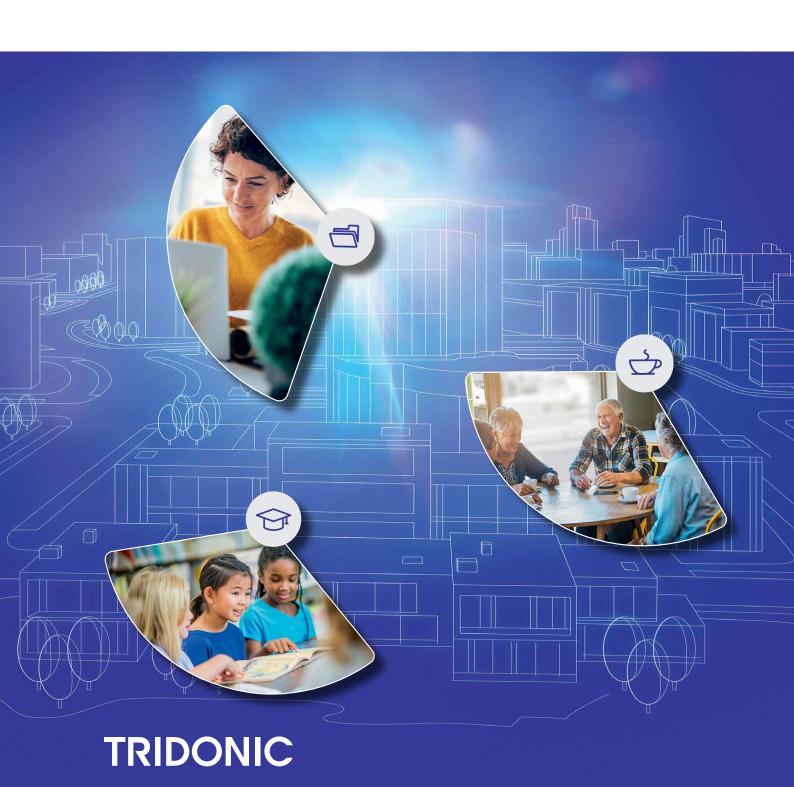
**Lighting Controls** 

# sceneCOM – automatic lighting control

For light just the way you like it



# Flexible. Dynamic. And always under control

# The simple path to comfortable lighting control





#### **Daylight-based control**

The lighting, with controllable illuminances and colour temperatures\*, mimics the natural course of daylight and supports the biological rhythm of people.



#### Simple operation

Lighting can be controlled both via a PC\*, tablet or smartphone as well as classically via pushbuttons.



## Selection of settings

Thanks to pre-defined lighting scenes, the right lighting effect can be selected according to the room use and situation.



#### Fast commissioning

With the user-friendly and simple web interface, commissioning is completed within just a few steps – without the need for any additional software.



#### Scalability

With sceneCOM, individual rooms, several floors and entire buildings can be controlled easily. A BACnet interfaces enables the integration into building managements systems, which support the BACnet protocol.



### **Groups and zones**

The simple commissioning means the effort in creating groups and zones for the luminaires is significantly reduced.



# Presence and absence detection

Activated DALI sensors detect and control the demand for light.



## Time management\*

The system's internal calendar is used to adapt the light automatically to days of the week and the seasons.

# Fully automatic lighting control - automatically

# Comfort, well-being and carefree safety

#### The focus is on the user - lighting control that adapts automatically to the user's needs

Once commissioned, the compact, intelligent sceneCOM controller takes control of the entire lighting solution – fully automatic and just how the user wants it. In this way, the lighting management system is easy-to-operate, focusing on comfort and individual well-being, with the additional benefit of reducing operating costs. The sceneCOM application controllers are designed for different applications and offer the appropriate features depending on the requirements. In this way, both simple and cost-effective as well as very demanding projects can be easily implemented. The large number of suitable sensors, momentary-action switches, drivers and modules leaves nothing to be desired – from simple switching on and off and dimming, to user-defined lighting scenes and dynamic Tunable White lighting and control of the emergency escape lighting. It's also possible to control the lighting manually at any time. In addition, an interface enables sceneCOM to be integrated into any building management system with a BACnet connection.







