



## DALI lighting control catalogue



## Legend



	Voltage
	Parameterisation
	Nominal tension
	Dimensions
	typ. power input
	Detection area
	Range (approx.) in m
	Mounting height min. / max. / recommended
	Degree / class of protection
	Ambient temperature
	Housing
	Cable length
	DALI output
	Follow-up time
	Brightness set value
	Switching power
	Orientation light
	Connections and wires
	HCL
	Monitored area

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The standalone solution for simple requirements

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The intelligent, economical and flexible room solution, ideal for retrofitting

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## DALISYS

The modular building solution, for simple to complex requirements

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**1975**

The foundation stone of our comprehensive range was the development and production of emergency lights. Shortly afterwards came the production of complete systems for emergency lighting installations. While B.E.G. still has emergency lighting in its range today, this of course comes with state of the art technology and energy-saving LEDs.

**Energy-efficient products  
combined with tradition**

Founded in 1975, family-owned B.E.G., headquartered in Lindlar, Germany, has stood for quality and innovation for over 40 years. From the very beginning, our team's focus has been on satisfying customers. The B.E.G. product range is divided into six product lines: LUXOMAT®, LUXOMATIC®, LUXOMAT®net, SAFETYLUX®, CHRONOLUX and B.E.G. SMARTHOME®. B.E.G. offers customers a wide product range, individual solutions, outstanding quality and personal service.

**1986**

B.E.G. was one of the first companies in Germany to produce motion detectors and automatic lighting. Since then, B.E.G. has produced many generations of motion detectors, which are installed primarily outside buildings, in particular for security.

The rapid growth in building automation and the resultant rise in demand for intelligent control products has led to the continual expansion of the daylight-dependent/occupancy-dependent detection business. The installation of occupancy detectors is being driven not only by convenience, but also now by cost reduction through energy saving, and environmental protection.



## Company history



### 2007

On an area of almost 4 ha, the current European distribution and logistics centre with adjoining production and development facilities started operation in Lindlar.

4 years later, the logistics centre was extended by several thousand m<sup>2</sup> to meet the increasing demand.

### 2017

The former administration building becomes a research and development centre with a light laboratory. For some time now, B.E.G. has its focus on networked products (e.g. DALI, LON, KNX). Thanks to the new development centre, B.E.G. is able to react to demands on the market within a short time.

B.E.G. has an ever increasing number of branches and agencies in many countries of the world. Each branch or agency employs well-trained personnel offering the best support possible in all issues with respect to building automation.

### 2014

The new administration building was build next door to the production and distribution centre. The new building is equipped with modern KNX bus technology and B.E.G.'s own KNX products, which provide for an important cost reduction of the operating costs. These products are also used in a research project of TH Köln (University of Applied Sciences).



# DALI Compact

## The standalone solution (with Broadcast)

**DALI Compact Broadcast:** up to 50 DALI lights on up to 3 DALI lines, for up to 3 groups

**DALI Compact addressable:** up to 64 DALI lights on 1 DALI line, for up to 4 groups



### Features

- „All-in-1“ single master option
- DALI power supply and push button control are integrated into the detector
- Standalone solution (BMS connection available via switch contacts)
- Commissioning and maintenance by installer
- Exterior light sensors, some are orientable
- Numerous options in settings via remote control or the B.E.G. smartphone app

#### DALI Compact Broadcast

- Grouping of luminaires using fixed wiring
- DSI protocol at choice
- Detection areas extendable with conventional slave devices

#### DALI Compact addressable

- Grouping of lights using digital group ID allocation
- Administration using short addresses
- Detection areas extendable with conventional slave devices

### Functions

- Occupancy-dependent and daylight-dependent switching and regulation
- Manual settings with conventional push buttons available
- Orientation light
- Soft-Start
- IR end-customer remote control (Mini)
- Cut-Off function and HVAC connection available

#### DALI Compact Broadcast

- Broadcast control

#### DALI Compact addressable

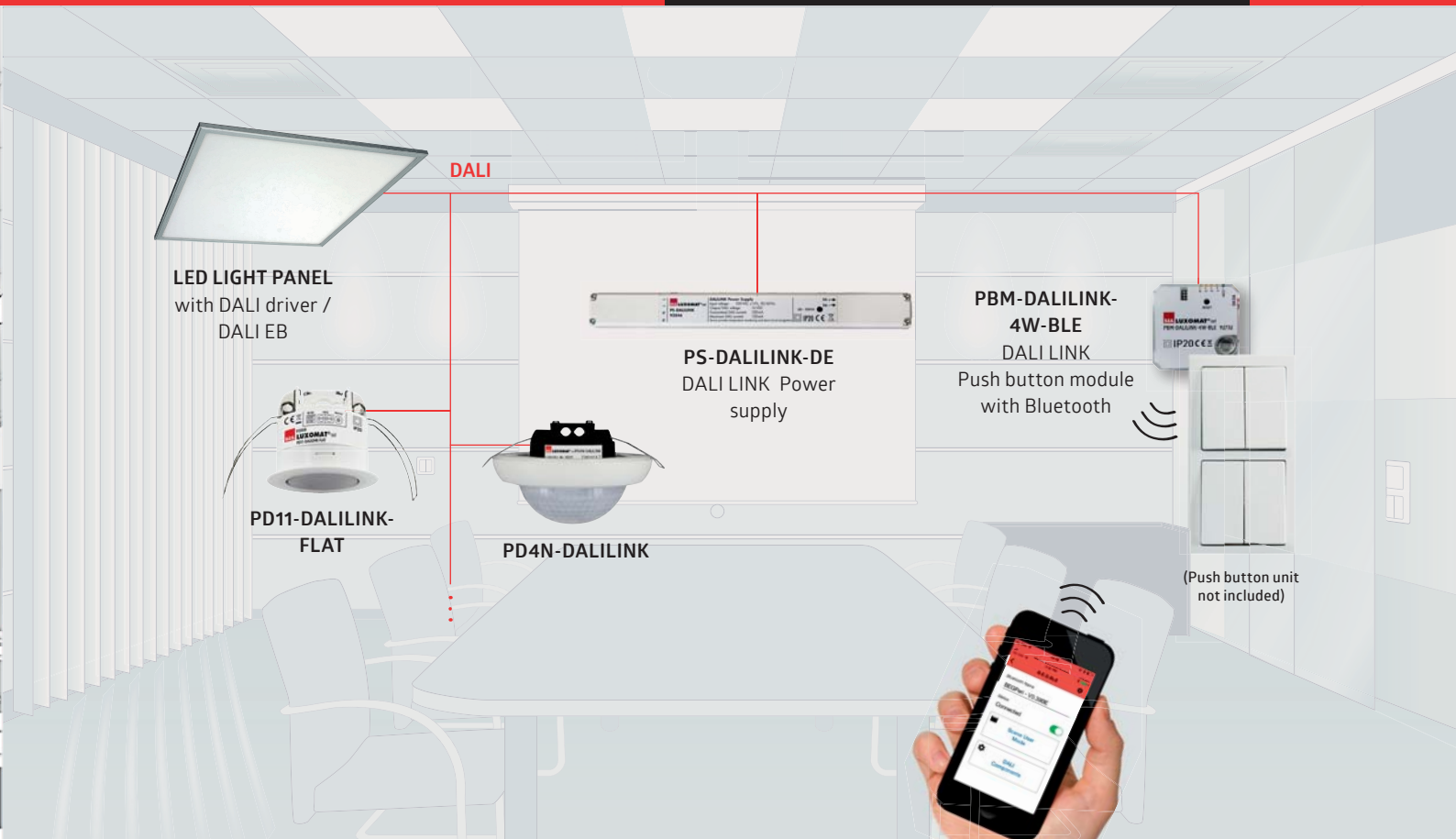
- Group control (addressable)
- Multi-channel regulation available with offset

Download the free remote control app!



# DALI LINK

## The modular room solution



### Features

- Modular multi-master option
- B.E.G. occupancy detector, B.E.G. DALI power supply and B.E.G. push button module are the 3 components for a single room regulation with DALI
- Addressable, group communication
- Available as "starter set" and individually
- Commissioning and maintenance by installer (QR code protection)
- Almost-invisible technology thanks to particularly flat PD11 with visible portion of only 0.85 mm when built into ceiling
- Innovative Bluetooth technology
- Can be extended to DALISYS



**STARTERSET-DALILINK-  
SMALL-OFFICE**  
(Part no. 93840)

### Functions

see DALI Compact and ...

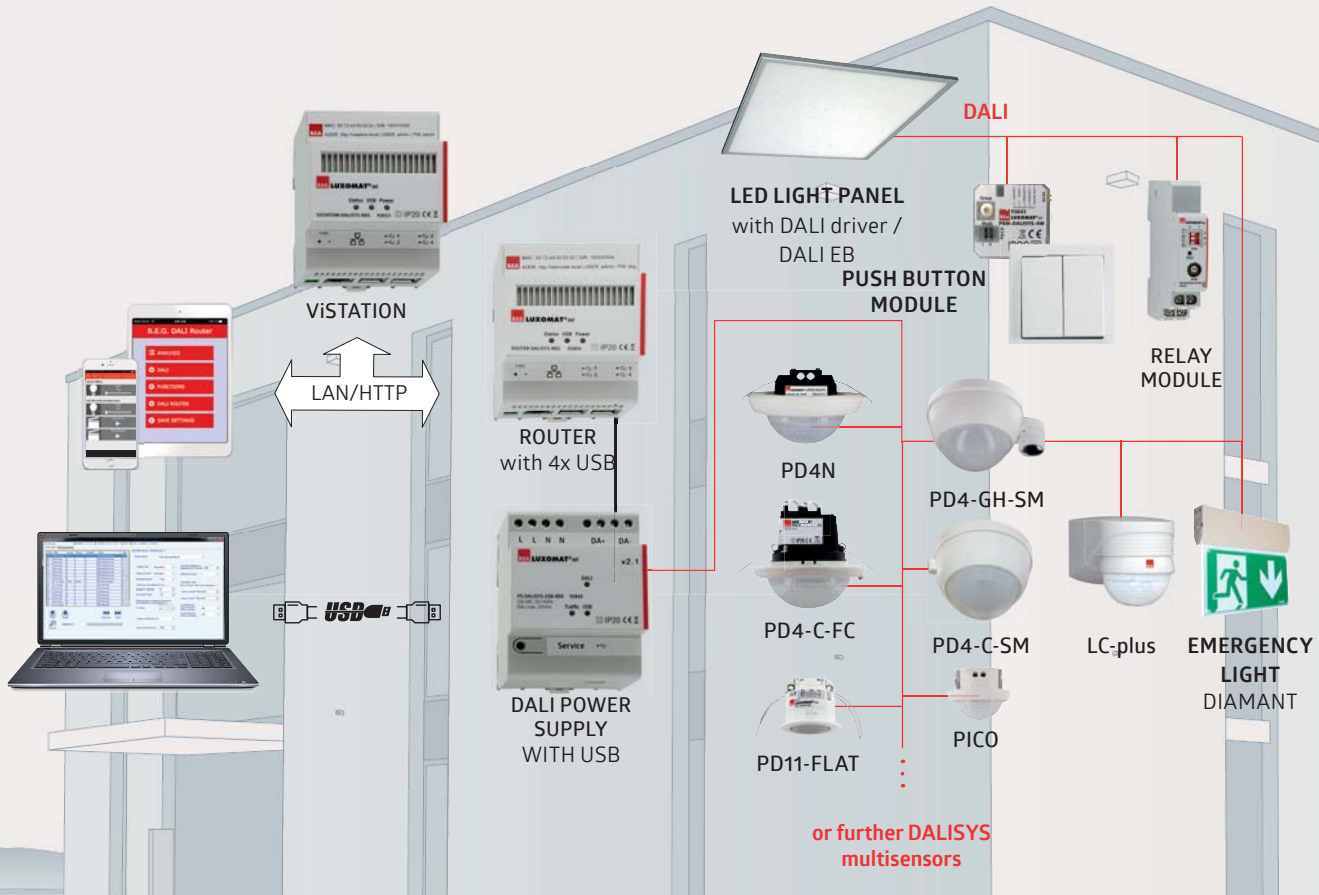
- Scene control
- Remote control-capable via Bluetooth app
- Guided Light
- Orientation light PLUS
- Soft Start PLUS

Download the free remote control app!



# DALISYS

## The Building Solution



### Features

- Networkable, modular multi-master option
- Combines management of normal lighting and emergency lighting, control of blinds and HVAC functions on one platform
- Decentralised control with distributed Intelligence, to provide a high level of operational reliability
- Multisensors have no power supply, and are master and slave in one unit
- Visualisation and central functions available without an upstream BMS
- BMS connection available via BACnet
- Planning, commissioning and maintenance by B.E.G.

### Functions

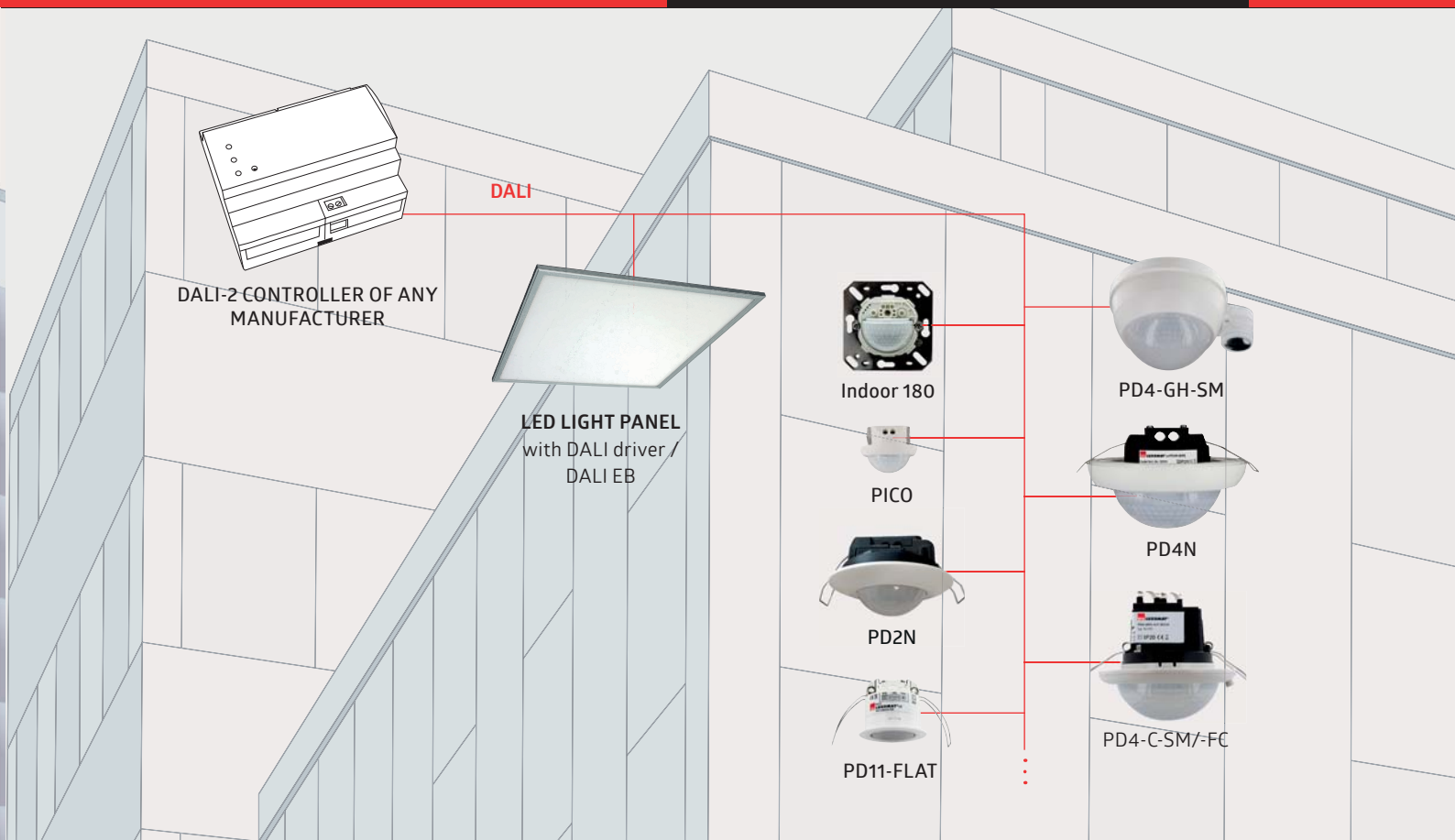
#### see DALI LINK and ...

- Emergency lighting management
- Control of blinds
- Guided Light PLUS
- Central functions: email reporting, calendar function, energy monitoring
- VISTATION – visualisation with user administration and virtual user terminals
- BACnet interface



## BMS

# Standardised multisensors



### Features

- DALI control devices developed to IEC 62386 Parts 101, 103, 303 and 304
- Lighting control takes place in a centralised compatible multi-master application controller from any manufacturer
- Operating voltage via DALI bus
- Large range for a wide variety of requirements
- Bright LED indication for rapid localisation
- Exterior light sensors, some are orientable
- Commissioning and maintenance of the installed lighting control solution by systems integrator

### Functions

- Addressable and usable to IEC 62386 Parts 101, 103, 303 and 304
- Sends lux values as required
- Sends information on room occupancy and motion detection as required
- Integrated follow-up time (hold time) for detection of room occupancy
- Polling support
- Various light measurement methods can be set via memory banks (depending on version)

## Development and production



### EMC chamber for professional quality assurance

- In our in-house EMC laboratory, the technical team tests products for electromagnetic emission and susceptibility. B.E.G. thus ensures that products do not produce high levels of electromagnetic radiation and that emissions from other devices such as smartphones do not affect the reliability of B.E.G. products.
- In the climate chamber, the B.E.G. quality testers expose products to temperatures from -50 to +50 °C for long periods. This tests the products' temperature resistance under extreme conditions.
- Lastly, a B.E.G. quality product has to undergo impact and IP testing, in which the robustness of the case and the reliability of the seals are examined in minute detail.
- These elaborate test procedures mean that the meticulous experts at B.E.G. can ensure that their products always meet the company's highest quality requirements. On that you can rely!

### Flexibility in developing new products

- The B.E.G. CAD department uses 3D printing techniques in the production of prototypes, to develop precise and testable objects.
- Layer by layer, the three-dimensional test models are printed to match the exact specifications of computer-designed objects
- The tools are then produced for series production or existing tools are modified. The use of extremely robust plastics and high-quality electronic components is a cornerstone for the extraordinary longevity of B.E.G. products.

## High-quality detector technology

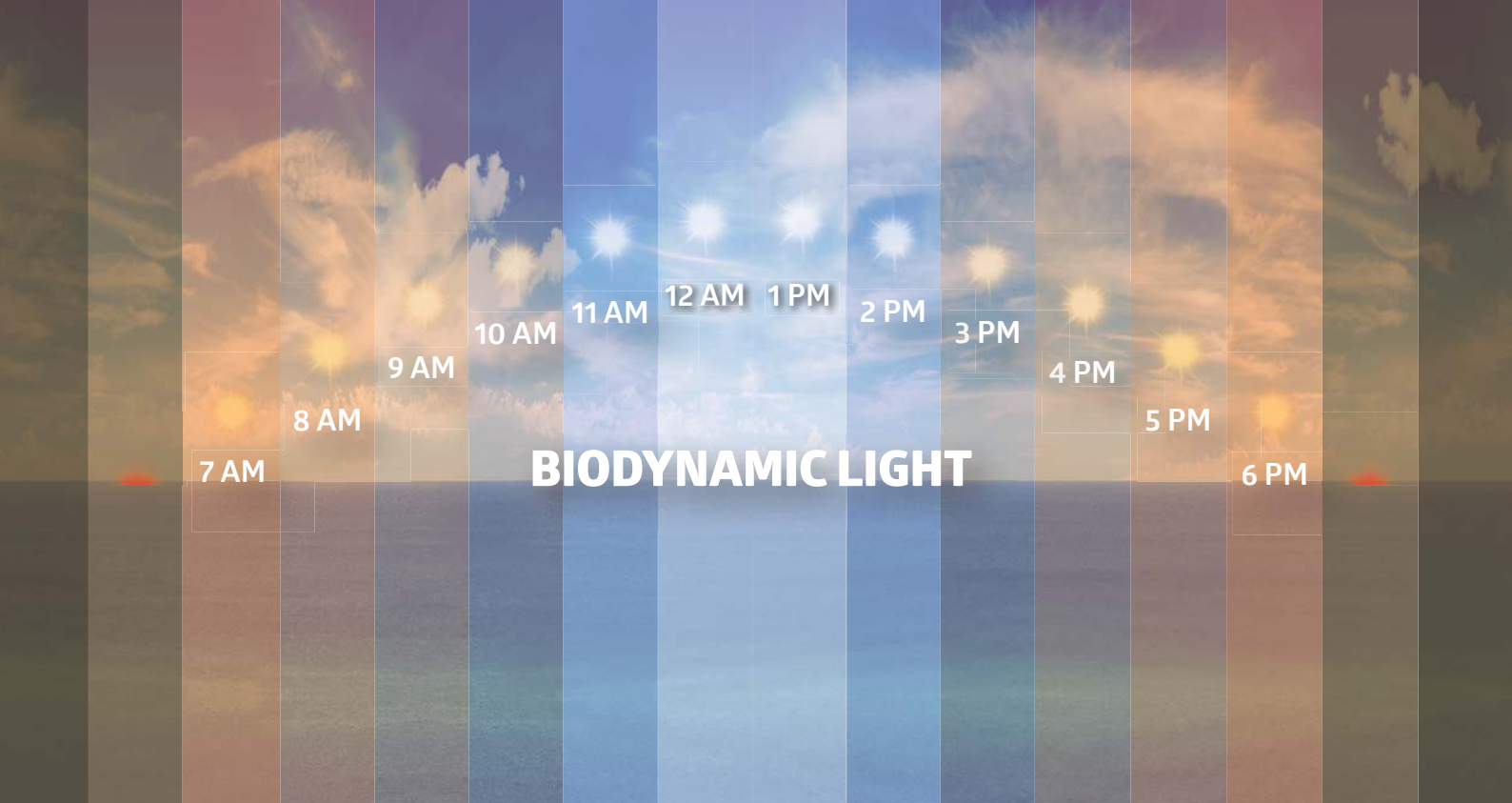
### Motion detector technology

- High-performance motion detectors are optimised for time-efficient and easy fitting. Detectors are individually adjustable for optimum setup of the detection area, so that for example the street is not covered when installation is on the outside of a property.
- Motion detectors are designed to reliably detect moving sources of heat in their detection area. According to the current ambient light level, they automatically switch the light on when movement is detected. If movement is no longer detected, the detector switches the light off again after the follow-up time previously configured.
- This is made possible by Passive Infrared (PIR) technology: The detection area of the motion detector is divided into many small sub-areas. The detector measures heat radiation in these sub-areas, e.g. the heat given off by a living being. If temperature differences occur in several sub-areas due to movement, these are recognised by the PIR sensor built into the motion detector. The sensor itself does not emit any infrared radiation and is therefore described as passive.
- If requirements should change, settings can be adjusted according to needs. Instead of the potentiometers, it is even easier to adjust the settings using a suitable B.E.G. remote control.
- B.E.G. stands for decades of experience in developing motion detectors and automatic luminaires, and for high levels of quality and reliability. This means B.E.G. lights and spotlights with motion detection technology provide the perfect combination of security, convenience and energy saving.

### Bidynamic occupancy detector technology (HCL)

- The PD4-M-HCL bidirectional occupancy detector with integrated DALI controller and "Tunable White" function for "Human Centric Lighting" regulates different lighting groups according to occupancy and daylight levels, and also has daylight-dependent control of brightness and colour temperature using a real-time clock.





In 2002, scientists discovered a third kind of photoreceptor in the retina of the eye. These are not primarily for vision, but are very sensitive to light with a high level of blue in it. Among other things, they regulate the production of hormones that are essential for the human “body clock”. This new discovery made sense of many things: for thousands of years, daylight has synchronised the biorhythms of people living predominantly outdoors.



Without daylight, the biorhythms get out of step. Modern humans mostly live in rooms which are not always flooded with sufficient daylight and are generally lit artificially. Therefore, for many hours in the day, daylight’s influence on biorhythms is missing, which can have negative effects on our well-being, concentration and health.



HCL lighting, or “Human Centric Lighting”, is lighting with humans as its focus. Therefore, lighting must take account of the latest discoveries and not only provide good static light, but also consider biodynamics, in other words the right light for the right time of day.

In practice, this means trying to track daylight as closely as possible by changing the colour temperature and adjusting light output. The lights themselves must therefore be dimmable and must allow for different white tones, known as “Tunable White”. Hence daylight can to a certain extent be brought into a building, even if the building’s design means little or no true daylight is available. Using lighting to replicate daylight is known as “circadian lighting”, from the Latin “circa” for “around” and “dies” = “day”. The skill now is to define the right colour temperature and the right light level for every hour of the day. These parameters differ according to latitude, longitude and time of year. The change in lighting should take place as smoothly as possible and should not be noticeable by the user – natural daylight provides the yardstick.

Variation in the white tone can also serve other purposes, e.g. a calming atmosphere can be created by warm white tones. Using high light levels and a greater blue component in the light can produce an increase in the ability to concentrate, a so-called “light shower”. There are practically no limits to creativity in this field, and different profiles for different application scenarios are listed in DIN SPEC 67600.

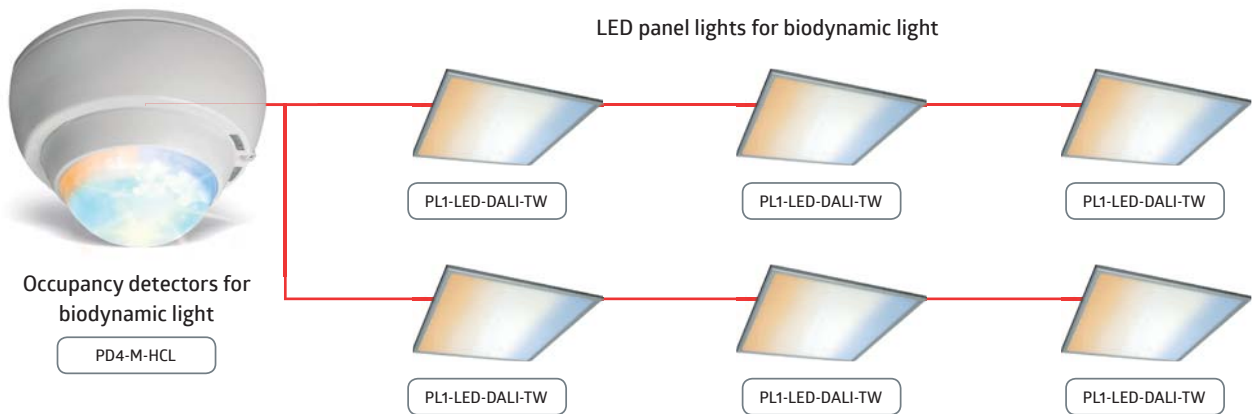
Many studies show that biodynamic lighting / HCL, with colour temperature and lighting levels adjusted to the current situation, generally improves well-being, productivity and health.

