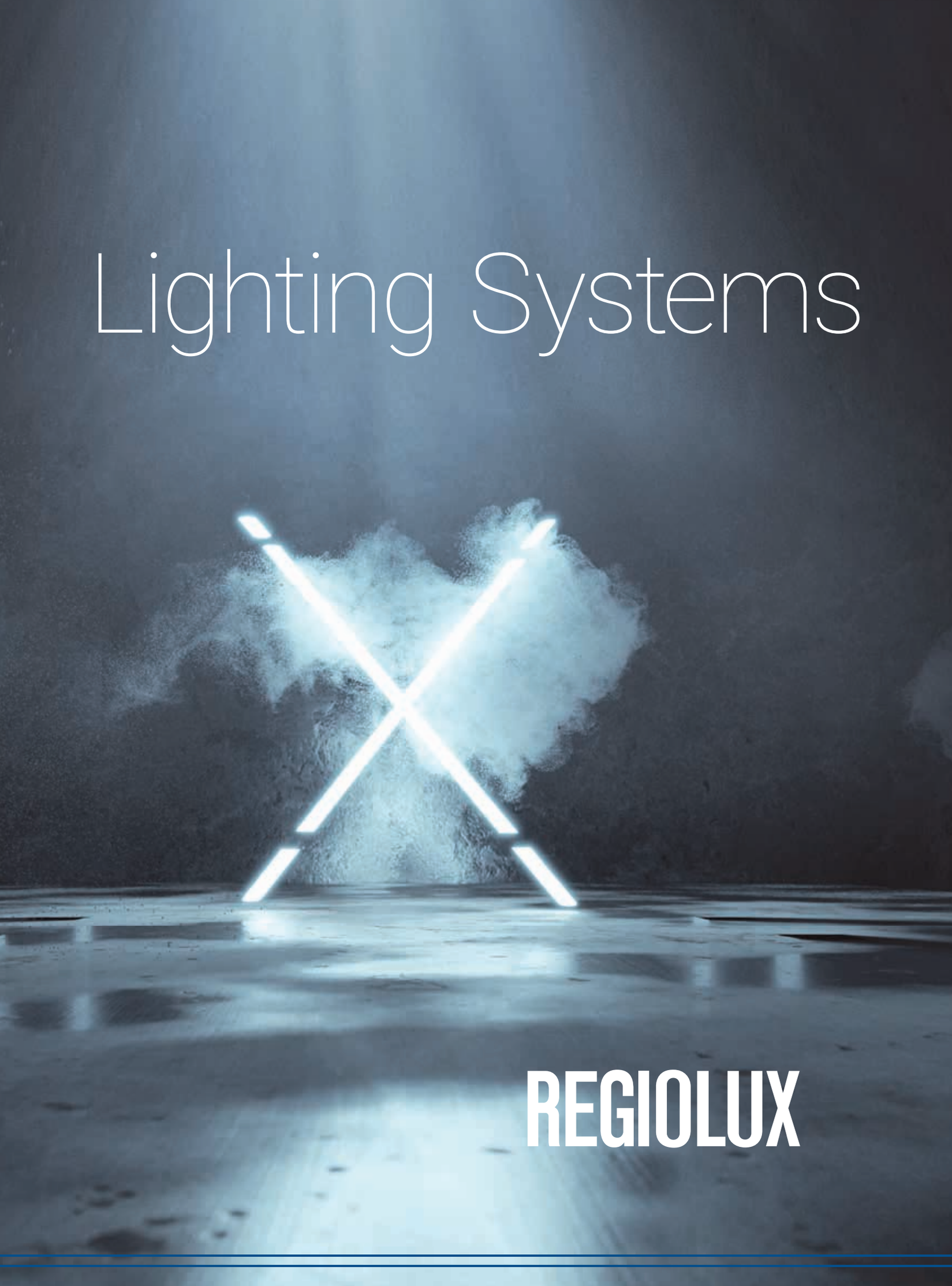
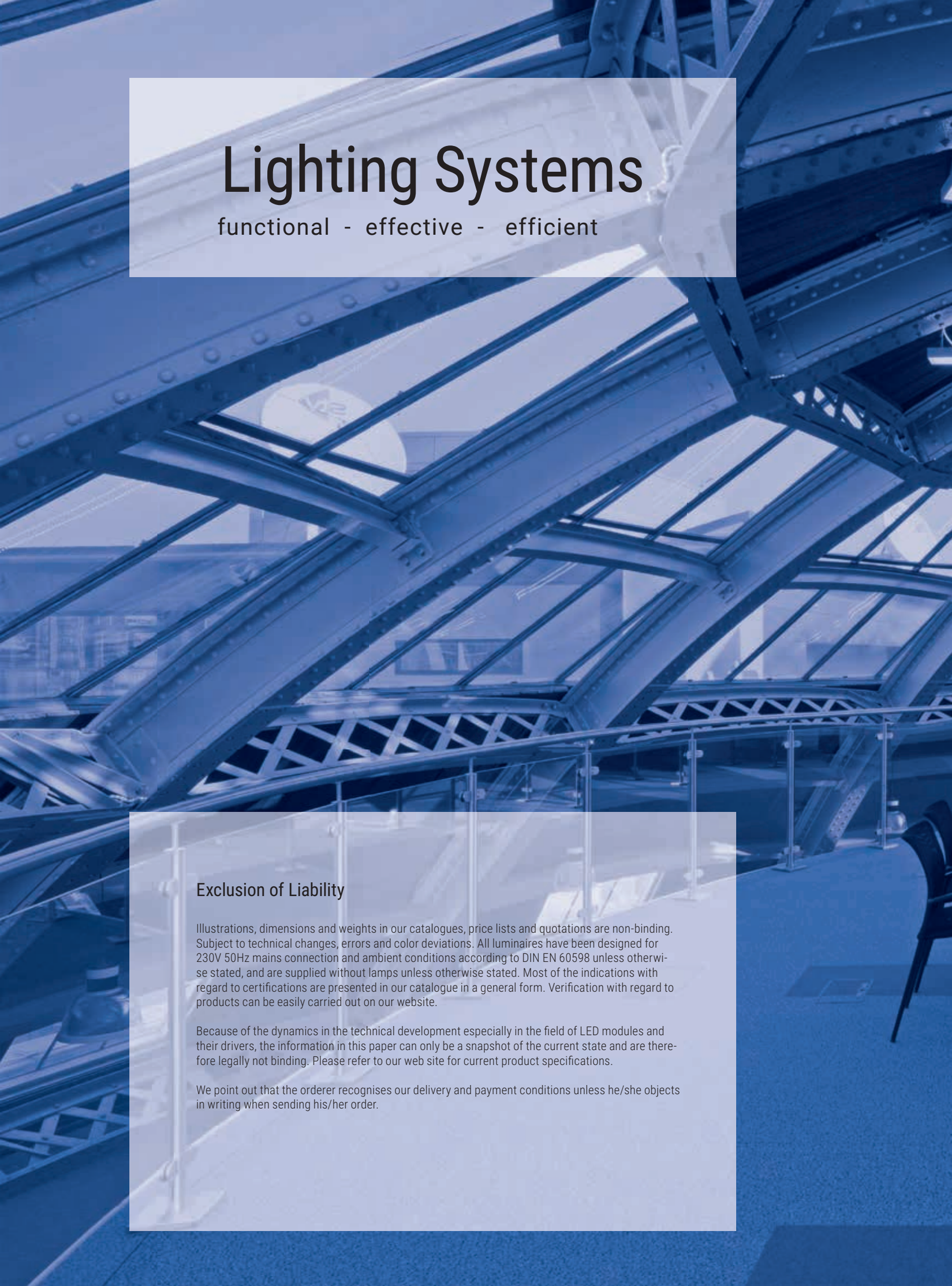
Lighting Systems



REGIOLUX



Lighting Systems

functional - effective - efficient

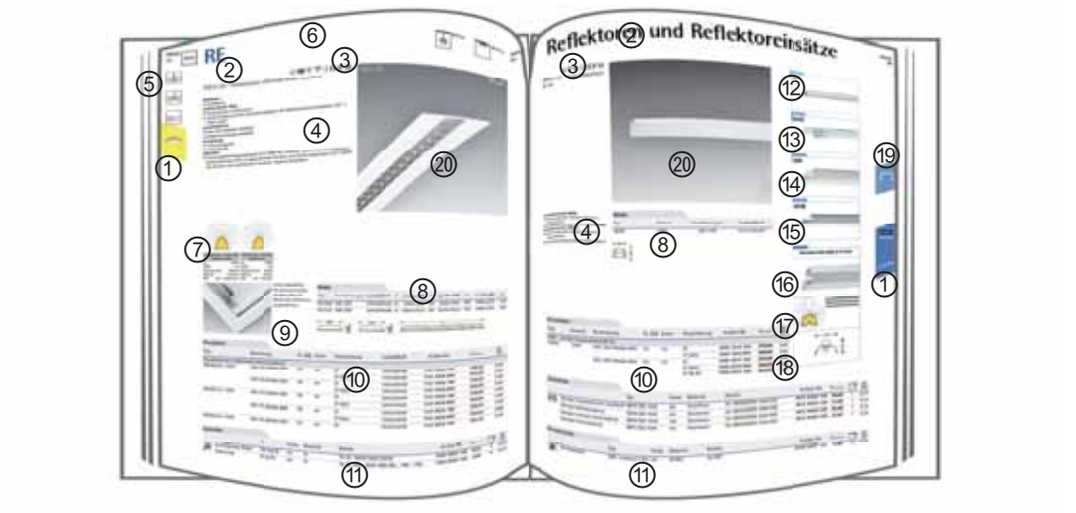
Exclusion of Liability

Illustrations, dimensions and weights in our catalogues, price lists and quotations are non-binding. Subject to technical changes, errors and color deviations. All luminaires have been designed for 230V 50Hz mains connection and ambient conditions according to DIN EN 60598 unless otherwise stated, and are supplied without lamps unless otherwise stated. Most of the indications with regard to certifications are presented in our catalogue in a general form. Verification with regard to products can be easily carried out on our website.

Because of the dynamics in the technical development especially in the field of LED modules and their drivers, the information in this paper can only be a snapshot of the current state and are therefore legally not binding. Please refer to our web site for current product specifications.

We point out that the orderer recognises our delivery and payment conditions unless he/she objects in writing when sending his/her order.

Description of page layout



① Product group

② Luminaire family, type

③ Certification: Overview and explanation in Technical information chapter 8: 8.6 Certification, insulation class and protection rating

④ Description with regard to lighting technology, housing, miscellaneous

⑤ Indications with regard to ceiling systems

⑥ Reference to accessories pages and products in other product groups

⑦ Light distribution curve (LVK) with data with regard to lighting technology of the reference product.
Explanations in the following area Explanations

⑧ Dimensional table and sectional drawings: Explanations of the variables in the following area Explanations

⑨ Detail image with explanation

⑩ Product table: Explanations of the abbreviations in the following area Explanations

⑪ Table with spare parts / accessories (if available): Explanations of the abbreviations in the following area Explanations

⑫ Combination quick-fit mounting system: Component mounting rail

⑬ Combination quick-fit mounting system: Component device mount

⑭ Combination quick-fit mounting system: Component light direction

⑮ Combination quick-fit mounting system: Component light direction insert

⑯ Quick-fit mounting system: Combination

⑰ Quick-fit mounting system: Light distribution curve of the combination, explanations in the following area Explanations

⑱ Quick-fit mounting system: Dimensioned drawing of the combination

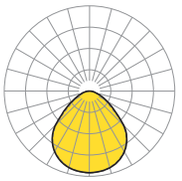
⑲ Indication to the product area mounting rail / device mount / light direction

⑳ Product image with icons and indication for functions and features

Explanations

Explanation of lighting technological data

① PNEMP/625 IP54 LED 4400 lm 840



②	η_{LB}	100 % ③
	lm/W	51 ④
	direct/indirect	100/0 % ⑤
	UGR lat./long	18,3/18,0 ⑥
	VDU	65° < 3000cd/m² ⑦

1. Configuration
Possible deviations of luminous flux between magnetic ballasts (Llb) and electronic ballasts (ECG) are not considered.

2. Luminous intensity distribution
Luminous intensity distribution curves shown in the catalogue are represented according to DIN 5032. Only both primary planes are displayed: 0°/180° planes (at right angles to luminaire axis) as a continuous line and 90°/270° (parallel to luminaire axis) as a dotted line. Curves are scaled to represent 1000 lumens of lamp luminous flux.

3. Light output ratios η_{LB}
Light output ratios specified for each luminaire are calculated from the relation of luminous flux Φ_L (τ_L) emitted from the luminaire with an ambient luminaire temperature τ_L = 25° C and further standardised conditions to the sum of measured luminous flux of the lamps with open distribution transferred individually to the luminaire ballast.
In the case of LED luminaires, the principle of absolute photometry is increasingly applied. In this case, the light output ratio is indicated with 100%. Additionally, the luminous flux is indicated in the form of the measured luminous flux of the luminaire.

4. Luminous efficiency
The luminous efficiency is the luminous flux of a bulb or luminaire related to its electrical power consumption.
In the case of LED luminaires presented according to the principle of absolute photometry (light output ratio 100%), the indication refers to the lumen output of the luminaire which is described by the ratio between luminous flux of the luminaire and system performance of the luminaire.

5. Direct and indirect light components
For evaluating the efficiency and lighting effect of a lighting system within a room, specification of the direct and indirect beam components is helpful.

6. Glare reduction according to UGR method
According to DIN EN 12464-1, not only is reflected glare considered but also direct glare within a specific room. As a standard evaluation system the UGR (Unified Glare Rating) method was introduced in Europe as part of the DIN EN 12464-1 standard. Details concerning the UGR method are described in the CIE 117 publication. The UGR values (lat. and long) of a lighting installation, determined according a table for the position of a standard viewer, are not permitted to exceed the value specified by the standard. In order to compare the direct glare of various luminaires, UGR values of a number of manufacturers are specified with reference to a so-called standard room. Please note that a correct comparison is only possible if all room conditions are identical. In addition it must be noted that UGR values for a real installation may significantly differ to those of the standard room.

Values given are based upon the following definitions.
Room dimensions:
Distance of eye level to luminaire level: H
Room width X = 4H
Room length Y = 8H
Standard reflection factors (0,7 ceiling; 0,5 walls; 0,2 floor)
Luminaire arrangement parallel to Y axis Luminaire distances:
Distance of luminaire to luminaire (spacing) S = 0,25H
Distance of luminaire to wall ½ S = 0,125H

Explanation of lighting technological data

7. Suitability for VDU workstations
Here, the suitability of luminaires for VDU workstations according to DIN EN 12464-1 is specified. The degree number means that the luminance in all luminaire planes beyond that angle does not exceed certain limitation values. Depending on screen quality and screen visualisation, the norm specifies different limitation values. In case of a positive display on screens with an own luminance (< 200 cd/m²), a maximum of 1500 cd/m² and in case of screens with a high luminance (> 200 cd/m²), a maximum of 3000 cd/m² is permissible.

Control gear

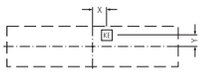
Abbr.	Description
ECG	Electronic ballast
Llb	Low-loss ballast
ind	Inductive, must be compensated on-site
multi	Multiwatt T5
ED	Electronic driver, not dimmable
EDM	Electronic driver Multi, not dimmable (8 or 16 adjustable lighting levels)
DALI	Electronic driver, DALI, dimmable
DALI DT8	Electronic driver, DALI, dimmable, change of light color (Tunable white)
LC.	Device with integrated LC components of special type
M.	Master unit Typ 1-N
S.	Sensor unit Typ 1-N
NL-B1, NL-B3	Emergency light single battery; 1=1h, 3=3h

Explanations

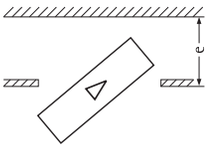
Definition of measurement table variables

Abbr.	Description
A	Distance between the individual luminaires
A1	Fixing distance in case of single mounting
A2	Fixing distance for first or last luminaire in case of light run mounting
A3	Fixing distance for the middle luminaires or between the luminaires in case of light run mounting
A4	Fixing distance (width)
B	Width
D	Diameter
DA	Diameter of cut for recessed luminaires
DA_B	Width of cut for recessed luminaires
DA_L	Length of cut for recessed luminaires
DS min	Minimum ceiling thickness with suspended ceiling
DS max	Maximum ceiling thickness with suspended ceiling
Db	Sensor detection diameter
Dr	Sensor detection diameter ideal movement towards the sensor
Ds	Sensor detection diameter seated activity
Dt	Sensor detection diameter tangential movement parallel towards the sensor
Et	Mounting depth (necessary depth for luminaire mounting)
Et min	Minimum mounting depth (necessary depth for luminaire mounting during celing construction)
FB	Width of luminaire groundplate
FD	Diameter of luminaire groundplate
FL	Length of luminaire groundplate
H	Height
HS	Installation height of sensor
KB	Width of luminaire head or ballast box
KD	Diameter of luminaire head or ballast box
KE	Cable infeed
KH	Hight of luminaire head or ballast box
KL	Length of luminaire head or ballast box
L	Length
L2	Additional length
MB	Modul (axes) width
ML	Modul (axes) length
P	Suspension length
Pmin	Minimum suspension length
Pmax	Maximum suspension length
P_{Sys}	Luminaire system performance
T	Depth
W	Wall distance
X	Distance from middel of the luminaire to the electrical feed in (X direction = length)
Y	Distance from middel of the luminaire to the electrical feed in (Y direction = width)

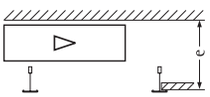
Description of measurement table variables



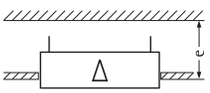
1. Positioning of electrical feed in.



2. Required installation depth "Et" for swivelling of luminaire in visible T rail constructions (lay-in luminaires). Required installation depth "Et" for swivelling luminaire and control gear (if applicable) through ceiling cut-out (clamp mounting).