#### **Comfort and efficiency**

Through constant communication with daylight and presence sensors sceneCOM always ensures perfect lighting conditions. Depending on the incidence of light, the artificial light share is automatically adjusted. This means the light always maintains the desired intensity. To prevent wasting energy unnecessarily, sceneCOM only activates the lighting when it is actually needed. If there is nobody in the room, the light switches itself off automatically.

#### Individuality and well-being

Light, which is just as dynamic as people – sceneCOM more than meets this desire. A push of a button is all it takes to adapt the lighting mood to individual requirements and a different use of the room. The combination with Tunable White technology offers an added bonus in terms of well-being.

#### Carefree safety

With sceneCOM, the issue of safety literally takes care of itself. All emergency lighting concerns are regulated automatically and completely reliably by the integrated control. Current standards and legal requirements are all met in full.

## Always on hand

# Perfect and efficient light around the clock

#### Focus on dynamic light

Individual visual ability, different activities in one room as well as alternating daytimes and seasons are a big challenge for the lighting. Controllable light is an advantage from many different perspectives. Not only does it create the ideal prerequisites for flexible room use, but is also shifts the focus to the different requirements of the people using it.

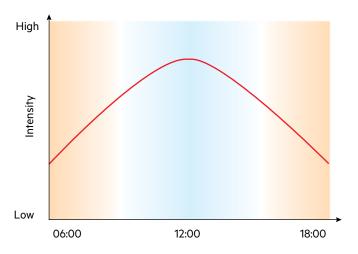
As a reliable control centre, sceneCOM has its eye firmly on illuminance and presence and enables fully automatic, dynamic light as well as maximum individuality. Sensors register every deviation from the pre-defined values and report these to the controller, which responds immediately. For example, if the daylight share changes, the Lux value of the artificial light is adapted accordingly. The lighting is also switched on and off fully automatically when the presence and absence of people is detected. It is also possible to link the lighting settings of different zones and rooms. The user himself doesn't notice the active communication between the sensors and the controller. Everything that the user perceives, is a demand-based, consistent illuminance, which is always activated whenever and wherever it is needed.

#### Well-being

With Tunable White function and modifiable illuminance, sceneCOM follows the Human Centric Lighting concept\*. By mimicking the natural course of daylight, artificial light not only supports the human biological rhythm, but can also have a positive impact on well-being.

A simple push of a button is all it takes to change the illuminance and colour temperature as desired. The result is perfectly illuminated rooms that can be used for a range of purposes.

\*not valid for sceneCOM S



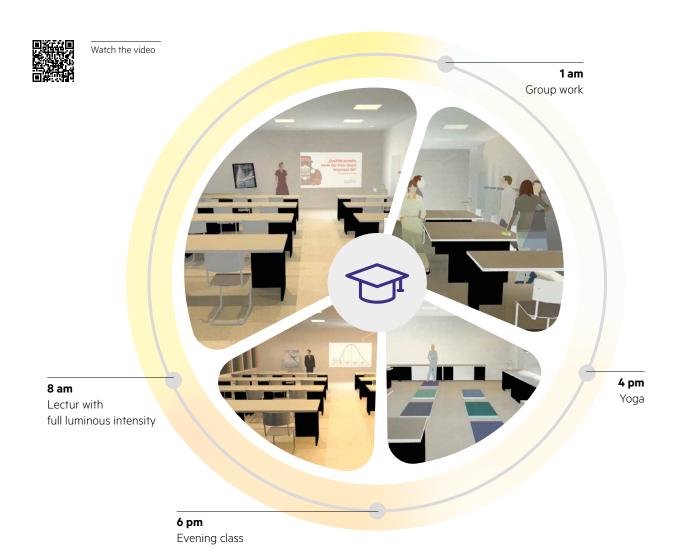
Studying nature illustrates how even the slightest changes in light can influence our moods and how we perceive objects. This notion is at the heart of Tunable White technology, which is based on the natural colour changes in the light over the course of the day.

# sceneCOM in educational settings

## Concentration and multi-functional room use

#### **Schools**

In classrooms, a wide range of requirements come together. Concentrated listening must be guaranteed just as well as a pleasant conversational atmosphere or productive group work. The lighting is required to respond quickly to all requirements.