# Biodynamic light – the perfect solution

But since HCL usually provides, at least part of the time, a higher minimum lighting level than workplace regulations require, and thus increases the energy consumption of the lighting, the use of occupancy detectors is more important with an HCL installation, in order to save as much energy as possible. Therefore it is not enough to install dim-

mable and colour-changeable “Tunable White” lighting, but an intelligent lighting control system must be used as well, to make HCL control energy efficient.

With the PD4-M-HCL, B.E.G. offers the ideal solution.



## Hospitals

As a rule, staying in hospital means that patients' movements are restricted. Depending on the condition, patients generally have to stay in bed and only rarely get to go outdoors. Not every bed provides sufficient daylight. HCL lighting can support the healing process by stabilising patients' circadian rhythms and improving their sleep.



## Retirement homes

As the population becomes ever older, it is important that older people in retirement homes are cared for in the best way possible. With age, people's vision deteriorates, and when people stay for a long time in enclosed rooms, it is possible for their body clock to get out of sync and for residents to wake up in the night more often. HCL solutions help to reset residents' body clocks and support a better quality of sleep.

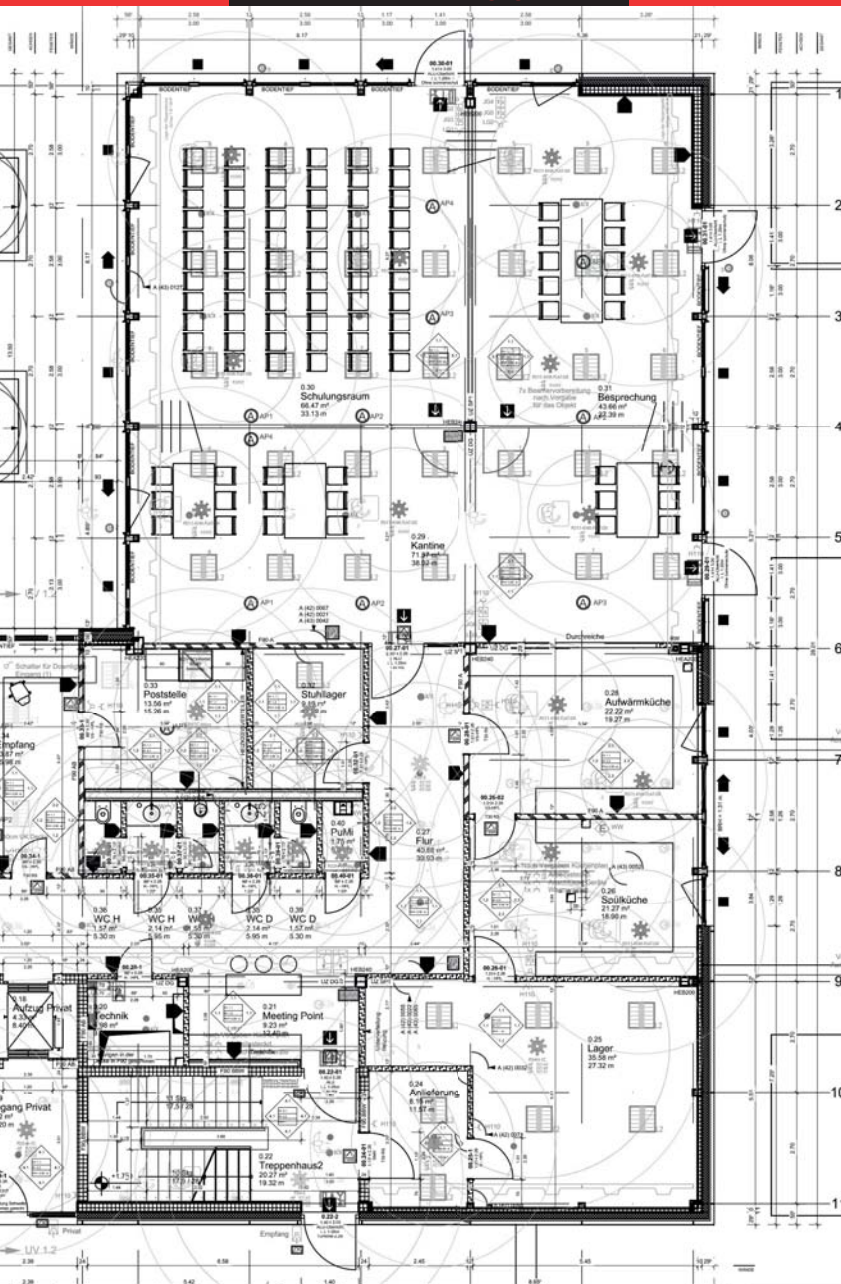


## Offices

Today, the majority of people no longer work in the open air, but in enclosed spaces. The design of the building cannot always provide sufficient daylight in all locations. Using HCL lighting, you can compensate for this deficiency and substantially enhance the workplace.



## Planner support



### Service and information for planners

- We support you at every stage. Our in-house planning department can produce for you, without obligation, a plan for a suitable lighting control system with specific mounting locations for motion and occupancy detectors.
- On our website, you can find the photometric information for all lights in LDT format for import into light planning programs such as DIALUX or RELUX.
- Our field operatives are all experts and undergo regular training. Therefore you will always have a capable contact at your side, even beside you on location or at the construction site.
- Our in-house staff are highly trained and will be delighted to give advice regarding your order. And your point of contact will always be happy to discuss product questions and suggest solutions.
- Our products are available exclusively through electrical wholesalers. Thanks to our long-term collaboration, wholesaler staff can in most cases help you with questions on B.E.G. products.
- We provide the right solution for a wide range of requirements. If the right product is not available, then we will offer a special solution, tailor-made for your project. Our years of experience and the excellent quality of our products make us the experts in intelligent building automation.

### Any special requirements?

Then do not hesitate to contact us.



# Modern lighting control with DALI Compact solutions

## Reliable planning and calculation with B.E.G. DALI

B.E.G. DALI Compact products are “standalone solutions”, and work on the single master principle. This means that only the occupancy detector sends the switching/dimming signal to all the lights.

The B.E.G. DALI Compact occupancy detectors combine all the components needed for energy-efficient lighting control in one case: the DALI power supply, push-button control, relay and application controller are housed directly in the detector case. Thanks to the broadcast process and the factory settings for set value brightness (500 lux) and follow-up time (10 minutes), devices can be commissioned quickly. The B.E.G. DALI range contains occupancy detectors to suit almost any requirement: for example with different sizes of detection area, with up to three DALI interfaces, with additional HVAC channel, with special corridor lenses or for high-bay applications. B.E.G. also offers an occupancy detector which can form multiple groups via only one DALI interface by addressing the connected lights.

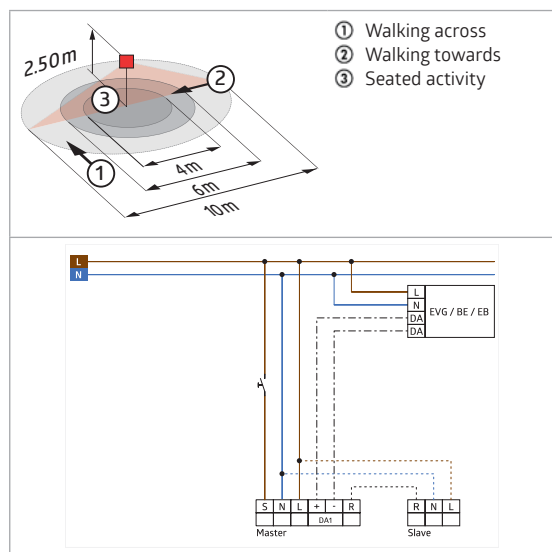
The area being monitored can be extended inexpensively with slave devices.



# Occupancy detectors DALI Compact

## Product and accessory

Description	Colour	Part number
PD2-M-DALI/DSI-FC	white mat, similar to RAL9010	92258
PD2-M-DALI/DSI-SM	white mat, similar to RAL9010	92280
IR-Adapter for Smartphones	black	92726
IR-PD-DALI	-	92094
IR-PD-DALI-E	-	92122
IR-PD-DALI-Mini	-	92112
Wire basket BSK (Ø 200 x 90 mm)	white	92199
SM socket IP54 PD2- / PD4-SM	white	92161



## Product Information

- Occupancy detector for daylight-dependent lighting control
- DALI / DSI interface for control of digital dimmable electronic ballasts as a group
- Manual switching and dimming via push button possible
- Switching between DALI and DSI programming possible with DIP switch and remote control
- Version as master device
- Extension of the detection area with slave devices possible
- Additional functions can be set up using the optional remote control.
- Orientation light function
- Factory settings 10 min and 500 lux

## Technical Data

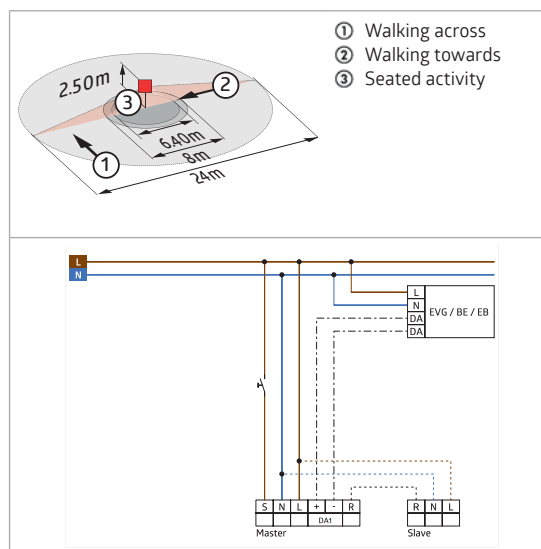
- ⌚ 110 – 240 V AC 50 / 60 Hz
- ⌚ FC= Ø 80 × 85 mm
- ⌚ SM= Ø 98 × 47 mm
- ⌚ approx. 1 W
- ⌚ vertical 360°
- ⌚ max. Ø 10 m across; max. Ø 6 m towards; max. Ø 4 m seated
- ⌚ 79 m² / 2.5 m mounting height
- ⌚ 2 m / 5 m / 2.5 m
- ⌚ FC= IP20 / Class II
- ⌚ SM= IP20 / Class II
- ⌚ -25 °C to +50 °C
- ⌚ Polycarbonate, UV-resistant
- Channel 1 (lighting control)**
- ⌚ up to 50 DALI / DSI-EB
- ⌚ 1 min – 30 min
- ⌚ 10 – 30 % / OFF / 5 min – 60 min / ∞
- ⌚ 10 – 2000 Lux
- ⌚ Mixed light measuring



## Occupancy detectors DALI Compact

## Product and accessory

Description	Colour	Part number
PD4-M-DALI/DSI-FC	white mat, similar to RAL9010	92275
PD4-M-DALI/DSI-SM	white mat, similar to RAL9010	92279
IR-Adapter for Smartphones	black	92726
IR-PD-DALI	-	92094
IR-PD-DALI-LD	-	92652
IR-PD-DALI-E	-	92122
IR-PD-DALI-Mini	-	92112
Wire basket BSK (Ø 200 x 90 mm)	white	92199
SM socket IP54 PD2- / PD4-SM	white	92161



## Product Information

- Occupancy detector with large detection area, daylight-dependent lighting control
- DALI / DSI interface for control of digital dimmable electronic ballasts as a group
- Switching between DALI and DSI programming possible with DIP switch and remote control
- Version as master device
- Extension of the detection area with slave devices possible
- Manual switching and dimming via push button possible
- Additional functions can be set up using the optional remote control.
- Orientation light function
- Factory settings 10 min and 500 lux

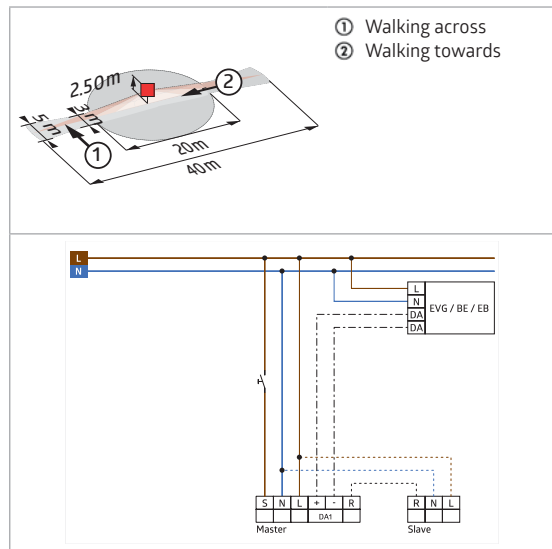
## Technical Data

- ⊖ 110 – 240 V AC 50 / 60 Hz
- ↙ FC= Ø 97 × 103 mm
- ↘ SM= Ø 98 × 63 mm
- ⏻ approx. 1 W
- 📐 vertical 360°
- 📏 max. Ø 24 m across; max. Ø 8 m towards; max. Ø 6.4 m seated
- 📏 450 m<sup>2</sup> / 2.5 m mounting height
- 📏 2 m / 10 m / 2.5 m
- 📏 FC= IP20 / Class II
- 📏 SM= IP20 / Class II
- 🌡️ -25 °C to +50 °C
- 📏 Polycarbonate, UV-resistant
- Channel 1 (lighting control)**
- 📏 up to 50 DALI / DSI-EB
- 🕒 1 min – 30 min
- 🕒 10 – 30 % / OFF / 5 min – 60 min / ∞
- 🕒 10 – 2000 Lux
- ⚙️ Mixed light measuring

# Occupancy detectors DALI Compact

## Product and accessory

Description	Colour	Part number
PD4-M-DALI/DSI-C-FC	white mat, similar to RAL9010	92328
PD4-M-DALI/DSI-C-SM	white mat, similar to RAL9010	92530
IR-Adapter for Smartphones	black	92726
IR-PD-DALI	-	92094
IR-PD-DALI-E	-	92122
IR-PD-DALI-LD	-	92652
IR-PD-DALI-Mini	-	92112
Wire basket BSK (Ø 200 x 90 mm)	white	92199
SM socket IP54 PD2- / PD4-SM	white	92161
Wall holder PD4-SM	white	92441



## Product Information

- Occupancy detector designed for corridors, daylight-dependent lighting control
- DALI / DSI interface for control of digital dimmable electronic ballasts as a group
- Switching between DALI and DSI programming possible with DIP switch and remote control
- Version as master device
- Extension of the detection area with slave devices possible
- Manual switching and dimming via push button possible
- Additional functions can be set up using the optional remote control.
- Orientation light function
- There are markings for adjusting the detector
- Factory settings 10 min and 500 lux

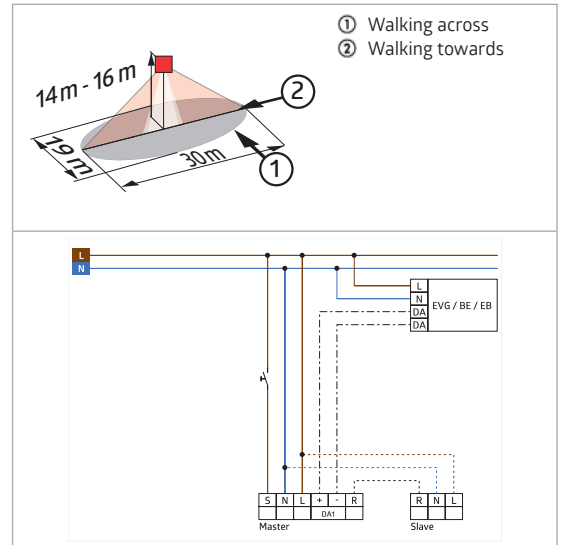
## Technical Data

- ⌚ 110 – 240 V AC 50 / 60 Hz
- 📏 FC= Ø 97 × 103 mm  
SM= Ø 98 × 63 mm
- ⚡ approx. 1 W
- 📐 vertical 360°
- 📏 max. 40 m × 5 m across; max. 20 m × 3 m towards
- 📏 250 m² / 2.5 m mounting height
- 📏 2.4 m / 2.6 m / 2.5 m
- 📏 FC= IP20 / Class II  
SM= IP20 / Class II
- 🌡️ -25 °C to +50 °C
- 📦 Polycarbonate, UV-resistant
- Channel 1 (lighting control)**
- 📡 up to 50 DALI / DSI-EB
- 🕒 1 min – 30 min
- 🕒 10 – 30 % / OFF / 5 min – 60 min / ∞
- 🕒 10 – 2000 Lux
- 📊 Mixed light measuring

# Occupancy detectors DALI Compact

## Product and accessory

Description	Colour	Part number
PD4-M-DALI/DSI-GH-SM	white mat, similar to RAL9010	93015
IR-Adapter for Smartphones	black	92726
PD4-S-GH-SM	white mat, similar to RAL9010	92265



## Product Information

- DALI occupancy detector for surface mounting in large mounting heights
- External telescopic light sensor for a mounting height between 5 and 16 m (mechanically adjustable) for measuring the light according to the application.
- DALI / DSI interface for control of digital dimmable electronic ballasts as a group
- Version as master device
- Extension of the detection area with slave devices possible
- Manual switching and dimming via push button possible
- Additional functions can be set up using the optional remote control.
- Logical switching or control output
- Permanent or time-limited orientation light
- There are markings for adjusting the detector
- **When used in high-bay warehouses, care should be taken that, in the cross-aisles of the warehouse, detectors are installed that can detect movement only in the desired aisle locations, by using blinds or other technical arrangements.**
- Factory settings 10 min and 500 lux

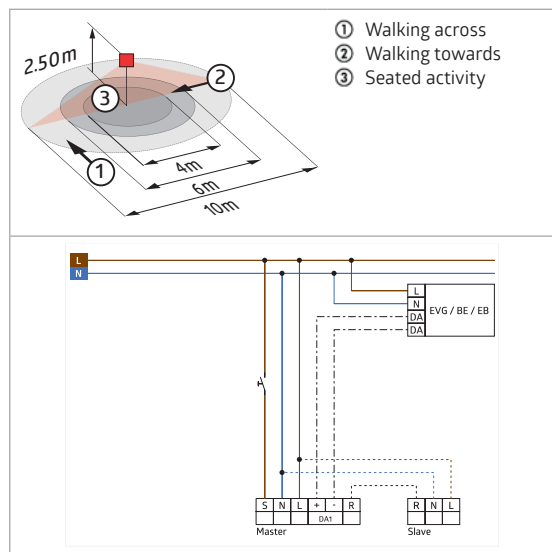
## Technical Data

- ⊖ 110 – 240 V AC 50 / 60 Hz
- ⊘ 101 × 76 mm
- Ⓐ 4 mA
- Ⓜ 0.9 W
- ⌒ vertical 360°
- △ 30 m × 19 m
- Ⓜ 450 m<sup>2</sup> / 14 m mounting height
- Ⓜ 5 m / 16 m / 14 m
- IP 54 / Class II
- 🌡 -25 °C to +50 °C
- 📦 Polycarbonate, UV-resistant
- Channel 1 (lighting control)**
- 📡 up to 50 DALI / DSI-EB
- 🕒 1 min – 30 min
- 🌞 5 – 100 % / 1 min – 120 min / ∞
- ⚙ 10 – 2500 Lux
- 📊 Mixed light measuring

# Occupancy detectors DALI Compact

## Product and accessory

Description	Colour	Part number
PD9-M-DALI/DSI-FC	white mat, similar to RAL9010	92920
IR-Adapter for Smartphones	black	92726
IR-PD-DALI	-	92094
IR-PD-DALI-E	-	92122
IR-PD-DALI-Mini	-	92112
Cover IP65 PD9-Sensor head	transparent	92958
Square design frame PD9-FC	pure white mat, similar to RAL9010	92993



## Product Information

- Mini occupancy detector for daylight-dependent lighting control
- DALI / DSI interface for control of digital dimmable electronic ballasts as a group
- Switching between DALI and DSI possible with remote control
- Manual switching and dimming via push button possible
- Version as master device
- Orientation light function
- Extension of the detection area with slave devices possible
- **Easy operation with remote control (required)**
- Power supply passes through the hole in the ceiling for the detector (34 mm Ø)
- Includes 45 mm cover ring and blinds
- Spring clips for quick and easy installation in suspended ceilings and light fittings
- Factory settings 10 min and 500 lux

## Technical Data

- ⌚ 110 – 240 V AC 50 / 60 Hz
- 📏 Sensor head: Ø 45 × 28 mm, Power supply: 165 × 24 × 24 mm
- ⌚ approx. 1 W
- 📐 vertical 360°
- 📐 max. Ø 10 m across; max. Ø 6 m towards; max. Ø 4 m seated
- 📏 79 m² / 2.5 m mounting height
- 📏 2 m / 5 m / 2.5 m
- 📏 IP20 / Class II
- 🌡️ -25 °C to +50 °C
- 📏 Polycarbonate, UV-resistant
- 📏 45 cm
- Channel 1 (lighting control)**
- 📡 up to 50 DALI / DSI-EB
- ⌚ 1 min – 30 min
- 📏 10 – 30 % / OFF / 5 min – 60 min / ∞
- 📏 10 – 2000 Lux
- 📏 Mixed light measuring

## Occupancy detectors DALI Compact

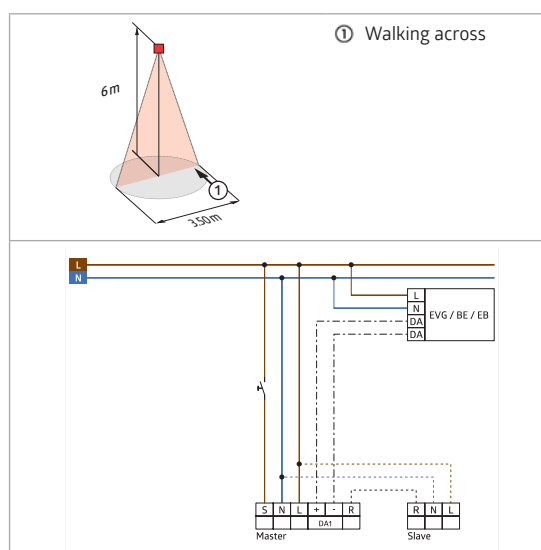
## Product and accessory

Description	Colour	Part number
PD9-M-DALI/DSI-GH-FC	white mat, similar to RAL9010	92938
IR-Adapter for Smartphones	black	92726
IR-PD-DALI-LD	-	92652
IR-PD-DALI-E	-	92122
Square design frame PD9-FC	pure white mat, similar to RAL9010	92993



## Product Information

- Mini occupancy detector for daylight-dependent lighting control, especially for large mounting heights
- DALI / DSI interface for control of digital dimmable electronic ballasts as a group
- Switching between DALI and DSI possible with remote control
- Orientation light function
- Version as master device
- Extension of the detection area with slave devices possible
- Light regulation feasible up to 5 m mounting height
- **Easy operation with remote control (required)**
- Manual switching and dimming via push button possible
- Power supply passes through the hole in the ceiling for the detector (34 mm Ø)
- Spring clips for quick and easy installation in suspended ceilings and light fittings
- Includes 45 mm cover ring and blind
- Factory settings 10 min and 500 lux



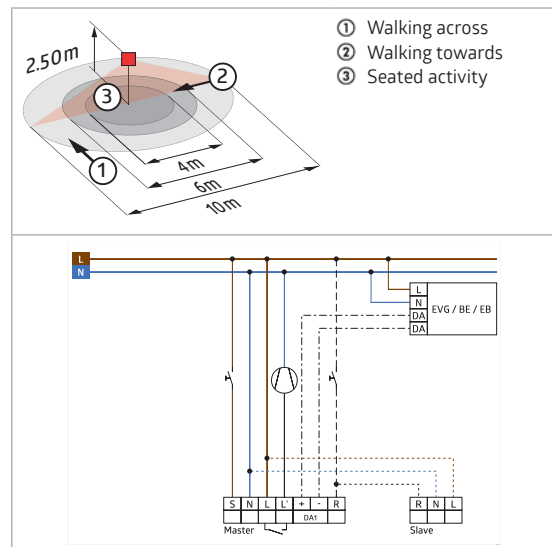
## Technical Data

- ⌚ 110 – 240 V AC 50 / 60 Hz
- 📏 Sensor head: Ø 45 × 41 mm, Power supply: 165 × 24 × 24 mm
- ⚡ approx. 1 W
- 📐 vertical 360°
- 📏 max. Ø 3.5 m across
- 📏 10 m<sup>2</sup> / 6 m mounting height
- 📏 5 m / 10 m / 6 m
- 📏 IP20 / Class II
- 🌡️ -25 °C to +50 °C
- 📏 Polycarbonate, UV-resistant
- 📏 45 cm
- Channel 1 (lighting control)**
- 📏 up to 50 DALI / DSI-EB
- 🕒 1 min – 30 min
- 📏 10 – 30 % / OFF / 5 min – 60 min / ∞
- 📏 10 – 2000 Lux
- 📏 Mixed light measuring

## Occupancy detectors DALI Compact

## Product and accessory

Description	Colour	Part number
PD2-M-DALI/DSI-1C-FC	white mat, similar to RAL9010	92486
PD2-M-DALI/DSI-1C-SM	white mat, similar to RAL9010	93033
IR-Adapter for Smartphones	black	92726
IR-PD-DALI-1C	-	92116
IR-PD-DALI-Mini	-	92112
Wire basket BSK (Ø 200 x 90 mm)	white	92199



## Product Information

- Occupancy detector for daylight-dependent lighting control
- DALI / DSI interface for control of digital dimmable electronic ballasts as a group
- Additional switching channel for one of the following two functions:
  - Cut-Off (complete ECG switch-off to avoid standby losses) or HVAC (for the energy-efficient control of heating, air-conditioning or ventilation systems or for displaying occupancy)
- Switching between DALI and DSI programming possible with DIP switch and remote control
- Orientation light function
- Relay with tungsten pre-make contact, optimised for LED loads
- Version as master device
- Extension of the detection area with slave devices possible
- Manual switching and dimming via push button possible
- Additional functions can be set up using the optional remote control.
- Avoidance of standby losses of the lighting system in accordance with EnEV DIN V 18599-4
- Factory settings 10 min and 500 lux

## Technical Data

- 110 – 240 V AC 50 / 60 Hz
- FC= Ø 80 × 85 mm
- SM= Ø 102 × 58 mm
- approx. 1 W
- vertical 360°
- max. Ø 10 m across; max. Ø 6 m towards; max. Ø 4 m seated
- 79 m<sup>2</sup> / 2.5 m mounting height
- 2 m / 5 m / 2.5 m
- FC= IP20 / Class II
- SM= IP54 / Class II
- 25 °C to +50 °C
- Polycarbonate, UV-resistant
- Channel 1 (lighting control)**
- up to 50 DALI / DSI-EB
- 1 min – 30 min
- 10 – 30 % / OFF / 5 min – 60 min / ∞
- 10 – 2000 Lux
- Channel 2 (HVAC or lighting control)**
- 2300 W, cos φ = 1; 1150 VA, cos φ = 0.5; 300 W LED; max. inrush current I<sub>p</sub> (20 ms) = 165 A
- 1x μ-contact, NO contact with tungsten pre-make contact
- 5 min – 120 min, Alarm pulse, Pulse
- Mixed light measuring