3. Reduced installation depth "Et min" with aligning of luminaire above T rail construction (during ceiling construction).



4. Required installation depth "Et" for swivelling of mounting bracket (clamp mounting).

Ceiling systems

	Ceilings with visible T-rails
	For concealed symmetrical rail constructions
	For concealed asymmetrical rail constructions
	For recessed ceilings
	For panel ceilings, module 100, 150, 200

Cross references

	Reference accessories
	Reference mounting rail installation
	Reference mounting note
	Reference product groups

Icons / functions features

	Configuraton with sensor available
	Configuraton with emergency light unit available
	Luminaires for HCL (human Centric Lighting)
	Luminaires suitable for Advanced Services
	Luminaires suitable for IoT (Internet of Things)
LED	LED (included)
α	Beam angle

Explanations

Materials

Abbr.	Description
A03S-U	Recognised national cable type: measurement voltage 300 V to 300 V; Silicone rubber isolation material, heat-resistant to +180° C; Single-wire conductor, round
ABS	Acrylonitrile Butadiene Styrene Copolymerisate
Al	Aluminium
AlMgSi	Aluminium magnesium silicon (extruded section)
Cu	Copper
EPDM	Synthetic rubber
Glass	Glass
Glass matt	Matt glass
Glass (ESG)	Tempered single-pane safety glass
H03VV-F	Harmonised cable: measurement voltage 300 V to 300 V; Isolation material PVC, heat-resistant to +70° C; sheathing material PVC, heat-resistant to +70 °C; fine-strand conductor, flexible
H05HH-F	Harmonised cable: measurement voltage 300 V to 500 V; Isolation material flat, divisible cable; sheathing material flat, divisible cable; fine-strand conductor, flexible
H05S-U	Harmonised cable: measurement voltage 300 V to 500 V; silicone rubber isolation material, heat-resistant to +180° C; single-wire conductor, round
H05V2-U	Harmonised cable: measurement voltage 300 V to 500 V; Isolation material PVC, heat-resistant to +90° C; single-wire conductor, round
H05VV-F	Harmonised cable: measurement voltage 300 V to 500 V; isolation material PVC, heat-resistant to +70° C; sheathing material PVC, heat-resistant to +70 °C; fine-strand conductor, flexible
H07V2-U	Harmonised cable: measurement voltage 450 V to 750 V; isolation material PVC, heat-resistant to +90° C; single-wire conductor, round
Inox	Stainless steel
Inox V2A	Stainless steel (alloy type 1.4301 or X5CrNi18-10)
Inox V4A	Stainless steel (alloy type 1.4401 or X5CrNiMo17-12-2)
Mix	Diverse materials
PA	Polyamide
PC	Polycarbonate
PMMA	Polymethylmethacrylate (acrylic glass)
Polymer	plastic (not defined specifically)
Polymer clear	Plastic (crystal clear)
Reinforced polymer	Plastic (with admixture of reinforcing materials)
PS	Polystyrene
PVC	Polyvinyl chloride
St	Steel
StZn	Steel with zinc coating

Colour code

Abbr.	Colour
al	aluminium
aeh	aluminium high gloss
aes	aluminium matt gloss
aen	aluminium natural anodized
ap	aluminium plate finish
am	anthracite metallic
bl	blue
bl/cr	blue chrome
ce	cream
cr	chrome
eg	brushed stainless steel
ge	yellow
ge/cr	yellow chrome
ga	grey
gr	green
hg	light grey
hgl	high gloss
kg	pebble grey, RAL 7032
kgm	pebble grey metallic, RAL 7032
kl	clear
me	metallike
op	opal white
og	orange
ro	red
sw	black, RAL 9005
si	silver
sg	silver-grey, RAL 9006
tz	translucent
tp	transparent
vw	traffic white, RAL 9016
ws	white
wa	white-aluminium, RAL 9006


AI

Advanced Services

Advanced Services lighting solutions for modern lighting system control and implementation of IoT technology

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Advanced Services

Every project solution has a different emphasis and its own focus or challenges.
Advanced Services design the lighting infrastructure and provide the interfaces for linking in further components. We have also proved ourselves an expert partner for complex requirements going beyond the use of light and luminaires.

Advanced Services acts as a „System integrator“ for all sub-sections here. This increases process efficiency.
We label our products with „Advanced Services proof“ if they are technically prepared for tasks

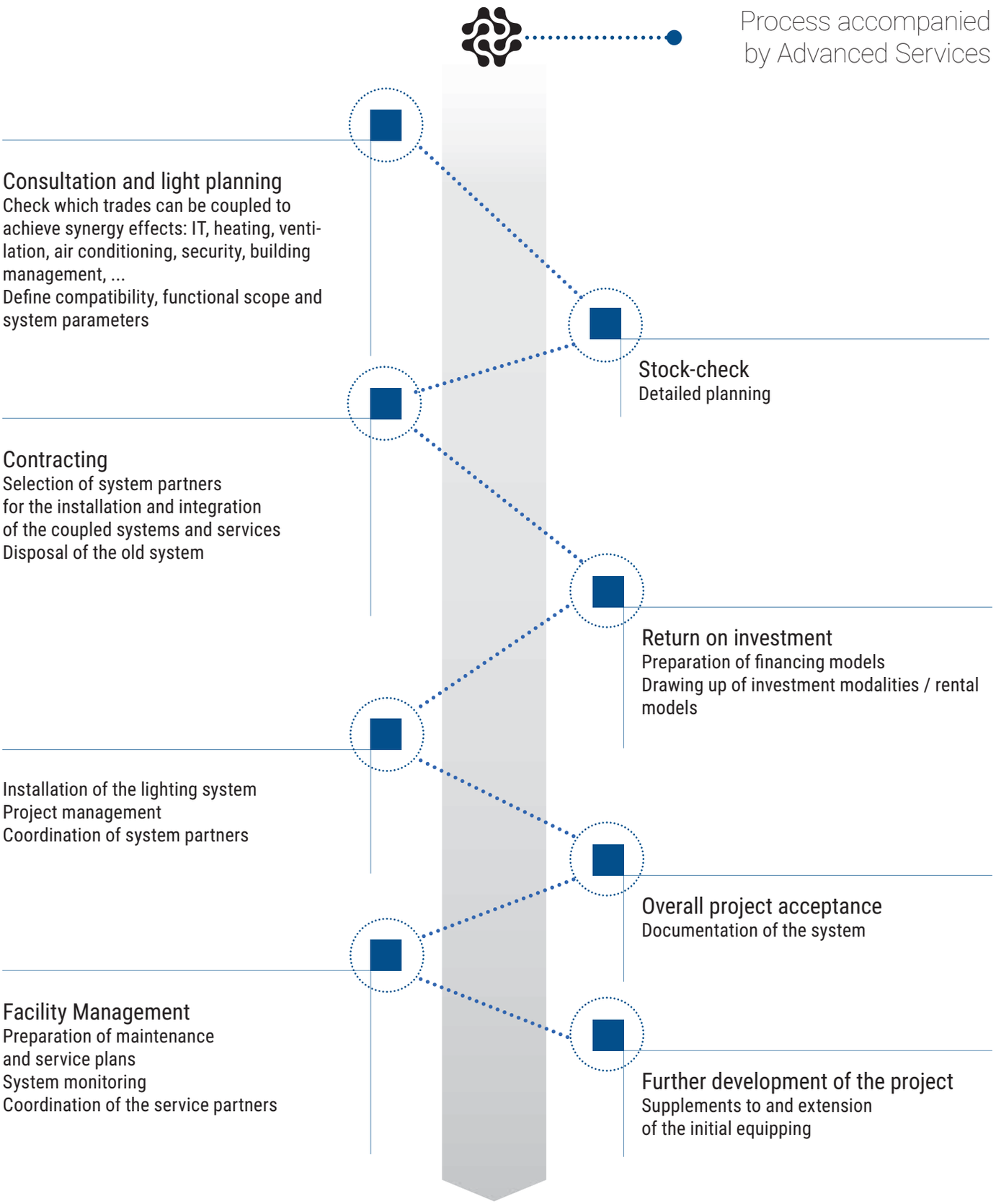
Regiolux luminaires are „Advanced Services proof“

Further information

in theme catalogue
„Advances Services“

Regiolux project design

We have pressed ahead with our own product development with partners in the Light Control area. They help us to raise conventional lighting solutions to a new level. And now we also have Location Based Services and Smart Building concepts that can be integrated into the world of IoT. Using synergy effects for all trades means using the light infrastructure and Advanced Services expediently.



Internet of Things - IoT

The Internet of Things (IoT) is a collective term used for technologies of a global infrastructure that make it possible to interconnect physical and virtual objects and allows them to work together through information and communication technologies. Components such as sensors and actuators extend functionality by recording states or executing actions. The aim of the Internet of Things is to automatically record relevant information from the real world. This information is linked together and made available to other processes and systems in the network as well.

Ready for IoT
Our label for IoT integration

In intelligent buildings, lighting systems form the ideal infrastructure for IoT technology. They are available throughout the building and provide the power supply for the components. Regiolux provides the required interfaces to IoT systems in luminaires in order to exploit the technology's potential. In the field of Advanced Services, Regiolux bundles expertise to achieve the integration of IoT technology and services. This allows the upgrading and retrofitting of lighting solutions depending on the specific task in question. We mark IoT-capable luminaires with a Ready for IoT symbol.

Regiolux luminaires are
„Ready for IoT"

Regiolux provides the required interfaces to IoT systems in luminaires in order to exploit the technology's potential. Regiolux luminaires with this symbol are „Ready for IoT".

Industry 4.0

Industry 4.0 is the term used to describe the comprehensive digitisation of industrial production.
Industrial production is to be integrated with modern information and communication technology. Intelligent and digitally interconnected systems form the technical basis for this. With their help, self-organised production should be possible to a major extent: humans, machines, systems, logistics and products communicate and cooperate directly with one another in Industry 4.0.

Light & Shop

Lighting can be used more flexibly than ever before. In the meantime, the light quality of LEDs has now surpassed conventional solutions. The right lighting solution can also be an important and supporting communications instrument. Exciting staging with improved colour rendering and light control live up to the expectations of an optimised yet flexible presentation of goods and brands. Changeable promotional areas and event zones are another factor here. Indoor navigation opens up numerous additional options for further applications. Lighting solutions designed to be controllable can be adapted to all of these individual requirements

VLC and YellowDot

Light-controlled indoor positioning

Regiolux offers luminaires equipped with drivers and certified under the „YellowDot“ label by Philips Lighting. The LED drivers are pre-configured to support the technology based on Visible Light Communication. With VLC, information is transferred with the help of light as a transmission medium. In doing so, light frequencies outside the range of human perception are used to transfer information. The light points of a luminaire emit a unique identification code through the modulation of the light. The camera of a smartphone acts here as a precisely positioned receiver. Various services can then be called up conveniently with a smartphone app.

Regiolux luminaires support and are certified for technologies based on Visible Light Communication (VLC).

Regiolux luminaires are „YellowDot“ certified

The range of customer-oriented applications based on wireless data in retail is getting bigger all the time. Dialogue-oriented information and messages thus reach the recipient directly at the point of sale. Free Wi-Fi and shopping apps for customers, digital displays and electronic shelf labels, mobile devices for employees and mobile checkouts are just some examples of this development. In addition, the technology has become more powerful. Modern access points transmit at both 2.4 and 5 GHz for Wi-Fi as well as Bluetooth and radio frequencies and cover ranges of up to 50 m on the sales floor. Free Wi-Fi access opens up further opportunities.

Visible Light Communication (VLC) could also prove useful as an additional position finding method. Light is used here as a wireless transfer medium for the data. With indoor positioning, it controls the transmission of information and enables navigation in buildings.

All these components have to be set up, controlled, managed and maintained. The services have kept pace with developments in this area too, and it's helpful if there is only one contact for the entire concept. With the implementation of omni-channel concepts, the complexity of the network solutions and individual components is further increasing. Centrally set up, managed and monitored, they simplify complex individual processes. This is also where the potential lies for cost-savings in digitisation and the provision of the infrastructure.

Areas of application for Indoor Navigation

- Navigation to the destination improves convenience for the customers
- Support for marketing and advertising campaigns
- Support during purchase decisions
- Analysis of the data and services used
- Record customer behaviour and wishes
- Optimise the arrangement and presentation of products
- Information for employees to assist with inventory management
- Determination of required tasks
- Provides data on the flow of goods and materials
- Precise, real-time data helps employees to localise problems

Human Centric Lighting

Natural daylight changes constantly from morning to evening, both in brightness and colour as well as direction. A professional lighting system can imitate this rhythm. It provides interior rooms with biologically effective artificial daylight. It supports the natural light there for the various lighting tasks. Human Centric Lighting also promotes a sense of well-being and the ability to concentrate.

Our label for Human Centric Lighting

Regiolux highlights the special characteristics and options of this product group with a dedicated label.

Regiolux luminaires are „HCL-ready“

HCL planning practice

Human Centric Lighting recreates the natural course of daylight in its spectral quality. The colour control is started by a timer and runs as a typical HCL curve. The switching times are programmed and usually do not require adjustment.
In the automatic mode, the system is switched on through the presence sensor and off after a delay when the room is left again. A wall switch allows the lighting to be switched on and off or changed over.

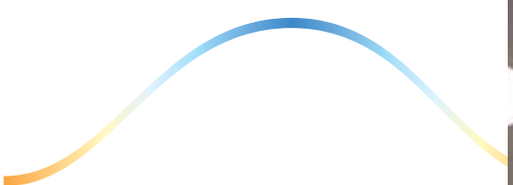
This means that automatic HCL operation or a defined lighting scene can be selected (meeting light 6000K, 100%, or working light 4000K, 60%) depending on requirements.
The luminaires are controlled as a group in broadcast mode. The control units and switches are delivered pre-configured so there is no need for programming and commissioning on site.

Client:	BayWa, Wilzhofen, DE
Lighting planning:	Regiolux Königsberg, DE
Installer:	Eckl-Dyk-Service GmbH, Alteglofsheim, DE

Colour temperatures

BayWa Wilzhofen:
Sales room with no outside walls
or windows with HCL light control

HCL
Typical progression



In the morning, the system starts with 2700K and 50% light, by midday 6500K and 100% have been reached and in the evening the lighting returns to 2700K and 50%.

All included in the standard functions:
LC-RX direct:LC controller

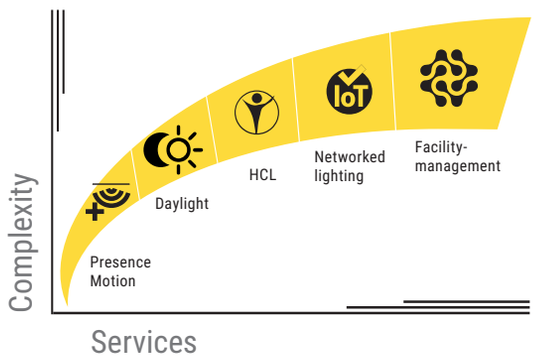
System solutions

Programmable controls with Advanced Services

If the intelligent lighting solutions are intended to serve as an infrastructure platform, Advanced Services at Regiolux and their partners can provide the desired solutions. They determine the functional scope and the system parameters. They hereby take into account compatibility requirements and interfaces that work reliably. The functionalities of wireless systems can likewise be coupled. The controllers programmed by Advanced Services can be coupled with not just lighting systems, but also with other systems through different technologies. The DALI protocols opens up all kinds of opportunities. When adapting the basic equipment of the lighting systems, the complete range of options can be called upon to get the most out of lighting strip systems too. In particular, the coupling with IT systems expands the classical tasks of a lighting solution. Remote access for monitoring and maintenance tasks is possible via the IT networks. In the world of the IoT, information and communication technologies work together. Site-specific services, oriented around mobile devices, can be integrated. The objective here is to provide an optimised user strategy, precisely and personally. Regardless of whether reactive or proactive services are favoured.
Advanced Services are committed to the goal of defining ideally suited system building blocks in each case. These are selected to create an individual solution in order to bring the respective benefits to bear. This applies to all optionally connectable system worlds.