#### Requirements

- \_\_ Absence detection between 7am and 6pm
- \_\_ Light that supports the user's circadian rhythm.\*
- Settings via push-buttons on the door
  - \_\_ Daylight-linked colour sequence (Tunable White)\*
  - \_ Choose lighting scene for presentations
  - \_ Full luminous intensity at 100%
  - \_\_ Switch off
- \_\_ Settings via push-buttons on the blackboard
  - \_ Switch blackboard lighting on and off
  - \_ Dim blackboard lighting
  - Choose lighting scene for presentations
  - \_\_ Daylight-linked colour sequence (Tunable White)\*

#### 8 am | Lecture with full luminous intensity

Artificial lighting dims with increasing daylight.

#### 1 pm | Group work

Activate cool-white colours and artificial horizon to motivate pupils after lunch.

### 4 pm | Yoga

Warm-white and slow dynamics for well-being in a cosy atmosphere.

#### 6 pm | Evening classes

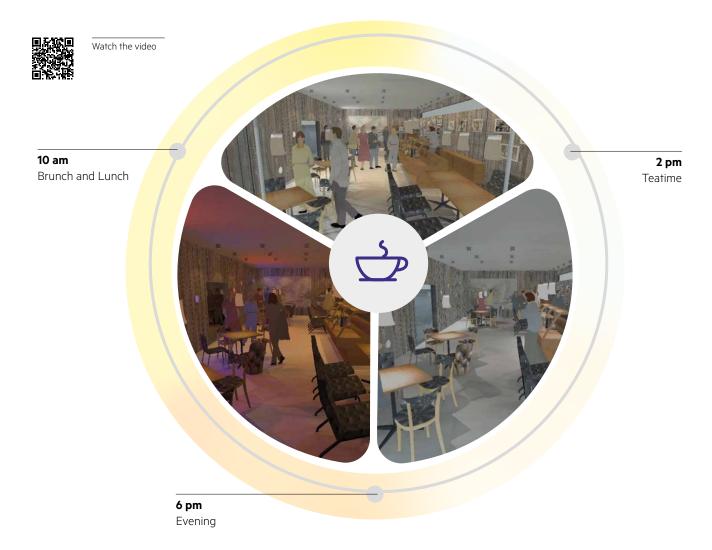
Intensity and ability to stay concentrated after work.

# sceneCOM in hospitality

# Efficient daylight utilisation and atmospheric ambiance

#### **Coffee shop**

Wherever light is required throughout the day, there are many reasons why daylight linking is advisable. After all, through the perfect coordination of artificial light and daylight, the lighting not only delivers the right intensity at all times, but also saves energy and costs.



#### Requirements

- Daylight detection
- \_ Lighting schedule according to opening hours
- Settings via push-buttons on the door
  - \_ Switch on and off
  - \_ Full luminous intensity at 100%
  - \_ Dim
- \_ Light scenes:
  - Counter illumination with 4,000 K, evening wall illumination with candlelight mood

#### 10 am | Brunch and lunch

A lot of coffee-to-go requests. Focus at point of sale to highlight take-away business.

### 2 pm | Teatime

People have more time. The spotlight is on the tables to support customer intimacy.

#### 6 pm | Evening

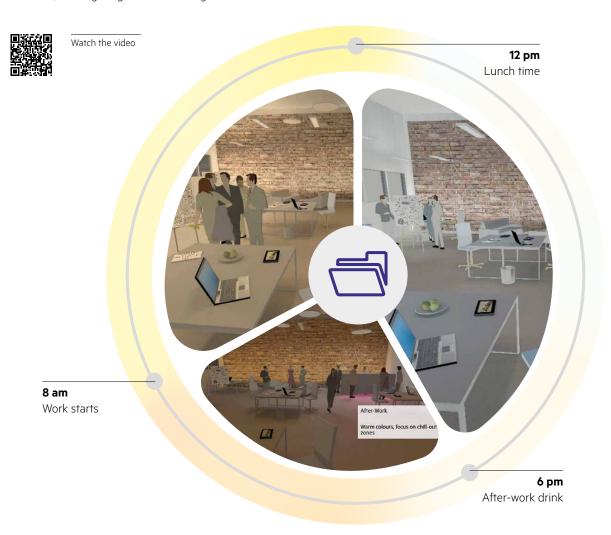
When darkness falls, a warm ambience and colours count to calm down in a relaxed atmosphere.