## Occupancy detectors DALI Compact

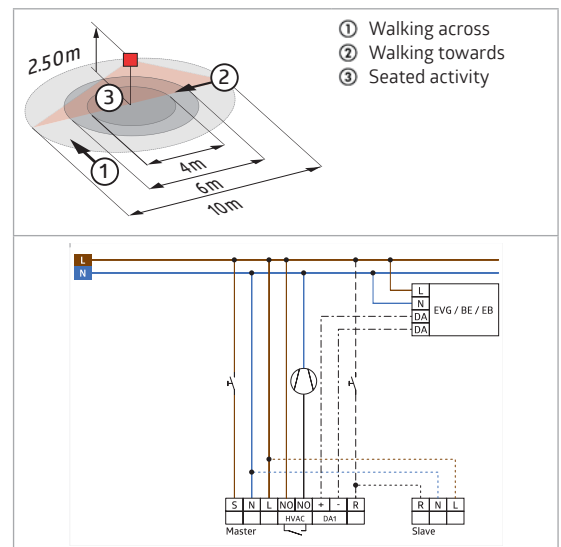
## Product and accessory

Description	Colour	Part number
PD2-M-DALI/DSI-HVAC-FC	white mat, similar to RAL9010	92698
IR-Adapter for Smartphones	black	92726
IR-PD-DALI-1C	-	92116
IR-PD-DALI-Mini	-	92112
Wire basket BSK (Ø 200 x 90 mm)	white	92199



## Product Information

- Occupancy detector for daylight-dependent lighting control
- DALI / DSI interface for control of digital dimmable electronic ballasts as a group
- Additional potential-free switching channel for one of the following two functions:  
Cut-Off (complete ECG switch-off to avoid standby losses) or HVAC (for the energy-efficient control of heating, air-conditioning or ventilation systems or for displaying occupancy).
- Alarm pulse: the detector triggers only when three movements are detected within 9 seconds
- Switching between DALI and DSI programming possible with DIP switch and remote control
- Orientation light function
- Relay with tungsten pre-make contact, optimised for LED loads
- Version as master device
- Extension of the detection area with slave devices possible
- Manual switching and dimming via push button possible
- Additional functions can be set up using the optional remote control.
- Avoidance of standby losses of the lighting system in accordance with EnEV DIN V 18599-4
- Factory settings 10 min and 500 lux



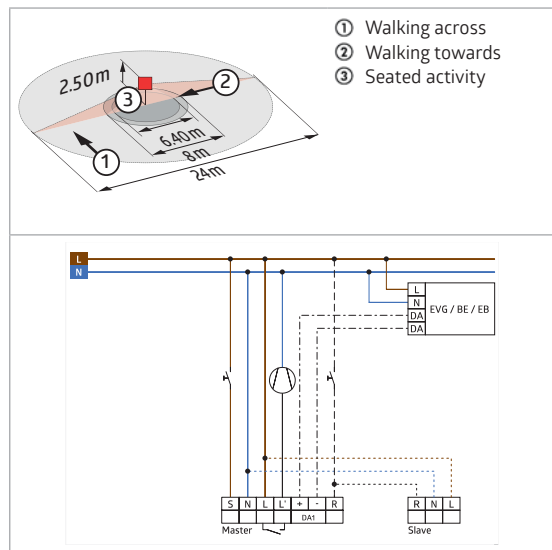
## Technical Data

- ⌚ 110 – 240 V AC 50 / 60 Hz
- 📏 Ø 80 × 85 mm
- 🔌 approx. 1 W
- 📐 vertical 360°
- 📏 max. Ø 10 m across; max. Ø 6 m towards; max. Ø 4 m seated
- 📏 79 m<sup>2</sup> / 2.5 m mounting height
- 📏 2 m / 5 m / 2.5 m
- 📏 IP20 / Class II
- 🌡️ -25 °C to +50 °C
- 📏 Polycarbonate, UV-resistant
- Channel 1 (lighting control)**
- 📏 up to 50 DALI / DSI-EB
- 🕒 1 min – 30 min
- 🕒 10 – 30 % / OFF / 5 min – 60 min / ∞
- ⚙️ 10 – 2000 Lux
- Channel 2 (HVAC or lighting control, potential-free (dry))**
- 📏 2300 W, cos φ = 1; 1150 VA, cos φ = 0.5; 300 W LED; max. inrush current I<sub>p</sub> (20 ms) = 165 A; max. inrush current I<sub>p</sub> (200 μs) = 800 A
- 📏 1x μ-contact, dry NO contact with tungsten pre-make contact
- 🕒 5 min – 120 min, Alarm pulse, Pulse
- 📏 Mixed light measuring

# Occupancy detectors DALI Compact

## Product and accessory

Description	Colour	Part number
PD4-M-DALI/DSI-1C-FC	white mat, similar to RAL9010	92488
PD4-M-DALI/DSI-1C-SM	white mat, similar to RAL9010	92489
IR-Adapter for Smartphones	black	92726
IR-PD-DALI-1C	-	92116
IR-PD-DALI-Mini	-	92112
Wire basket BSK (Ø 200 x 90 mm)	white	92199



## Product Information

- Occupancy detector with large detection area, daylight-dependent lighting control
- DALI / DSI interface for control of digital dimmable electronic ballasts as a group
- Additional switching channel for one of the following two functions:  
Cut-Off (complete ECG switch-off to avoid standby losses) or HVAC (for the energy-efficient control of heating, air-conditioning or ventilation systems or for displaying occupancy)
- Switching between DALI and DSI programming possible with DIP switch and remote control
- Orientation light function
- Relay with tungsten pre-make contact, optimised for LED loads
- Version as master device
- Extension of the detection area with slave devices possible
- Manual switching and dimming via push button possible
- Additional functions can be set up using the optional remote control.
- Avoidance of standby losses of the lighting system in accordance with EnEV DIN V 18599-4
- Factory settings 10 min and 500 lux

## Technical Data

- 110 – 240 V AC 50 / 60 Hz
- Ø 101 × 76 mm
- approx. 1 W
- vertical 360°
- max. Ø 24 m across; max. Ø 8 m towards; max. Ø 6.4 m seated
- 450 m<sup>2</sup> / 2.5 m mounting height
- 2 m / 10 m / 2.5 m
- IP20 / Class II
- 25 °C to +50 °C
- Polycarbonate, UV-resistant
- Channel 1 (lighting control)**
- up to 50 DALI / DSI-EB
- 1 min – 30 min
- 10 – 30 % / OFF / 5 min – 60 min / ∞
- 10 – 2000 Lux
- Channel 2 (HVAC or lighting control)**
- 2300 W, cos φ = 1; 1150 VA, cos φ = 0.5; 300 W LED;
- max. inrush current I<sub>p</sub> (20 ms) = 165 A; max. inrush current I<sub>p</sub> (200 μs) = 800 A
- 1x μ-contact, NO contact with tungsten pre-make contact
- 5 min – 120 min, Alarm pulse, Pulse
- Mixed light measuring



## Occupancy detectors DALI Compact

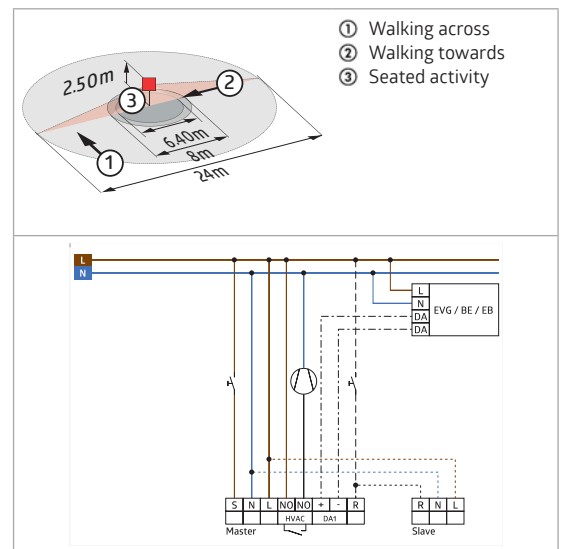
## Product and accessory

Description	Colour	Part number
PD4-M-DALI/DSI-HVAC-FC	white mat, similar to RAL9010	92699
IR-Adapter for Smartphones	black	92726
IR-PD-DALI-1C	-	92116
IR-PD-DALI-Mini	-	92112
Wire basket BSK (Ø 200 x 90 mm)	white	92199



## Product Information

- Occupancy detector with large detection area, daylight-dependent lighting control
- DALI / DSI interface for control of digital dimmable electronic ballasts as a group
- Switching between DALI and DSI programming possible with DIP switch and remote control
- Additional potential-free switching channel for one of the following two functions:  
Cut-Off (complete ECG switch-off to avoid standby losses) or HVAC (for the energy-efficient control of heating, air-conditioning or ventilation systems or for displaying occupancy).
- Alarm pulse: the detector triggers only when three movements are detected within 9 seconds
- Orientation light function
- Relay with tungsten pre-make contact, optimised for LED loads
- Version as master device
- Extension of the detection area with slave devices possible
- Manual switching and dimming via push button possible
- Additional functions can be set up using the optional remote control.
- Avoidance of standby losses of the lighting system in accordance with EnEV DIN V 18599-4
- Factory settings 10 min and 500 lux



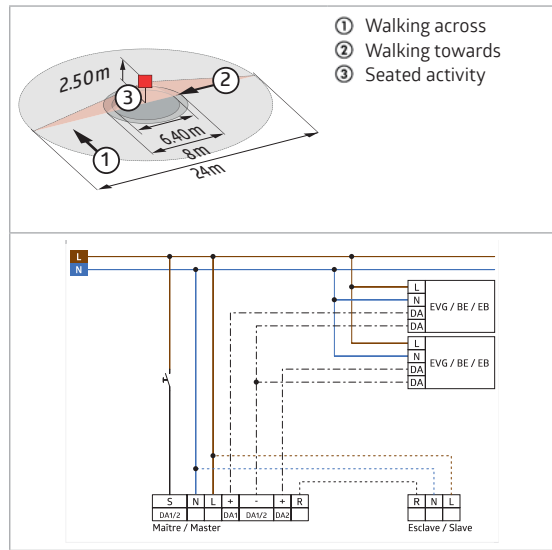
## Technical Data

- 110 – 240 V AC 50 / 60 Hz
- Ø 97 × 103 mm
- approx. 1 W
- vertical 360°
- max. Ø 24 m across; max. Ø 8 m towards; max. Ø 6.4 m seated
- 450 m<sup>2</sup> / 2.5 m mounting height
- 2 m / 5 m / 2.5 m
- IP20 / Class II
- 25 °C to +50 °C
- Polycarbonate, UV-resistant
- Channel 1 (lighting control)**
- up to 50 DALI / DSI-EB
- 1 min – 30 min
- 10 – 30 % / OFF / 5 min – 60 min / ∞
- 10 – 2000 Lux
- Channel 2 (HVAC or lighting control, potential-free (dry))**
- 2300 W, cos φ = 1; 1150 VA, cos φ = 0.5; 300 W LED;
- max. inrush current I<sub>p</sub> (20 ms) = 165 A; max. inrush current I<sub>p</sub> (200 μs) = 800 A
- 1x μ-contact, dry NO contact with tungsten pre-make contact
- 5 min – 120 min, Alarm pulse, Pulse
- Mixed light measuring

# Occupancy detectors DALI Compact

## Product and accessory

Description	Colour	Part number
PD4-M-DUO-DALI/DSI-FC	white mat, similar to RAL9010	92276
IR-Adapter for Smartphones	black	92726
IR-PD-DALI	-	92094
IR-PD-DALI-E	-	92122
IR-PD-DALI-Mini	-	92112
Wire basket BSK (Ø 200 x 90 mm)	white	92199



## Product Information

- Occupancy detector for two separate lighting groups, for daylight-dependent lighting control
- One common detection area
- Two independent, movable light sensors
- 2 DALI/DSI interfaces for control of digital dimmable electronic ballasts as a group
- Switching between DALI and DSI programming possible with DIP switch and remote control
- Version as master device
- Extension of the detection area with slave devices possible
- Additional functions can be set up using the optional remote control.
- Manual switching and dimming via push button possible
- Orientation light function

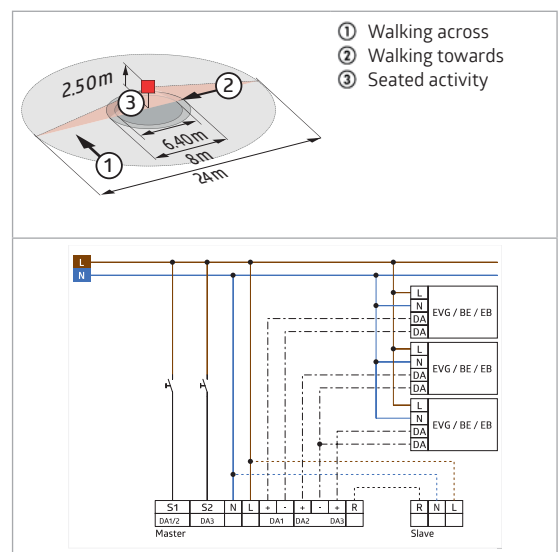
## Technical Data

- ⊙ 110 – 240 V AC 50 / 60 Hz
- ⊞ Ø 97 × 103 mm
- ⏻ approx. 1 W
- 📐 vertical 360°
- ⚠ max. Ø 24 m across; max. Ø 8 m towards; max. Ø 6.4 m seated
- 📏 450 m<sup>2</sup> / 2.5 m mounting height
- 📏 2 m / 10 m / 2.5 m
- 📦 IP20 / Class II
- 🌡 -25 °C to +50 °C
- 📦 Polycarbonate, UV-resistant
- Channel 1 and Channel 2 (lighting control)**
- 📡 up to 25 DALI / DSI-EB per channel
- 🕒 1 min – 30 min
- ⌚ 20 / 5 s – 60 min / ∞
- ⚙ 10 – 2000 Lux
- 🌞 Mixed light measuring

## Occupancy detectors DALI Compact

## Product and accessory

Description	Colour	Part number
PD4-M-TRIO-DALI/DSI-SM	white mat, similar to RAL9010	92750
PD4-M-TRIO-DALI/DSI-FC	white mat, similar to RAL9010	92755
IR-Adapter for Smartphones	black	92726
IR-PD4-TRIO-DALI	-	92104
Wire basket BSK (Ø 200 x 90 mm)	white	92199
Wire basket BSK (Ø 164 x 143 mm)	white	92467
Socket IP54 PD4-TRIO-SM	white	92386



## Product Information

- Occupancy detector for two lighting groups for daylight-dependent lighting regulation
- Control of up to 25 digital dimming electronic ballasts and control modules as a group per DALI output 1 and 2, and up to 10 for DALI output 3
- Two independent, movable light sensors
- One common detection area
- Switching between DALI and DSI possible with remote control
- Version as master device
- Extension of the detection area with slave devices possible
- Manual switching and dimming via push button possible
- Additional functions can be set up using the optional remote control.
- Orientation light function

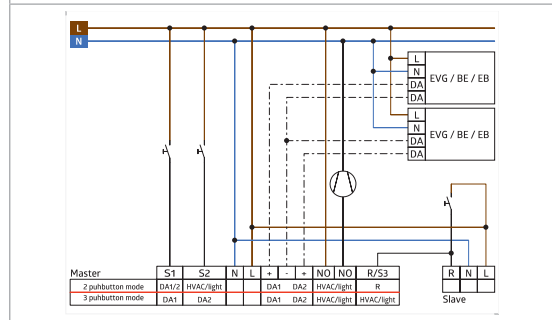
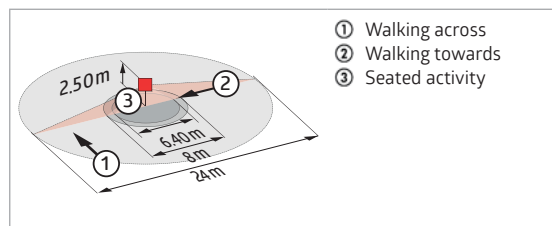
## Technical Data

- ⌚ 110 – 240 V AC 50 / 60 Hz
- ⏏ SM= Ø 124 × 85 mm  
FC= Ø 117 × 100 mm
- ⌚ approx. 2.2 W
- 📐 vertical 360°
- 📐 max. Ø 24 m across; max. Ø 8 m towards; max. Ø 6.4 m seated
- 📏 450 m<sup>2</sup> / 2.5 m mounting height
- 📏 2 m / 10 m / 2.5 m
- 📏 SM= IP20 / Class II  
FC= IP20 / Class II
- 🌡️ -25 °C to +50 °C
- 📦 Polycarbonate, UV-resistant
- Channel 1 and Channel 2 (lighting control)**
- 📡 up to 25 DALI / DSI-EB per channel
- 🌞 10 – 30 % / OFF / 1 min – 60 min / ∞
- Channel 3 (lighting control)**
- ⚡ Switching power: up to 10 DALI / DSI EB
- Channel 1 to channel 3**
- 🕒 1 min – 60 min
- ☀️ 40 – 1200 Lux
- 📏 Mixed light measuring

# Occupancy detectors DALI Compact

## Product and accessory

Description	Colour	Part number
PD4-M-TRIO-2DALI/DSI-1C-SM	white mat, similar to RAL9010	92751
PD4-M-TRIO-2DALI/DSI-1C-FC	white mat, similar to RAL9010	92756
IR-Adapter for Smartphones	black	92726
IR-PD4-TRIO-DALI	-	92104
Wire basket BSK (Ø 200 x 90 mm)	white	92199
Wire basket BSK (Ø 164 x 143 mm)	white	92467
Socket IP54 PD4-TRIO-SM	white	92386



## Product Information

- Occupancy detector for two separate lighting groups, for daylight-dependent lighting control
- One potential-free switching channel for control of equipment (HVAC) or lighting
- Two independent, movable light sensors
- One common detection area
- 2 DALI/DSI interfaces for control of digital dimmable electronic ballasts as a group
- Switching between DALI and DSI possible with remote control
- Orientation light function
- Relay with tungsten pre-make contact, optimised for LED loads
- Version as master device
- Extension of the detection area with slave devices possible
- Manual switching and dimming via push button possible
- Additional functions can be set up using the optional remote control.

## Technical Data

- 110 – 240 V AC 50 / 60 Hz
- SM= Ø 124 × 85 mm
- FC= Ø 117 × 100 mm
- approx. 2 W
- vertical 360°
- max. Ø 24 m across; max. Ø 8 m towards; max. Ø 6.4 m seated
- 450 m² / 2.5 m mounting height
- 2 m / 10 m / 2.5 m
- SM= IP20 / Class II
- FC= IP20 / Class II
- 25 °C to +50 °C
- Polycarbonate, UV-resistant
- Channel 1 and Channel 2 (lighting control)**
- up to 25 DALI / DSI-EB per channel
- 10 – 30 % / OFF / 1 min – 60 min / ∞
- Channel 3 (HVAC control or lighting control, potential-free (dry))**
- Switching power: 3000 W, cos φ = 1
- 1500 VA, cos φ = 0.5
- max. inrush current I<sub>p</sub> (20 ms) = 165 A
- max. inrush current I<sub>p</sub> (200 μs) = 800 A
- Type of contact: 1x μ-contact, dry NO contact with tungsten pre-make contact
- Channel 1 to channel 3**
- 1 min – 60 min
- 10 – 2000 Lux
- Mixed light measuring

## Occupancy detectors DALI Compact

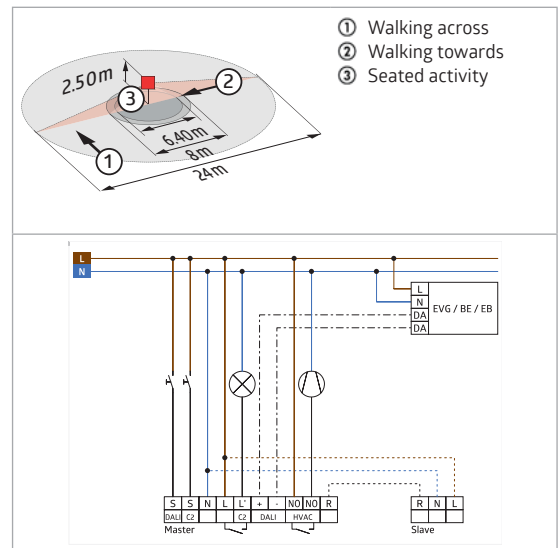
## Product and accessory

Description	Colour	Part number
PD4-M-TRIO-2R-1D-FC	white mat, similar to RAL9010	92790
IR-PD4-TRIO-2R1D	-	92473
Wire basket BSK (Ø 200 x 90 mm)	white	92199



## Product Information

- Occupancy detector with large detection area, daylight-dependent lighting control
- DALI / DSI interface for control of digital dimmable electronic ballasts as a group
- One channel for light switching
- One potential-free switching channel for control of equipment (HVAC) or lighting
- Two independent, movable light sensors
- Switching between DALI and DSI possible with remote control
- Version as master device
- Manual switching and dimming via push button possible
- Extension of the detection area with slave devices possible
- Orientation light function
- Additional functions can be set up using the optional remote control.



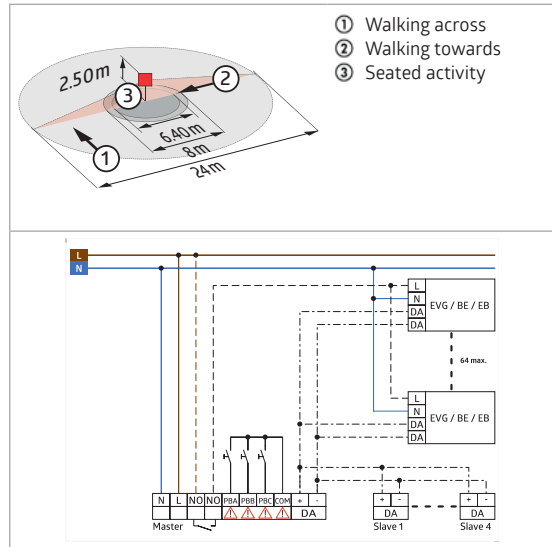
## Technical Data

- ⌚ 110 – 240 V AC 50 / 60 Hz
- ⏏ Ø 117 × 100 mm
- ⚡ < 1 W
- 📐 circular 360°
- 📏 max. Ø 24 m across; max. Ø 8 m towards; max. Ø 6.4 m seated
- 📏 450 m<sup>2</sup> / 2.5 m mounting height
- 📏 2 m / 10 m / 2.5 m
- 📏 IP20 / Class II
- 🌡 -25 °C to +50 °C
- 📏 Polycarbonate, UV-resistant
- Channel 1 (lighting control)**
- 📏 up to 25 DALI / DSI-EB
- 🕒 15 sec – 30 min
- 📏 10 – 30 % / OFF / 1 min – 60 min / ∞
- ⚙ 10 – 2000 Lux
- Channel 2 (lighting control)**
- 📏 2300 W, cos φ = 1
- 📏 1150 VA, cos φ = 0.5
- 📏 1x μ-contact, NO contact with tungsten pre-make contact
- 🕒 15 min – 30 min, semi-automatic, full automatic (in common with channel 1)
- Channel 3 (HVAC control or lighting control, potential-free (dry))**
- 📏 Switching power: 700 W, cos φ = 1
- 📏 350 VA, cos φ = 0.5
- 📏 Type of contact: μ-contact dry NO contact with tungsten pre-make contact
- 📏 Mixed light measuring

# Occupancy detectors DALI Compact

## Product and accessory

Description	Colour	Part number
PD4-M-DAA4G-FC	white mat, similar to RAL9010	92591
PD4-M-DAA4G-SM	white mat, similar to RAL9010	92743
IR-Adapter for Smartphones	black	92726



## Product Information

- Flexible DALI Compact solution designed for conference rooms, training rooms and classrooms
- High-sensitivity occupancy detector with the capability to address up to 64 DALI electronic ballasts (EB) automatically, with segmented control via 4 groups
- Quick commissioning and maintenance processes via Smartphone/Tablet App (Android, iOS) - No PC-Tool required
- 3 lighting zones:  
A for main lighting with segmented constant light regulation via 3 DALI groups and offset control,  
B for lectern or blackboard lighting via separate DALI group,  
C for lectern or blackboard lighting by integrated relay
- Powerful switching relay for different operating modes, e.g. Cut-off function for DALI ballasts, HVAC, blackboard illumination.
- Manual switching or dimming via conventional pushbuttons
- Detection area can be extended with up to four Slave devices of type PD4-S-DAA4G
- Complete range of functions can only be activated using the B.E.G. IR-Adapter or the BLE-IR-Adapter and a compatible Smartphone or Tablet (Android, iOS).
- Avoidance of standby losses of the lighting system in accordance with EnEV DIN V 18599-4

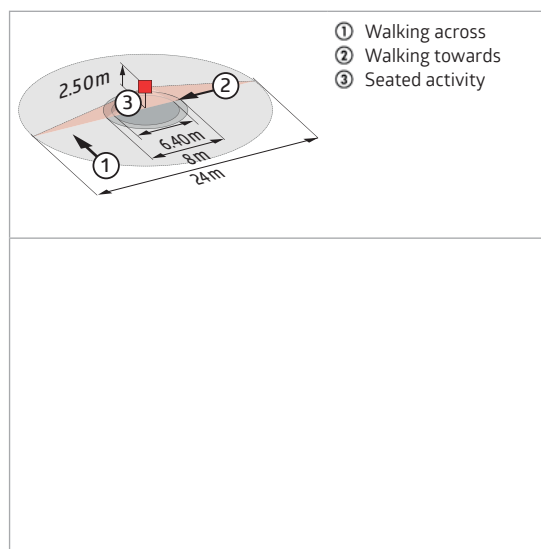
## Technical Data

- 110 – 240 V AC 50 / 60 Hz
- SM= Ø 124 × 85 mm
- FC= Ø 117 × 100 mm
- approx. 0.4 W
- vertical 360°
- max. Ø 24 m across; max. Ø 8 m towards; max. Ø 6.4 m seated
- 450 m<sup>2</sup> / 2.5 m mounting height
- 2 m / 10 m / 2.5 m
- SM= IP20 / Class II
- FC= IP20 / Class II
- 25 °C to +50 °C
- Polycarbonate, UV-resistant
- DALI Control**
- up to 64 DALI / DSI-EB, can be grouped into 3 DALI groups plus blackboard lighting or HVAC control
- 1 min – 150 min (Light zones)
- 10 – 30 % / OFF / 5 min – 60 min / ∞
- 10 – 2000 Lux
- Relay (dry NO)**
- 2300 W, cos φ = 1; 1150 VA, cos φ = 0.5; 300 W LED
- 5 s – 120 min (HVAC)
- Mixed light measuring

## Occupancy detectors DALI Compact

## Product and accessory

Description	Colour	Part number
PD4-S-DAA4G-FC	white mat, similar to RAL9010	92721
PD4-S-DAA4G-SM	white mat, similar to RAL9010	92759
Wire basket BSK (Ø 200 x 90 mm)	white	92199



## Product Information

- DALI bus operated slave device
- For extension of the detection area of a master device PD4-M-DAA4G / PD4-M-HCL
- Trigger pulse to master device upon detected movement independent of the ambient light level
- Automatic test mode via master device
- Plug & Play – no parameterisation required
- Easy to mount
- False ceiling or surface mount version available