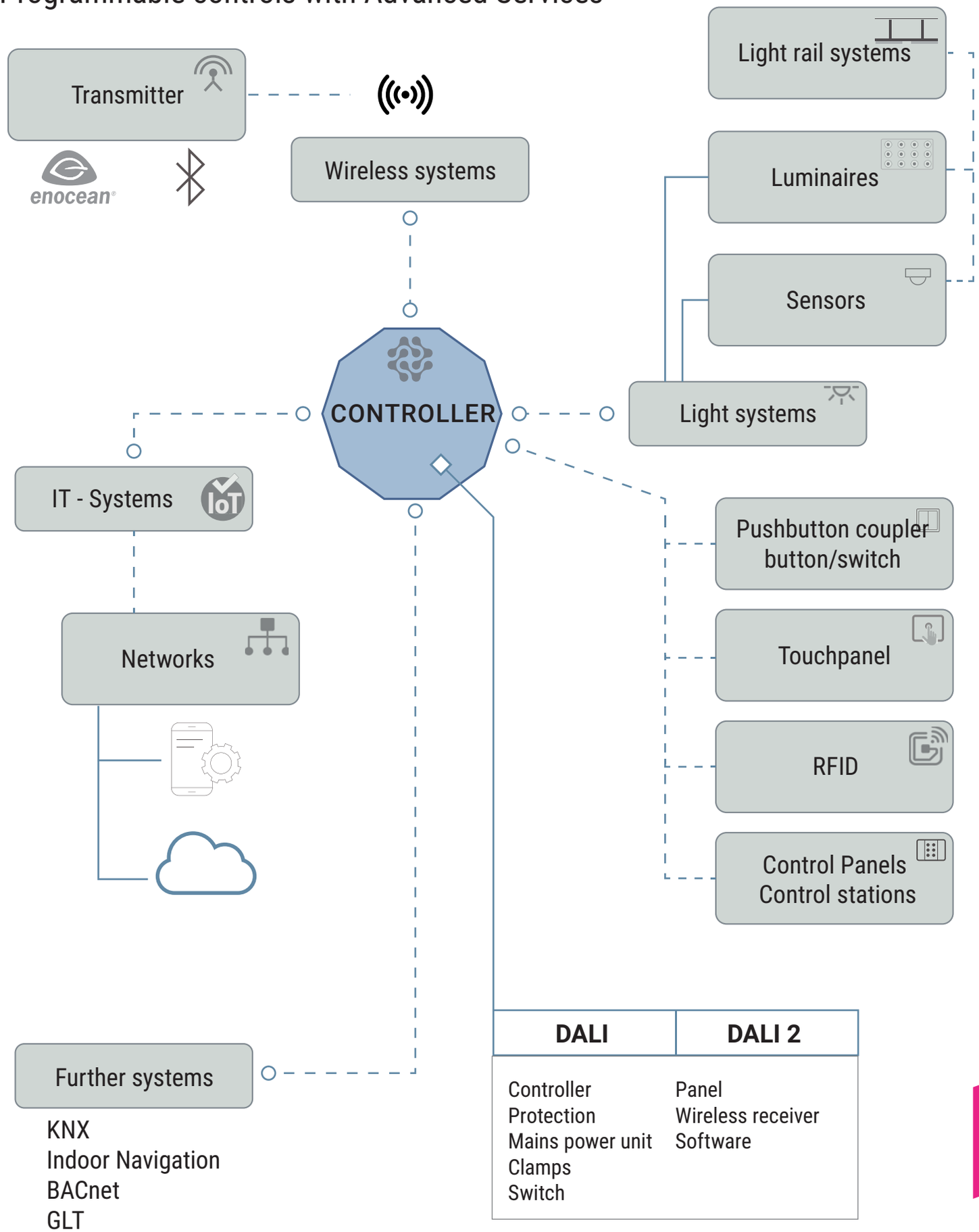
System solutions from Advanced Services

As the functional scope of a lighting system increases, so the complexity of planning increases too are connected and equipped with intelligent modules.
Modern lighting systems are particularly effective and successful if the individual tasks can be mapped in a system operating at its optimum.



System Solution

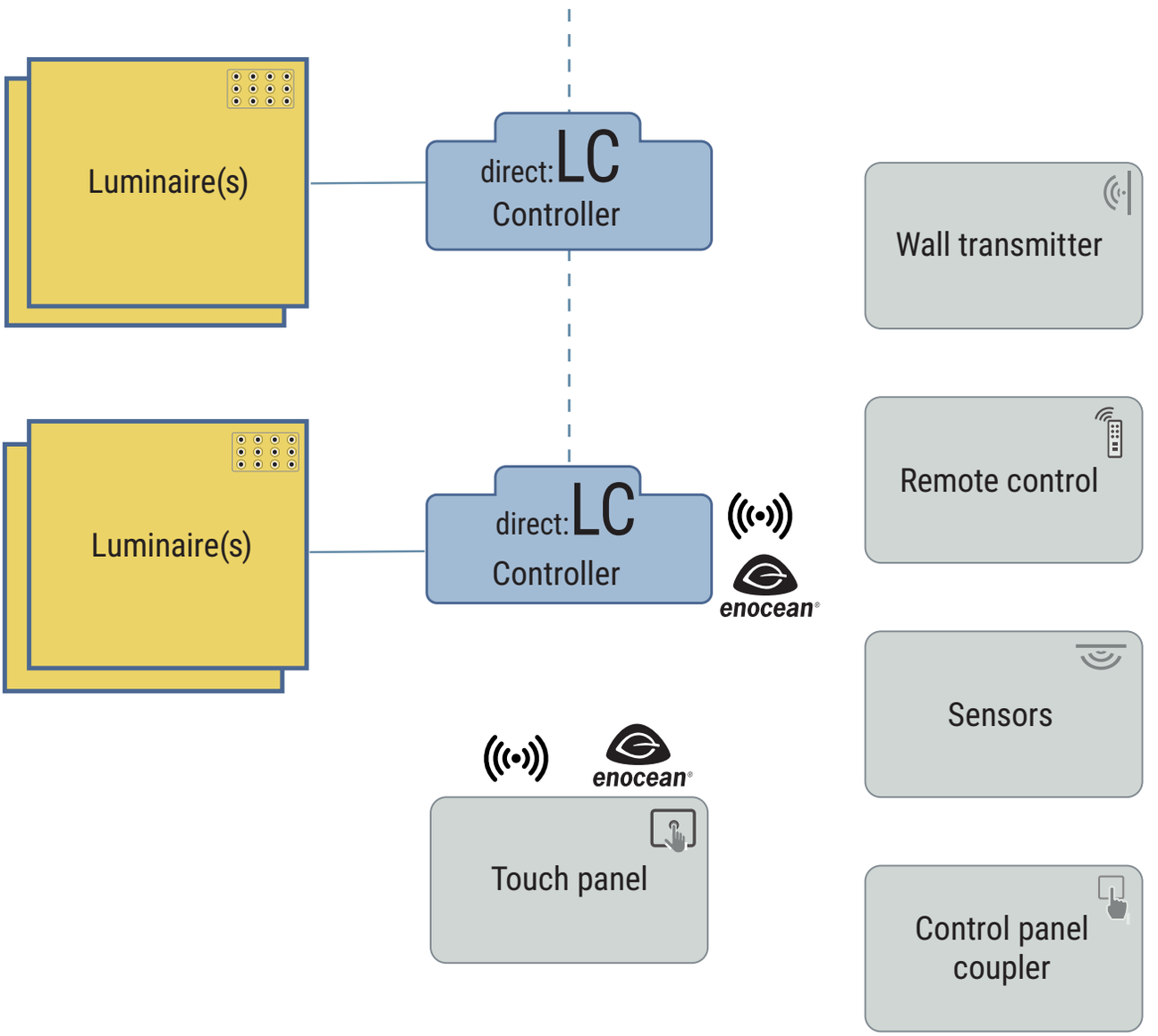
Programmable controls with Advanced Services



System Solution

direct:LC Controller

With direct:LC controllers from Regiolux, several luminaires can be controlled simultaneously in groups or individually. With their defined functional scope, they are perfect for operating our lighting solutions. They can be linked together to form uniformly controllable system circuits. Wireless control is provided via corresponding controls. In addition, the direct:LC controller can be controlled via a battery-less wireless sensor systems without batteries and control modules with EnOcean technology. EnOcean devices in the electrical installation are maintenance-free and enable flexible building automation. Information can be called up and displayed quickly and simply via touch panels.



Wireless freedom through radio technology

In the meantime, lighting control systems have become a decisive factor in many modern lighting systems. This development is gathering pace thanks to the various opportunities offered by the digitisation of light.

The overall concept of the building lighting is usually a crucial factor when it comes to finding a feasible solution with acceptable costs. With the lighting systems from Regiolux, the user can implement various concepts and select whether the systems are controlled wirelessly or whether they are to work in a classical wired configuration.

Exploit potential with EnOcean light controller

Regiolux relies on EnOcean controllers for wireless and radio-controlled lighting systems with maximum flexibility. This concept brings together the key aspects of flexibility and energy efficiency. The necessary components can be easily retrofitted as there is no need to run new control lines to the luminaires. WLAN routers, firewall definitions, additional devices and remote controllers as well as wire routing, on the other hand, generally entail significantly higher additional costs.
A lighting system can be conveniently controlled by software via a multitude of parameters. The controller is installed in a control box and is easily accessible. In fact, in the set variants, the connection lines are already pre-assembled.

Designed as a complete solution, plug-and-play, fault-free and ready to be used without any programming required. This takes a large step towards perfect lighting equipment with Tunable White or Human Centric Lighting.

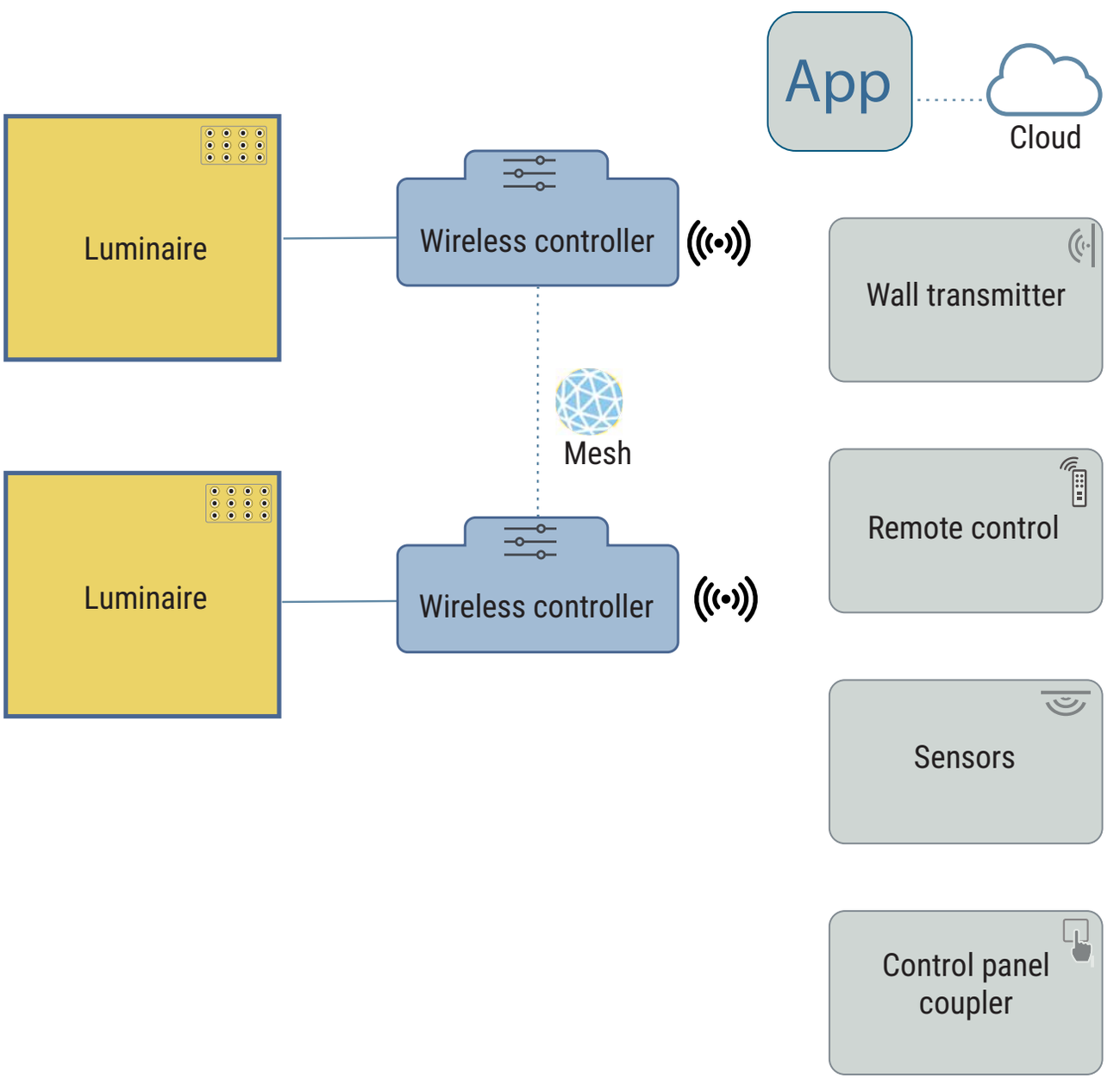
Control parameters

- On/Off/Dim
- Freely adjustable light level and light colour (with DT8)
- Scene and group selections
- Individual addressing
- Timer
- Light regulation
- Movement detection
- Adjusting basic DALI parameters

System Solution

Wireless controller

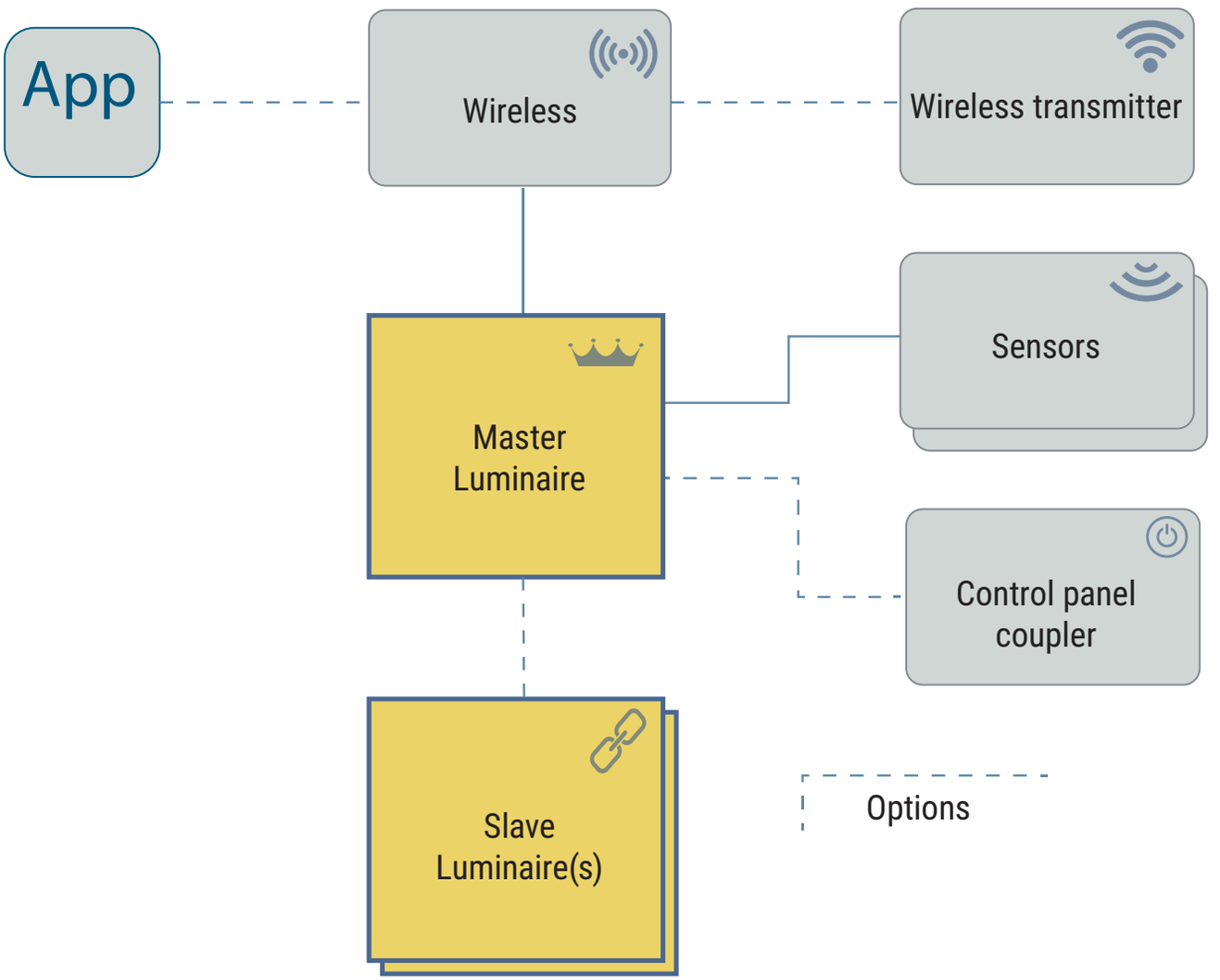
Luminaires that are controlled via a wireless controller can be linked together to form different building blocks. They receive their control commands wirelessly from a classical range of control devices. They are also designed for connection and control by apps, thus also incorporating the opportunities of the Cloud. The compatibility with a multitude of couplers enables individual control stations to be used. Wireless controllers are also able to automatically establish links to the luminaires located in the mesh area and to execute commands in accordance with the common settings in the application.
Regiolux is open to your requirements profile and so relies on flexibility when selecting suitable components.



System Solution

Master luminaires

For some time now, master Luminaires have been the quickest and simplest introduction to automated lighting solutions. They control the subordinate slave luminaires with their configuration. With the integrated sensor systems, they are tailored to the best possible energy efficiency via daylight control and presence/motion detectors. Additional operating stations can also be coupled as an option. If the master luminaires are equipped with a radio module they can now be controlled by suitable transmitters and can be operated and configured via apps.