# sceneCOM in open-plan offices

# Individually adaptable light and light scenes

#### **Coworking space**

An office that not only has individually used workplaces, but also a lounge to be used at the end of the working day, demands a high degree of flexibility. The illuminance must be individually adjustable at each workplace. For social activities, zone lighting with different light scenes is recommended.



## Requirements

- \_\_ Individual lighting control at every workplace via tablet
  - \_ Tunable White
  - Presence and absence detection
- \_\_ Settings via push-buttons on the door
  - \_ Switch on and off
  - \_ Full luminous intensity at 100%
  - \_ Dim
- \_\_ Push-button in lounge area
  - \_ Switch on and off
  - \_ Full luminous intensity at 100%
  - Dim
  - \_\_ Light scenes: After-work drink, film evening
- \_ Lighting schedule\*
  - \_ Light switched off on holidays\*

#### 8 am | Individual start of work

The lighting at each workplace is adapted to the respective requirements.

### 12 pm | Lunch time

After lunch activation via cool colours on the ceiling and wall to keep activated.

#### 16 pm | After-work drink

In a cosy atmosphere; warm colours, focus on chillout zones to create a comfortable environment.

# Click Go to get started

# Quick and easy installation

sceneCOM is commissioned in simple steps via an attractive GUI. No additional software is required. As soon as the sceneCOM controller is connected to the PC or tablet, commissioning can begin. All installed DALI luminaires and DALI sensors are automatically detected by the addressing wizard and can then be configured. Room structures and groupings can also be created in the addressing wizard in the same step.

#### Configuration with the wizard

The addressing wizard guides the user step-by-step through the entire installation process and makes sure nothing is forgotten. Not only does it provide for extremely convenient commissioning, but it also ensures a perfect result. After completion of the basic functions, such as switching and dimming, other wizards help with the configuration of special luminaires, schedules or daylight utilisation.

Experts also have the possibility of making individual settings directly in the system.

### Four steps to a finished lighting management system

- 1. Identify and assign luminaires
- 2. Assign luminaires to the rooms
- 3. Add input devices
- 4. Check, save, retrieve





sceneCOM L/XL/XL EM/XL EM BAC is commissioned in simple steps via an attractive GUI.

# Five times more, always made to match

# The right solution for every building

#### sceneCOM S

sceneCOM S is the versatile lighting control system for individual rooms. From simple switching on and off, dimming, daylight linking and individual lighting scenes to setting colour temperatures – the wide range of functions can be selected at the flick of a switch. Sensors and luminaires can be allocated to multiple groups or scenes, too. Thanks to compatibility with the latest DALI 2 standard and Tridonic's specially designed sceneCOM S (sCS) commissioning app, integrating and commissioning devices has never been easier.

### sceneCOM L

The basic version provides the ideal starting point for a fully automatic lighting management system for multi-functional rooms. Equipped with presence and daylight linking, sceneCOM also provides the right illuminance for individual or several rooms. The system's internal calendar allows for an exact definition of the light setting for weekdays and seasons.

#### sceneCOM XL

From shows with RGB to colour-changing light that mimics the natural course of daylight – the wide range of functions of sceneCOM XL leave nothing to be desired and shift the focus onto human well-being.

#### sceneCOM XL EM

In addition to all functions from sceneCOM XL, sceneCOM XL EM also enables the integration and control of up to 50 self-contained emergency luminaires.

Tests and test logs are also implemented automatically. All data is saved directly on the controller and can be managed centrally via a piece of software.