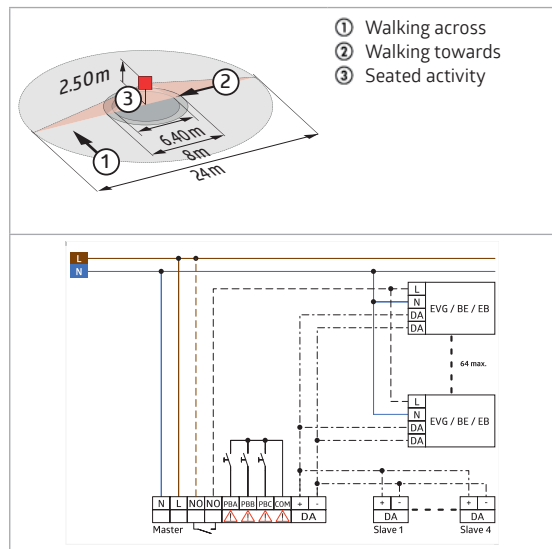
## Technical Data

- ⊖ 22 V DC via DALI Bus
- ↙ FC= Ø 98 × 96 mm  
SM= Ø 103 × 76 mm
- ↻ vertical 360°
- △ max. Ø 24 m across; max. Ø 8 m towards; max. Ø 6.4 m seated
- ⊞ 450 m<sup>2</sup> / 2.5 m mounting height  
2 m / 10 m / 2.5 m
- IP FC= IP20 / Class II  
SM= IP54 / Class II
- ⊖ -25 °C to +50 °C
- ☐ Polycarbonate, UV-resistant  
up to 4 slave devices in combination with one PD4-M-DAA4G
- ⏱ Pulse interval: 30 sec (in test mode 2 sec during 3 min)

# Occupancy detectors DALI Compact

## Product and accessory

Description	Colour	Part number
PD4-M-HCL-FC	white, similar to RAL9010	93006
PD4-M-HCL-SM	white, similar to RAL9010	93007
IR-Adapter for Smartphones	black	92726
Wire basket BSK (Ø 200 x 90 mm)	white	92199



## Product Information

- Bidirectional occupancy detector with integrated DALI controller for an energy-efficient and biologically effective light control (Human Centric Lighting)
- Very sensitive occupancy detector with the ability to address up to 64 DALI-DT8 Tunable White luminaires approved by B.E.G. and to control them in groups
- The integrated real time clock regulates automatically the colour temperature and the brightness level in such a way that the human circadian rhythm is supported
- 3 light zones:
  - A for the main light with segmented HCL control via 3 groups and offset control,
  - B for desk or accentuated illumination via a separate DALI group,
  - C for desk or accentuated illumination via integrated relay
- Pure Colour: An outdoor colour temperature light sensor, available as an accessory, can be used to measure / transmit the current daylight value.
- Manual switching or dimming via conventional pushbuttons
- Powerful switching relay for different operating modes, e.g. Cut-off function for DALI ballasts, HVAC, blackboard illumination.
- Quick commissioning and maintenance processes via Smartphone/Tablet App (Android, iOS) - No PC-Tool required
- Detection area can be extended with up to four Slave devices of type PD4-S-DAA4G
- Complete range of functions can only be activated using the B.E.G. IR-Adapter or the BLE-IR-Adapter and a compatible Smartphone or Tablet (Android, iOS).
- Avoidance of standby losses of the lighting system in accordance with EnEV DIN V 18599-4

## Technical Data

- ⌚ 110 – 240 V AC 50 / 60 Hz
- ⌚ FC= Ø 117 x 100 mm
- ⌚ SM= Ø 124 x 85 mm
- ⌚ approx. 0.3 W
- ⌚ circular 360°
- ⌚ max. Ø 24 m across; max. Ø 8 m towards; max. Ø 6.4 m seated
- ⌚ 450 m² / 2.5 m mounting height
- ⌚ 2 m / 10 m / 2.5 m
- ⌚ FC= IP20 / Class II
- ⌚ SM= IP20 / Class II
- ⌚ -25 °C to +50 °C
- ⌚ Polycarbonate, UV-resistant
- DALI Control**
- ⌚ up to 64 DALI ballasts, can be grouped into 3 DALI groups plus blackboard lighting or HVAC control, tunable white DT8 controller
- ⌚ 1 min – 150 min (Light zones)
- ⌚ 10 – 2500 Lux
- Relay (dry NO)**
- ⌚ 2300 W, cos φ = 1; 1150 VA, cos φ = 0.5; 300 W LED
- ⌚ 1x μ-contact, NO contact
- ⌚ 5 s – 120 min (HVAC)



# 2

## The intelligent and economical multiroom solution – DALI LINK

### Simple and expandable lighting control

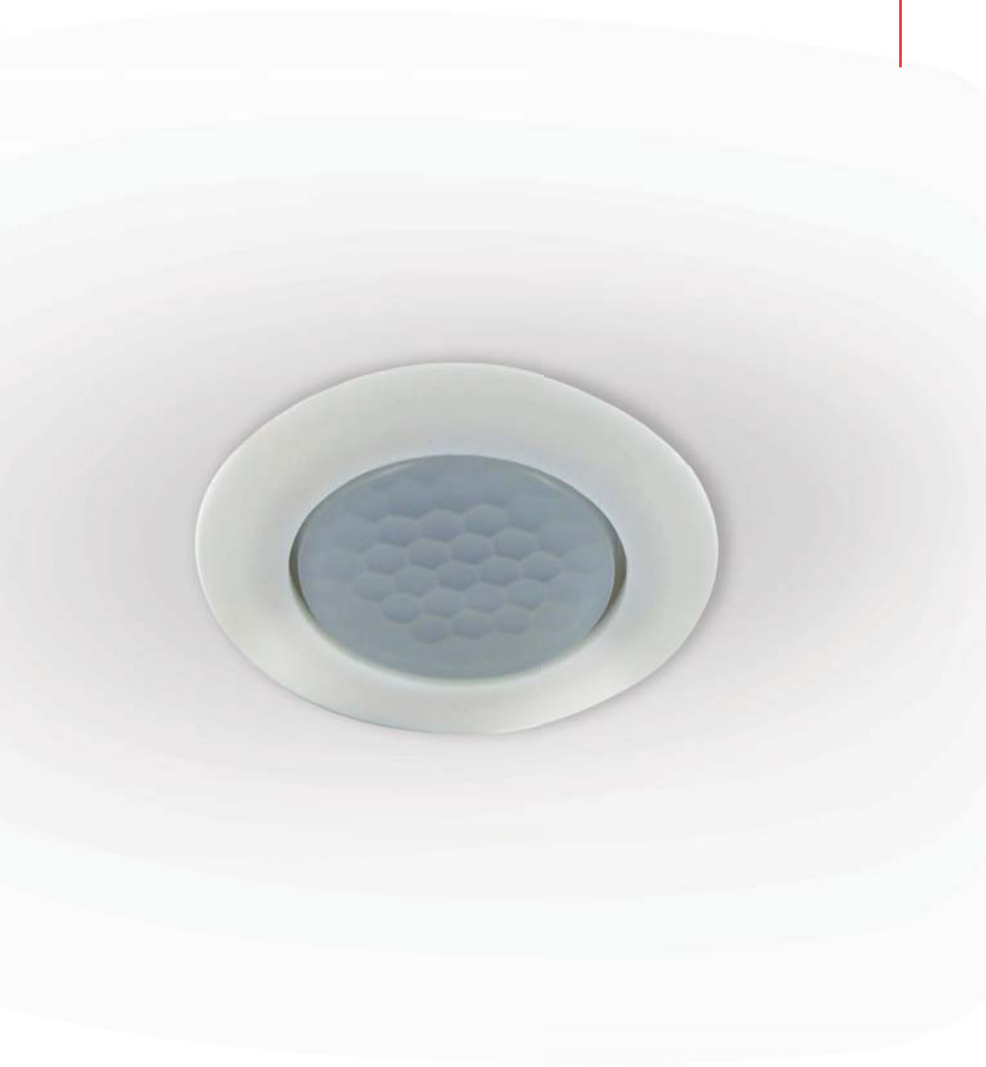
With three components, user-friendly automation can be implemented in the room – quickly and easily addressed via Bluetooth from any smartphone.

The DALI LINK starter set contains all the components you need to implement lighting automation for your DALI luminaires:

The super-flat, high-performance PD11 multisensor reliably detects brightness and movement in the room and thus enables intelligent lighting control.

The innovative push-button interface is not only used to override the automatic control but also houses a Bluetooth interface. Via this interface, the room system can be controlled via smartphone or tablet.

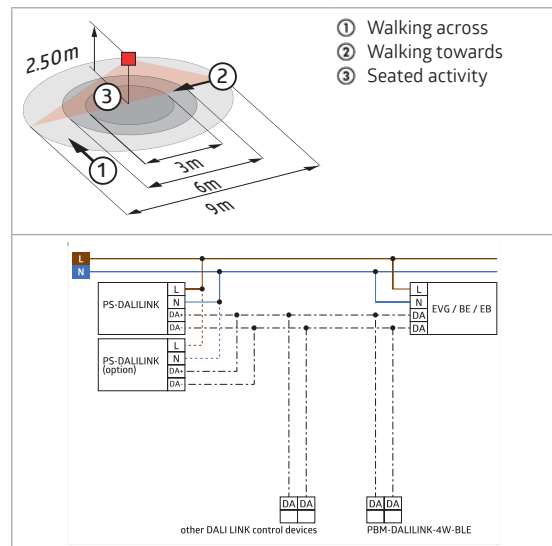
The power supply enables the system to be operated.



## DALI LINK

## Product and accessory

Description	Colour	Part number
PD11-DALILINK-FLAT-FC	white mat, similar to RAL9010	93068
PS-DALILINK-FC	white	92846
PS-DALILINK-USB-REG	white	93189
PBM-DALILINK-4W-BLE	transparent	92732
IR-PD-DALI-Mini	-	92112
In-wall mounting set / PD11	white	92833
Cover ring PD11 Ø 52 mm	black glossy, similar to RAL9011	92537
Cover ring PD11 Ø 100 mm	white mat, similar to RAL9011	92692
Square design frame PD11-FC	white mat, similar to RAL9010	92994



## Product Information

- Low profile DALI multisensor (visible height: 0,85 mm)
- Seamless integration in DALI lighting control B.E.G. LUXOMAT®net DALI LINK as modular multimaster option for
- Multimaster-capable with slave function
- Measuring of mixed light thanks to internal light sensor
- Semi-automatic, full-automatic or twilight switch mode
- Integrated daylight harvesting circuit (or switch output)
- Guided Light, Soft-Start PLUS, Orientation light PLUS
- Works out-of-the box for easy installation check
- Full range of functions can only be activated with other products of the product group B.E.G. LUXOMAT®net DALI LINK
- Spring clips for quick and easy installation in suspended ceilings
- Includes blinds and clamp ring for installation in lights
- With accessories for flush-mounting in ceiling and exposed concrete

## Technical Data

- ⌚ 9.5 – 22.5 V DC (typical 16 V) via DALI Bus
- 📏 Ø 52 × 48 mm
- ⚙️ Settings: PBM-DALILINK-4W-BLE + Smartphone with DALI LINK App (iOS / Android)
- Ⓜ️ 4 mA
- ⚡ 0.1 W
- 📐 vertical 360°
- 📏 max. Ø 9 m across; max. Ø 6 m towards; max. Ø 3 m seated
- 📏 64 m² / 2.5 m mounting height
- 📏 2 m / 5 m / 2.5 m
- 📏 IP20 / Class II
- 🌡️ -25 °C to +50 °C
- 📏 Polycarbonate, UV-resistant
- 📏 Connections and wires: for solid conductors 0.5 – 2.5 mm²
- 🕒 1 sec – 120 min
- 🔌 5 – 100 % / 1 min – 120 min / ∞
- 🌞 10 – 2500 Lux

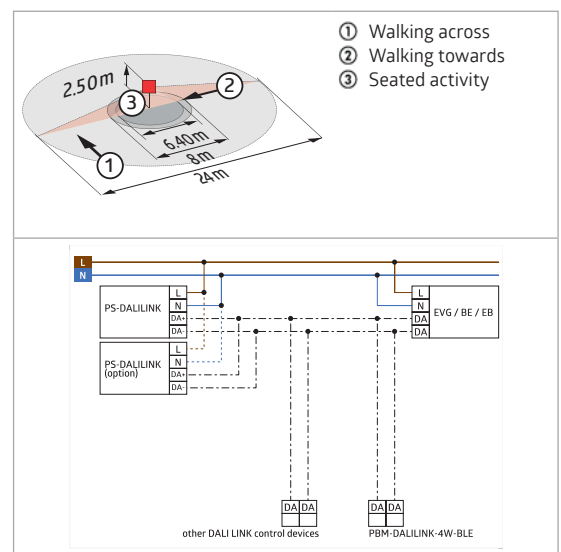
## Product and accessory

Description	Colour	Part number
PD4N-DALILINK	white mat, similar to RAL9010	93377
PS-DALILINK-FC	white	92846
PS-DALILINK-USB-REG	white	93189
PBM-DALILINK-4W-BLE	transparent	92732
IR-PD-DALI-Mini	-	92112
Wire basket BSK (Ø 200 x 90 mm)	white	92199
SM mounting socket set IP54 PD2N- / PD4N-FM	white	93307



## Product Information

- Wide motion detection range DALI multisensor
- Seamless integration in DALI lighting control B.E.G. LUXOMAT<sup>net</sup> DALI LINK as modular multimaster option for
- Multimaster-capable with slave function
- Mixed light measurement with internal and external light sensor
- Semi-automatic, full-automatic or twilight switch mode
- Integrated daylight harvesting circuit (or switch output)
- Guided Light, Soft-Start PLUS, Orientation light PLUS
- Works out-of-the box for easy installation check
- Full range of functions can only be activated with other products of the product group B.E.G. LUXOMAT<sup>net</sup> DALI LINK
- Detection area can be restricted with blinds



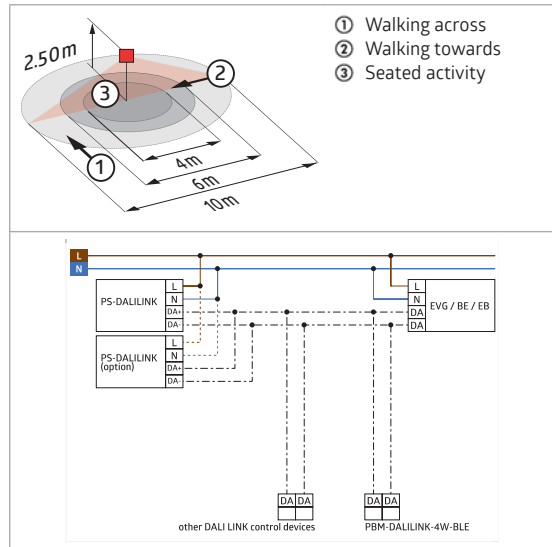
## Technical Data

- ⌚ 9.5 – 22.5 V DC (typical 16 V) via DALI Bus
- 📏 Ø 106 × 68 mm
- ⚙️ Settings: PBM-DALILINK-4W-BLE + Smartphone with DALI LINK App (iOS / Android)
- Ⓜ️ 7 mA
- 📐 vertical 360°
- 📐 max. Ø 24 m across; max. Ø 8 m towards; max. Ø 6.4 m seated
- 📏 450 m<sup>2</sup> / 2.5 m mounting height
- 📏 2 m / 10 m / 2.5 m
- 📏 IP20 / Class II
- 🌡️ -25 °C to +55 °C
- 📏 Polycarbonate, UV-resistant
- 🕒 1 sec – 120 min
- 📏 5 – 100 % / 1 min – 120 min / ∞
- 📏 10 – 2500 Lux

DALI LINK

Product and accessory

Description	Colour	Part number
PICO-DALILINK-FC	white, similar to RAL9010	93908
PS-DALILINK-FC	white	92846
PS-DALILINK-USB-REG	white	93189
PBM-DALILINK-4W-BLE	transparent	92732
IR-PD-DALI-Mini	-	92112



Product Information

- Mini DALI multisensor with only 11mm installation depth for installation in luminaires
- Seamless integration in DALI lighting control B.E.G. LUXOMAT<sup>®</sup>net DALI LINK as modular multimaster option for
- Multimaster-capable with slave function
- Measuring of mixed light thanks to internal light sensor
- Semi-automatic, full-automatic or twilight switch mode
- Integrated daylight harvesting circuit (or switch output)
- Guided Light, Soft-Start PLUS, Orientation light PLUS
- Works out-of-the box for easy installation check
- Full range of functions can only be activated with other products of the product group B.E.G. LUXOMAT<sup>®</sup>net DALI LINK
- Detection area can be restricted with blinds

Technical Data

- ⌚ 9.5 – 22.5 V DC (typical 16 V) via DALI Bus
- 📏 Ø 33 × 27 mm
- ⚙️ Settings: PBM-DALILINK-4W-BLE + Smartphone with DALI LINK App (iOS / Android)
- ⓐ 2 mA
- 📐 vertical 360°
- 📐 max. Ø 10 m across; max. Ø 6 m towards; max. Ø 4 m seated
- 📐 79 m<sup>2</sup> / 2.5 m mounting height
- 📐 2 m / 3 m / 2.5 m
- 📐 IP20 / Class II
- 🌡️ -25 °C to +55 °C
- 📦 Polycarbonate, UV-resistant
- ⚙️ 10 – 2500 Lux

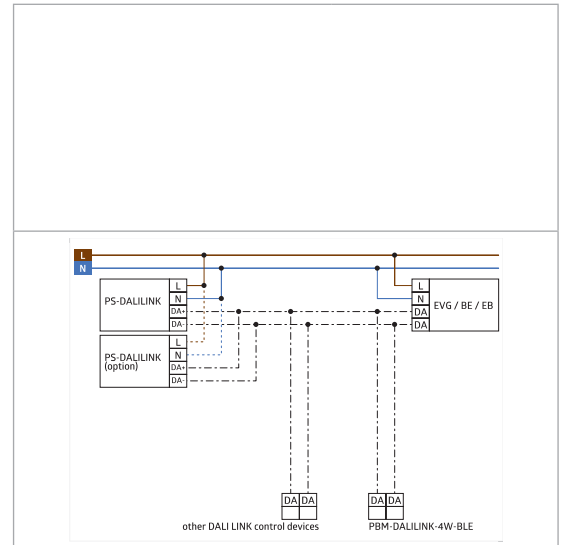
## Product and accessory

Description	Colour	Part number
PBM-DALILINK-4W-BLE	transparent	92732
PS-DALILINK-FC	white	92846
PS-DALILINK-USB-REG	white	93189



## Product Information

- DALI pushbutton module with 4 binary inputs and integrated Bluetooth gateway for hidden mounting behind flush mount switches.
- Parameterisation of the DALI LINK solution via Bluetooth with a smartphone and the B.E.G. BLE App.
- 4 inputs for conventional push buttons, freely configurable
- Seamless integration in DALI lighting control B.E.G. LUXOMAT<sup>net</sup> DALI LINK as modular multimaster option for
- Operating modes: Standard, staircase or scene mode
- Integrated buzzer to determine location of installed device
- Full range of functions can only be activated with other products of the product group B.E.G. LUXOMAT<sup>net</sup> DALI LINK



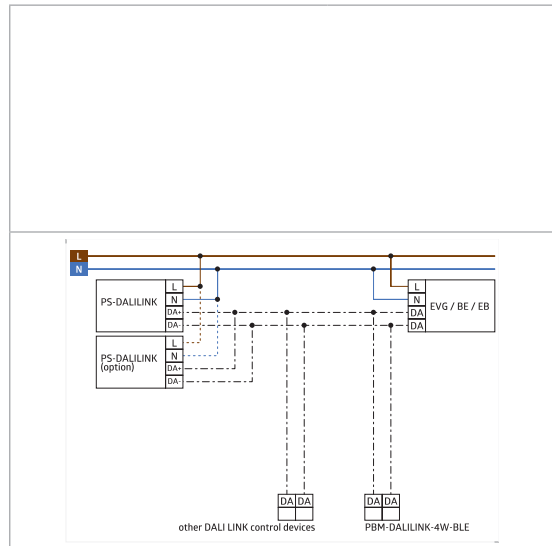
## Technical Data

- ⌚ 16 – 22.5 V DC (typical 16 V) via DALI Bus
- 📏 38 × 38 × 14 mm
- ⚙️ Settings: Smartphone with DALI LINK App (iOS / Android)
- Ⓜ️ 7 mA
- 📦 IP20 / Class II
- 🌡️ -25 °C to +50 °C
- 📦 Polycarbonate
- 📏 max. 50 cm
- 🕒 1 min – 150 min (staircase mode only)

DALI LINK

Product and accessory

Description	Colour	Part number
PS-DALILINK-FC	white	92846



Product Information

- DALI power supply for the B.E.G. DALI LINK multi room solution for installation in suspended ceilings.
- Parameterisation of the DALI LINK solution via Bluetooth with a smartphone and the B.E.G. BLE App.
- For example, 25 DALI luminaires and 6 DALI LINK control devices (multi-sensors or push-button interfaces) can be connected to the power supply.
- It is possible to operate a maximum of one additional DALI LINK power supply unit in parallel, doubling the number of DALI devices in the DALI LINK system (50 DALI luminaires / 12 DALI LINK control units).
- Seamless integration in DALI lighting control B.E.G. LUXOMAT<sup>®</sup>net DALI LINK as modular multimaster option for
- Integrated temperature monitoring and short-circuit detection
- Integrated LED for visualisation of operating information

Technical Data

- ⌚ 110 – 277 V AC 50 / 60 Hz
- 📏 240 × 26 × 26 mm
- 🔌 DALI – typical 16 V DC
- ⚡ 3.3 W
- 🛡️ IP20 / Class II
- 🌡️ -5 °C to +45 °C
- 📦 Polycarbonate + ABS mixture
- 🔗 Connections and wires: for solid conductors 0.25 – 2.5 mm<sup>2</sup>
- ⚡ 100 mA
- ⚡ 120 mA

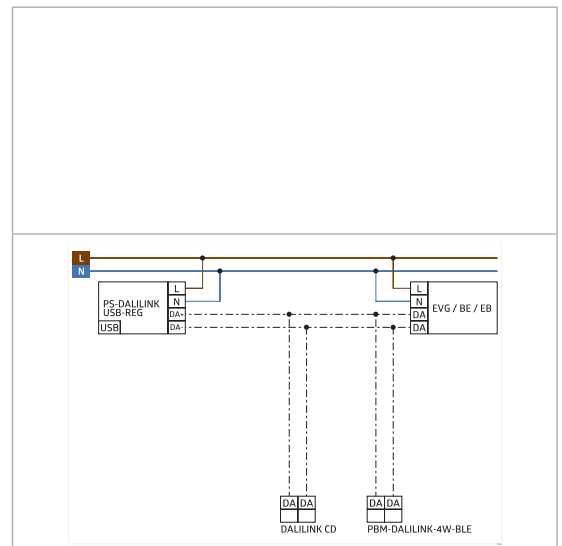
Product and accessory

Description	Colour	Part number
PS-DALILINK-USB-REG	white	93189



Product Information

- DALI power supply with integrated USB interface for DIN-rail mounting
- For example, 45 DALI luminaires and 10 DALI LINK control devices (multi-sensors or push-button interfaces) can be connected to the power supply.
- Integrated application controller for addressing up to 64 DALI components
- Seamless integration in B.E.G. LUXOMAT®net DALISYS
- Update function via integrated keypad and USB interface
- Integrated LEDs for visualisation of operating information
- Full range of functions can only be activated with other products of the product group B.E.G. LUXOMAT®net DALI LINK



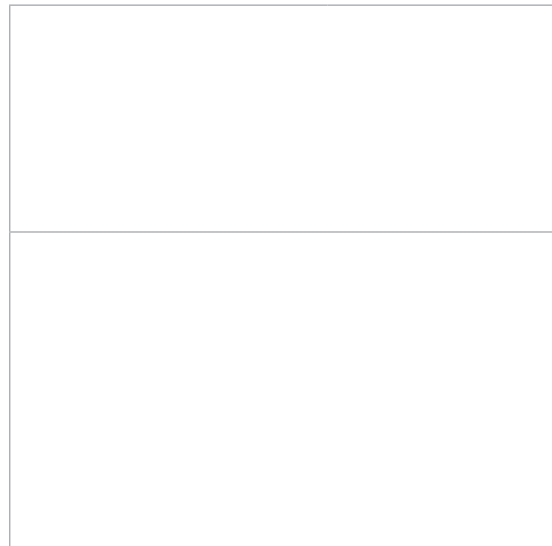
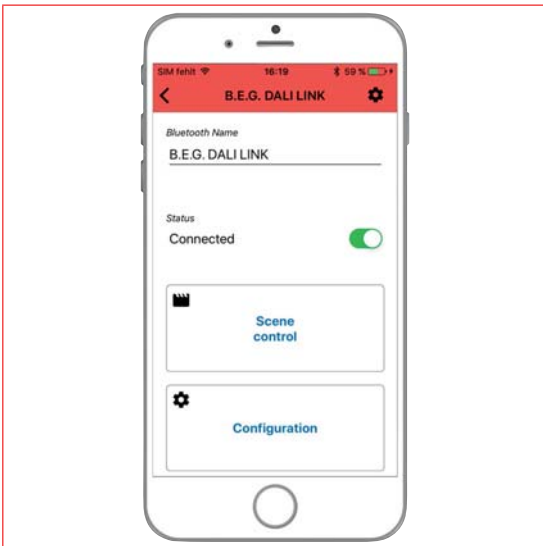
Technical Data

- 230 V AC -15%/+10% 50 / 60 Hz
- (4 TE) 90 × 72 × 64 mm
- Settings: with Firmware update function button, B.E.G. PC Tools
- 16 V DC
- 6 W
- IP20 / Class II
- +5 °C to +45 °C
- Polyamide, UV-resistant
- Connections and wires: USB
- 210 mA

DALI LINK

Product and accessory

Description	Colour	Part number
SW-DALILINK-BLE-APP		92847



Product Information

- Smartphone App for commissioning and/or operating the B.E.G. LUXOMATnet DALI LINK multi room lighting control solution
- 2 software versions for iOS and Android
- Available for free in the corresponding app store (search string „B.E.G. DALI LINK“)
- App uses Bluetooth technology
- QR-Code authorisation mechanism for commissioning process
- Create and edit up to 16 scenes
- Quick localisation of DALI devices with grouping wizard
- Supports addressing and parameterisation of B.E.G. DALI LINK multi-sensors, B.E.G. DALI LINK push button modules, B.E.G. DALI LINK relay modules and established DALI control gears of any manufacturer
- All device parameters can be copied and pasted to other devices
- Multi-lingual user interface

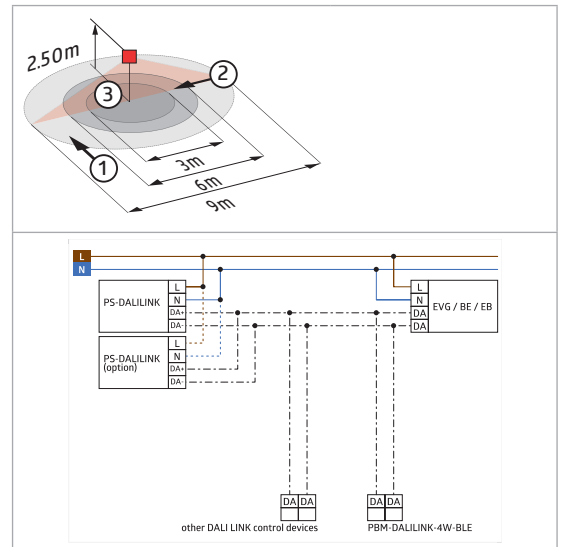
Technical Data

Operating system: Android >= V4.1 / iOS >= 11.2.6



Product and accessory

Description	Colour	Part number
STARTERSET-DALILINK-SMALL-OFFICE		93840
PS-DALILINK-FC	white	92846
PD11-DALILINK-FLAT-FC	white mat, similar to RAL9010	93068
PBM-DALILINK-4W-BLE	transparent	92732



Product Information

- DALI LINK Multi Room Solution - Starter Set
- DALI pushbutton module with 4 binary inputs and integrated Bluetooth gateway for hidden mounting behind flush mount switches.
- Particularly flat, addressable DALI multi sensor with a visible height of only 0.85 mm and with integrated DALI application controller.
- DALI power supply for the B.E.G. DALI LINK multi room solution for installation in suspended ceilings.