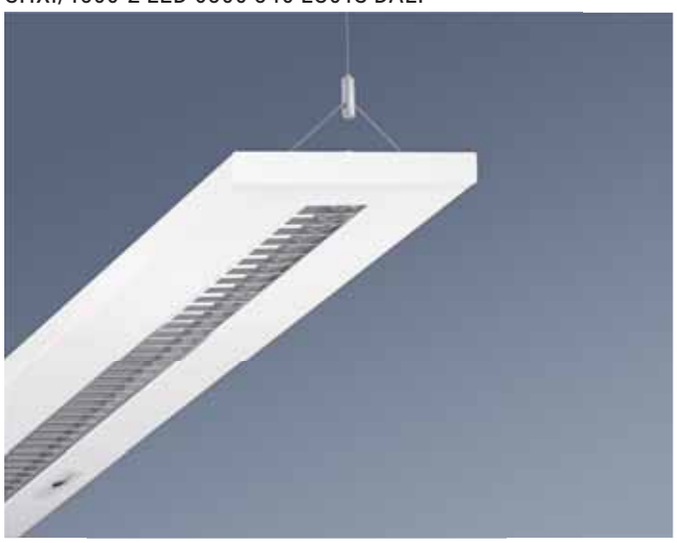


Overview Master luminaires

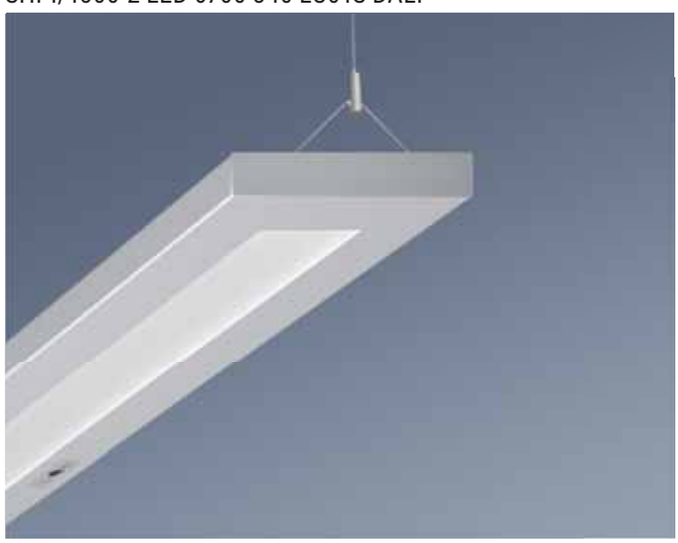
teno
TNEMP/625 LED 4000 840 LC01 DALI ▸ 146

alvia
ALIMPR/1400 LED 9100 840 LC01 DALI ▸ 14

stail
SHXI/1500-2 LED 6800 840 LC01S DALI ▸ 34

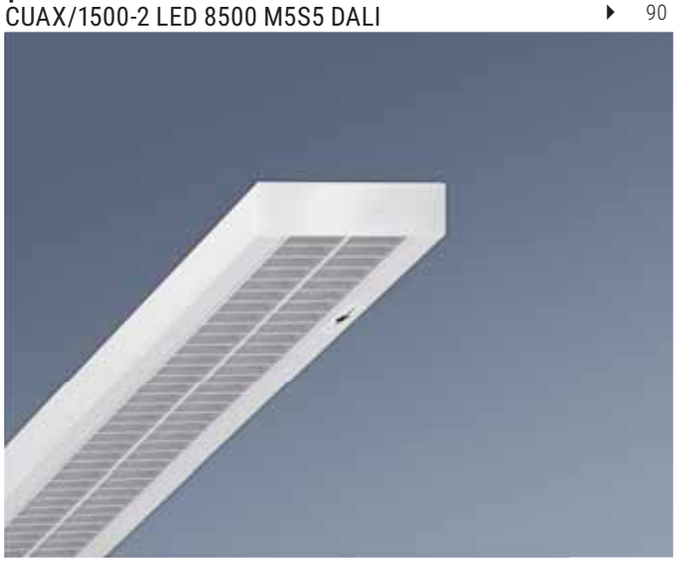


stail
SHPI/1500-2 LED 6700 840 LC01S DALI ▸ 32



visula
VSSIMP/635 LED 15700 840 M5S5 DALI ▸ 202

procube
CUAX/1500-2 LED 8500 M5S5 DALI ▸ 90



Light-Control areas of application

Industry

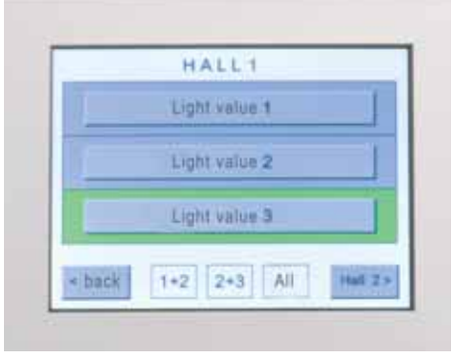
Regiolux lighting rail systems are used in industrial and commercial operations with 7 optics. Together with surface area luminaires, they also provide excellent lighting under the most difficult of conditions and extreme installation heights. What's more, they impress with uniform illumination in hall or warehouse lighting. The high energy efficiency and the future-proof control provides investment security with the use of SDT quick-fit mounting systems. In addition, the worker and cake hall reflectors and surface area luminaires are highly developed product lines that are available to meet the demands of hall illumination.

Logistic

The focus is primarily on functionality when it comes to the illumination of warehousing halls. The workplace regulations stipulate the requirements for the illumination of work routes and for glare reduction. With rack lighting, the vertical direction of the light has also been optimised to suit the large room heights. Presence and daylight control can also be added for the various functional areas. These are energy efficient and ensure an excellent working environment.

Sports and Multipurpose halls

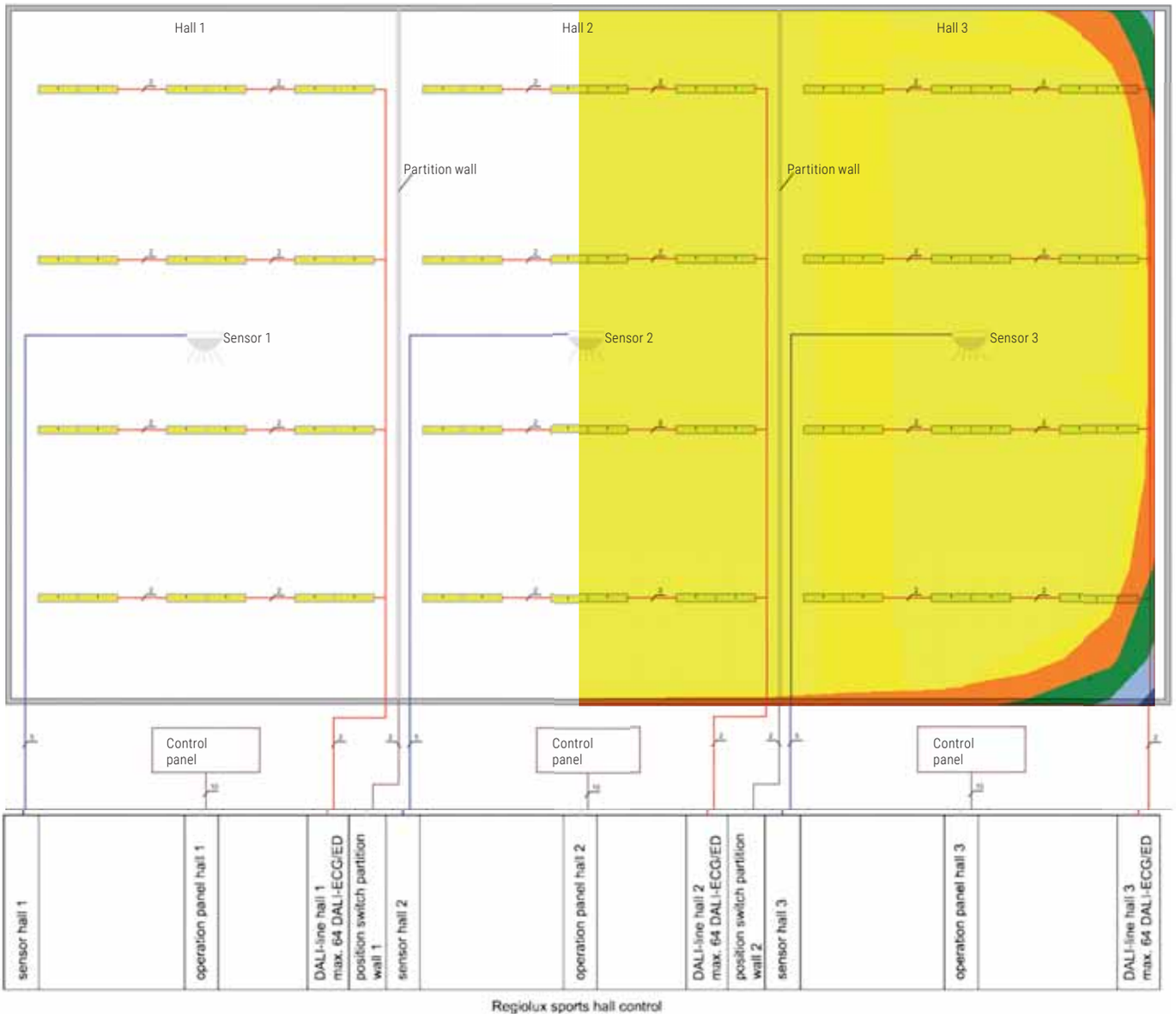
A modern multipurpose hall for sports and events also provides the town with an attractive new venue for leisure and learning. Flexibility in the use of the room system is required in order to be able to cover a particularly wide range of clubs and communities. The separate use of sections of halls is functional and simple to design. In practice, this means that expansion and modification potential is also provided in the lighting planning alongside setting the focal points. From a functional sports perspective, achieving glare-free illumination of the whole hall area is a basic prerequisite. The common areas and waiting zones of the entrance area are often multifunctional connecting areas. They can also be upgraded with atmospheric room qualities through a flexible design of the lighting control.



Convenient control via touch panel

Wiring example

DALI daylight control and controller for 3-zone sports hall



Project solution:

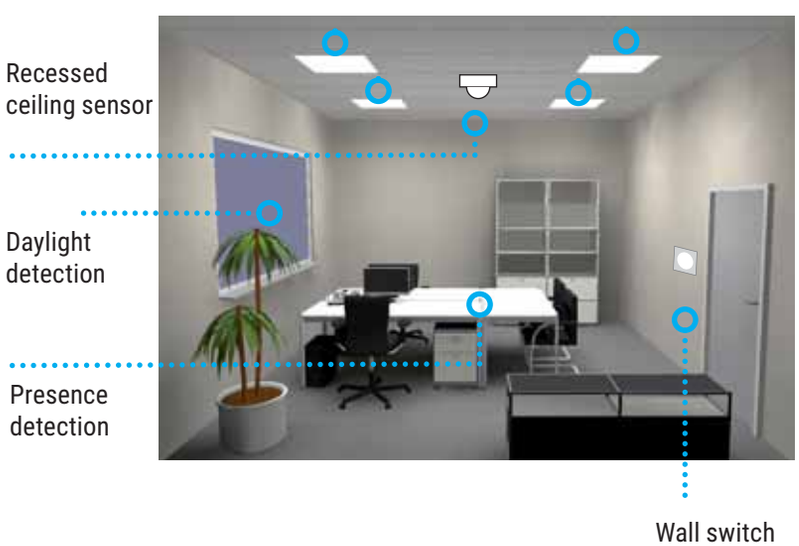
- Regiolux sports hall controller, pre-wired and assembled ready for connection in a switch cabinet
- 1 sensor for light, presence/motion sensor, with ball protection guard for each hall zone
- Processing of the Open/Close signals of the hall partition walls in the controller.
- Individual hall zones or the entire hall can be operated from on-site control points
- Selection of 3 lighting setpoints using buttons / switches
- Acknowledgement for operation and fault
- Override automatic mode at the controller's touch panel
- Individual hall zones or the entire hall can be operated at the controller's touch panel
- Completely automatic or semi-automatic mode can be selected at the controller's touch panel
- Settings for basic values, such as setpoints, shut-off delays, etc at the controller's touch panel
- 3 DALI lines for controlling up to 64 DALI luminaires each (or DALI drivers) per hall zone

All-inclusive luminaire sets

A luminaire set is the ideal starter-pack for lighting systems with modern lighting management for offices. The individual components are matched to one another so that there will be no surprises. The direct:LC controllers are pre-programmed and designed for the technical lighting requirements of a double workplace. They have been prepared for plug&play with pre-assembled cables. This plug&play concept allows the straightforward implementation of standard applications and refurbishment work. Luminaire sets are all-round, carefree solutions from Regiolux that have all the answers.

Upgrade the office

Pre-assembled luminaires, plug-and-play



Modern lighting systems can be equipped with intelligent sensors and can be wireless or wired. Controlling these lighting systems brings together the key aspects of flexibility and energy efficiency. A large number of parameters can be controlled conveniently via software: on/off/dimming, free control of light level, free control of light colour (with DT8), scene selections, group selections, individual addressing, timer, light control, motion detection, settings of basic DALI parameters.

Office

Light provides energy and safety, stimulates a sense of well-being, health and the ability to concentrate. Wherever daylight can be supplemented with dynamic light, this can provide our body with a crucial impetus to support our internal body clock. The subject of light in everyday office life therefore takes on a completely new dimension. Biodynamic light adds to the quality of our everyday life at the desk.

With the lighting sets, we have compiled a tailor-made performance package for this area that fulfils all prerequisites. Daylight control and presence detection, Tunable White and HCL solutions can be implemented with teno and panella.
The team from Advanced Services will provide information about possible expansions.

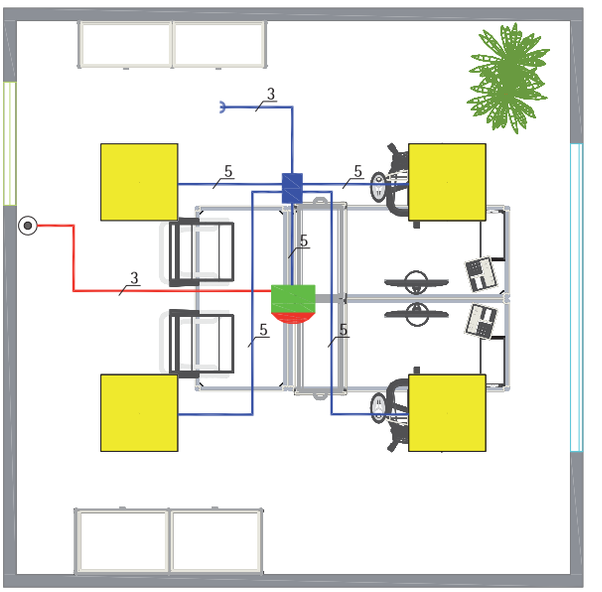
panella set

Luminaire set for daylight control and presence detection

Luminaires and sensors are equipped with plug-and-play, pre-assembled 3 m long connecting cables. Power is supplied via a 3m long Schuko power supply cable, which is also pre-assembled. The entire electrical connection can be completed without tools.
The sensor is a presence/motion sensor with daylight control. The luminaires are freely adjustable via the DALI output control.
Threshold value, setpoint value, run-on time and orientation light can be conveniently set via the remote control. A basic function is available straight away via the factory settings following initial start-up.
Optionally, a button can be connected to the sensor to start the semi-automatic control or for manual operation.

Wiring diagram

panella luminaire set for a double workplace



pre-assembled
optional

Set components

Luminaire set for daylight control and presence detection

Mounting:
• Ceiling installation: Ceilings with visible T-rails

Set details:
Luminaire set for daylight control and presence detection

PEMP/600 LC16 – Set
Luminaire set with control unit and pre-assembled power supply cables
Consisting of:
• 4 panella-PEMP/600 LED 3700 840 DALI
• 1 DALI recessed ceiling sensor
• 1 Remote control
• plug-and-play
• daylight linking and sensor-dependent control
• can be configured via remote control

PEMP/625 LC16 – Set
Luminaire set with control unit and pre-assembled power supply cables
Consisting of:
• 4 panella-PEMP/625 LED 3800 840 DALI
• 1 DALI recessed ceiling sensor
• 1 Remote control
• plug-and-play
• daylight linking and sensor-dependent control
• can be configured via remote control

Set type	Lamps	lm/W	P_{Sys} [W]	Colour	Ballast	Art. no.	kg
Micro-prismatic diffuser direct distribution luminaire set							
panella-Set PEMP/600 LC16	LED 3700 840	119	32	vw	DALI	8425 6016 650	15,50
panella-Set PEMP/625 LC16	LED 3800 840	117	32	vw	DALI	8425 6015 650	16,30

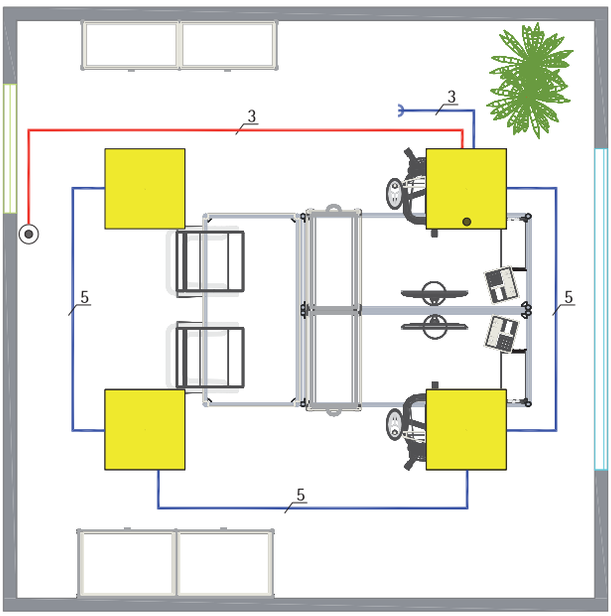
teno set

Luminaire set for daylight control and presence detection

All luminaires are equipped with plug-and-play, pre-assembled 3m long connecting cables. Power is supplied to the master luminaire via a 3m long Schuko power supply cable, which is also pre-assembled. The entire electrical connection can be completed without tools.
Presence control with/without daylight control is possible via the sensor and controller installed in the master luminaire (teno LC01). The luminaires are freely adjustable via the DALI output control. Basic functions such as setpoint, run-on time and advanced features can be easily set via a free app. A basic function is available straight away via the factory settings following initial start-up. Optionally, a push-button can be connected to the master luminaire to start the semi-automatic control or for manual operation.