## sceneCOM XL EM BAC

Via an interface, sceneCOM XL EM

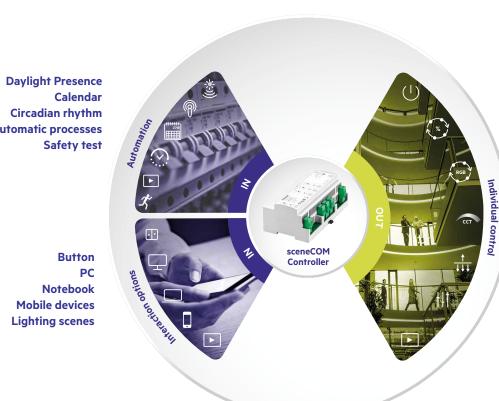
Bac can be integrated in any building management system with a BACnet interface. For each controller, up to 100 BACnet data points can be selected and transferred. The connection is made conveniently via an Ethernet IP interface.

Functions	sceneCOM S	sceneCOM L	sceneCOM XL	sceneCOM XL EM	sceneCOM XL EM Bac
Addressing				-	
Schedule*		•		-	
System Image				•	
Presence linking	-			•	
Conditional scene sequence*		•			
BACnet					
Data backup		•			
Installations test		•			
Calendar*		•			
Self-contained emergency luminaires*				•	
Log		•		•	
RGB and Tunable White*					
Shows*					
Special luminaires				•	
Scenes	-	•		•	
Faults					
Daylight linking (with light sensor)		-		•	
Zones	-			•	

<sup>\*</sup>not valid for sceneCOM S

# The controller - the compact command centre and its peripheral devices

## A system overview









**Automatic processes** 

Switch on/off **Change illuminance Change colour** Change colour temperature Change indirect-direct light balance

**Change lighting scene Activate dynamic lighting** scenario

#### At a glance: sceneCOM Controller

- \_ Independent lighting control for up to 192 DALI devices on 3 DALI lines
- \_ Simple configuration via WEB interface
- Comprehensive control of DALI circuit is possible
- \_\_ Freely programmable daily planning with calendar function
- \_\_ DALI emergency lighting test plan and monitoring (up to 50 emergency light devices)
- Corresponds to IEC 62034
- \_ IP rating IP20
- For distribution board installation

#### **Interfaces**

- \_\_ 3 DALI lines
- \_\_ BACnet interface
- Terminals: Screw terminals

#### **Functions**

- \_\_ Addressing wizard
- Presence linking
- Local and downloadable data backup
- \_ Calendar
- Self-contained emergency luminaires
- \_ Freely programmable shows
- \_ RGB and Tunable White
- Scenes and zones



#### sceneCOM Controller - the control centre

The compact sceneCOM controller combines all the functions required for control and commissioning of a lighting solution in the smallest space. Not only does it save space in the distribution board, but it also saves time for maintenance. Having said that, its expandable system architecture leaves the controller open for expansion in the future. As with lighting control, it also controls the commissioning of the system and guides the user through the individual steps in a precise and clearly understandable manner.

As both the functional lighting and the emergency lighting are controlled via sceneCOM, the wiring effort is significantly reduced. This also reduces installation costs.



#### The sensor as a reporting office

Sensors featuring PIR technology combine the functions of motion and daylight sensors and offer various detection ranges, making them the ideal solution for every application. Low-bay sensors are perfect for low-ceilinged rooms such as offices and classrooms.



#### UPB4 sC - the connection to the control unit

With the small DALI device, up to four switches can be installed in an instant, from simple single momentary-action switches to double momentary-action switches – any model is possible. Configuration of the functions, which is carried out entirely individually via the sceneCOM controller, is just as convenient as the assembly and wiring.