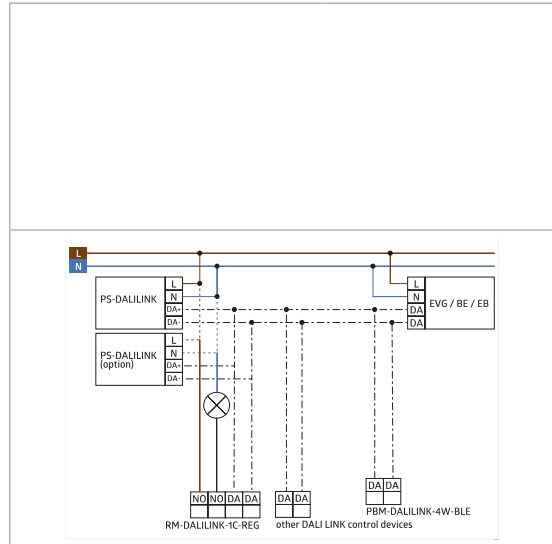
Technical Data

- ⌚ 110 – 277 V AC  
(in translation) PS-DALILINK-FC, PBM-DALILINK-4W-BLE, PD11-DALILINK-FLAT

DALI LINK

Product and accessory

Description	Colour	Part number
RM-DALILINK-1C-REG	white	93807



Product Information

- DIN-rail DALI relay module with 1 switching channel
- High-output and potential-free contact for loads with high inrush current
- Integrated application controller with different operating modes
- Operating modes: Standard, Cut-off, HVAC, Impulse, Alarm
- DIP- and HEX-switch for quick commissioning with basic functionality
- Full range of functions can only be activated with other products of the product group B.E.G. LUXOMAT<sup>®</sup>net DALI LINK

Technical Data

- ⌚ 9.5 – 22.5 V DC (typical 16 V) via DALI Bus
- 📏 (1 TE) 85 × 18 × 63 mm
- ⚙️ Settings: PBM-DALILINK-4W-BLE + Smartphone with DALI LINK App (iOS / Android)
- Ⓜ 10 mA
- 📦 IP20 / Class II
- 🌡 -25 °C to +50 °C
- 📦 Polycarbonate, UV-resistant
- Relay**
- ⚡ 3000 W, cos φ = 1; 1500 VA, cos φ = 0.5
- ⌚ μ-contact, NO contact
- 🕒 1 min – 150 min (Cut-off and HVAC mode only)
- 🕒 1 min – 150 min (HVAC mode only)

# DALISYS – Intelligent Lighting Control and more

## Networkable, modular multimaster concept

DALISYS is an innovative bus system for lighting control based on DALI, comparable in flexibility and functionality with KNX. It combines luminaire and emergency luminaire management, visualisation, blind control and HVAC functions on a single platform. Our large range of DALISYS occupancy detectors offers the right detector for applications in all types of buildings, from single rooms to high-bay warehouses. DALISYS is open to other building automation systems via BACnet/IP.

The distributed intelligence. While other systems often use simple sensors needing further controllers, the B.E.G. multi-master sensors can control DALI luminaires and other actuators thanks to their own intelligence. The decentralised control of DALISYS improves system stability and simplifies configuration considerably. The integrated remote access enables cost-effective maintenance and, if required, new functions can be implemented by means of software updates.

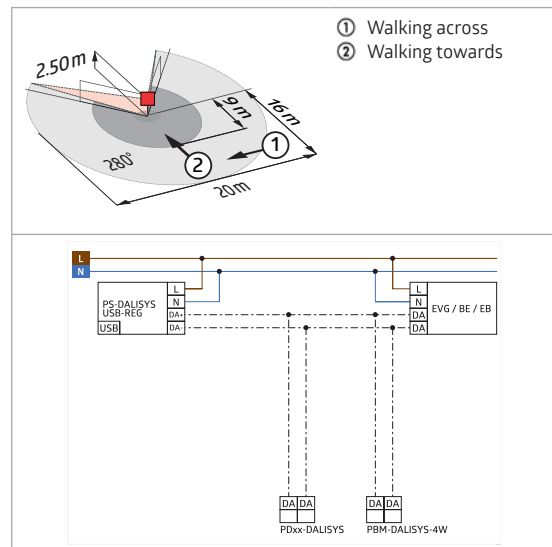
B.E.G.'s project department and its experienced DALISYS integration service offer assistance and support from the very first idea through the planning process to commissioning and final acceptance on site.



## DALISYS

## Product and accessory

Description	Colour	Part number
LC-plus-DALISYS 280	white mat, similar to RAL9010	93308
PS-DALISYS-USB-REG	white	92843
ROUTER-DALISYS-REG	white	92850
PBM-DALISYS-4W	white	92842



## Product Information

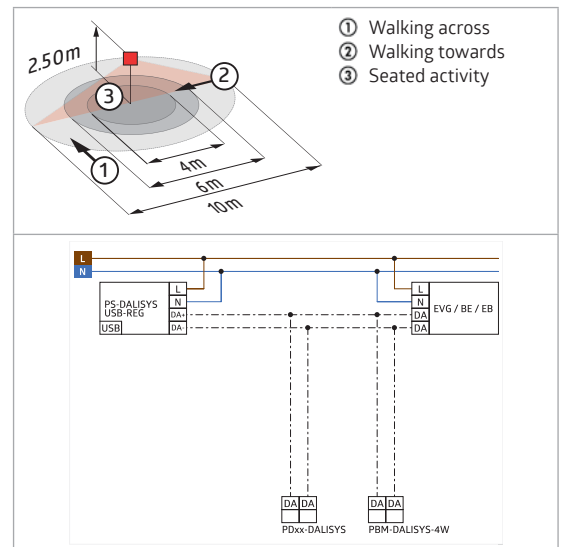
- Wide motion detection range DALI multisensor for wall or outside corner mounting
- Seamless integration in B.E.G. LUXOMAT<sup>®</sup>net DALISYS
- Multimaster-capable with slave function
- Semi-automatic, full-automatic or twilight switch mode
- Integrated daylight harvesting circuit (or switch output)
- Guided Light, Soft-Start PLUS, Orientation light PLUS
- DIP- and HEX-switch for quick commissioning with basic functionality
- Works out-of-the box for easy installation check
- Full range of functions can only be activated with other products of the product group B.E.G. LUXOMAT<sup>®</sup>net DALISYS

## Technical Data

- ⌚ 10 – 22 V DC via DALI Bus
- 📏 110 × 68 × 78 mm
- ⚙️ Settings: B.E.G. PC Tools, B.E.G. DALISYS router
- Ⓜ️ 7 mA
- 📐 horizontal 280°
- 📏 max. 16 m across; max. 9 m towards
- 📏 391 m<sup>2</sup> / 2.5 m mounting height
- 📏 2 m / 3 m / 2.5 m
- 📦 IP54 / Class II
- 🌡️ -25 °C to +50 °C
- 📦 Polycarbonate, UV-resistant
- 🕒 1 sec – 2 h
- 🕒 5 – 100 % / 1 s – 120 min
- 🌞 10 – 2500 Lux

## Product and accessory

Description	Colour	Part number
PD2N-DALISYS-FM	white	93368
PD2N-DALISYS-FC	white	93369
Wire basket BSK (Ø 200 x 90 mm)	white	92199
SM mounting socket set IP54 PD2N- / PD4N-FM	white	93307



## Product Information

- Wide motion detection range DALI multisensor
- Powered via DALI bus
- Seamless integration in B.E.G. LUXOMAT<sup>net</sup> DALISYS
- Bright LED indication for commissioning
- Multimaster-capable with slave function
- Mixed light measurement with internal and external light sensor
- Semi-automatic, full-automatic or twilight switch mode
- Integrated daylight harvesting circuit (or switch output)
- Guided Light, Soft-Start PLUS, Orientation light PLUS
- Works out-of-the box for easy installation check
- Full range of functions can only be activated with other products of the product group B.E.G. LUXOMAT<sup>net</sup> DALISYS

## Technical Data

- ⌚ 10 – 22 V DC via DALI Bus
- ⊘ 106 × 42 mm
- ⊘ 83 × 55 mm
- ⚙ Settings: B.E.G. PC Tools, B.E.G. DALISYS router
- ⓐ 3 mA
- 📐 vertical 360°
- ⚠ max. Ø 10 m across; max. Ø 6 m towards; max. Ø 4 m seated
- 📏 79 m<sup>2</sup> / 2.5 m mounting height
- 📏 2 m / 5 m / 2.5 m
- 🛡 IP20 / Class II
- 🌡 -25 °C to +55 °C
- 📦 Polycarbonate, UV-resistant
- 🕒 1 sec – 120 min
- 🌞 5 – 100 % / 1 min – 120 min / ∞
- ⚙ 10 – 2500 Lux

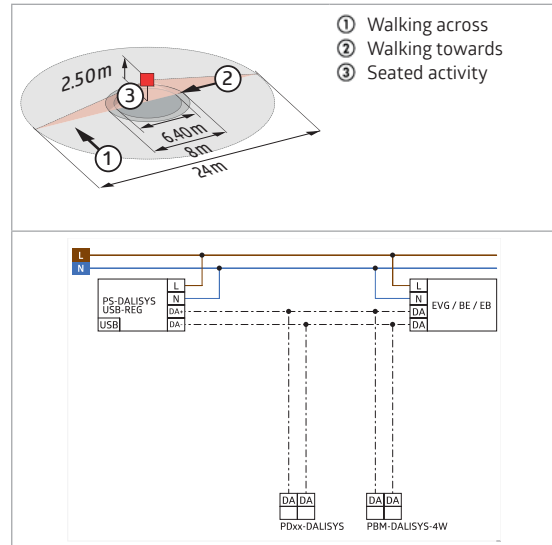
## Product and accessory

Description	Colour	Part number
PD4N-DALISYS	white mat, similar to RAL9010	93340
Wire basket BSK (Ø 200 x 90 mm)	white	92199
SM mounting socket set IP54 PD2N- / PD4N-FM	white	93307



## Product Information

- Wide motion detection range DALI multisensor
- Powered via DALI bus
- Seamless integration in B.E.G. LUXOMAT<sup>net</sup> DALISYS
- Bright LED indication for commissioning
- Multimaster-capable with slave function
- Mixed light measurement with internal and external light sensor
- Semi-automatic, full-automatic or twilight switch mode
- Integrated daylight harvesting circuit (or switch output)
- Guided Light, Soft-Start PLUS, Orientation light PLUS
- Works out-of-the box for easy installation check
- Full range of functions can only be activated with other products of the product group B.E.G. LUXOMAT<sup>net</sup> DALISYS
- Suitable for mounting in false ceilings and flush-mounting
- Accessory for surface mounting available

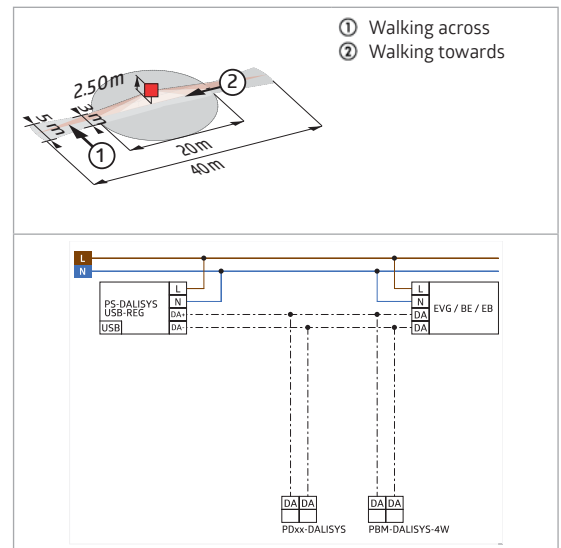


## Technical Data

- ⌚ 10 – 22 V DC via DALI Bus
- ⏏ Ø 106 × 68 mm
- ⚙ Settings: B.E.G. DALISYS ROUTER / B.E.G. DALISYS PC-Tools
- ⓐ 7 mA
- 📐 vertical 360°
- ⚠ max. Ø 24 m across; max. Ø 8 m towards; max. Ø 6.4 m seated
- 📏 450 m<sup>2</sup> / 2.5 m mounting height
- 📏 2 m / 10 m / 2.5 m
- 📏 IP20 / Class II
- 🌡 -25 °C to +55 °C
- 📦 Polycarbonate, UV-resistant
- 🕒 1 sec – 120 min
- 🌞 5 – 100 % / 1 min – 120 min / ∞
- ⚙ 10 – 2500 Lux
- Mixed light measuring

## Product and accessory

Description	Colour	Part number
PD4-DALISYS-C-FC	white mat, similar to RAL9010	93378
PD4-DALISYS-C-SM	white mat, similar to RAL9010	93370
Wire basket BSK (Ø 200 x 90 mm)	white	92199



## Product Information

- Wide motion detection range DALI multisensor designed for corridors
- Seamless integration in B.E.G. LUXOMAT<sup>®</sup>net DALISYS
- Multimaster-capable with slave function
- Bright LED indication for commissioning
- Semi-automatic, full-automatic or twilight switch mode
- Integrated daylight harvesting circuit (or switch output)
- Guided Light, Soft-Start PLUS, Orientation light PLUS
- DIP- and HEX-switch for quick commissioning with basic functionality
- Works out-of-the box for easy installation check
- Full range of functions can only be activated with other products of the product group B.E.G. LUXOMAT<sup>®</sup>net DALISYS
- There are markings for adjusting the detector

## Technical Data

- ⊖ 10 – 22 V DC via DALI Bus
- SM= Ø 98 × 96 mm
- FC= Ø 103 × 76 mm
- ⚙ Settings: B.E.G. PC Tools, B.E.G. DALISYS router
- Ⓐ 7 mA
- 📐 vertical 360°
- 📏 max. 40 m × 5 m across; max. 20 m × 3 m towards
- 📏 250 m<sup>2</sup> / 2.5 m mounting height
- 📏 2.4 m / 2.6 m / 2.5 m
- 📏 IP SM= IP54 / Class II
- 📏 FC= IP20 / Class II
- 🌡 -25 °C to +50 °C
- 📏 Polycarbonate, UV-resistant
- 🕒 1 sec – 120 min
- 🌞 5 – 100 % / 1 min – 120 min / ∞
- 🌞 10 – 2500 Lux

## DALISYS

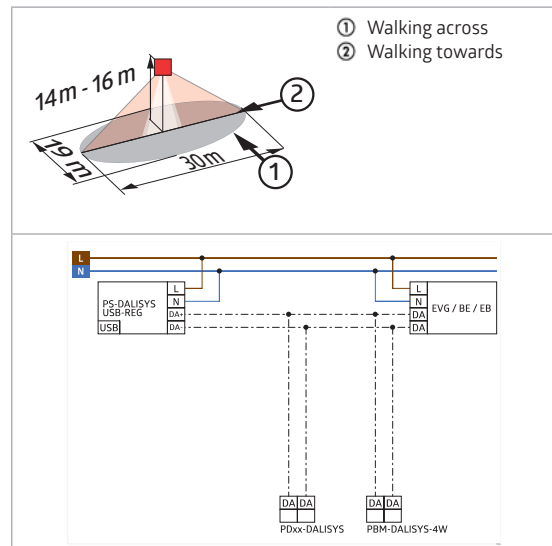
## Product and accessory

Description	Colour	Part number
PD4-DALISYS-GH-SM	white mat	93345



## Product Information

- DALI multisensor for surface mounting in large mounting heights
- External telescopic light sensor for a mounting height between 5 and 16 m (mechanically adjustable) for measuring the light according to the application.
- Seamless integration in B.E.G. LUXOMAT<sup>®</sup>net DALISYS
- Bright LED indication for commissioning
- Multimaster-capable with slave function
- Integrated daylight harvesting circuit (or switch output)
- Guided Light, Soft-Start PLUS, Orientation light PLUS
- Works out-of-the box for easy installation check
- Full range of functions can only be activated with other products of the product group B.E.G. LUXOMAT<sup>®</sup>net DALISYS
- There are markings for adjusting the detector
- **When used in high-bay warehouses, care should be taken that, in the cross-aisles of the warehouse, detectors are installed that can detect movement only in the desired aisle locations, by using blinds or other technical arrangements.**



## Technical Data

- ⌚ 10 – 22 V DC via DALI Bus
- 📏 Ø 101 × 76 mm
- ⚙️ Settings: B.E.G. PC Tools, B.E.G. DALISYS router
- Ⓜ️ 7 mA
- 📐 vertical 360°
- 📏 30 m × 19 m
- 📏 450 m<sup>2</sup> / 14 m mounting height
- 📏 5 m / 16 m / 14 m
- 📏 IP54 / Class II
- 🌡️ -25 °C to +50 °C
- 📏 Polycarbonate, UV-resistant
- 🕒 1 sec – 120 min
- 🕒 5 – 100 % / 1 min – 120 min / ∞
- 🌞 10 – 2500 Lux



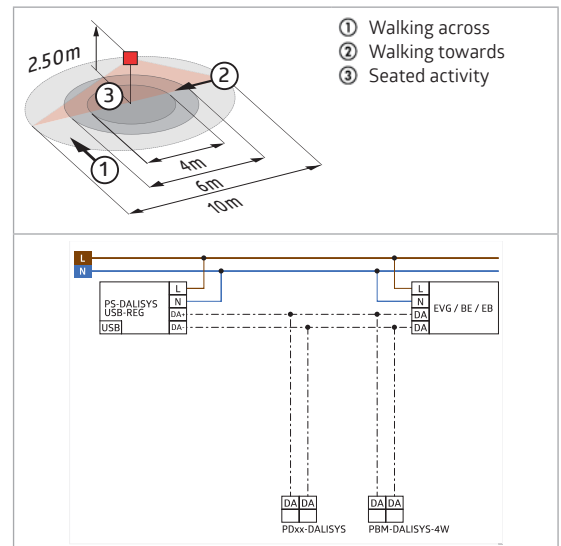
## Product and accessory

Description	Colour	Part number
PICO-DALISYS-FC	white	93909



## Product Information

- Mini DALI multisensor with only 11mm installation depth for installation in luminaires
- Especially designed for luminaire mounting
- Powered via DALI bus
- Seamless integration in B.E.G. LUXOMAT<sup>®</sup>net DALISYS
- Multimaster-capable with slave function
- Semi-automatic, full-automatic or twilight switch mode
- Integrated daylight harvesting circuit (or switch output)
- Guided Light, Soft-Start PLUS, Orientation light PLUS
- Works out-of-the box for easy installation check
- Full range of functions can only be activated with other products of the product group B.E.G. LUXOMAT<sup>®</sup>net DALISYS



## Technical Data

- ⌚ 10 – 22 V DC via DALI Bus
- 📏 Ø 33 × 27 mm
- ⚙️ Settings: B.E.G. DALISYS ROUTER / B.E.G. DALISYS PC-Tools
- ⓐ 2 mA
- 📐 vertical 360°
- 📐 max. Ø 10 m across; max. Ø 6 m towards; max. Ø 4 m seated
- 📐 79 m<sup>2</sup> / 2.5 m mounting height
- 📐 2 m / 3 m / 2.5 m
- 📐 IP20 / Class II
- 🌡️ -25 °C to +55 °C
- 📦 Polycarbonate, UV-resistant
- ⚙️ 5 – 2500 Lux

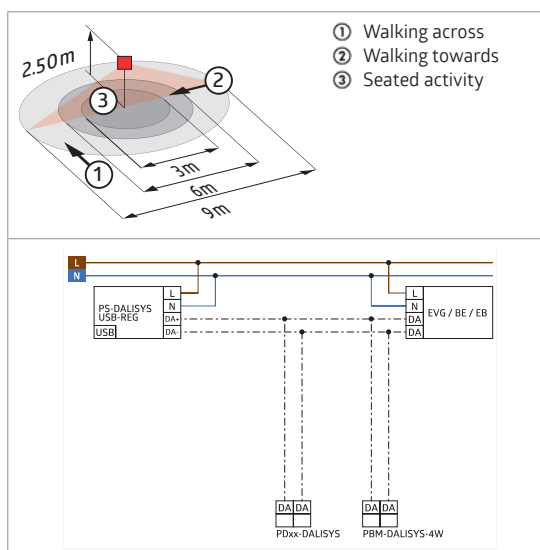
## Product and accessory

Description	Colour	Part number
PD11-DALISYS-FLAT-FC	white mat, similar to RAL9010	92731
In-wall mounting set / PD11	white	92833
Cover ring PD11 Ø 52 mm	black glossy, similar to RAL9011	92537
Cover ring PD11 Ø 100 mm	white mat, similar to RAL9011	92692
Square design frame PD11-FC	white mat, similar to RAL9010	92994



## Product Information

- Low profile DALI multisensor (visible height: 0.85 mm)
- Seamless integration in B.E.G. LUXOMAT<sup>®</sup>net DALISYS
- Multimaster-capable with slave function
- Semi-automatic, full-automatic or twilight switch mode
- Integrated daylight harvesting circuit (or switch output)
- Guided Light, Soft-Start PLUS, Orientation light PLUS
- Works out-of-the box for easy installation check
- Full range of functions can only be activated with other products of the product group B.E.G. LUXOMAT<sup>®</sup>net DALISYS
- Spring clips for quick and easy installation in suspended ceilings
- Includes blinds and clamp ring for installation in lights
- With accessories for flush-mounting in ceiling and exposed concrete



## Technical Data

- ⊖ 10 – 22 V DC via DALI Bus
- ⊘ 52 × 48 mm
- ⚙ Settings: B.E.G. PC Tools, B.E.G. DALISYS router
- ⓐ 7 mA
- 📐 vertical 360°
- ⚠ max. Ø 9 m across; max. Ø 6 m towards; max. Ø 3 m seated
- 📏 64 m<sup>2</sup> / 2.5 m mounting height
- 📏 2 m / 5 m / 2.5 m
- 📦 IP20 / Class II
- 🌡 -25 °C to +50 °C
- 📦 Polycarbonate, UV-resistant
- 🕒 1 sec – 120 min
- 🔌 5 – 100 % / 1 min – 120 min / ∞
- ⚙ 10 – 2500 Lux

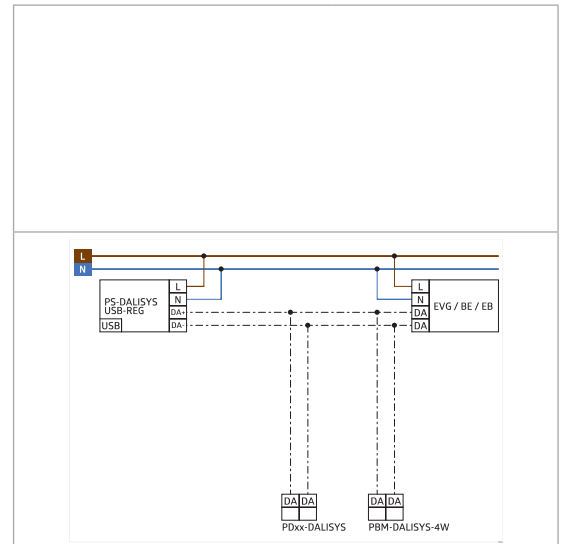
## Product and accessory

Description	Colour	Part number
PBM-DALISYS-4W	white	92842



## Product Information

- Binary DALI input device for installation in in-wall sockets
- 4 inputs for conventional push buttons, freely configurable
- Seamless integration in B.E.G. LUXOMAT®net DALISYS
- Operating modes: Standard, staircase or scene mode
- Integrated LED to determine location of dismantled device
- Integrated buzzer to determine location of installed device
- DIP- and HEX-switch for quick commissioning with basic functionality
- Full range of functions can only be activated with other products of the product group B.E.G. LUXOMAT®net DALISYS

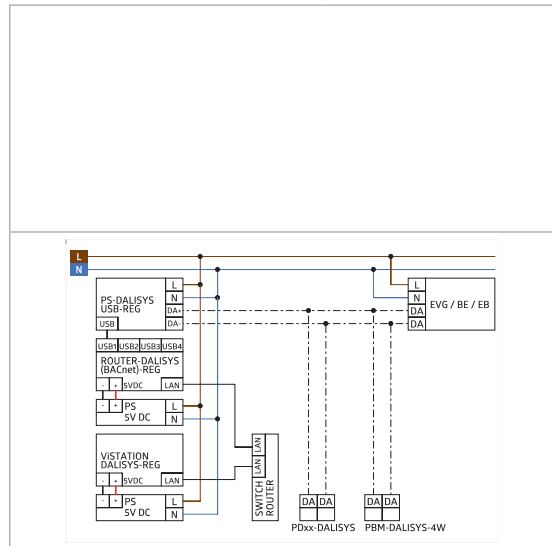


## Technical Data

- ⌚ 10 – 22 V DC via DALI Bus
- 📏 38 × 38 × 12 mm
- ⚙️ Settings: via DIP switch, HEX switch, B.E.G. BLE App, B.E.G. PC Tools, B.E.G. DALI Router
- ⓐ 7 mA
- 📦 IP20 / Class II
- 🌡️ -25 °C to +50 °C
- 📏 Polycarbonate, UV-resistant
- 📏 max. 50 cm
- 🕒 1 min – 150 min (staircase mode only)

Product and accessory

Description	Colour	Part number
ROUTER-DALISYS-REG	white	92850



Product Information

- DALI router with integrated web server for DIN-rail mounting
- 1 to 4 DALI lines (via USB and B.E.G. LUXOMAT®net PS-DALISYS-USB-REG)
- Up to 100 DALI routers per LAN --> up to 400 networked DALI lines
- Central management of parameters, addresses, groups and scenes for all networked DALI components
- Biologically effective lighting control HCL (Human Centric Lighting) in combination with DALISYS multisensors and compatible luminaires (NTP service via LAN or WAN required)
- Expanded guided light function GUIDED LIGHT PLUS (across all DALI lines)
- Event routing function for implementing DALI cross-line lighting zones
- DALI emergency light manager
- Update Manager, for updating the router firmware via LAN/WAN
- Can be operated via compatible web browser on any user device (smartphone, tablet, PC)
- Analysis and diagnosis tools for fault-finding
- Including separately enclosed 5VDC/2A power supply for DIN rail mounting (~18mm)