Wiring diagram

teno luminaire set for a double workplace



pre-assembled
optional

Set components

Daylight control and presence detection

Mounting:
• Ceiling installation: Ceilings with visible T-rails

Set details
Luminaire set for daylight control and presence detection

TNEMP/600 LC01 - Set
Luminaire set with control unit and pre-assembled power supply cables
Consisting of:
• 1 teno-TNEMP/600 LED 4000 840 LC01
• 3 teno-TNEMP/600 LED 4000 840 DALI
• with pre-assembled combination and connection cables, 3m
• plug-and-play
• daylight linking and sensor-dependent control
• can be configured and controlled via Osram App

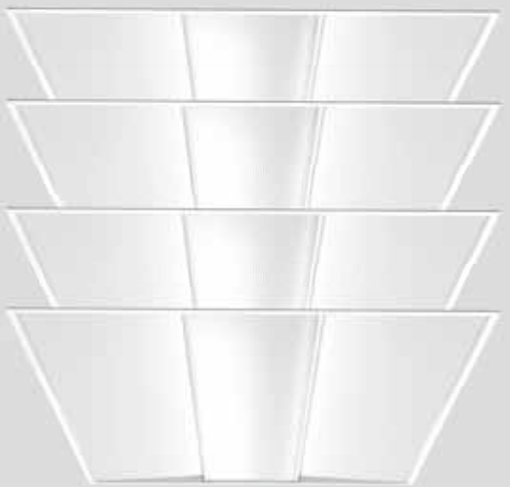
TNEMP/625 LC01 - Set
Luminaire set with control unit and pre-assembled power supply cables
Consisting of:
• 1 teno-TNEMP/625 LED 4000 840 LC01
• 3 teno-TNEMP/625 LED 4000 840 DALI
• with pre-assembled combination and connection cables, 3m
• plug-and-play
• daylight linking and sensor-dependent control
• can be configured and controlled via Osram App

Set type	Lamps	lm/W	P_{Sys} [W]	Colour	Ballast	Art. no.	kg
Micro-prismatic diffuser direct distribution luminaire set							
teno-Set TNEMP/600 LC01	LED 4000	116	35	vw	DALI	8425 5081 670	20,70
teno-Set TNEMP/625 LC01	LED 4000	116	35	vw	DALI	8425 5082 670	21,50

teno TW set

Luminaire set in Tunable White technology

Luminaires and the controller box are equipped with plug-and-plug, pre-assembled 3m long connecting cables. Power is supplied to the controller box via a 3m long Schuko power supply cable, which is also pre-assembled. The entire electrical connection can be completed without tools.
With the EnOcean controller, the luminaires are freely adjustable via the DALI output control. The EnOcean wall switch allows manual dimming and colour temperature changes within Tunable White. Full functionality is available straight away via the pre-programmed controller following initial start-up.

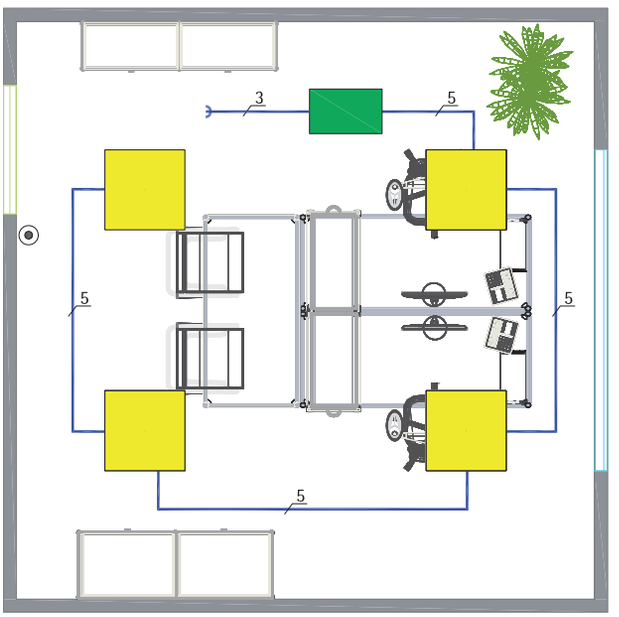


Wall switch functionality
Button rocker left
- Short press top: Off
- Short press bottom: On
- Long press top: Dim downwards
- Long press bottom: Dim upwards

Button rocker right
- Short push up: Colour temperature one step colder
- Short press bottom: Colour temperature one step warmer
- Long press top: Colour temperature continuously colder
- Long press bottom: Colour temperature continuously warmer

Wiring diagram

teno TW luminaire set for a double workplace



pre-assembled

Set components

Tunable White technology

Mounting:
Ceiling installation: ceilings with visible T-rails

Set details:
Luminaire set in Tunable White technology
for manual dimming and colour changing

TNEMP/600 DT8 LC17 - Set
Luminaire set with control unit and pre-assembled power supply cables
Consisting of:
- 4 teno-TNEMP/600 LED 4000 927-965 DALI DT8
- 1 EnOcean control box with controller
- 1 EnOcean button, 4-channel, white
- with pre-assembled combination and connection cables, 3m
- plug-and-play
- wireless (radio) control for manual dimming and pre-programmed colour changing

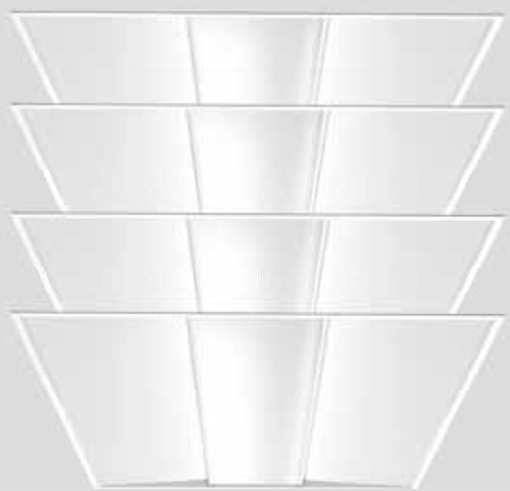
TNEMP/625 DT8 LC17 - Set
Luminaire set with control unit and pre-assembled power supply cables
Consisting of:
- 4 teno-TNEMP/625 LED 4000 927-965 DALI DT8
- 1 EnOcean control box with controller
- 1 EnOcean button, 4-channel, white
- with pre-assembled combination and connection cables, 3m
- plug-and-play
- wireless (radio) control for manual dimming and pre-programmed colour changing

Set type	Lamps	lm/W	P_{Sys} [W]	Colour	Ballast	Art. no.	kg
Micro-prismatic diffuser direct distribution luminaire set							
teno-Set TNEMP/600 DT8 LC17	LED 4000	116	35	vw	DALI DT8	8425 5081 970	21,70
teno-Set TNEMP/625 DT8 LC17	LED 4000	116	35	vw	DALI DT8	8425 5082 970	22,50

teno HCL set

Luminaire set in Tunable White technology for Human Centric Lighting

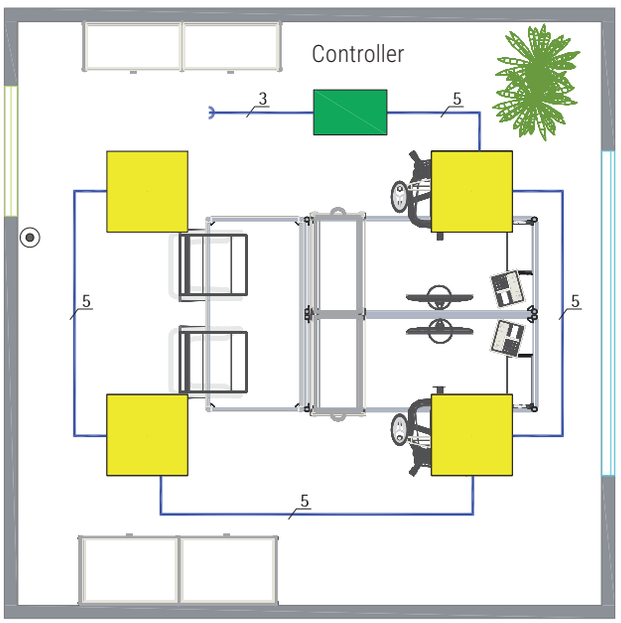
Luminaires and the controller box are equipped with plug-and-plug, pre-assembled 3m long connecting cables. Power is supplied to the controller box and the timer box via a 3m long Schuko power supply cable, which is also pre-assembled. The entire electrical connection can be completed without tools.
With the EnOcean controller, the luminaires are freely adjustable via the DALI output control. Full functionality is available straight away via the pre-programmed controller following initial start-up.
The colour control is started via the timer box and runs in the controller as a typical HCL curve. The switching times are programmed and usually do not require adjustment. When the lighting is switched on, the light colour and dimming value are output in accordance with the values defined at the specified time.
The wall switch is used to turn the lighting on or off in automatic HCL mode.



Wall functionality switch
Wall functionality switch
up: off
down: HCL mode on

Wiring diagram

teno HCL luminaire set for a double workspace



Set components

Human Centric Lighting

Mounting:
Ceiling installation: ceilings with visible T-rails

Set details:
Luminaires-Set in Tunable White Technik für Human Centric Lighting

TNEMP/600 DT8 LC27 - Set
Luminaire set with control unit and pre-assembled power supply cables
Consisting of:
- 4 teno-TNEMP/600 LED 4000 927-965 DALI DT8
- 1 EnOcean control box with controller
- 1 EnOcean timer box for HCL colour control
- 1 EnOcean button, 2-channel, white
- with pre-assembled combination and connection cables, 3m
- plug-and-play
- wireless control for Human Centric Lighting pre-programmed

TNEMP/625 DT8 LC27 - Set
Luminaire set with control unit and pre-assembled power supply cables
Consisting of:
- 4 teno-TNEMP/625 LED 4000 927-965 DALI DT8
- 1 EnOcean control box with controller
- 1 EnOcean timer box for HCL colour control
- 1 EnOcean button, 2-channel, white
- with pre-assembled combination and connection cables, 3m
- plug-and-play
- wireless control for Human Centric Lighting pre-programmed

Set type	Lamps	lm/W	P_{Sys} [W]	Colour	Ballast	Art. no.	kg
Micro-prismatic diffuser direct distribution luminaire set							
teno-Set TNEMP/600 DT8 LC27	LED 4000	116	35	vw	DALI DT8	8425 5081 870	21,70
teno-Set TNEMP/625 DT8 LC27	LED 4000	116	35	vw	DALI DT8	8425 5082 870	22,50

Light Control - product ranges

The products for the lighting control tasks have been put together from a practical perspective. They can be integrated into the lighting systems at a reasonable cost. In addition, they are also coordinated with our products and light systems. As a result, they can be combined with almost any of the standard solutions.
Networked technology is not always required to realise efficient lighting control tailored to needs. Even with modern motion and presence detectors, further control functions can be configured and additional energy savings made. Regiolux has various concepts in the product standard. They are standalone or integrated into the luminaires and device mounts. You will always find everything you might need for the most varied of solutions and requirements in our product range.

Product groups

Improve energy efficiency with light control

LC canopies with intelligent controls

SAE-PS-LC01C

Wire suspension with control unit, set with integrated LC-OM DALIECO BT controller to control up to 32 DALI pendant luminaires DT6 or DT8. Suitable for LC01S luminaires with integrated LC-OM DALI LS/PD LI sensor. Operation and configuration via the Osram BT control app (can be downloaded from app stores). Other accessories available.

Type	Colour	LxBxH/DxH	Art. no.		kg
SAE-PS-LC01C 5x0,75	vw	317 x 44,5 x 39	9110 0125 121	1	0,58
SAE-PS-LC01C 5x0,75	sg	317 x 44,5 x 39	9110 0125 135	1	0,58

SAE-PS-LC04

Wire suspension with control unit, set with integrated Regiolux direct:LC EnOcean controller to control up to 15 DALI pendant luminaires DT6 or DT8. Must be programmed using the Regiolux direct:LC-App software. Other accessories available.

Type	Colour	LxBxH/DxH	Art. no.		kg
SAE-PS-LC04 5x0,75	vw	317 x 44,5 x 39	9110 0425 121	1	0,58
SAE-PS-LC04 5x0,75	sg	317 x 44,5 x 39	9110 0425 135	1	0,58

SAE-PS-LC05

Wire suspension with control unit, set with integrated 1-channel EnOcean radio receiver for switch dim control one DALI pendant luminaire. Other accessories available.

Type	Colour	LxBxH/DxH	Art. no.		kg
SAE-PS-LC05 5x0,75	vw	317 x 44,5 x 39	9110 0525 121	1	0,58
SAE-PS-LC05 5x0,75	sg	317 x 44,5 x 39	9110 0525 135	1	0,58

SAE-PS-LC10

Wire suspension with control unit, set with integrated basicDIM wireless controller to control one DALI pendant luminaire DT6 or DT8. Operation and configuration via the Casambi app (can be downloaded from app stores).

Type	Colour	LxBxH/DxH	Art. no.		kg
SAE-PS-LC10 5x0,75	vw	317 x 44,5 x 39	9110 1025 121	1	0,58
SAE-PS-LC10 5x0,75	sg	317 x 44,5 x 39	9110 1025 135	1	0,58

LC canopies with intelligent controls

SAYE-PS-LC01C

Wire suspension with control unit, set with integrated LC-OM DALIECO BT controller to control up to 32 DALI pendant luminaires DT6 or DT8. Suitable for LC01S luminaires with integrated LC-OM DALI LS/PD LI sensor. Operation and configuration via the Osram BT control app (can be downloaded from app stores). Other accessories available.

Type	Colour	LxBxH/DxH	Art. no.		kg
SAYE-PS-LC01C 120 5x0,75	vw	317 x 44,5 x 39	9123 0125 121	1	0,60
	sg	317 x 44,5 x 39	9123 0125 135	1	0,60
SAYE-PS-LC01C 190 5x0,75	vw	317 x 44,5 x 39	9121 0125 121	1	0,60
	sg	317 x 44,5 x 39	9121 0125 135	1	0,60
SAYE-PS-LC01C 295 5x0,75	vw	317 x 44,5 x 39	9122 0125 121	1	0,60
	sg	317 x 44,5 x 39	9122 0125 135	1	0,60

SAYE-PS-LC04

Wire suspension with control unit, set with integrated Regiolux direct:LC EnOcean controller to control up to 15 DALI pendant luminaires DT6 or DT8. Must be programmed using the Regiolux direct:LC-App software. Other accessories available.

Type	Colour	LxBxH/DxH	Art. no.		kg
SAYE-PS-LC04 120 5x0,75	vw	317 x 44,5 x 39	9123 0425 121	1	0,60
	sg	317 x 44,5 x 39	9123 0425 135	1	0,60
SAYE-PS-LC04 190 5x0,75	vw	317 x 44,5 x 39	9121 0425 121	1	0,60
	sg	317 x 44,5 x 39	9121 0425 135	1	0,60
SAYE-PS-LC04 295 5x0,75	vw	317 x 44,5 x 39	9122 0425 121	1	0,60
	sg	317 x 44,5 x 39	9122 0425 135	1	0,60

SAYE-PS-LC05

Wire suspension with control unit, set with integrated 1-channel EnOcean radio receiver for switch dim control one DALI pendant luminaire. Other accessories available.

Type	Colour	LxBxH/DxH	Art. no.		kg
SAYE-PS-LC05 120 5x0,75	vw	317 x 44,5 x 39	9123 0525 121	1	0,60
	sg	317 x 44,5 x 39	9123 0525 135	1	0,60
SAYE-PS-LC05 190 5x0,75	vw	317 x 44,5 x 39	9121 0525 121	1	0,60
	sg	317 x 44,5 x 39	9121 0525 135	1	0,60
SAYE-PS-LC05 295 5x0,75	vw	317 x 44,5 x 39	9122 0525 121	1	0,60
	sg	317 x 44,5 x 39	9122 0525 135	1	0,60

SAYE-PS-LC10

Wire suspension with control unit, set with integrated basicDIM wireless controller to control one DALI pendant luminaire DT6 or DT8. Operation and configuration via the Casambi app (can be downloaded from app stores).

Type	Colour	LxBxH/DxH	Art. no.		kg
SAYE-PS-LC10 120 5x0,75	vw	317 x 44,5 x 39	9123 1025 121	1	0,60
	sg	317 x 44,5 x 39	9123 1025 135	1	0,60
SAYE-PS-LC10 190 5x0,75	vw	317 x 44,5 x 39	9121 1025 121	1	0,60
	sg	317 x 44,5 x 39	9121 1025 135	1	0,60
SAYE-PS-LC10 295 5x0,75	vw	317 x 44,5 x 39	9122 1025 121	1	0,60
	sg	317 x 44,5 x 39	9122 1025 135	1	0,60

DALI signal

Compact control systems

Main component

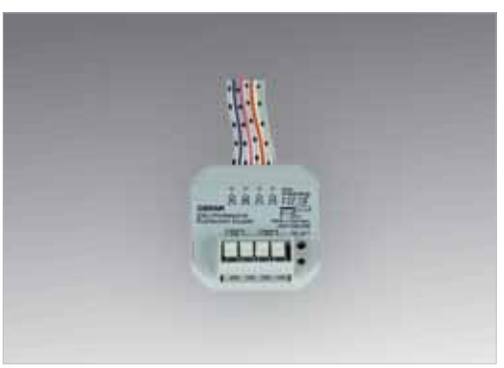
LC-OM DALIeco

Light/presence control unit for cavity / luminaire installation

2-channel control unit for daylight and presence-dependent control of up to 32 DALI operating units, connection of further light and presence sensors; predefined function modes for simplified commissioning; individual adjustment of the function parameters using IR remote control; automatic and manual specification of the setpoint regulation value; 100 h burn-in function for low-pressure fluorescent lamps; operation using standard buttons and IR remote control; operating voltage 230V 50Hz. Housing intended for installation in cavities such as suspended ceilings or even in luminaire housings.

Type	LxBxH/DxH	Art. no.		kg
LC-OM DALIeco	118 x 30 x 21	8450 1039 100	1	0,05

Accessories

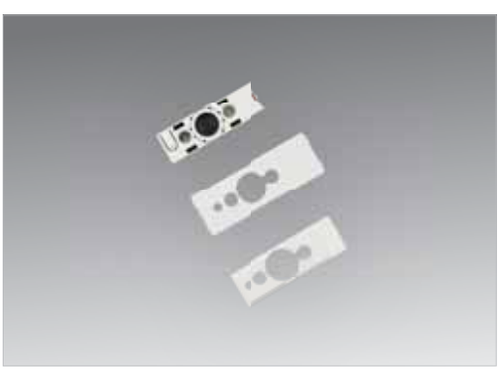


LC-OM DALI PRO PB COUPLER

DALI push button coupler

The DALI pushbutton coupler is a binary input device for insertion in a flush mounted box. The device is powered via the connected DALI line. The device has 4 input channels for potential-free contacts. It can be connected to switches or pushbuttons. The required voltage is supplied by the DALI pushbutton coupler (no additional voltage source needed). Initiated by the connected pushbutton or switch, the DALI pushbutton coupler sends telegrams to a central DALI controller via the DALI line.