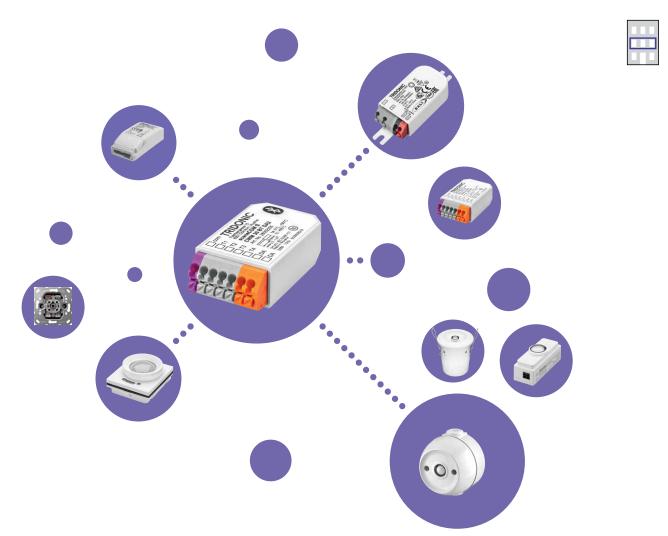


#### Web interface - the intuitive path towards lighting control

The clearly designed, integrated web interface allows for simple configuration and intuitive operation. Additional software and tools are not required. A web browser is all you need to commission and control sceneCOM via a PC, laptop or tablet. The structure of the web interface is the same for all devices.

## sceneCOM S

# Lighting control



#### At a glance: sceneCOM S Controller

- Multi Master Application Controller developed in accordance with DALI Standard EN 62386-101 Ed. 2, also known as DALI 2
- Ultra-compact form-factor suitable for wall socket and luminaire installation
- \_\_ Future-proof thanks to simple firmware update via Bluetooth App
- 4 independent inputs enabling connection of push buttons
- \_ IP rating IP20
- Tunable White, Device Type 8 (as specified in IEC-62386-209 Ed.1)
   fully supported
- \_\_ Tridonic DALI-2 products e.g. MSensor G3 or DALI XC G3 are fully
- \_ implemented and configurable
- \_ Power supply via DALI line
- \_ 5-year guarantee

#### **System constraints**

- Max number of control gears connected: 64
- Number of input devices connected in total:
   16 (max. 16 instances each)
- \_\_ Max. number of groups: 16 according to DALI-2 Standard
- \_\_ Max. number of scenes: 16 according to DALI-2 Standard

#### **Interfaces**

- \_ DALI line
- 4 independent inputs enabling connection of floating contact, standard momentary switches
- \_ Wireless communications: BT 4.0 4.2

#### **Functions**

- \_ DALI addressing
- \_\_ DALI Grouping
- Sensor-based automation including presence/movement detection, daylight-linking
- Manual input via DALI push button interface
- Support of IR-remote commands to control the light via sensors
- Device replacement handling
- Monitoring device data
- \_ Tunable White
- \_ Static lighting scenes
- Point-to-Point connection with wireless end user devices like Tablets and Smart phones via BT
- Over the air update via BT app
- Mobile comissioning APP with the intuitive user interface available Android and iOS
- \_ Project/layout templates
- Project sharing/cloning functions



#### sceneCOM S controller - the little multi-master

The extremely compact multi-master application controller for DALI 2-based applications can be commissioned wirelessly via smartphone or tablet thanks to a Bluetooth interface and the sCS commissioning app. An over-the-air update ensures that the software is always up to date. Its excellent interoperability enables communication with up to 64 DALI 2-based sensors, switches and converters. Individual presence detectors can be assigned to several luminaire groups at the same time. Several lighting scenes can also be selected using a switch. Due to the reduced housing, the application controller can also be integrated in an extremely space-saving way.



#### **MSensor G3 multi-sensors**

The DALI 2 certified multi-sensors with PIR technology combine the functions of motion and daylight sensors and offer various detection ranges, making them the ideal solution for every application. Low-bay sensors are perfect for low-ceilinged rooms such as offices and classrooms. Mid-bay sensors achieve the best results in the sales and industrial sectors. For areas up to 18 metres high, the product group's range of high-bay sensors is particularly well-suited for logistics buildings and industrial halls.



#### **DALI 2 XC G3 push-button coupler**

The push-button coupler is compatible with all DALI 2-certified application controllers. Several DALI 2 XC can be attached to each DALI control line. Standard switches and momentary-action switches can be connected via four independently programmable inputs.



#### **DALI PS3 power supply**

The 70 mA power supply is specifically designed for smaller DALI 2-based applications. Thanks to its extremely minimalist design, DALI PS3 is also ideally suited for integration in luminaires and wall switches.



#### Operating and control devices

An infra-red remote control is available for the lighting control system. The light can be switched on and off and dimmed at the touch of a button. In addition, predefined light scenes can be selected easily and colour temperatures set individually.