Technical Data

- ⌚ 5 V DC
  - 📏 (4 TE) 90 × 72 × 64 mm
  - ⚙️ Settings: via web-application in B.E.G. DALI router
  - 🔌 max. 5 W
  - 📦 IP20 / Class II
  - 🌡️ 0 °C to +45 °C
  - 📦 Polyamide, UV-resistant
- Connections and wires: USB

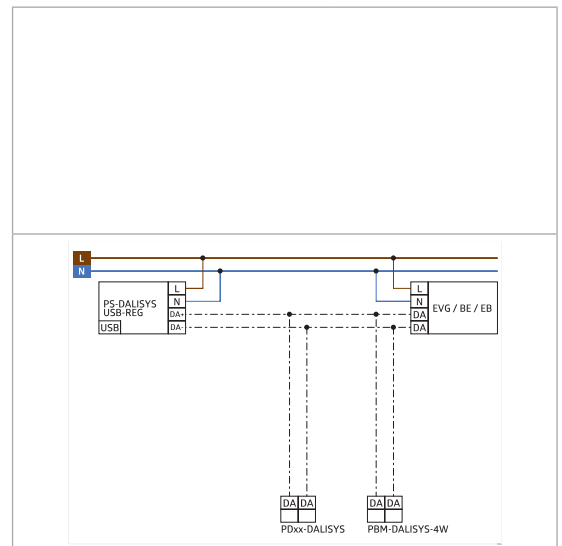
Product and accessory

Description	Colour	Part number
PS-DALISYS-USB-REG	white	92843



Product Information

- DALI power supply with integrated USB interface for DIN-rail mounting
- As standalone solution or for seamless integration into B.E.G. LUXOMAT<sup>net</sup> DALISYS
- Integrated application controller for addressing up to 64 DALI components
- Update function via integrated keypad and USB interface
- Integrated LEDs for visualisation of operating information
- Full range of functions can only be activated with other products of the product group B.E.G. LUXOMAT<sup>net</sup> DALISYS



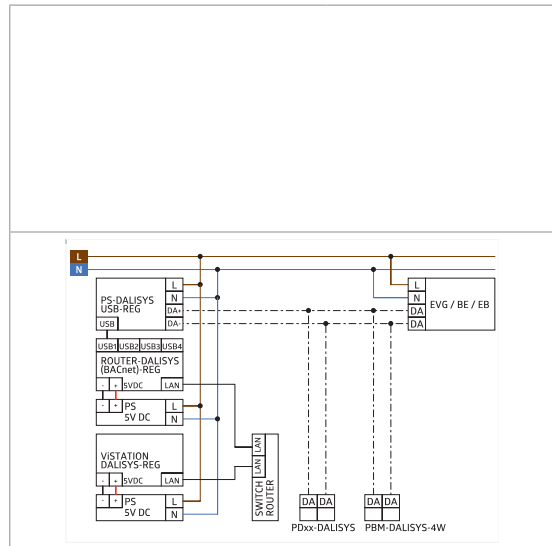
Technical Data

- ⌚ 230 V AC -15%/+10% 50 / 60 Hz
- 📏 (4 TE) 90 × 72 × 64 mm
- ⚙️ Settings: with Firmware update function button, B.E.G. PC Tools
- 🔌 16 V DC
- 🔌 6 W
- 📡 IP20 / Class II
- 🌡️ +5 °C to +45 °C
- 📄 Polyamide, UV-resistant
- 🔌 Connections and wires: 0,2 ... 4,0 mm<sup>2</sup> rigid  
0,25 ... 2,5 mm<sup>2</sup> fine-wired (with or without ferrule), USB
- ⚡ 210 mA

DALISYS

Product and accessory

Description	Colour	Part number
VISTATION-DALISYS-REG		93023



Product Information

- Virtual Interface Station - The visualisation and remote server for the B.E.G. LUXOMAT®net DALISYS lighting management system
- Plastic housing, 4 widths units (DIN-rail, top hat)
- 1 Ethernet/LAN connection
- 2D floor plan and/or tile view with customer-specific data (separate service costs for graphic design)
- For up to 100 DALISYS routers per LAN
- Central visualisation of light, occupancy and error data
- Manual override of individual lighting zones possible
- Manual override via scene function possible
- User and rights management for individual control of specific rooms
- Can be operated via compatible web browser on any user device (smartphone, tablet, PC)
- Including separately enclosed 5VDC/2A power supply for DIN rail mounting (~18mm)
- Preconfigured for in-house technicians with all rights
- Administration access preconfigured for user administration
- Weekly timer (external NTP service required)
- Calendar program, overwrites week timer for specified days (external NTP service required)
- Astro program, e.g. for sunrise or sunset events (external NTP service required)
- Show status report, e.g. to list health status of all DALI devices
- Send status report regularly by e-mail (external SMTP server required)

Technical Data

- ⌚ 5 V DC
- 📏 (4 TE) 90 × 72 × 64 mm
- ⏻ max. 5 W
- 📏 IP20 / Class II
- 🌡️ 0 °C to +45 °C
- 📦 Polyamide, UV-resistant

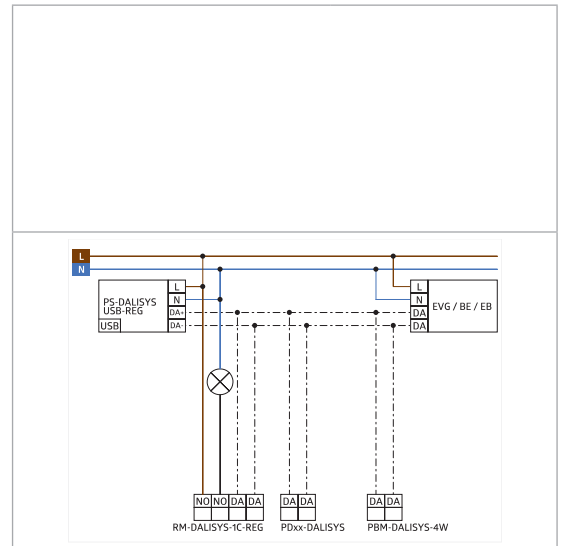
Product and accessory

Description	Colour	Part number
RM-DALISYS-1C-REG	white	92849



Product Information

- DIN-rail DALI relay module with 1 switching channel
- High-output and potential-free contact for loads with high inrush current
- Seamless integration in B.E.G. LUXOMAT<sup>®</sup>net DALISYS
- Integrated application controller with different operating modes
- Operating modes: Standard, Cut-off, HVAC, Impulse, Alarm
- DIP- and HEX-switch for quick commissioning with basic functionality
- Full range of functions can only be activated with other products of the product group B.E.G. LUXOMAT<sup>®</sup>net DALISYS



Technical Data

- ⌚ 10 – 22 V DC via DALI Bus
- 📏 (1 TE) 85 × 18 × 63 mm
- ⚙️ Settings: via DIP switch, HEX switch, B.E.G. BLE App, B.E.G. PC Tools, B.E.G. DALI Router
- Ⓐ 10 mA
- 📦 IP20 / Class II
- 🌡️ -25 °C to +50 °C
- 📦 Polycarbonate, UV-resistant
- Relay**
- ⚡ 3000 W, cos φ = 1; 1500 VA, cos φ = 0.5
- ⚡ μ-contact, NO contact
- ⌚ 1 min – 150 min (Cut-off and HVAC mode only)
- ⌚ 1 min – 150 min (HVAC mode only)



Series Diamant DT32 LED and Classic-2DN LED

Intelligent emergency lights  
with LED-Technik

- LED emergency light with single battery
- Bidirectionally remote control-capable with the IR adapter and the B.E.G. smartphone app
- Automatic self-test with a two-colour status LED
- Central monitoring option of emergency lights with Data Control N



DATA CONTROL N





# 4

## BMS multi-sensors for all your detection needs

### Multifunctional light management

The BMS multi-sensors offer the advantage over standard 24V multi-sensors that the 2-core DALI bus, which often exists already for the lighting, can be used.

The new DALI standard offers the possibility to send sensor information such as movement, occupancy and light values without cyclical query in multi-master mode.

This information is standardised so that B.E.G.'s BMS multisensors can be used with all multimaster capable application controllers which support multisensors according to IEC 62386 parts 101, 103, 303 and 304.

Equipped with modern digital passive infrared sensors, the multi-sensors offer an excellent detection quality for movement and occupancy. The various multi-sensors, e.g. the small mini sensor „PICO“ with an installation depth of only 11 mm, the super-flat PD11, or the high-bay detector PD4-BMS-GH a suitable detector for almost every application is available.

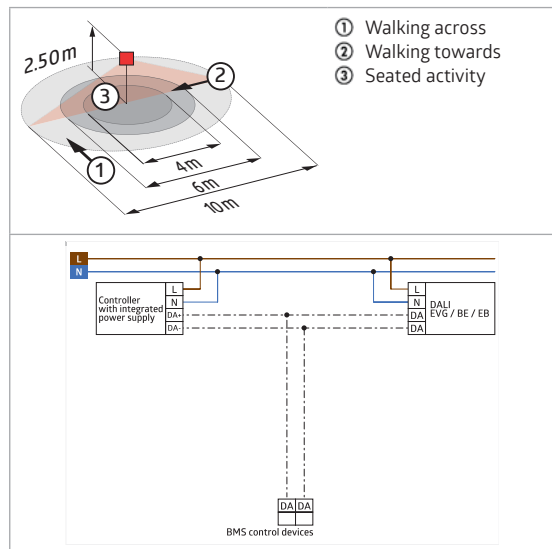
Light measurement with B.E.G.'s external light sensor is very reliant, and with the PD4-BMS-GH a constant light regulation is possible up to a mounting height of 16m.



BMS

Product and accessory

Description	Colour	Part number
PD2N-BMS-FC	white	93329
PD2N-BMS-FM	white	93337
Wire basket BSK (Ø 200 x 90 mm)	white	92199
SM mounting socket set IP54 PD2N- / PD4N-FM	white	93307



Product Information

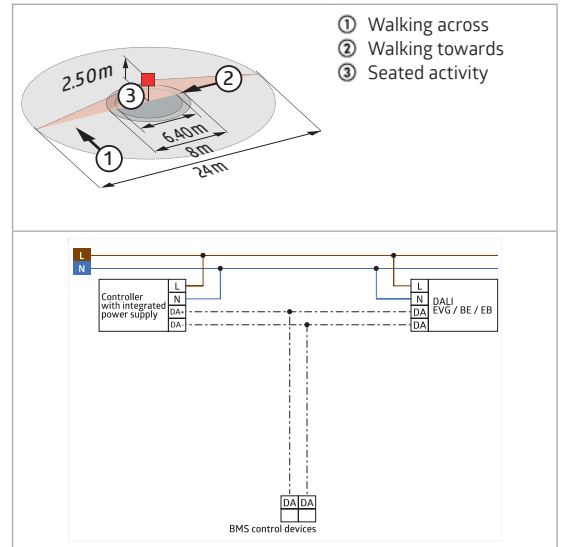
- Wide motion detection range DALI multisensor
- Powered via DALI bus
- Bright LED indication for commissioning
- DALI multimaster technology according to IEC 62386 part 103
- Instance 0 provides information regarding occupancy and movement for the DALI-Bus according to IEC 62386 part 303
- Instance 1 provides LUX values for the DALI-Bus according to IEC 62386 part 304
- Parameterisation is possible via mandatory Multimaster-Application-Controller of any manufacturer. This controller must support IEC 62386 parts 101/103/303/304.
- Mixed light measurement with internal and external light sensor
- Detection area can be restricted with blinds

Technical Data

- ⌚ 9.5 - 22.5 V DC (typical 16 V) via DALI Bus
- 📏 FC= Ø 83 x 55 mm  
FM= Ø 106 x 42 mm
- ⚙️ Settings: via DALI-Bus and application which supports DALI multisensors according to IEC62386, parts 101, 103, 303 and 304
- ⓐ 6 mA
- 📐 vertical 360°
- 📐 max. Ø 10 m across; max. Ø 6 m towards; max. Ø 4 m seated
- 📐 79 m² / 2.5 m mounting height
- 📏 2 m / 5 m / 2.5 m
- 📦 IP 20 / Class II  
FM= IP20 / Class II
- 🌡️ -25 °C to +55 °C
- 📦 Polycarbonate, UV-resistant
- ⚙️ 10 - 2500 Lux

Product and accessory

Description	Colour	Part number
PD4N-BMS	white mat, similar to RAL9010	93311
Wire basket BSK (Ø 200 x 90 mm)	white	92199
SM mounting socket set IP54 PD2N- / PD4N-FM	white	93307



Product Information

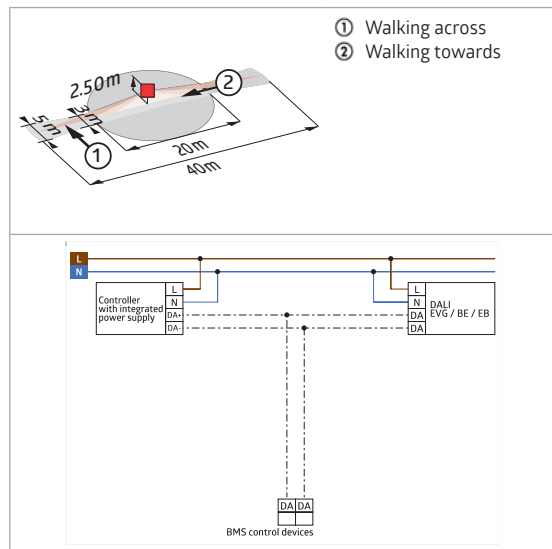
- Wide motion detection range DALI multisensor
- Powered via DALI bus
- Bright LED indication for commissioning
- DALI multimaster technology according to IEC 62386 part 103
- Instance 0 provides information regarding occupancy and movement for the DALI-Bus according to IEC 62386 part 303
- Instance 1 provides LUX values for the DALI-Bus according to IEC 62386 part 304
- Parameterisation is possible via mandatory Multimaster-Application-Controller of any manufacturer. This controller must support IEC 62386 parts 101/103/303/304.
- Mixed light measurement with internal and external light sensor
- Suitable for mounting in false ceilings and flush-mounting
- Accessory for surface mounting available
- Detection area can be restricted with blinds

Technical Data

- ⊖ 9.5 – 22.5 V DC (typical 16 V) via DALI Bus
- ⏏ Ø 106 × 68 mm
- ⚙ Settings: via DALI-Bus and application which supports DALI multisensors according to IEC62386, parts 101, 103, 303 and 304
- ⓐ 7 mA
- 📐 vertical 360°
- 📏 max. Ø 24 m across; max. Ø 8 m towards; max. Ø 6.4 m seated
- 📐 450 m² / 2.5 m mounting height
- 📏 2 m / 10 m / 2.5 m
- 📦 IP20 / Class II
- 🌡 -25 °C to +55 °C
- 📦 Polycarbonate, UV-resistant
- ⚙ 10 – 2500 Lux

Product and accessory

Description	Colour	Part number
PD4-BMS-C-FC	white	93332
PD4-BMS-C-SM	white	93357
Wire basket BSK (Ø 200 x 90 mm)	white	92199
Wall holder PD4-SM	white	92441



Product Information

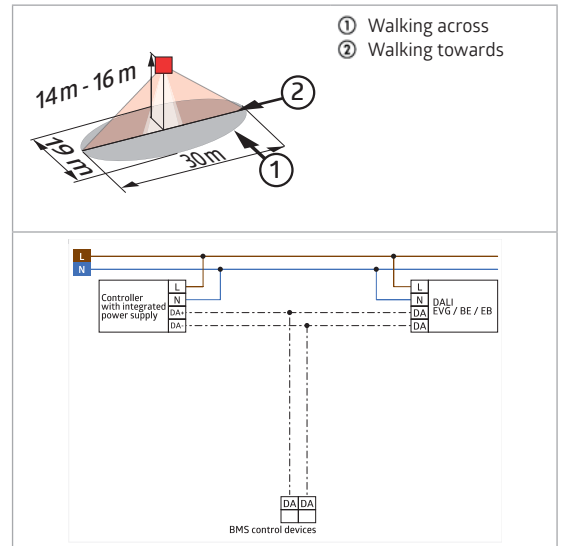
- Wide motion detection range DALI multisensor with a special lens for corridor applications
- False ceiling or surface mount version available
- Powered via DALI bus
- Bright LED indication for commissioning
- DALI multimaster technology according to IEC 62386 part 103
- Instance 0 provides information regarding occupancy and movement for the DALI-Bus according to IEC 62386 part 303
- Instance 1 provides LUX values for the DALI-Bus according to IEC 62386 part 304
- Parameterisation is possible via mandatory Multimaster-Application-Controller of any manufacturer. This controller must support IEC 62386 parts 101/103/303/304.
- Mixed light measurement with external light sensor
- Detection area can be restricted with blinds
- There are markings for adjusting the detector

Technical Data

- ⌚ 9.5 – 22.5 V DC (typical 16 V) via DALI Bus
- ⌚ FC= Ø 98 x 96 mm
- ⌚ SM= Ø 103 x 76 mm
- ⌚ Settings: via DALI-Bus and application which supports DALI multisensors according to IEC62386, parts 101, 103, 303 and 304
- ⌚ 7 mA
- ⌚ vertical 360°
- ⌚ max. 40 m x 5 m across; max. 20 m x 3 m towards
- ⌚ 250 m² / 2.5 m mounting height
- ⌚ 2.4 m / 2.6 m / 2.5 m
- ⌚ FC= IP20 / Class II
- ⌚ SM= IP54 / Class II
- ⌚ -25 °C to +50 °C
- ⌚ Polycarbonate, UV-resistant
- ⌚ 10 – 2500 Lux

Product and accessory

Description	Colour	Part number
PD4-BMS-GH-SM	white matt, similar to RAL9010	93025



Product Information

- DALI multisensor for surface mounting in large mounting heights
- External telescopic light sensor for a mounting height between 5 and 16 m (mechanically adjustable) for measuring the light according to the application.
- Powered via DALI bus
- Bright LED indication for commissioning
- DALI multimaster technology according to IEC 62386 part 103
- Instance 0 provides information regarding occupancy and movement for the DALI-Bus according to IEC 62386 part 303
- Instance 1 provides LUX values for the DALI-Bus according to IEC 62386 part 304
- Parameterisation is possible via mandatory Multimaster-Application-Controller of any manufacturer. This controller must support IEC 62386 parts 101/103/303/304.
- Mixed light measurement with external light sensor
- Detection area can be restricted with blinds
- There are markings for adjusting the detector
- **When used in high-bay warehouses, care should be taken that, in the cross-aisles of the warehouse, detectors are installed that can detect movement only in the desired aisle locations, by using blinds or other technical arrangements.**

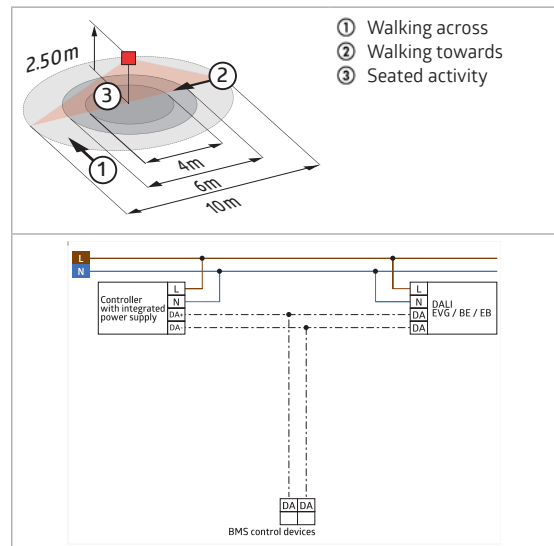
Technical Data

- ⌚ 9.5 – 22.5 V DC (typical 16 V) via DALI Bus
- 📏 Ø 101 × 76 mm
- ⚙️ Settings: via DALI-Bus and application which supports DALI multisensors according to IEC62386, parts 101, 103, 303 and 304
- Ⓜ️ 7 mA
- 📐 vertical 360°
- 📐 30 m × 19 m
- 📐 450 m<sup>2</sup> / 14 m mounting height
- 📐 5 m / 16 m / 14 m
- 🏠 IP54 / Class II
- 🌡️ -25 °C to +50 °C
- 📦 Polycarbonate, UV-resistant
- ⚙️ 10 – 2500 Lux

BMS

Product and accessory

Description	Colour	Part number
PICO-BMS-FC	white	93924



Product Information

- Mini DALI multisensor with only 11mm installation depth for installation in luminaires
- Powered via DALI bus
- DALI multimaster technology according to IEC 62386 part 103
- Instance 0 provides information regarding occupancy and movement for the DALI-Bus according to IEC 62386 part 303
- Instance 1 provides LUX values for the DALI-Bus according to IEC 62386 part 304
- Parameterisation is possible via mandatory Multimaster-Application-Controller of any manufacturer. This controller must support IEC 62386 parts 101/103/303/304.
- Measuring of mixed light thanks to internal light sensor
- Detection area can be restricted with blinds

Technical Data

- ⌚ 9.5 – 22.5 V DC (typical 16 V) via DALI Bus
- 📏 Ø 33 × 27 mm
- ⚙️ Settings: via DALI-Bus and application which supports DALI multisensors according to IEC62386, parts 101, 103, 303 and 304
- ⓐ 2 mA
- 👁️ vertical 360°
- 📐 max. Ø 10 m across; max. Ø 6 m towards; max. Ø 4 m seated
- 📏 79 m² / 2.5 m mounting height
- 📏 2 m / 3 m / 2.5 m
- 📦 IP20 / Class II
- 🌡️ -25 °C to +55 °C
- 🏠 Polycarbonate, UV-resistant
- ⚙️ 10 – 2500 Lux

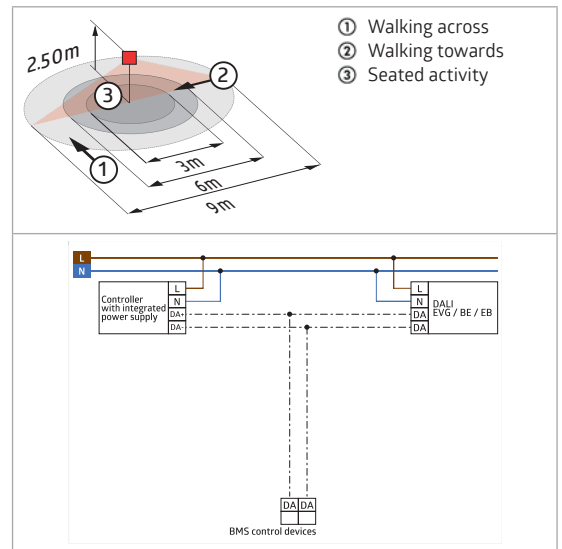
Product and accessory

Description	Colour	Part number
PD11-BMS-FLAT-FC	white mat, similar to RAL9010	93330
In-wall mounting set / PD11	white	92833
Cover ring PD11 Ø 52 mm	black glossy, similar to RAL9011	92537
Cover ring PD11 Ø 100 mm	white mat, similar to RAL9011	92692
Square design frame PD11-FC	white mat, similar to RAL9010	92994



Product Information

- Low profile DALI multisensor (visible height: 0,85 mm)
- Powered via DALI bus
- DALI multimaster technology according to IEC 62386 part 103
- Instance 0 provides information regarding occupancy and movement for the DALI-Bus according to IEC 62386 part 303
- Instance 1 provides LUX values for the DALI-Bus according to IEC 62386 part 304
- Parameterisation is possible via mandatory Multimaster-Application-Controller of any manufacturer. This controller must support IEC 62386 parts 101/103/303/304.
- Spring clips for quick and easy installation in suspended ceilings
- Includes blinds and clamp ring for installation in lights
- With accessories for flush-mounting in ceiling and exposed concrete



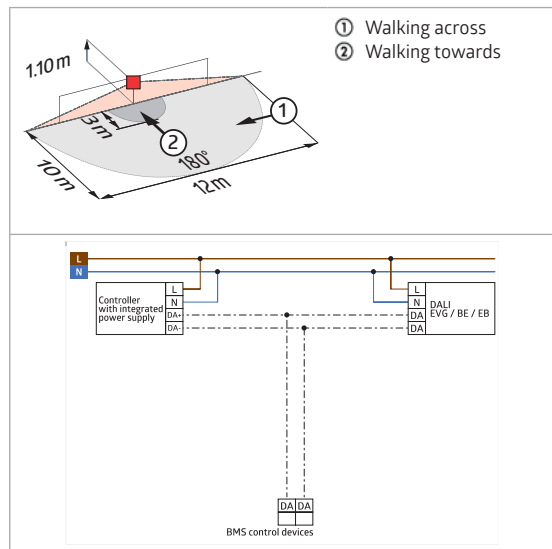
Technical Data

- ⊖ 9.5 – 22.5 V DC (typical 16 V) via DALI Bus
- ⊘ Ø 52 × 48 mm
- ⚙ Settings: via DALI-Bus and application which supports DALI multisensors according to IEC62386, parts 101, 103, 303 and 304
- ⓐ 4 mA
- 📐 vertical 360°
- ⚠ max. Ø 9 m across; max. Ø 6 m towards; max. Ø 3 m seated
- 📏 64 m² / 2.5 m mounting height
- 📏 2 m / 5 m / 2.5 m
- 📏 IP20 / Class II
- 🌡 -25 °C to +50 °C
- 📦 Polycarbonate, UV-resistant
- ⚙ 10 – 2500 Lux

BMS

Product and accessory

Description	Colour	Part number
Indoor 180-BMS covering not included	white mat, similar to RAL9010	93397
Surface mounting socket Indoor 180	pure white mat, similar to RAL9010	92141
Central plate Indoor 180	traffic white mat, similar to RAL9016	38947
Central plate Indoor 180	oyster white mat, similar to RAL1013	39076



Product Information

- DALI multisensor designed for in-wall mounting
- Powered via DALI bus
- DALI multimaster technology according to IEC 62386 part 103
- Instance 0 provides information regarding occupancy and movement for the DALI-Bus according to IEC 62386 part 303
- Instance 1 provides LUX values for the DALI-Bus according to IEC 62386 part 304
- Parameterisation is possible via mandatory Multimaster-Application-Controller of any manufacturer. This controller must support IEC 62386 parts 101/103/303/304.
- Measuring of mixed light thanks to internal light sensor
- Detection area can be restricted with blinds
- For use with covering (interior cover dimensions 50 x 50 mm) in 5 different colours
- In combination with centre plates usable with current frame systems of various manufacturers
- B.E.G. frames and centre plates for combination with other frame systems available
- Please order cover frame separately, available in various colours

Technical Data

- ⌚ 9.5 – 22.5 V DC (typical 16 V) via DALI Bus
- 📏 70 × 70 × 61 mm
- ⚙️ Settings: via DALI-Bus and application which supports DALI multisensors according to IEC62386, parts 101, 103, 303 and 304
- Ⓜ️ 3 mA
- ⚡ approx. 0.5 W
- 📐 horizontal 180°
- 📏 max. 10 m across; max. 3 m towards
- 📏 157 m² / 1.1 m mounting height
- 📏 1 m / 2.2 m / 1.1 m
- 📦 IP20 / Class II
- 🌡️ -25 °C to +55 °C
- 📦 Polycarbonate, UV-resistant
- ⚙️ 10 – 2500 Lux
- 📊 Mixed light measuring



# Schematics for electricians and consultants

## Convenient and safe planning with B.E.G.

Choosing the right occupancy detector or multisensor for every area of the project is not always easy with the diversity and special functions of the detectors. As a specialist, B.E.G. offers detectors for almost every requirement. We will be happy to assist you with the selection and planning.