Type	LxBxH/DxH	Art. no.		kg
LC-OM DALI PRO PB COUPLER	42 x 42 x 20	8450 1029 100	1	0,02

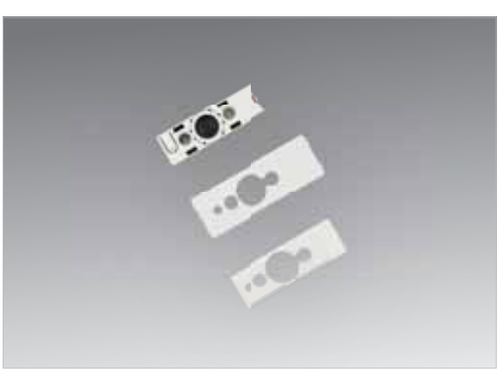


LC-OM DALIeco LS/PD LI

Light/presence sensor for installation in luminaire

Light and presence sensor with adjustable presence detection range for luminaire and/or ceiling installation for connection to the DALIeco Control control unit; light and presence sensor via remote control can be activated/deactivated individually; V(λ)-corrected light sensor element; presence detection using active radar sensor element; function display with two-colour LED; movement detection range is adjustable; mounting height: 2...5m working range of light sensor: 20...800 lx (measured at sensor); integrated infrared remote control receiver; connection via 4p4c socket (RJ10) with reverse polarity protection.

Type	LxBxH/DxH	Art. no.		kg
LC-OM DALIeco LS/PD LI	48 x 15 x 17	8450 1040 100	1	0,01



LC-OM DALI LS/PD LI

Light / presence sensor

Light and presence sensor with adjustable presence detection range for mounting in the luminaire and/or ceiling for the connection to the DALIeco Control control unit; integrated infrared remote control receiver; integrated button for completely automatic start-up and deactivation of the infrared receiver; light sensor / presence detector can be individually activated / deactivated using remote control; 2-colour function display using LED; presence detection range can be adjusted between 40° - 90° using integrated shutter; direct connection on DALI; mounting height 2...5 m.

Type	LxBxH/DxH	Art. no.		kg
LC-OM DALI LS/PD LI	48 x 15 x 17	8450 1044 100	1	0,04

Accessories

LC-OM Sensor KIT 2

Ceiling surface-mounting adapter

Adapter for surface mounting of LC-OM DALIeco LS/PD LI and LC-OM DALI LS/PD LI light sensor.

Type	LxBxH/DxH	Art. no.		kg
LC-OM Sensor KIT 2	110 x 78 x 20	8450 1043 100	1	0,20

LC-OM DALIeco HF LS LI

HF Light/presence sensor

Light sensor and presence detector with adjustable presence detection range for luminaire and/or ceiling installation for connection to the DALIeco Control control unit; light sensor and presence detector can be activated/deactivated individually via remote control; V(λ)-corrected light sensor element; presence detection using active radar sensor element; function display with two-colour LED; movement detection range is adjustable; mounting height: 2...13 m working range of light sensor: 20...800 lx (measured at sensor); integrated Infrared remote control receiver; connection via 4p4c socket (RJ10) with reverse polarity protection.

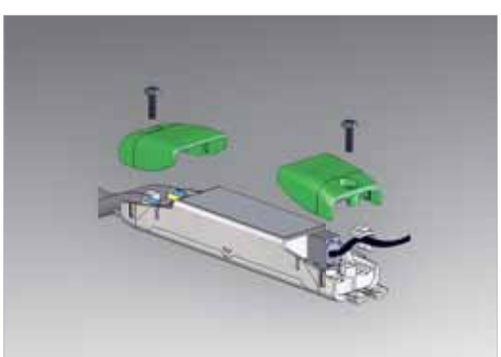
Type	LxBxH/DxH	Art. no.		kg
LC-OM DALIeco HF LS LI	56 x 28 x 21	8450 1049 100	1	0,06

LC-OM DALI HF LS LI SENSOR COUPLER

SENSOR COUPLER

Control device for integration of the sensor HF LS LI in OSRAM DALI systems. Enables DALI connection for light sensors and movement sensors HF LS LI. Status LED and select button for test and reset to factory settings. 2-pole DALI connection via screwless plug terminal. Operating voltage 230V50Hz. Ceiling installation possible with additional mounting accessories (ECO CI KIT, not included in the scope of delivery)

Type	LxBxH/DxH	Art. no.		kg
LC-OM DALI HF LS LI SENSOR COUPLER	118 x 30	8450 1051 100	1	0,05



LC-OM ECO CI KIT

Mounting accessories for control unit

Terminal covers and strain relief for installation of control devices outside the luminaire. Suitable for: LC-OM DALIeco, LC-OM ... SENSOR COUPLER.

Type	LxBxH/DxH	Art. no.		kg
LC-OM ECO CI KIT	140 x 33 x 23	8450 1013 100	1	0,03

LC-OM MASTER REMOTE PC KIT

Remote control for commissioning the DALIeco (M5S5) light control system

Infrared remote control for controlling LC-OM DALIeco; individual buttons for function mode selection, setting the run-on and standby times, standby level, setting the offset between channels, channel value setting, automatic/manual setting of the control setpoint, centralised or sensor-based activation and/or deactivation of light measurement, centralised or sensor-based activation and/or deactivation of presence detection, activation of 100 hours burn-in function; integrated LED for displaying the programming mode and signal transmission; includes USB cable and software.

Type	LxBxH/DxH	Art. no.		kg
LC-OM MASTER REMOTE PC KIT	230 x 45 x 13	8450 1041 200	1	0,11

DALI signal

Accessories

LC-OM USER REMOTE

Remote control for the operation of the DALIeco (M5S5) light control system

Infrared remote control for the control of LC-OM DALIeco; retrieval and storage of 4 light scenes; tempory deactivation of presence detection (holiday function); reactivation of the automatic light control function after manual override using resume function; dimming and switching of two light groups, central switching of both groups; adaptable IR coding for the independent operation of up to 15 systems.

Type	LxBxH/DxH	Art. no.		
LC-OM USER REMOTE	230 x 33 x 10	8450 1042 100	1	0,11

LC-OM DALI REPEATER SO

Amplifier for distributor installation

Addressable signal amplifier for DALI controllers. Occupies one DALI address and controls up to 64 DALI operating devices together as one group. Extends the permissible length of the control line by 300 m. Operating voltage 230V50Hz. Housing intended for installation in conventional distribution boxes.

Type	LxBxH/DxH	Art. no.		
LC-OM DALI REPEATER SO	96 x 72 x 62,2	8450 1007 100	1	0,18

DALI signal

Main component

LC-OM DALIeco BT

Light/presence control unit for cavity / luminaire installation

1-channel Bluetooth controller for daylight linking and presence-dependent control of up to 32 DALI DT6 and DT8 devices, connection of up to 6 sensors and pushbutton couplers, various changeable functional modes, configuration and operation via iOS or Android app Osram Control BT, operating voltage 230V 50Hz. Housing intended for installation in cavities such as suspended ceilings or even in luminaire housings.

Type	LxBxH/DxH	Art. no.		kg
LC-OM DALIeco BT	118 x 30 x 21	8450 1053 100	1	0,04

Accessories

LC-OM DALI PRO PB COUPLER

DALI push button coupler

The DALI pushbutton coupler is a binary input device for insertion in a flush mounted box. The device is powered via the connected DALI line. The device has 4 input channels for potential-free contacts. It can be connected to switches or pushbuttons. The required voltage is supplied by the DALI pushbutton coupler (no additional voltage source needed). Initiated by the connected pushbutton or switch, the DALI pushbutton coupler sends telegrams to a central DALI controller via the DALI line.

Type	LxBxH/DxH	Art. no.		kg
LC-OM DALI PRO PB COUPLER	42 x 42 x 20	8450 1029 100	1	0,02

LC-OM DALI LS/PD LI

Light/presence sensor for installation in luminaire

Light and presence sensor with adjustable presence detection range for mounting in the luminaire and/or ceiling for the connection to the DALIeco Control control unit; integrated infrared remote control receiver; integrated button for completely automatic start-up and deactivation of the infrared receiver; light sensor / presence detector can be individually activated / deactivated using remote control; 2-colour function display using LED; presence detection range can be adjusted between 40° - 90° using integrated shutter; direct connection on DALI; mounting height 2...5 m.

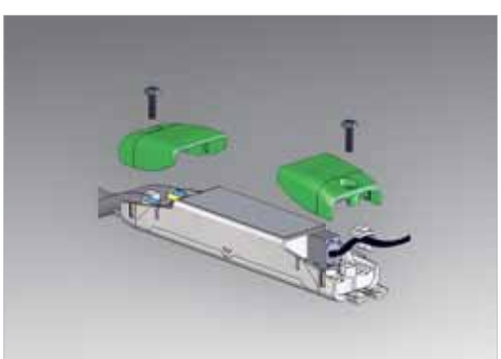
Type	LxBxH/DxH	Art. no.		kg
LC-OM DALI LS/PD LI	48 x 15 x 17	8450 1044 100	1	0,04

LC-OM Sensor KIT 2

Ceiling surface-mounting adapter

Adapter for surface mounting of LC-OM DALIeco LS/PD LI and LC-OM DALI LS/PD LI light sensor.

Type	LxBxH/DxH	Art. no.		kg
LC-OM Sensor KIT 2	110 x 78 x 20	8450 1043 100	1	0,20



LC-OM ECO CI KIT

Mounting accessories for control unit

Terminal covers and strain relief for installation of control devices outside the luminaire. Suitable for: LC-OM DALIeco, LC-OM ... SENSOR COUPLER.

Type	LxBxH/DxH	Art. no.		kg
LC-OM ECO CI KIT	140 x 33 x 23	8450 1013 100	1	0,03

DALI signal

Main component

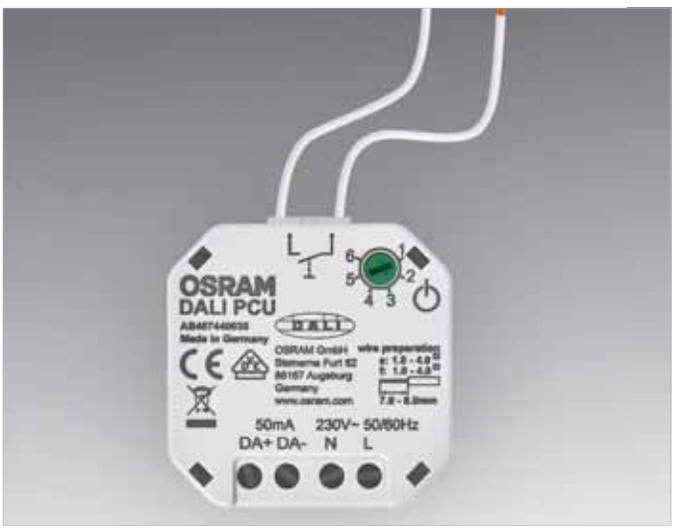
LC-RX TW-DALI-Potentiometer

TW-DALI potentiometer DT8

For manual dimming and operating of DALI luminaires and for adjusting the colour temperature for tunable white DT8 luminaires; incl. integrated DALI power supply for max. 26 DALI devices DT8, operating voltage 230 V 50 HzIntegrated/surface-mounted device incl. alpine white cover

Type	LxBxH/DxH	Art. no.		
LC-RX TW-DALI-Potentiometer	81 x 81 x 56	8450 6009 202	1	0,21

Main component



LC-OM DALI PCU

DALI button control unit

For switching and dimming DALI luminaires; installation in switch box 60 mm deep; max. 25 DALI devices can be connected; up to 4 DALI PCUs can be operated in parallel; min. brightness and behaviour after mains is re-established can be set; operating voltage 230 V at 50 Hz. Dimensions (L/W/H) 45x45x22 mm.

Type	LxBxH/DxH	Art. no.		
LC-OM DALI PCU	48 x 48 x 22	8450 1029 200	1	0,04

DALI signal

Compact control systems

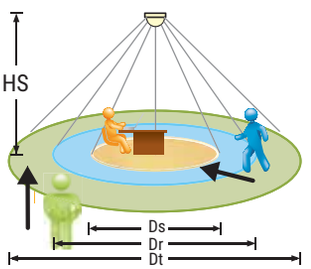
Main component

LC-BEG PD4-M-DALI-AP

Light/presence sensor for ceiling surface mounting

Group presence detector, with DALI/DSI interface; integrated light sensor for automatic, constant light control; control of up to 50 DALI/DSI units as group; manual adjustments and using remote control; any number of slave devices can be connected for low-cost expansion of the detection range; reception area isee table; 1 channel (light control); DALI/DSI master max. 50 DALI/DSI units; time setting 1-30 min; brightness value 10-2000 lx; the mounting height shall not exceed 5 m for constant light control.

Type	LxBxH/DxH	Art. no.		kg
LC-BEG PD4-M-DALI-AP	98 x 63	8450 6004 100	1	0,14



HS	Ds	Dr	Dt
m	m	m	m
2,00	5,20	6,40	17,00
2,50	6,40	8,00	24,00
3,00	7,60	9,60	29,00
3,50	9,00	11,00	34,00
4,00	–	13,60	39,00
4,50	–	14,40	44,00
5,00	–	16,00	48,00
10,00	–	16,00	48,00

Sensor device mounts

IP20 SDBA M12

▶ 326

Blind unit SDBA with attached motion sensor
for daylight linking and presence-dependent switching and control.

IP54 SDBAS M12

▶ 358

Blind unit SDBAS with attached motion sensor
for daylight linking and presence-dependent switching and control.

Accessories

LC-BEG PD4-S-AP

Slave sensor presence for ceiling surface mounting

Presence sensor, slave sensor with circular and long-range monitoring area, surface mounting, for master/slave combination. Only one master for light switching is necessary; motion detection in all areas of the room possible with slave sensors; switching pulse to the master in the case of detected movement; recognition of the motion independent of ambient lighting; sensor and power part in the same housing; range area see table.

Type	LxBxH/DxH	Art. no.		kg
LC-BEG PD4-S-AP	101 x 76	8450 6005 100	1	0,20

LC-BEG IR-RC

Remote control and programming adapter for smart phones

IR-RC adapter to operate all remote-controllable LC-BEG sensors, for connection to the audio output of smart phones, Luxomat remote control app needed, can be downloaded from the app store for iOS and Android, incl. micro USB charging cable.

Type	LxBxH/DxH	Art. no.		kg
LC-BEG IR-RC	80 x 60 x 8	8450 6021 100	1	0,04

LC-BEG IR-PD-DALI-E

Remote control and programming tool

Infra-red remote control for the control of LC-BEG-DALI sensors and the linked luminaire groups. Installation aid and programming tool. Wall mount included in scope of delivery. Range max. 8m.

Type	LxBxH/DxH	Art. no.		kg
LC-BEG IR-PD-DALI-E	80 x 60 x 8	8450 6028 100	1	0,03

Sensor device mounts

IP20 SDBA S17 ▶ 327

Blind unit SDBAS with attached motion sensor
for daylight linking and presence-dependent switching and control.

DALI signal

Compact control systems

Main component

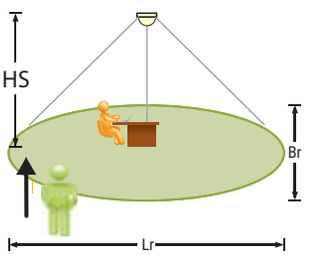
LC-BEG PD4-M-DALI-GH-AP

LC-BEG PD4-M-DALI-GH-AP

Group presence detector, with DALI/DSI interface; integrated light sensor for automatic constant light regulation; actuation of up to 50 DALI/DSI controllers as a group; settings both manual and through remote control; any number of slave devices can be connected for the low-cost expansion of the monitoring area;

Monitoring area : vertical 360° oval; see table for range;
1 channel (light control); DALI/DSI-Master max. 50 DALI/DSI EVG; time setting 1-30min; brightness value 10-2500lx; installation height between 5-16m.

Type	LxBxH/DxH	Art. no.		
LC-BEG PD4-M-DALI-GH-AP	98 x 63	8450 6029 100	1	0,13



HS	Lr	Br
m	m	m
5,00	26,00	18,00
6,00	26,00	18,00
7,00	28,00	19,00
8,00	28,00	19,00
9,00	30,00	19,00
10,00	30,00	19,00
14,00	30,00	19,00

Sensor device mounts

IP20 SDBA LC07

▶ 327

Blind unit SDBA with attached motion sensor
for daylight linking and presence-dependent switching and control.

IP54 SDBAS LC07

▶ 359

Blind unit SDBAS with attached motion sensor
for daylight linking and presence-dependent switching and control.

Z Accessories

LC-BEG PD4-S-GH-AP

Presence slave sensor for ceiling surface mounting

Presence detector, slave with oval shape and long-range detection range as surface mounting version, significant potential for energy savings, particularly in large rooms and for monitoring large areas; only one master necessary for light switching; movement detection in all room segments possible with slaves; switching pulse to the master in the case of detected movement; recognition of the movement independent of ambient brightness; no adjustment elements at the slave; sensor and power part in the same housing; max. installation height 14m; range area see table.