## **Accessoires**

# Components and Drivers



## Tridonic product portfolio – the complete solution

Tridonic's extensive range of products meets every requirement. All components – from drivers and modules to emergency lighting supply and control units – are perfectly coordinated and connect to create holistic lighting solutions for every application area.



#### Tunable White drivers and modules - the dynamic duo

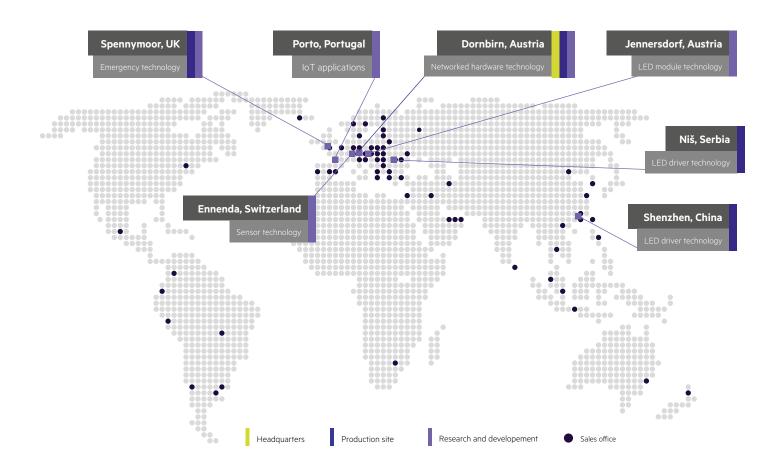
Pre-calibrated kits of Tunable White modules and drivers offer the ideal prerequisite for dynamic light that can be individually adapted using Tridonic's wide range of controls and control elements.

**More lighting control systems** on www.tridonic.com



# **Prepared for the Future**

# Our Activities and Locations



## 1.778

Around 1,778 employees throughout the world are committed to helping you with their know-how and creativity to create the perfect light.

## 1

In our unique software competence center in Porto (Portugal), information technology experts are developing new solutions for smart buildings and smart cities. They are working on a range of products from intelligent lighting management and control systems to highly advanced IoT solutions and their matching digital services.

## 6

There are six research and development centres in which new LEDs and networked lighting technologies are being developed.

## 21

With 21 branch offices on five continents we are there for you wherever you are in the world.

## 3

There are three things you can rely on at Tridonic: optimum product quality, decades of expertise and our committed and flexible support.

## 2.600

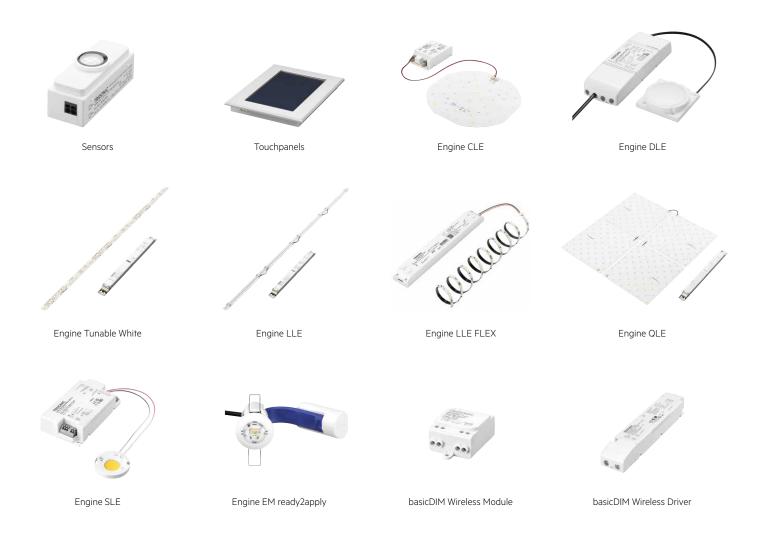
That's how many patents and inventions testify to Tridonic's extraordinary powers of innovation.

#### **Details**

For further information, data sheets, product catalogues and ordering details, please go to www.tridonic.com

# Light at the right place

# At the right time



We will help you to create lighting solutions that are unbeatable in terms of economyand functionality, according to the slogan: We devote all our energy to your light.

As an international company, Tridonic is represented worldwide by 30 branch offices and partners in 73 countries.



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