On the following pages we have compiled tips on the optimum installation location, correct switching and correct setting of our detectors as well as planning examples for various projects. Here you can quickly see which detectors are best suited for which situations.

Furthermore, make use of the experience of B.E.G. for successful planning and smooth deployment of B.E.G. detectors. Our field staff will advise you directly on site.

If you wish, our specialists can use your CAD plan to plan the optimum distribution of our motion and presence detectors. Simply send us your plans by e-mail. We take care of the rest, of course free of charge.

You can rely on us: Even after the purchase, we are there to advise you until the completion of your project.



# PIR placement

B.E.G. occupancy detectors and multisensors measure the temperature differences in their detection area that occur when a warm object moves (PIR = passive infrared sensor). A sensor's detection area depends on the optical system, but also on the number of installed PIR sensors.

As well as PIR sensors, the detectors have brightness sensors. When movement is detected, occupancy detectors and multisensors only switch on the light if the surroundings are too dark. The switch-on threshold can be individually set.

If the measured light value is above an internally calculated switch-off threshold, the occupancy detector switches the light off despite detected movements. When the measured light value falls below the switch-on threshold, the detector switches the light on again.

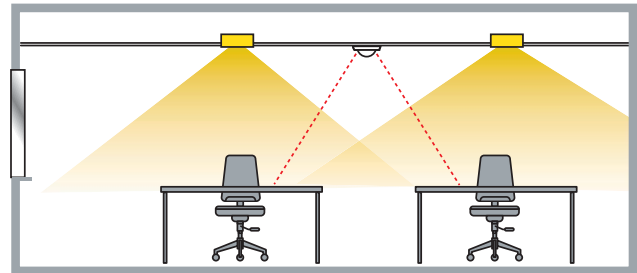
## Programming

B.E.G. occupancy detectors and multisensors offer a wide range of programming options, allowing them to be tailored on site to individual situations. Probably the most important value to be set on an occupancy detector/multisensor is the desired set value brightness, i.e. the target value to which the sensor regulates the light.

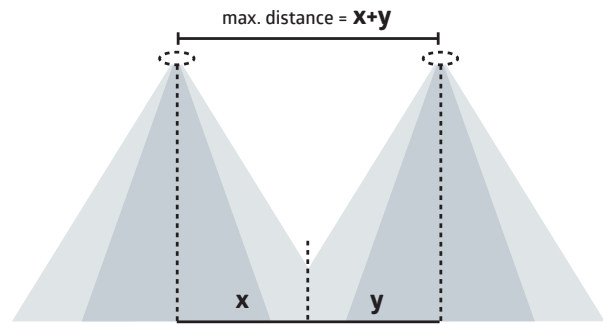
The usual occupancy parameters can also be set: Mode (full or semi-automatic), follow-up time, regulation speed, orientation light with percentage and duration, power-on behaviour, burn-in time and locking behaviour.

**Tip:** When choosing a mounting location, avoid reflective surfaces which could redirect light onto the sensor.

## General principles



1. The sensor detection area should be in the illuminated area of the lights that it controls.
2. The integrated light sensor measures the light which is present at the ceiling. Please take care that the light emitted from a light source does not directly illuminate the detector in order to avoid that this light has negative influence on the measured light value.
3. The sensor should not be exposed to direct sunlight. The distance of the sensor from the window must be selected such that the entire detection area lies within the room and potential daylight reflections from shiny surfaces do not hit the sensor.



4. If several sensors are used in one room, the sensors' detection areas should slightly overlap, in order to avoid "dead" areas.
5. Please note that the detection ranges may change if there is a deviation from the optimum mounting height and that with higher mounting the detection accuracy decreases.

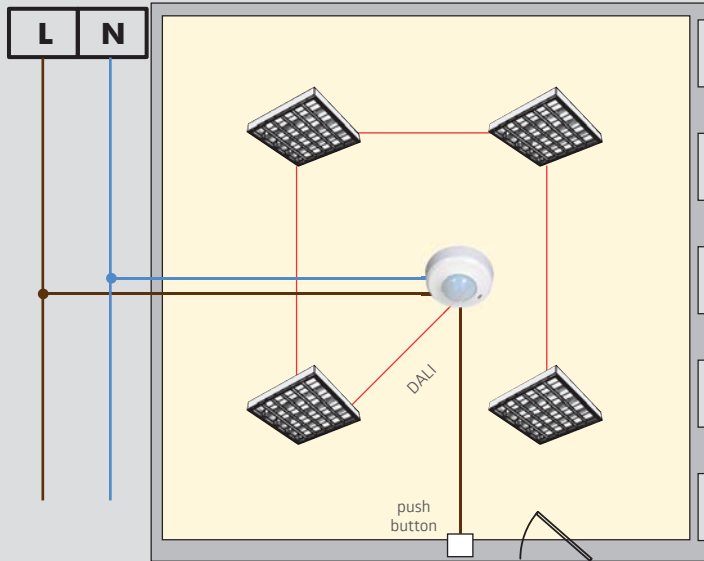
### Example Detection Area PD4

Mounting height	Range (circular detection) T=18°C		
	Seated activity	Walking across	Walking towards
2.00 m	Ø=5.20 m	Ø=17.00 m	Ø=6.40 m
2.50 m	Ø=6.40 m	Ø=24.00 m	Ø=8.00 m
3.00 m	Ø=7.60 m	Ø=29.00 m	Ø=9.60 m
3.50 m	Ø=9.00 m	Ø=34.00 m	Ø=11.00 m
4.00 m	-	Ø=39.00 m	Ø=13.60 m
4.50 m	-	Ø=44.00 m	Ø=14.40 m
5.00 m	-	Ø=48.00 m	Ø=16.00 m
10.00 m	-	Ø=48.00 m	Ø=16.00 m

# DALI Compact

## General planning information

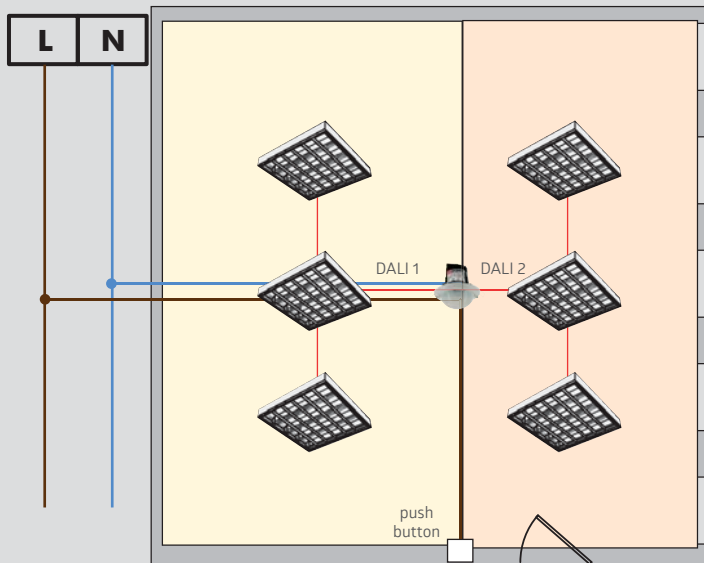
### 1-Channel



#### Office with one dimmable lighting zone

- Main lighting, full automatic, 500 lux, 10 minutes follow-up time
- Optionally available with additional switch contact for accent lighting or cut-off function (saves on standby energy consumption of all DALI electronic ballasts)

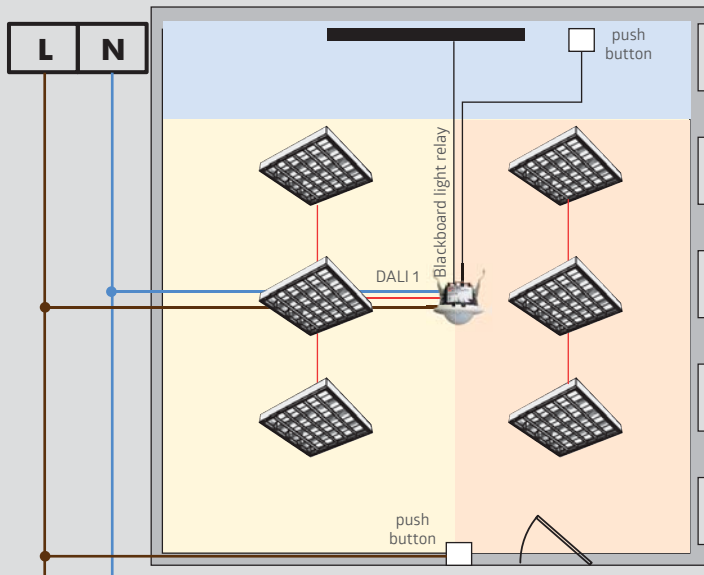
### 2-Channel



#### Office with one segmented dimmable lighting zone

- Main lighting, full automatic, 500 lux, 10 minutes follow-up time
- Two integrated adjustable light sensors measure the light at the wall and window sides, separately from each other
- Option to regulate two lighting groups differently according to the two brightness values
- Common control of lighting runs possible via push-buttons

### 3-Channel



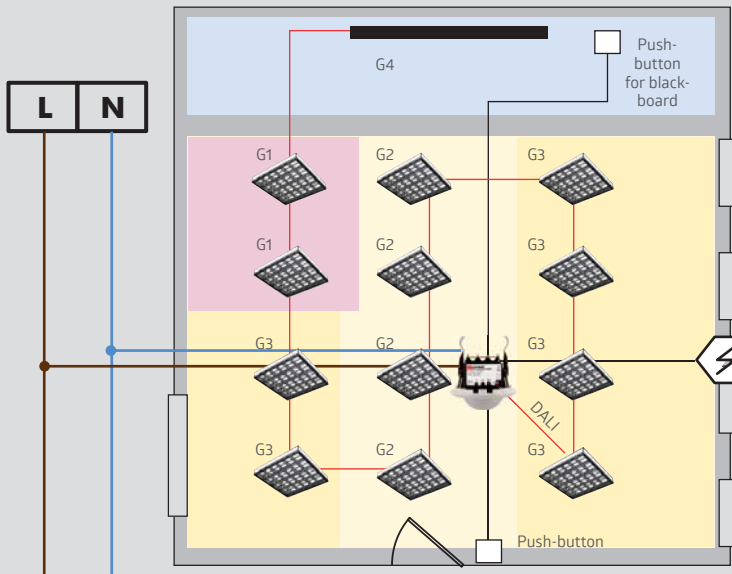
#### Classroom with one window facade and blackboard lighting

- Main lighting, full automatic, 500 lux, 10 minutes follow-up time
- Two integrated adjustable light sensors measure the light at the wall and window sides, separately from each other
- Option to have two lighting groups regulated differently according to the two brightness values
- Separate control of lighting runs possible via push buttons
- Additional switching channel for blackboard lighting, can be activated by push button or movement

# DALI Compact (Broadcast)

## General planning information

# DAA4G



**Classroom with two window facades and cut-off**

**Lighting zone A (groups 1-3):**

- Main lighting, full automatic, 500 lux, 10 minutes follow-up time
- DALI Group 1: dark areas ■ 100%
- DALI Group 2: neutral areas ■ 90%
- DALI Group 3: bright areas ■ 75%

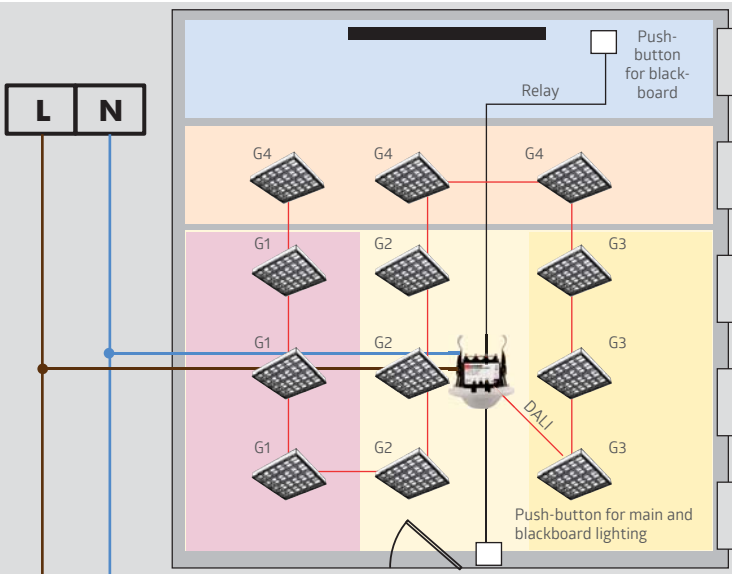
**Lighting zone B (group 4):**

- Blackboard lighting via DALI group 4

**Cut-off function:**

- Using relay, saving of standby energy consumption of all DALI electronic ballasts (typically 0.2 to 0.8 watts per electronic ballast, depending on manufacturer)

# DAA4G



**Classroom with one window facade and experimental area**

**Lighting zone A (groups 1-3):**

- Main lighting, full automatic, 500 lux, 10 minutes follow-up time
- DALI Group 1: dark areas ■ 100%
- DALI Group 2: neutral areas ■ 90%
- DALI Group 3: bright areas ■ 75%

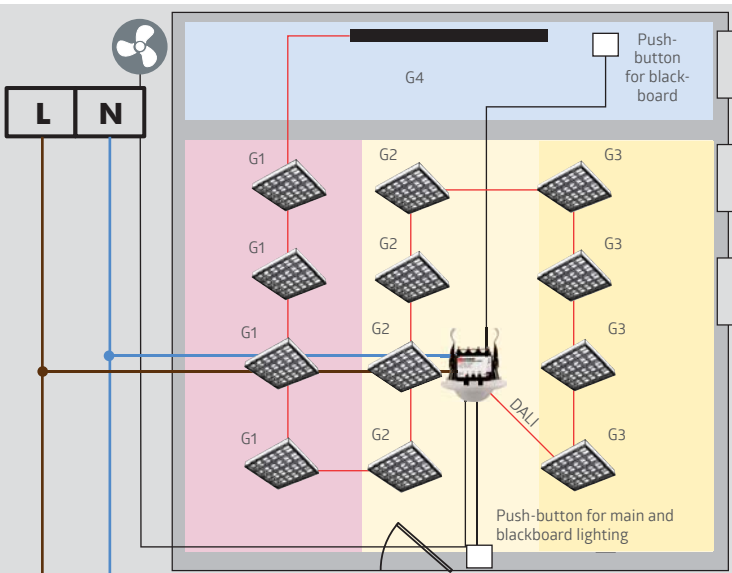
**Lighting zone B (group 4):**

- Accent lighting for laboratory desk, dimmable via DALI group 4, semi-automatic

**Lighting zone C:**

- Blackboard lighting (via relay), semi-automatic

# DAA4G



**Classroom with one window facade and HVAC**

**Lighting zone A (groups 1-3):**

- Main lighting, full automatic, 500 lux, 10 minutes follow-up time
- DALI Group 1: dark areas ■ 100%
- DALI Group 2: neutral areas ■ 90%
- DALI Group 3: bright areas ■ 75%

**Lighting zone B (group 4):**

- Blackboard lighting via DALI group 4

**HVAC:**

- Regulation of ventilation via relay with separately adjustable follow-up time and optional switch-on delay

# DALISYS Configuration

## General planning information

### Step 1: hardware setup

DIP and HEX switches allow for pre-programming of control group and planned operating mode of the control devices, so that grouping is the only thing required for the EBs after installation.

### Step 2: identification

All components on a DALI line in a DALISYS multi-master system have a unique address ("short address"), so that they can be individually addressed. These must not be duplicated on a DALI line, otherwise it causes conflicts. Addressing in DALISYS is performed by applications which automatically prevent duplicate addresses from being assigned.

### Step 3: localisation

If you then search for a device, its location is confirmed in different ways: EBs cause connected lights to blink on localisation, B.E.G. multisensors have an integrated LED which blinks. Push-button modules generally use a small loudspeaker, which draws attention to itself with a tone.

**Tip:** when planning a DALI multi-master solution, do not define any short addresses, but put placeholders on the plan where short addresses can be entered. Leave their allocation to the integrators/installers, or to software with automatic addressing. By contrast, groups should in the vast majority of cases be defined at the planning stage.

### Step 4: formation of groups

In order to form groups (limited to 16 in the DALI standard), a plan should be produced which precisely identifies which group ID (0 to 15) has to be assigned to which area.

### Step 5: setup

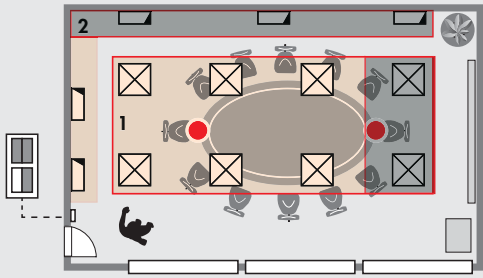
In this step, functions are stored through the setup of EBs and control devices. So for example, a DALI push-button module can be configured with four binary inputs that can be set up for one conventional double push-button for switching and dimming of two groups, and another for the retrieval of two scenes.

### Step 6: scene configuration

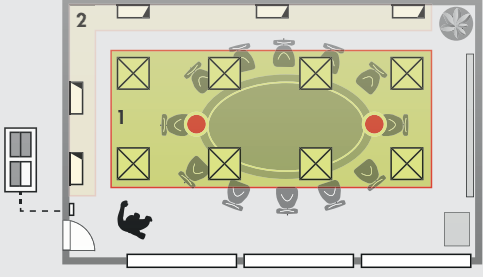
So-called scenes can be flexibly configured via the software applications. Properly speaking, scenes have nothing to do with groups, but the configuration and retrieval of scenes is often allied to the formation of groups. However, this is not strictly required. Up to 16 scenes are possible. In addition, scene blending times and rates can be programmed.

**Sample: scene functions**

Scene 1 "Presentation/Film"



Scene 2 "Meeting"



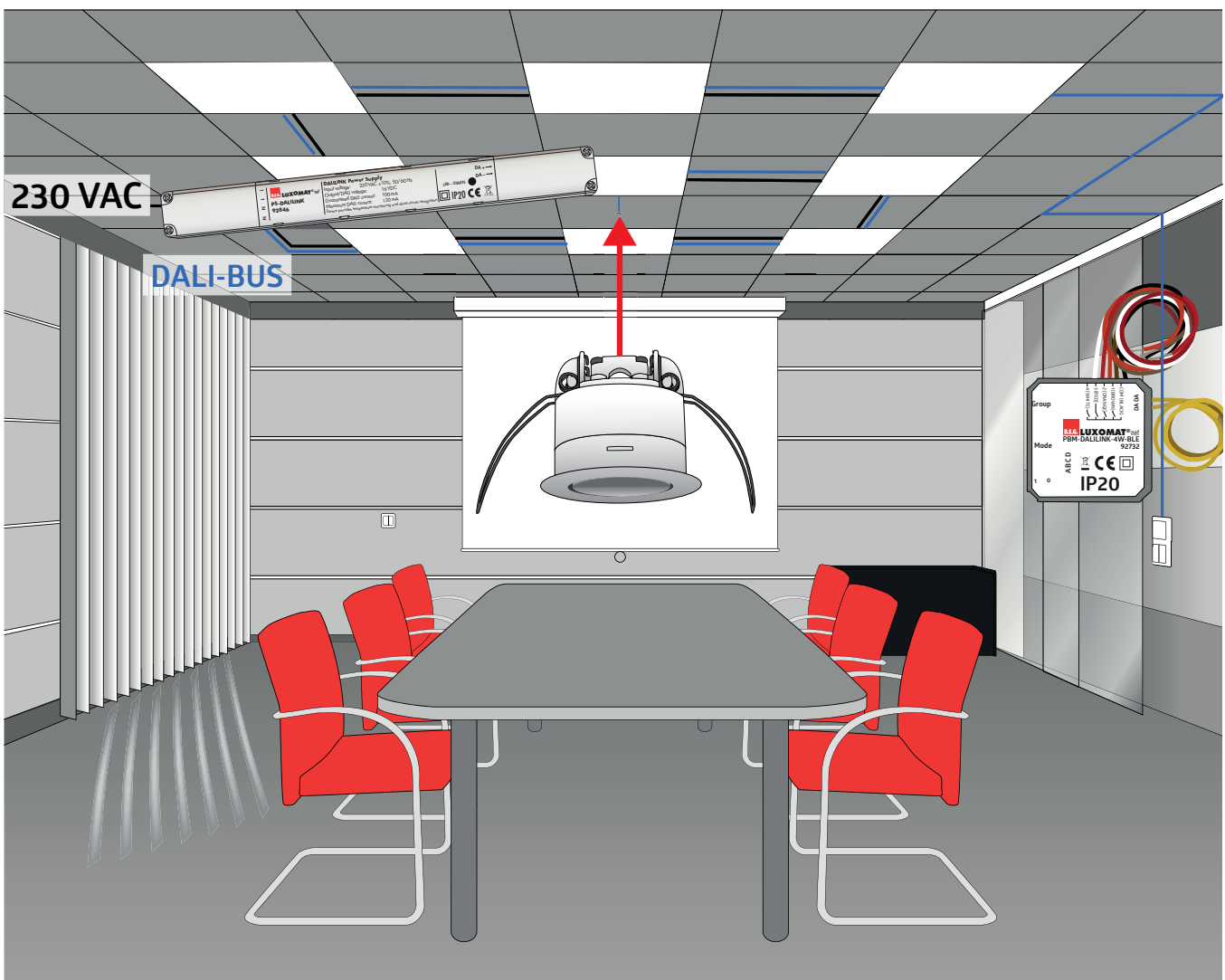
*When activating the "Meeting" scene, all EBs in group 1 are set to 100% and all EBs in group 2 to 80%. Within each group, the light output of all lights is therefore identical. However, activation of the "Presentation/Film" scene, in which for example only the lights near the projection screen in group 1 are switched off, takes place independent of grouping.*

# DALI LINK

## Modular multiroom solution

Both commissioning and remote control are carried out via an intuitive smartphone app with Bluetooth. So with simple tools, connected DALI components can be addressed and grouped, and scenes can be configured via a smartphone. The smartphone app can be used as a remote control by the users of the room. It can be used to quickly activate scenes (e.g. "Presentation" or "Meeting") or the light can be switched on/off or dimmed.

The compact 100mA DALI power supply can drive up to 25 DALI EBs from any manufacturer, and up to six B.E.G. DALI control devices (multi-sensors and pushbutton modules). Using the B.E.G. relay module (DALI EB), additional functions (e.g. HVAC) can be implemented, which switch on or off the lighting in a room depending on occupancy.



One DALI line  
Auto-addressing  
Max. length 300m

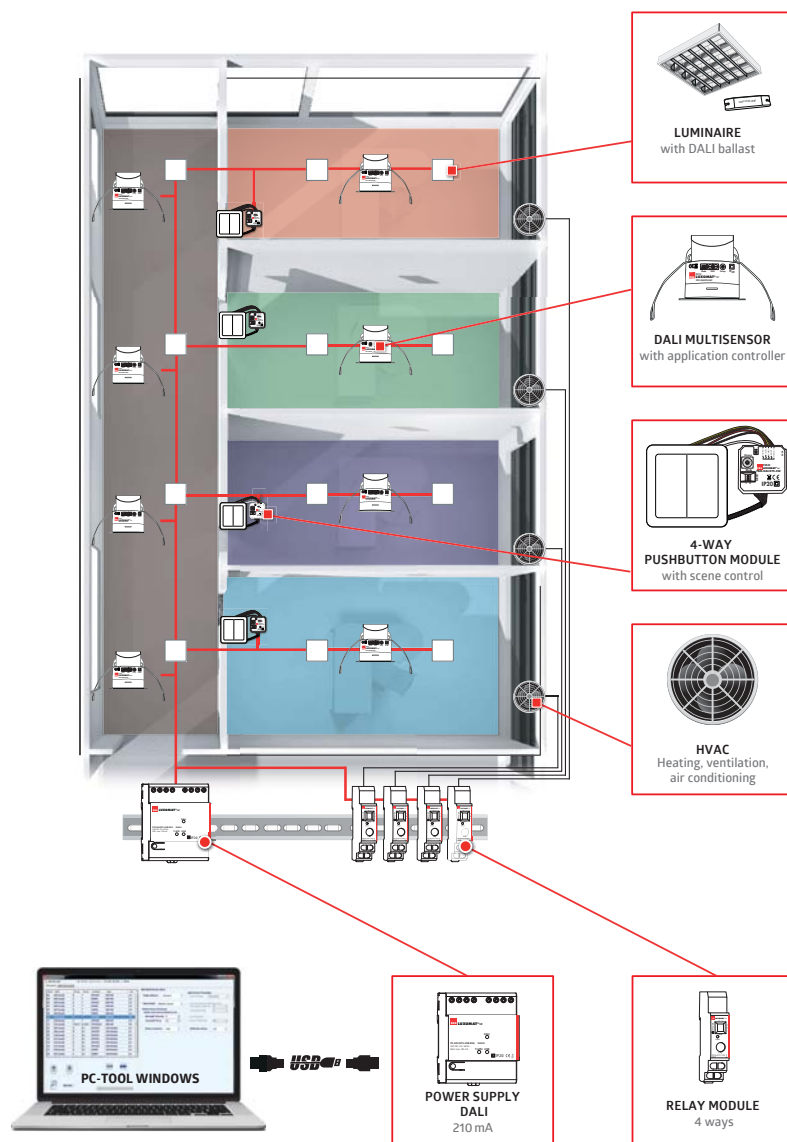
Max. 25 lighting devices  
(e.g. LED luminaires)  
Max. 6 control devices  
(e.g. DALI LINK Multisensors or  
DALI LINK Push button modules)

Commissioning, maintenance,  
remote control (scenes) via  
smartphone and Bluetooth  
interface.

# DALISYS Building solution

This solution is ideal for small buildings, warehouses, open plan offices, multi-floor offices, stairways etc. with simple or complex requirements for modern lighting control. Commissioning is carried out with an intuitive PC tool (Windows) via the DALI power supply as a rail-mounted device with integrated USB interface. In this way, using a convenient user interface, for example on a laptop, up to 64 DALI components can be addressed, up to 16 groups can be formed and up to 16 scenes configured.

With the building solution, the "Guided Light" function can be used to synchronise movement detection across groups. The high-performance 210mA DALI power supply can drive EBs from any manufacturer, B.E.G. relay modules, B.E.G. multisensors and B.E.G. push-button modules. Deployment of B.E.G. multisensors is limited to a total of eight, if they are to regulate one zone according to ambient light.