Type	LxBxH/DxH	Art. no.		kg
LC-BEG PD4-S-GH-AP	98 x 63	8450 6003 100	1	0,13

LC-BEG IR-RC

Remote control and programming adapter for smart phones

IR-RC adapter to operate all remote-controllable LC-BEG sensors, for connection to the audio output of smart phones, Luxomat remote control app needed, can be downloaded from the app store for iOS and Android, incl. micro USB charging cable.

Type	LxBxH/DxH	Art. no.		kg
LC-BEG IR-RC	80 x 60 x 8	8450 6021 100	1	0,04

LC-BEG IR-PD-DALI-E

Remote control and programming tool

Infra-red remote control for the control of LC-BEG-DALI sensors and the linked luminaire groups. Installation aid and programming tool. Wall mount included in scope of delivery. Range max. 8m.

Type	LxBxH/DxH	Art. no.		kg
LC-BEG IR-PD-DALI-E	80 x 60 x 8	8450 6028 100	1	0,03

Sensor device mounts

IP20 SDBA S23 ▶ 326

Blind unit SDBA with attached slave sensor for extending the range of a master sensor.

DALI signal

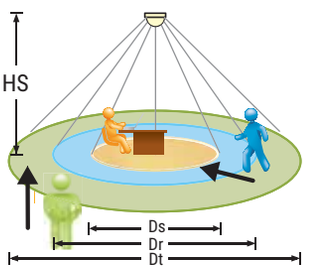
Main component

LC-BEG PD4-M-DALI-DE

Light/presence sensor for ceiling recessing

Group presence detector, with DALI/DSI interface; integrated light sensor for automatic, constant light control; control of up to 50 DALI/DSI units as group; manual adjustments and using remote control; reception area see table; 1 channel (light control); DALI/DSI master max. 50 DALI/DSI units; time setting 1-30 min; brightness value 10-2000 lx; the mounting height shall not exceed 5 m.

Type	LxBxH/DxH	Art. no.		kg
LC-BEG PD4-M-DALI-DE	97 x 103	8450 6010 100	1	0,14



HS	Ds	Dr	Dt
m	m	m	m
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2,50	6,40	8,00	24,00
3,00	7,60	9,60	29,00
3,50	9,00	11,00	34,00
4,00	–	13,60	39,00
4,50	–	14,40	44,00
5,00	–	16,00	48,00
10,00	–	16,00	48,00

Accessories

LC-BEG PD4-S-DE

Presence slave sensor for ceiling recessing

Presence sensor, slave sensor with circular and long-range monitoring area, surface mounting, for master/slave combination. Only one master for light switching necessary; motion detection in all room segments possible with slave sensors; switching pulse to the master in the case of detected movement; recognition of the motion independent of ambient brightness; sensor and power part in the same housing; range area see table.

Type	LxBxH/DxH	Art. no.		kg
LC-BEG PD4-S-DE	97 x 103	8450 6014 100	1	0,10

LC-BEG IR-PD-DALI-E

Remote control and programming tool

Infra-red remote control for the control of LC-BEG-DALI sensors and the linked luminaire groups. Installation aid and programming tool. Wall mount included in scope of delivery. Range max. 8m.

Type	LxBxH/DxH	Art. no.		kg
LC-BEG IR-PD-DALI-E	80 x 60 x 8	8450 6028 100	1	0,03

LC-BEG IR-RC

Remote control and programming adapter for smart phones

IR-RC adapter to operate all remote-controllable LC-BEG sensors, for connection to the audio output of smart phones, Luxomat remote control app needed, can be downloaded from the app store for iOS and Android, incl. micro USB charging cable.

Type	LxBxH/DxH	Art. no.		kg
LC-BEG IR-RC	80 x 60 x 8	8450 6021 100	1	0,04

Switching signal

Switching control devices

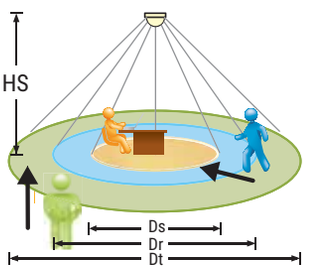
Main component

LC-BEG PD4-M-1C-AP

Light/presence sensor for ceiling surface mounting

Presence detector, with circular and long-range monitoring area, 1 switching channel for switching light (potential-free); high-performance relay for switching high lamp outputs; any number of slave devices for low-cost extension of the monitoring area can be connected; settings manual and via remote control; monitoring area see table, lateral ∅ 24.0 m, frontal ∅ 8.0 m; 1 channel (light control); switching power 2300 W, cosφ=1; 1150 VA; cosφ=0.5 time setting 15 sec.-30 min. or pulse; brightness value 10-2000 lx.

Type	LxBxH/DxH	Art. no.		
LC-BEG PD4-M-1C-AP	98 x 65	8450 6001 100	1	0,16



HS	Ds	Dr	Dt
m	m	m	m
2,00	5,20	6,40	17,00
2,50	6,40	8,00	24,00
3,00	7,60	9,60	29,00
3,50	9,00	11,00	34,00
4,00	–	13,60	39,00
4,50	–	14,40	44,00
5,00	–	16,00	48,00
10,00	–	16,00	48,00

Sensor device mounts

IP20 SDBA S20 ▸ 327

Blind unit SDBA with attached motion sensor for daylight linking and presence-dependent switching.

IP54 SDBAS S20 ▸ 359

Blind unit SDBAS with attached motion sensor for daylight linking and presence-dependent switching.

Accessories

LC-BEG PD4-S-AP

Slave sensor presence for ceiling surface mounting

Presence sensor, slave sensor with circular and long-range monitoring area, surface mounting, for master/slave combination. Only one master for light switching is necessary; motion detection in all areas of the room possible with slave sensors; switching pulse to the master in the case of detected movement; recognition of the motion independent of ambient lighting; sensor and power part in the same housing; range area see table.

Type	LxBxH/DxH	Art. no.		kg
LC-BEG PD4-S-AP	101 x 76	8450 6005 100	1	0,20

LC-BEG IR-PD-E

Remote control and programming tool

Infra-red remote control for the control of LC-BEG-PD4 sensors. Installation aid and programming tool. Four predefined brightness values for the switch-on value of the lighting; selection completely or semi-automatic; predefined switch-on times of the lighting: pulse, 15 s to 30 min.; predefined switch-on times for device control: pulse, 5 to 120 min.; saving of the current dimming value as switch-on and/or switch-off value; permanent anti-sabotage protection; range up to a max. of MH=8m. Wall mount included in scope of delivery.

Type	LxBxH/DxH	Art. no.		kg
LC-BEG IR-PD-E	80 x 60 x 8	8450 6027 100	1	0,04

LC-BEG IR-RC

Remote control and programming adapter for smart phones

IR-RC adapter to operate all remote-controllable LC-BEG sensors, for connection to the audio output of smart phones, Luxomat remote control app needed, can be downloaded from the app store for iOS and Android, incl. micro USB charging cable.

Type	LxBxH/DxH	Art. no.		kg
LC-BEG IR-RC	80 x 60 x 8	8450 6021 100	1	0,04

Sensor device mounts

IP20 SDBA S17 ▶ 327

Blind unit SDBA with attached slave sensor for extending the range of a master sensor.

Switching signal

Switching control devices

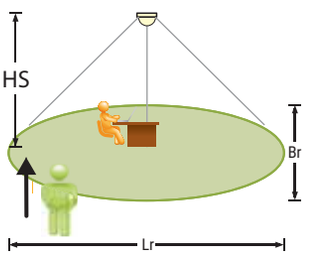
Main component

LC-BEG PD4-M-1C-GH-AP

Light/presence sensor for ceiling surface mounting

Presence sensor, remote-controllable with oval and long-range monitoring area, specifically for high rise racking; automatic reading of the current light value; switching the lighting on and off and parameterisation of the presence sensor by remote control; high-performance relay, with inrush current limiter; sensor and power part in the same housing; can also be switched using pushbutton; range area see table; 1 channel (light control); switching power 2300 W, cosϕ=1; 1150 VA, cosϕ=0.5; time setting 15 sec.-30 min. or pulse; brightness value - 10-2000 lx.

Type	LxBxH/DxH	Art. no.		
LC-BEG PD4-M-1C-GH-AP	98 x 63	8450 6002 100	1	0,13



HS	Lr	Br
m	m	m
5,00	26,00	18,00
6,00	26,00	18,00
7,00	28,00	19,00
8,00	28,00	19,00
9,00	30,00	19,00
10,00	30,00	19,00
14,00	30,00	19,00

Sensor device mounts

IP20 SDBA S10 ▸ 326

Blind unit SDBA with attached motion sensor
for daylight linking and presence-dependent switching.

IP54 SDBAS S10 ▸ 358

Blind unit SDBAS with attached motion sensor
for daylight linking and presence-dependent switching.

Accessories

LC-BEG PD4-S-GH-AP

Presence slave sensor for ceiling surface mounting

Presence detector, slave with oval shape and long-range detection range as surface mounting version, significant potential for energy savings, particularly in large rooms and for monitoring large areas; only one master necessary for light switching; movement detection in all room segments possible with slaves; switching pulse to the master in the case of detected movement; recognition of the movement independent of ambient brightness; no adjustment elements at the slave; sensor and power part in the same housing; max. installation height 14m; range area see table.

Type	LxBxH/DxH	Art. no.		kg
LC-BEG PD4-S-GH-AP	98 x 63	8450 6003 100	1	0,13

LC-BEG IR-PD4-GH

Remote control and programming tool

Infrared remote control for controlling LC-BEG-PD4-M-1C-GH sensors; installation help and programming tool; seven predefined brightness values for the switch-on value of the lighting; day and night operation; selection of completely or semi-automatic operation; predefined switch-on times of the lighting: pulse, 15 s – 30 min.; storing of the current dimming value as switch-on and/or switch-off value; determination of the switch-on threshold for reaching a calculated setpoint value; wall mount included in the scope of delivery.

Type	LxBxH/DxH	Art. no.		kg
LC-BEG IR-PD4-GH	80 x 60 x 8	8450 6006 100	1	0,04

LC-BEG IR-RC

Remote control and programming adapter for smart phones

IR-RC adapter to operate all remote-controllable LC-BEG sensors, for connection to the audio output of smart phones, Luxomat remote control app needed, can be downloaded from the app store for iOS and Android, incl. micro USB charging cable.

Type	LxBxH/DxH	Art. no.		kg
LC-BEG IR-RC	80 x 60 x 8	8450 6021 100	1	0,04

Sensor device mounts

IP20 SDBA S23 ▶ 326

Blind unit SDBA with attached slave sensor for extending the range of a master sensor.

direct:LC

EnOcean control devices

Main component

LC-RX direct:LC-Controller

LC-RX direct:LC controller

EnOcean DALI controller, DT8 protocol for Tunable White, up to max. 15 devices, 230 V 50 Hz, 868 MHz, freely configurable via direct:LC-App, incl. surface-mount box

Type	LxBxH/DxH	Art. no.		
LC-RX direct:LC-Controller	180 x 90 x 60	8450 7015 100	1	0,00

Accessories

LC-RX direct:LC-USB

LC-RX direct:LC USB

EnOcean USB stick, 868 MHz, for configuration of the direct:LC controller via the PC software direct:LC-APP(available on request under dali@regiolux.de)

Type	LxBxH/DxH	Art. no.		
LC-RX direct:LC-USB	-	8450 7015 110	1	0,00

Transmitter

DPSN wireless ▸ 255

Wireless transmitter for 3-phase rail DPSN

Transmitter

LC-RX direct:LC-Taster

wall transmitter, 2 channels

EnOcean wall button, 2-channel, 1 rocker, without batteries, alpine white colour with frame

Type	LxBxH/DxH	Art. no.		kg
LC-RX direct:LC-Taster 2W	80,5 x 80,5 x 15	8450 6009 207	1	0,15

LC-RX direct:LC-Taster

wall transmitter, 4 channels

EnOcean wall button, 4-channel, 2 rockers, without batteries, alpine white colour with frame

Type	LxBxH/DxH	Art. no.		kg
LC-RX direct:LC-Taster 4W	80,5 x 80,5 x 15	8450 6009 205	1	0,15

LC-RX direct:LC-FB 8

Control unit

EnOcean remote control, 8 channels, without battery, with wall bracket

Type	LxBxH/DxH	Art. no.		kg
LC-RX direct:LC-FB 8	185 x 50 x 17	8450 8101 100	1	0,00

LC-PE EnOcean MFB4K

EnOcean mini handheld transmitter

The mini hand-held transmitter is suitable for switching and dimming lighting. It can be switched without batteries and from any location. The small and ergonomic mini hand-held transmitter in a closed housing is designed as remote control and has 4 buttons. Colour of the housing: black; colour of the buttons: grey.

Type	LxBxH/DxH	Art. no.		kg
LC-PE EnOcean MFB4K	82 x 50 x 21	8450 7007 100	1	0,08

Light-Control for increasing energy efficiency

Time based lighting systems meet the highest contemporary standards of light quality, ergonomics and safety, design considerations, and regarding energy terms. With modern lighting technology in conjunction with sophisticated electronic components, high-efficiency light arms, optimal measures for glare reduction and efficient light sources, lighting solutions can be realised that they correspond to all needs, generate much more light and consume less energy than old systems with conventional, sometimes completely outdated technology.

The optionally available technologies for better control and regulation of lighting systems provide even more potential for cost saving and efficiency. In installations where a sensible use of natural daylight is possible, up to 75% of energy saving can be achieved compared to existing systems. There are also savings regarding the use of sensor technology in presence detection, for example, in storage and distribution areas.

Energy Optimisation - benefitting from saving potentials in interior lighting

When renovating the lighting system, one should start with a general check-up of its current condition. Only on the basis of this analysis, statements about possible savings are possible. The numbers listed in the chart are to be interpreted as a rough guide. In particular, the savings from daylight-dependent systems can vary strongly, depending on various conditions (eg, geographic location, window size and position, direction, obstruction, use of time). We recommend to carry out an appropriate cost calculation prior to the renovation.

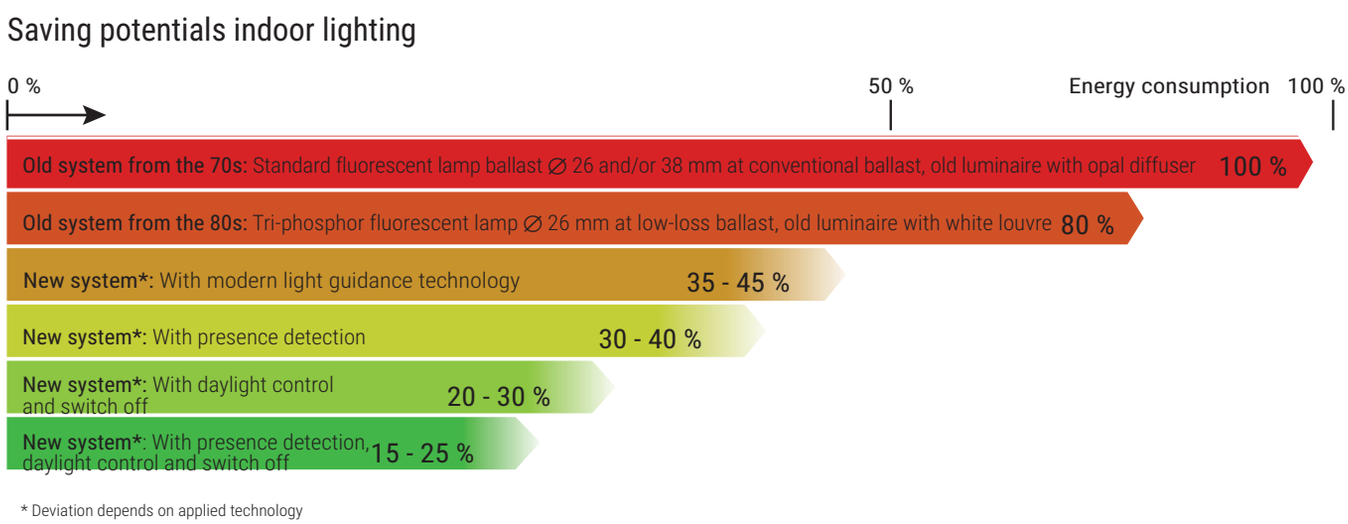


Fig. 1: Saving potential indoor lighting
A modern lighting design with a suitable light control can reduce up to 75% of energy.

Light-Control Application Manuals

www.regiolux.de/en/service/know-how/application-manuals

Save with daylight-dependent control of lighting systems

Luminaire installations that take account of entering daylight must not continuously generate maximum illumination output for achieving the necessary lighting level. Dimmable electronic ballasts and light sensors dim the artificial light at high ambient brightness. Depending on the daylight flooding the room, it may be useful to have multiple control loops.

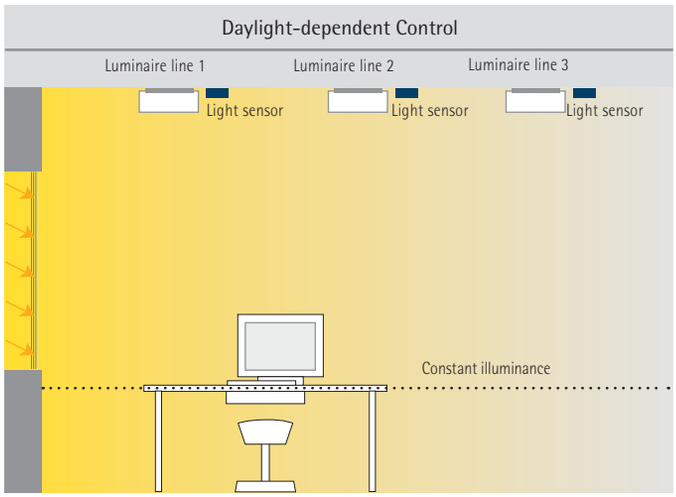


Fig. 2: Daylight-dependent control
The light sensors control the installed lighting rows depending on the amount of daylight. The aim is to provide a constant illumination intensity for a visual task.

Presence control

With the help of presence detection, expenses can be reduced even further. Corresponding presence sensors ensure that the lighting is only activated when there are people in the room. Otherwise, the illumination is automatically switched off or lowered to a residual level with a dimmable lighting system. The latter is interesting, especially in rooms where a residual brightness is constantly desired, such as in hospital corridors.

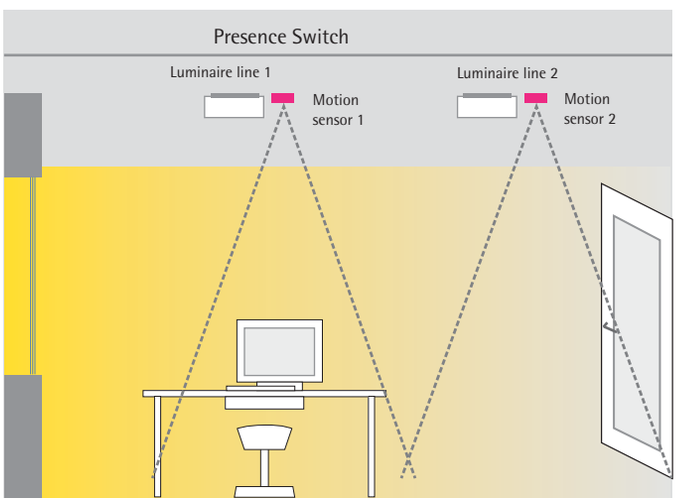


Fig. 3: Presence dependent switching
Two luminaire lines switched via motion sensors. Work and entrance areas are defined as default capture areas.

Even with typical standard applications, Regiolux luminaire systems achieve enduringly low operational and maintenance costs. By developing and implementing individual solutions for special applications, Regiolux also helps to increase efficiency even further. We offer a wide variety of solutions of modern control devices and sensors that meet current requirements for efficient illumination in a sustainable way. Please also see our preconfigurated master luminaires in the product sections.

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Hermann Kaufmann, Euro Unitech GmbH, Wien AT	Vienna-City-Marathon, Wien, AT	17
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Frank Freihofer, Kitzingen DE	BayWa AG, Großwallstadt, DE	38
Jan-Eric Winkelmann, Rostock DE	Evangelische Stiftung Michaelshof, Rostock, DE	44
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Daithi Taylor, Enfield IE	Hewlett Packard Enterprise, Dublin, IE	61
Hermann Kaufmann, Euro Unitech GmbH Wien AT	Wertheim, Gutramsdorf, AT	66
Inga Paas, Köln DE	Goldener Ring, Düsseldorf, DE	68
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Gerhard Hagen, Bamberg DE	Georg Hartmann Realschule, Forchheim, DE	92
Frank Freihofer, Kitzingen DE	Staatliche Realschule, Ebern, DE	95
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Mila Hacke, Berlin DE	Schweizerhof Grundschule, Berlin, DE	107
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ALHO Holding GmbH, Morsbach DE	Juwi, Wörrstadt, DE	124
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Art Wager	istockphoto.com	142
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Tino Metten, Lichtwerk GmbH, Königsberg DE	Joachim-Schumann-Schule, Babenhausen, DE	163
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Frank Freihofer, Kitzingen DE	KÄFER Stahlhandel, Gochsheim, DE	166
Daithi Taylor, Enfield IE	Hewlett Packard Enterprise, Dublin, IE	176
Torsten Kiesslich-Koecher, Regiolux GmbH, Königsberg DE	William Norton House, Dublin, IRL	180
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Michael Meschede, Kaufungen DE	Hotel Kultur- und Kongresszentrum Esperanto, Fulda, DE	194
Hermann Kaufmann, Euro Unitech GmbH Wien AT	Steuerkanzlei Emsenhuber, Melk, AT	196
Hermann Kaufmann, Euro Unitech GmbH Wien AT	Vienna-City-Marathon, Wien, AT	199

Photographer	Project	Page
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Helmut Reisinger GmbH, Kapfenberg AT	Boehlerit GmbH & Co KG, Kapfenberg AT	207
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artJazz	istockphoto.com	218
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Jana Wenderoth, Kassel DE	Firmenzentrale medDV, Fernwald, DE	230
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gitusik	fotolia.com	244
rdnzl	fotolia.com	244
ExQuisine	fotolia.com	244
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Oleksandr Delyk	fotolia.com	245
industrieblick	fotolia.com	245
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olgavolodina	fotolia.com	246
Martin Sass, Marktheidenfeld DE	Udo Lermann, Marktheidenfeld DE	248
Gerhard Hagen, Bamberg DE	CleverFit, Bayreuth DE	250
tomazl	istockphoto.com	253
Michael Meschede, Kaufungen DE	Kasseler Bank eG, Kassel DE	258
Daithi Taylor, Enfield IE	Hewlett Packard Enterprise, Dublin, IE	260
Manfred Sass, Marktheidenfeld DE	Udo Lermann GmbH & Co. KG, Marktheidenfeld, DE	264
Christian Tech, Fulda DE	Rundpavillion EGA, Erfurt, DE	267
Frank Freihofer, Kitzingen DE	Fristo Getränkemarkt, Butzbach, DE	268
Frank Freihofer, Kitzingen DE	BayWa, Wilzhofen, DE	271
Frank Freihofer, Kitzinger DE	Elektro Scheuermann, Reichenberg, DE	275
Warakorn	otolia.com	279
Gerhard Hagen, Bamberg DE	Kunstoffwerk Mauer, Drei Gleichen, DE	279
Gerhard Hagen, Bamberg DE	Kunstoffwerk Mauer, Drei Gleichen, DE	281
Jake Campbell, Kiel DE	Autohaus am Bungsberg, Oldenburg, DE	282
Hermann Kaufmann, Euro Unitech GmbHWien AT	Raiffeisen Lagerhaus , Bergland, AT	288
Dan Ax, Frankfurt/Main DE	Bizerba Deutschland, Balingen, DE	293
Peter Weiderer, GautzschGmbH&CoKG Windorf DE	Gautzsch Zentrallager, Rathsmannsdorf-Windorf DE	309
Manfred Sass, Marktheidenfeld DE	Udo Lehrmann GmbH & Co. KG, Marktheidenfeld DE	328
Fa, Oosterberg, Soest NL	Keune Haircosmetics, Soest NL	329
Bernd Ullrich, Kleinheubach DE	WIKA, Klingenberg DE	331
Michael Meschede, Kaufungen DE	Groß Druckguss GmbH, Heiligenstadt DE	333
Michael Meschede, Kaufungen DE	Groß Druckguss GmbH, Heiligenstadt DE	336
Jens Arbogast, Graben-Neudorf DE	Pneu Matthy GmbH, Karlsruhe, DE	339
Inga Paas, Köln DE	Provita Medical, Wermelskirchen, DE	342
Tom Reindel, Düsseldorf DE	Schenker Deutschland AG, Coburg DE	345
Brückner und Fuchs, Chemnitz DE	Bosch Rexroth AG, Chemnitz, DE	355
Frank Freihofer, Kitzingen DE	Seehafen Kiel, Kiel DE	357
Stefan Meyer Architekturfotografie, Berlin DE	OBI GmbH, Schwabhausen DE	361
Frank Freihofer, Kitzingen DE	Elektro Scheuermann, Reichenberg, DE	362
Frank Freihofer, Kitzingen DE	Zentrallager Stadtwerke Würzburg, Würzburg, DE	374
Dan Ax, Frankfurt/Main DE	Edeka Reichert Weinstadt, Weinstadt-Endersbach, DE	379
Jon Norddahl, Frederiksberg DK	Movianto Danmark, Greve DK	381
Inga Paas, Köln DE	Saturn MyZeil, Frankfurt am Main DE	383
Jan Bitter, Berlin DE	Eisschnelllaufhalle Sportforum Marzahn, Berlin, DE	397
Hermann Kaufmann, Euro Unitech GmbH Wien AT	Wolf Systembau Gesellschaft m.b.H, Scharnstein, AT	405
Jana Wenderoth, Kassel DE	Einkaufsmarkt Sandershausen, Sandershausen, DE	415
Frank Freihofer, Kitzingen DE	Liebherr Logistikzentrum, Oberopfingen, DE	418
Matthias Frank Schmidt, Erfurt DE	Freie Universität Berlin, Berlin DE	420
industrieblick	fotolia.com	422
Kzenon	fotolia.com	423
Nyo009	fotolia.com,	427
Frank Freihofer, Kitzingen DE	BayWa AG, Großwallstadt, DE	428

Application pictures

Photographer	Project	Page
stokkete	fotolia.com	430
Andrey Kiselev	fotolia.com	430
kuliperko	fotolia.com	431
Frank Freihofer, Kitzingen DE	BayWa AG, Großwallstadt, DE	436
Frank Freihofer, Kitzingen DE	Ruhl-Baustahl, Marktbreit, DE	439
Gerhard Hagen, Bamberg DE	Parkhaus Schaeffler 2.0, Bamberg, DE	440
Nadja Weiß, Lichtwerk GmbH, Königsberg DE	Hallenbad Königsberg, Konigsberg i. Bay., DE	442
Nadja Weiß, Lichtwerk GmbH, Königsberg DE	Hallenbad Königsberg, Konigsberg i. Bay., DE	444
Nadja Weiß, Lichtwerk GmbH, Königsberg DE	Hallenbad Königsberg, Konigsberg i. Bay., DE	447
Jana Wenderoth, Kassel DE	Firmenzentrale medDV, Fernwald, DE	448
Gerhard Hagen, Bamberg DE	Parkhaus Schaeffler 2.0, Bamberg, DE	452
Frank Freihofer, Kitzingen DE	ÜZ Lülsfeld, Lülsfeld, DE	455
ALHO Holding GmbH, Morsbach DE	Fertigungshalle ALHO, Morsbach, DE	456
Hermann Kaufmann, Euro Unitech GmbH Wien AT	Weingut Voelkl, Lengenfeld, AT	459
Frank Freihofer, Kitzingen DE	Zentrallager Stadtwerke Würzburg, Würzburg DE	461
Matthias Frank Schmidt, Erfurt DE	Multifunktionale Halle für Sport und Kultur Meiningen, DE	462
Tino Metten, Lichtwerk GmbH, Königsberg DE	Turnhalle TV Hofheim, Hofheim, DE	464
Jake Campbell, Kiel DE	Fredericia Indraetscenter, Fredericia, DK	471
Frank Freihofer, Kitzingen DE	KETV Karlsruher Eislauf- und Tennisverein, Karlsruhe, DE	472
Robert Endres, Regiolux GmbH, Königsberg DE	Sporthalle Bergtheim, Bergtheim, DE	476
Robert Endres, Regiolux GmbH Königsberg DE	Sporthalle Bergtheim, Bergtheim, DE	478
Gerhard Hagen, Bamberg DE	Frankenhalle Sennfeld, Sennfeld, DE	483
Frank Freihofer, Kitzingen DE	Seehotel, Zeulenroda, DE	484
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guvendemir	istockphoto	488
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Christian Tech, Fulda DE	ZEE - Zentrum für Elektromobilität und Energieeffizienz, Barleben, DE	578
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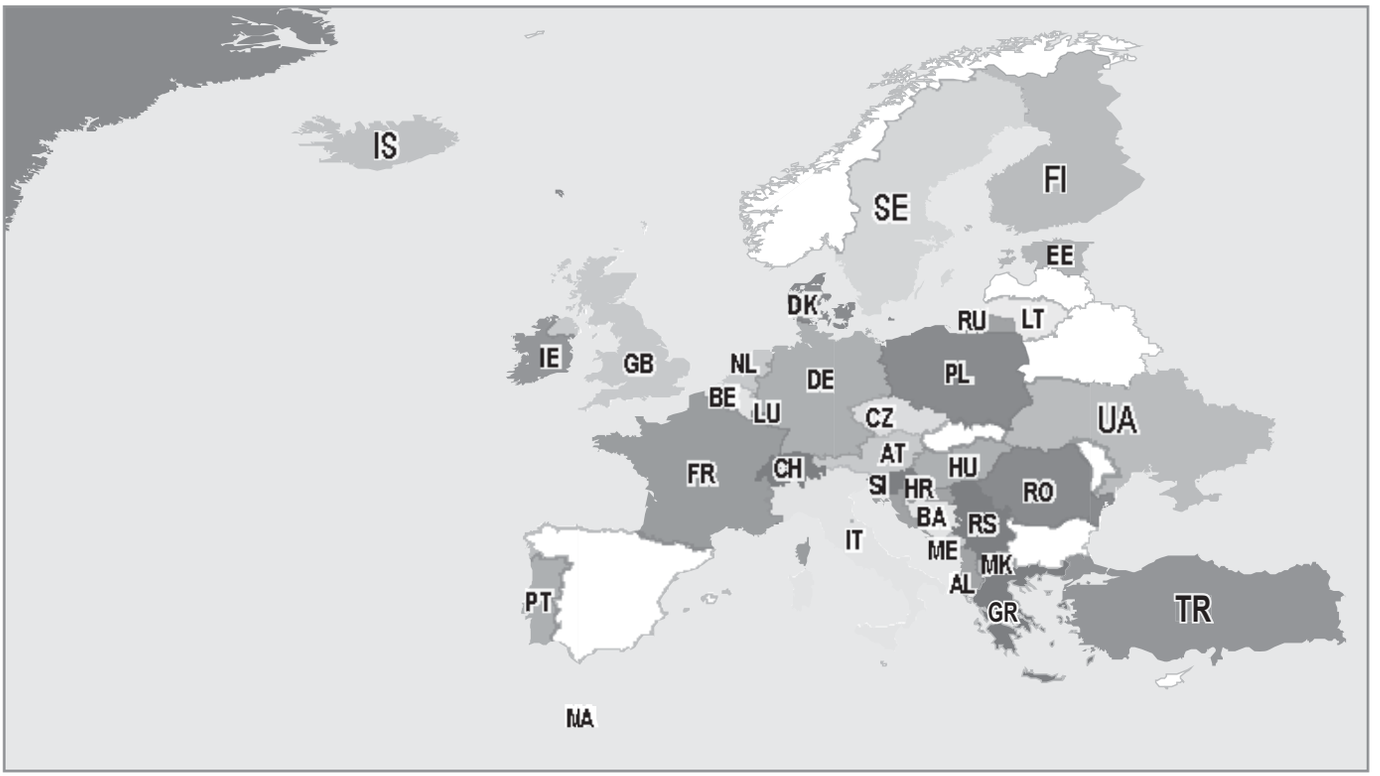
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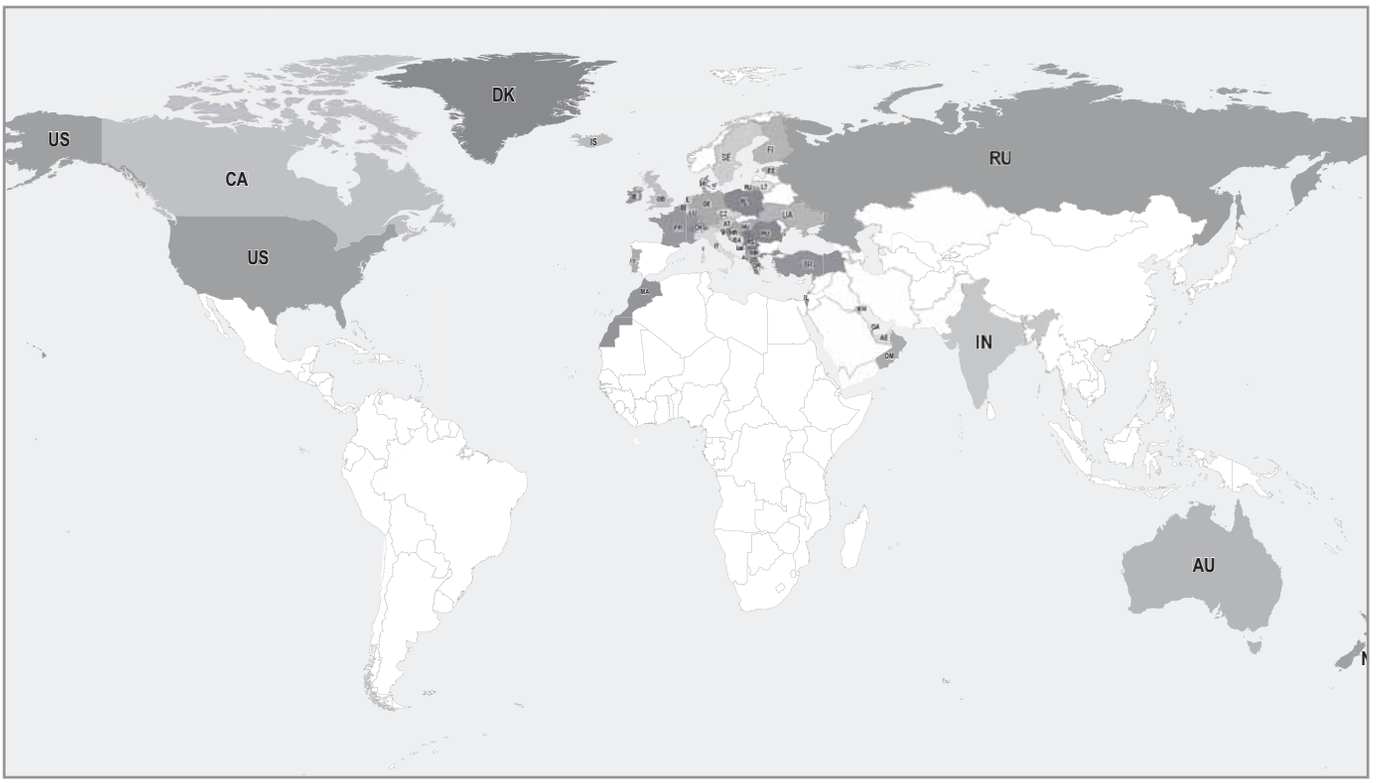
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