One DALI line  
Auto-addressing  
Max. length 300m

Max.  
64 components  
16 groups  
8 regulation zones

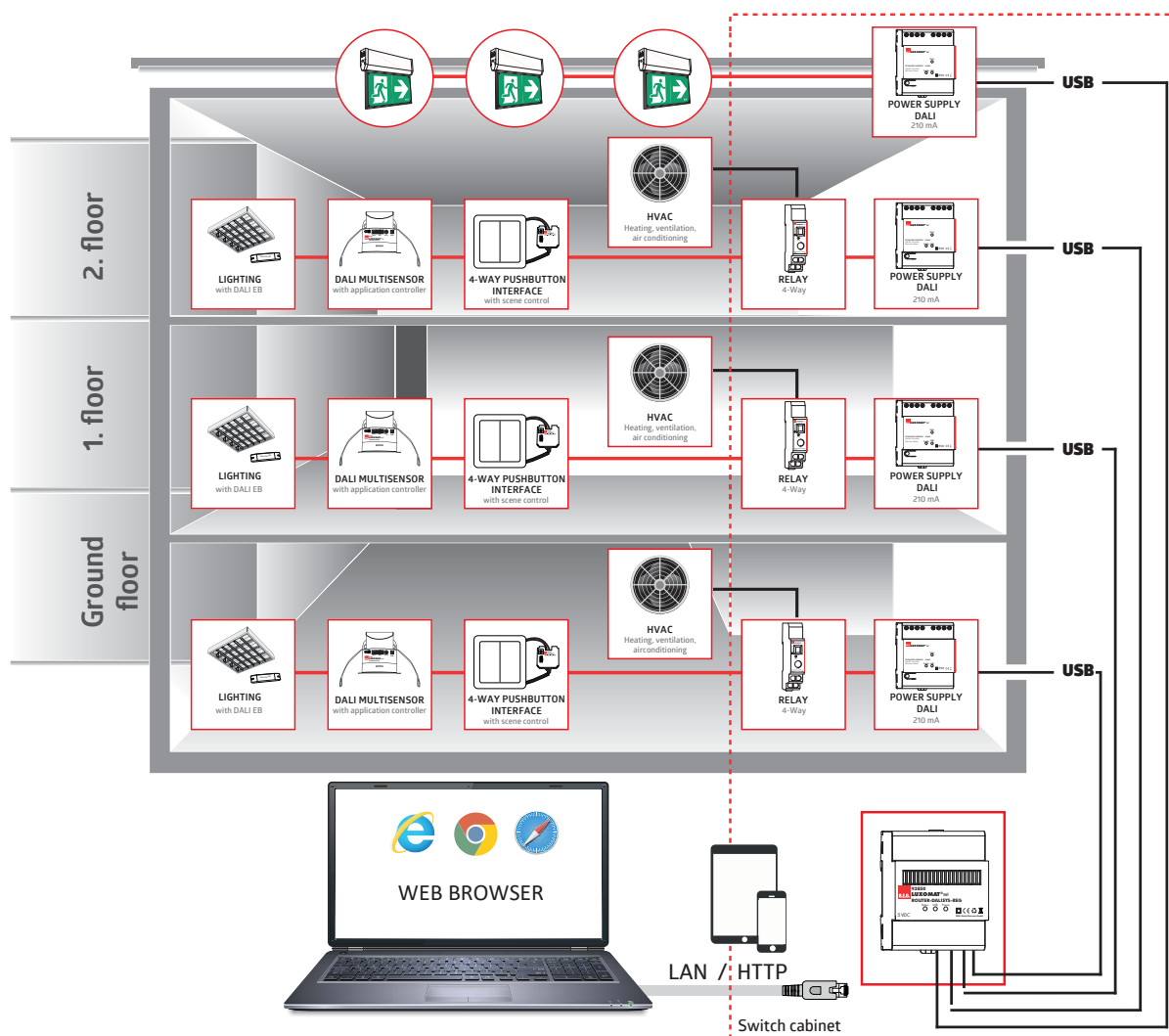
Commissioning and m  
aintenance via USB

# DALISYS

## Building solution

With up to 100 DALI routers each with 4 integrated USB interfaces, in practice 400 interconnected DALI lines can be set up over a local network (LAN/Ethernet). The benefit from this is firstly to enable central management of the entire decentralised lighting control system – including emergency lighting – in one or more buildings. Secondly, lighting control can be automated on a time basis using the calendar function, and maintenance processes can be streamlined thanks to the email reporting system – for example lamp faults.

In addition, the “Guided Light PLUS” function is available, which can synchronise lighting control triggered by motion detection not only across groups, but also across DALI lines. This means no more restrictions on predictive, person-driven lighting control. The energy monitor enables continuous monitoring. Analysis and information on energy consumption and the update function offer additional protection of your investment through regular optimisation and additional functionality.



A “B.E.G. Mesh”,  
consisting of up to  
100 DALI routers

Max.  
100 x 4 DALI lines  
400 x 64 components  
400 x 16 groups  
400 x 8 regulation zones

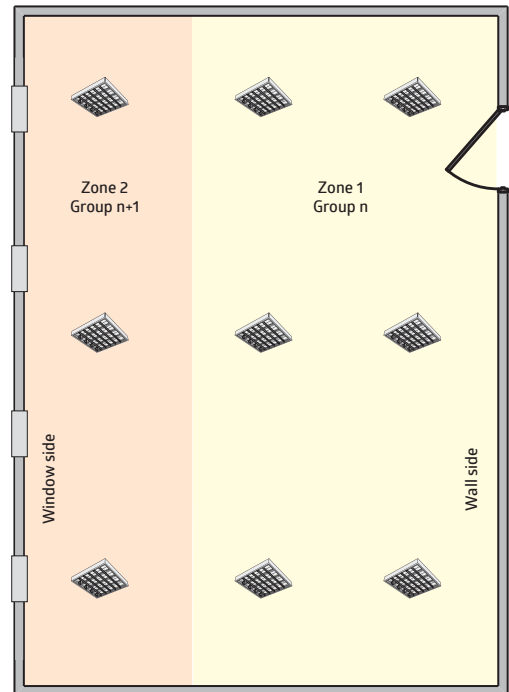
Commissioning, maintenance,  
monitoring, time-based control,  
reports, emergency light  
management via LAN/Ethernet



### Two-channel regulation

DALISYS multisensors can control two channels. So for example, two lighting areas can be set up in one room, one on the wall side, and one on the window side. If this function is used, an additional DALI group is used for the second channel. This group number cannot be selected, but follows on from the group number given for the main group. For example, if Group 1 is assigned during group allocation, then Group 2 is automatically set up for the second channel if two-channel mode is used. Take care that this group is not used by another multisensor.

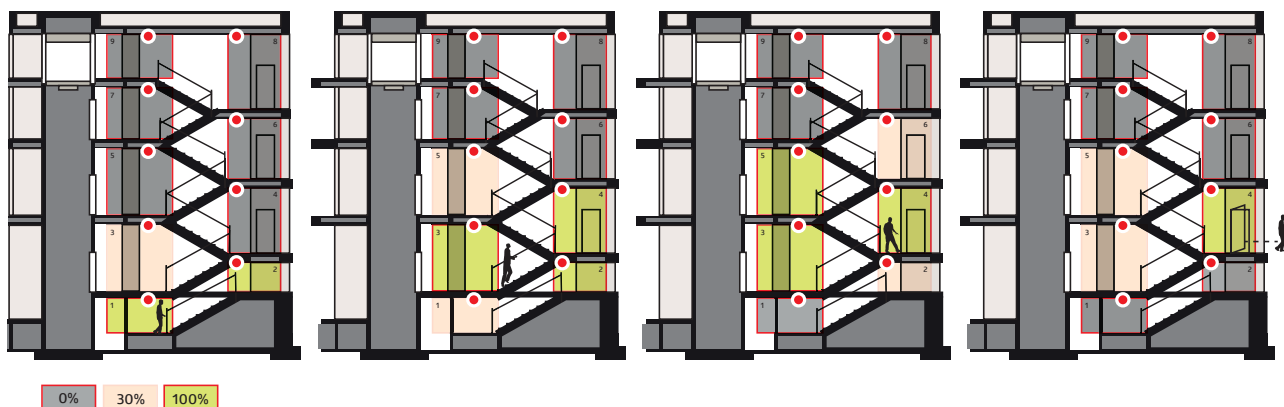
For the second channel, an offset value is stored. This is always a negative percentage of the light value for the main group. This means that in regulation mode with daylight falling into the room, the lights of the second group are dimmer than the lights of the main group by this percentage. The second channel is regulated together with the first channel. The lights on the window side are then regulated to a lower light output than those on the wall side. Due to the need for dimming, the function is only available in regulation mode.



### Guided Light Function

A special DALISYS function is "Guided Light", an innovative form of guidance. Guided Light accompanies users through the building like a pool of light. The sensors co-operate across lines and even groups to fully activate the lighting in the area where the user is located. Surrounding areas are dimmed to a preset orientation lighting value. This means the user will never see a dark room.

In a multi-room solution, the external trigger events must be configured for every B.E.G. multisensor in order to set up the Guided Light function. For an example, we will take a stairway with nine groups. The information for each group is stored so that the main light is activated when there is movement in the directly-adjacent group. When there is movement in the next-but-one group, the orientation lighting is activated. When movement is no longer detected, the follow-up time is activated. The groups switch first from main light to orientation light and then from orientation light to completely off.



The stairway is entered at the lowest floor. Immediately, groups 1 and 2 activate their main lights, and group 3 activates its orientation lighting. While the stairway is being used, the main light is always on for the floor where the user is, and for the floors directly above and below. Two floors above and below, the orientation lighting is also on. After the user has left the stairway at the fourth floor, the groups switch off in sequence.

# DALISYS

## Explanation of the functions

### Switching/regulation mode



There is the option to select between switching mode (light 100% on/off) and regulation mode (mixed light regulation, dimmed only as much as required), or to completely deactivate occupancy detection for use as a photoelectric switch.

### Stairway function



Especially for stairways where no occupancy detectors are installed, the stairway function can be activated in the push-button module. Here, a time delay is defined controlling how long the light should remain on after it is turned on by activating a push-button. Once the time is over, the light switches off for a short time, and then on again for 30 seconds. This gives anyone in the stairway the chance to restart the follow-up time, if light is needed for longer.

### Full or semi-automatic operation



In full automatic mode, the lighting switches on and off automatically according to occupancy and light level. In semi-automatic mode, the lighting only switches on after the push-button has been activated manually. Switching off takes place automatically or manually. When the follow-up time runs out, if a new movement is detected within 10 seconds, the detector switches the light back on automatically and the follow-up time begins again. After the 10 seconds is over with no new movement, manual switch-on is required. Semi-automatic mode behaves essentially the same as full automatic, apart from manual activation.

### Orientation light



The orientation light function is for providing dimmed lighting after the selected follow-up time has expired. This can be set as a percentage. Provision of dimmed lighting can be time-limited or permanently-on, while no motion is detected and ambient light levels remain below the selected value.

### Soft Start



Without this function, when motion is detected the sensor switches the light on to 100% and then starts to regulate it down to the target value. If Soft Start is activated, when motion is detected, the detector regulates from 0% up to the target value. This avoids blinding the user and conserves the lamps.

### Manual push-button control



The push-button interface enables a push-button to be integrated into the DALI bus, to allow overriding of automatic sensor regulation. A typical push-button setup is as follows: to switch the light on and off, use a short press of the push-button. The light remains switched on or off as long as people are detected, plus the follow-up time set. A long press (>2 seconds) activates dimming. When the push-button is released, the current dimming value is retained. If dimming is activated again, the dimming direction is reversed. With DALISYS, push-buttons can be set up with additional functions, such as selection of scenes of central switch-off.

### Cut-off function



In normal DALI systems, lights are placed in standby mode when they are not needed. They therefore continue to use electricity. The cut-off function means that DALI lights are completely switched off to 0% brightness, thus saving energy.

### HVAC function



The HVAC (heating, ventilation and air conditioning) function allows energy-intensive equipment, e.g. an air-conditioning unit) to be switched on or off. An HVAC channel functions in a similar way to a light output switching channel. However, the range of functions is more suited to HVAC applications. For example, dimming is not possible, and an HVAC channel normally works independent of brightness levels.

### Scene control



Scenes can be configured and retrieved as required via the relevant applications (depends on solution). For each individual DALI lighting device, a dimming value (0-100%) is assigned for the desired scenes.

### Floor plan visualisation



In the DALISYS building solution, a visualisation can be produced if required, to match the floor plan of the building. So at a glance you can get an overview of where the lighting is on or off.

### Virtual control panel



In the DALISYS building solution, it is possible to manage users who can control lighting for specific rooms via smartphone/tablet or PC.

### Email error reporting



Maintenance of the lighting installation is simplicity itself when the system displays errors directly. The system manager receives an email error notification showing that a light is defective, for example.

### Calendar function



A calendar function is available with the DALISYS router. The user can program time-dependent control and have individual commands carried out depending on day and time. For example, the light output in the evening can be set to 300 lux for energy saving purposes instead of the daytime value of 500 lux. This function also allows you to program a simulated presence.

### Emergency lighting management



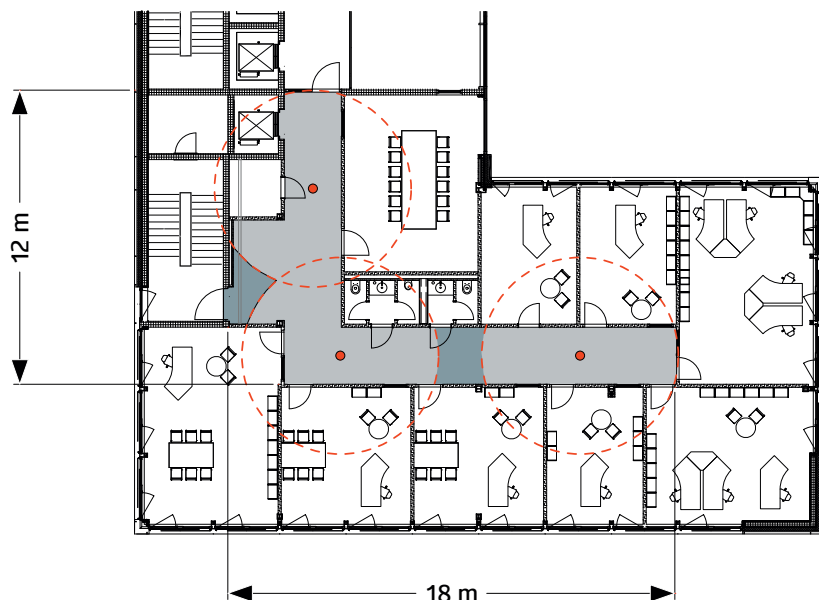
The DALISYS router makes possible central monitoring of all emergency lights/emergency exit signs. The "Emergency Light Manager" application shows all the information about installed DALI emergency lights and carries out all the necessary functional and long-term tests. Test cycles can also be set up by the user. In the tests, any errors are displayed, and the automatic documentation of them can be downloaded.

### Energy monitoring



The DALISYS router application displays the energy consumption of individual DALI loads. For optimisation purposes, the values can be recorded, evaluated and calculated in monetary terms.

# Planning example corridor with PD4-M



Detector for  
● Lighting group 1

Mounting height = 2,50 m

## Use case:

Automatic lighting control with occupancy detectors is to be implemented in a corridor on an office floor.

## Recommendation:

PD4 devices as DALI Compact. The lighting is controlled by a PD4-M-DALI/DSI-1C-FC which, in the 1C version, has an additional relay which cuts off the power to the DALI lighting when not in use, thus reducing DALI standby consumption.

All parameters are configured on the detector via IR remote control or smartphone adapter, the DALI luminaires are addressed directly via broadcast and dimmed accordingly.

A push-button control (on / off / dimming) is possible.

At the end of the follow-up time, an orientation light (e.g. 10%) can be used, either for a fixed time or as permanent basic lighting. The slave devices send a motion signal to the master.

## Alternative:

- PD4-M-DALI/DSI without cut-off relay
- DALI LINK (see example 3)
- DALISYS (see example 2)

## Note:

The detectors should be positioned in such a way that all access zones are safely covered with frontally detection zones. "Dead zones" should be avoided in corridor sections. If it is not possible to avoid gaps in the detection range, the follow-up time should be increased.

Please note that the detection ranges of the detectors depend on the direction of movement of the persons to be detected (frontally to the detector or transverse to the detector).

## Object data:

Type: Corridor without daylight

Corridor dimensions:

L 18,00 x W 12,00 m

Ceiling height: 2,50 m (clear height)

## Lighting:

1 luminaire group with electronic ballasts

## Product listing:

1 pcs. LUXOMAT® PD4-M-DALI/DSI (-1C)

2 pcs. LUXOMAT® PD4-S

## Master device setting:

Follow-up time R1: > 5 min

Switch-on threshold R1: 50 - 150 Lux

Follow-up time R2: optional

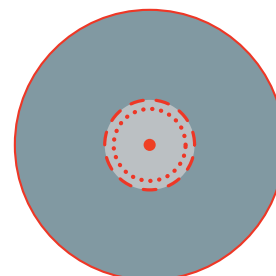
If required: Orientation light

## Operation mode:

Master/slave operation in the corridor area (see wiring diagram PD4-M-DALI/DSI-1C)

The master device must always be mounted in the darkest area of the corridor.

## Detection range Type „PD4“

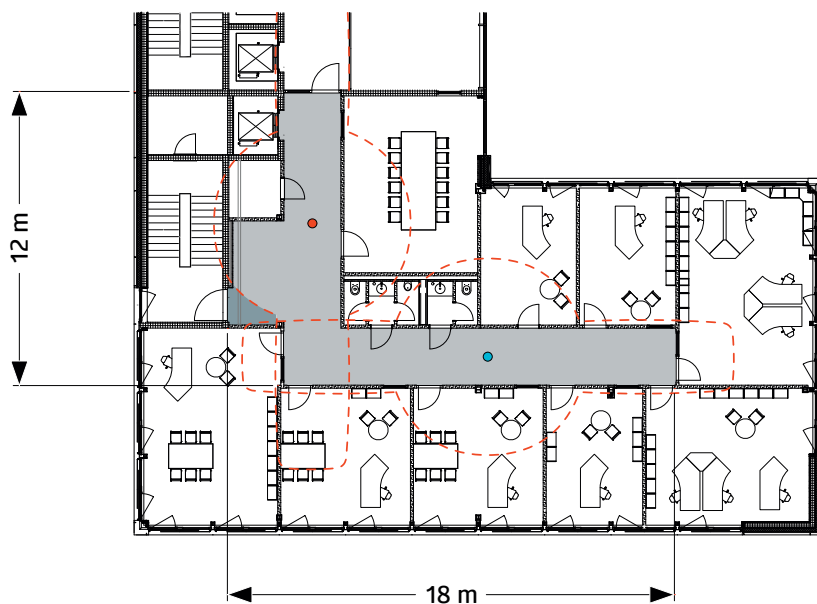


- across Ø 24 m
- - - frontally Ø 8 m
- ..... seated activity Ø 6,4 m

for a mounting height of 2,50 m

Please note that the detection range changes depending on the mounting height!

## Planning example corridor with PD4-M-C



- Detector for
- Lighting group 1
- Lighting group 2

Mounting height = 2,50 m

### Use case:

In a corridor on an office floor, an optically inconspicuous, automatic lighting control system should be implemented.

### Recommendation:

PD4 corridor devices as DALISYS. Each detector controls a lighting group in its detection zone. Optionally, a DALISYS detector can also control a second lighting group with an offset, but this is more relevant for a large window front.

With DALISYS, the devices can send each other a signal so that the neighbouring detector, for example, already enters the orientation light or full lighting.

Here, too, an orientation light can be used at the end of the follow-up time or, if the offices are also equipped with DALISYS, the corridor area adjacent to the offices can be illuminated if the office is occupied.

### Alternative:

- PD4-M-DALI/DSI without cut-off relay, (see example 1)

### Note:

The detectors should be positioned in such a way that all access zones are safely covered with frontally detection zones. "Dead zones" should be avoided in corridor sections. If it is not possible to avoid gaps in the detection range, the follow-up time should be increased. Please note that the detection ranges of the detectors depend on the direction of movement of the persons to be detected (frontally to the detector or transverse to the detector).

### Object data:

Type: Corridor without daylight

Corridor dimensions:

L 18,00 x W 12,00 m

Ceiling height: 2,50 m (clear height)

### Lighting:

2 luminaire groups with electronic ballasts

### Product listing:

2 pcs. PD4-DALISYS-C  
(proportional) one DALISYS power supply

### Master device setting:

Follow-up time R1: > 5 min

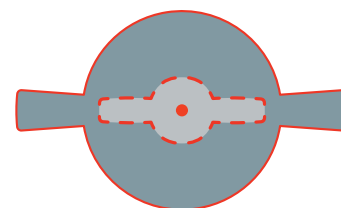
Switch-on threshold R1: 50 - 150 Lux

Follow-up time R2: optional

### Operation mode:

DALISYS detectors are simply integrated into the DALI line of the lighting and therefore require (almost) no wiring of their own.

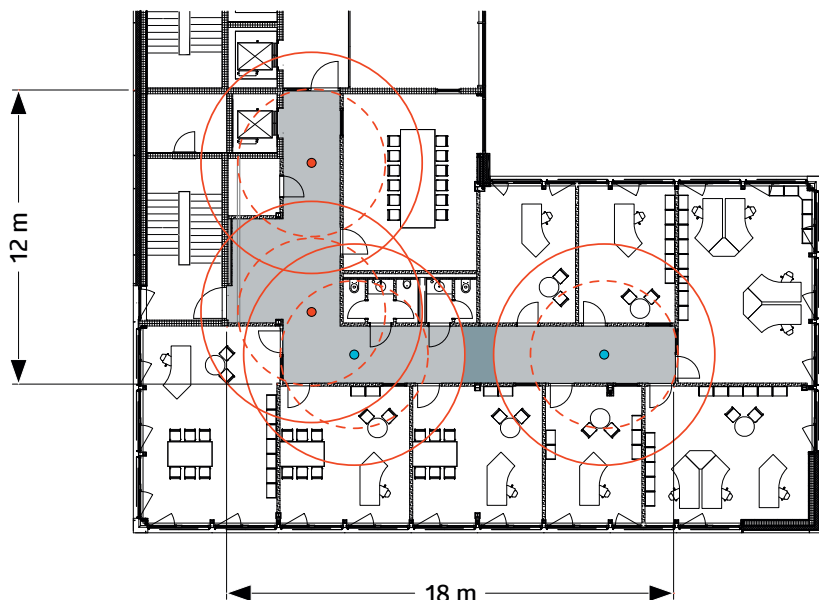
### Detection range Type „PD4-K“



— across                      Ø 40 m  
 - - - frontally                Ø 20 m  
 for a mounting height of 2,50 m

Please note that the detection range changes depending on the mounting height!

# Planning example corridor with PD11



- Detector for
- Lighting group 1
- Lighting group 2

Mounting height = 2,50 m

### Use case:

Automatic lighting control with design occupancy detectors is to be implemented in a corridor on an office floor.

### Recommendation:

PD11 devices in DALI LINK version. The PD11 fits almost perfectly into the ceiling, but does not have such a large detection range, so in this case at least 4 devices have to be set.

Each detector controls one lighting group in its detection area, giving the corridor 4 lighting groups.

Similar to DALISYS, the DALI LINK devices can send a signal to each other so that the neighbouring detector, for example, already enters the orientation light or full lighting.

Here, too, an orientation light can be used at the end of the follow-up time. However, a DALI LINK system is limited to a maximum of 64 luminaires. If several rooms are to be linked together (e.g. with „Guided Light“), DALISYS should be used.

### Alternative:

- BMS with alternative DALI controller
- DALISYS (see example 2).

### Note:

The PD11 design occupancy detector blends almost invisibly into the ceiling with only 0.85 mm visible height. The detectors should be positioned in such a way that all access zones are safely covered with frontally detection zones. “Dead zones” should be avoided in corridor sections. If it is not possible to avoid gaps in the detection range, the follow-up time should be increased.

Please note that the detection ranges of the detectors depend on the direction of movement of the persons to be detected (frontally to the detector or transverse to the detector).

### Object data:

Type: Corridor without daylight

Corridor dimensions:

L 18,00 x W 12,00 m

Ceiling height: 2,50 m (clear height)

### Lighting:

2 luminaire groups with electronic ballasts

### Product listing:

- 4 pcs. PD11-DALILINK-FLAT
- 1 pcs. DALI LINK Power supply
- 1 pcs. DALI LINK Push-button interface
- + Bluetooth configuration and operating interface.

### Master device setting:

Follow-up time R1: > 5 min

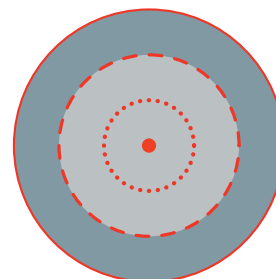
Switch-on threshold R1: 300 Lux or individually with remote control

### Operation mode:

Master/slave operation in the corridor area (see wiring diagram PD11-DALILINK-FLAT)

The master device must always be mounted in the darkest area of the corridor.

### Detection range Type „PD11“

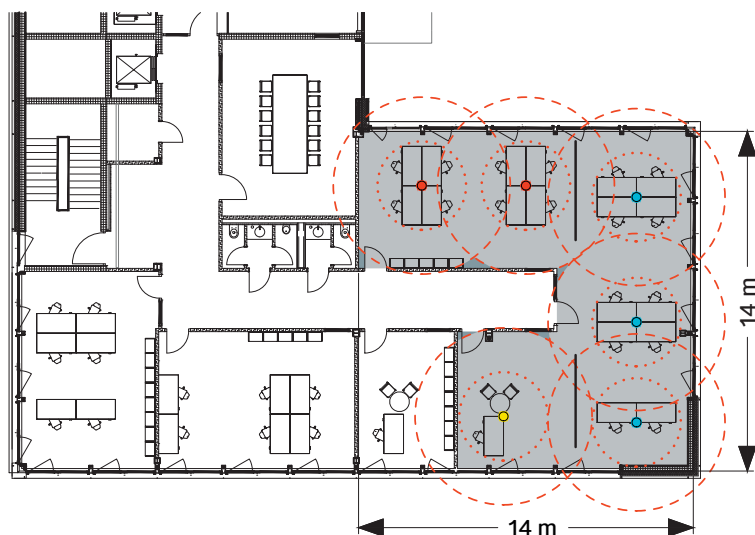


- across Ø 9 m
- - - frontally Ø 6 m
- ..... seated activity Ø 3 m

for a mounting height of 2,50 m

Please note that the detection range changes depending on the mounting height!

## Planning example open-plan office with PD11



- Detector for
- Lighting group 1
  - Lighting group 2
  - Lighting group 3

Mounting height = 3,00 m

### Use case:

In an open-plan office with areas separated by partition walls, an optically inconspicuous, automatic lighting control system with occupancy detectors is to be implemented.

### Recommendation:

PD11 devices as DALI LINK. It makes sense to set a PD11 for each work center or work center group.

Each DALI LINK detector can control two lighting groups; the luminaires close to windows can take account of the greater amount of daylight entering on the window side via offset. Thus the lighting is more even and more energy is saved.

In addition, all detectors can, if desired, keep the other workstations in the orientation light so that unoccupied workstations are not completely dark. If the last employee leaves, the light is of course switched off everywhere.

No rewiring is required for changes of use (e.g. if several detectors should control the same zone), the detectors are simply reconfigured via an app.

### Alternative:

- DALI Compact with one PD2-M-DALI/DSI per workstation / workstation group.
- DALI Compact with one PD4-M-DUO-DALI/DSI per workstation / workstation group
- DALISYS (see example 2).

### Note:

The PD11 design occupancy detector blends almost invisibly into the ceiling with only 0.85 mm visible height. The detectors should be placed so that the coverage area for "seated activity" covers the desk workstations.

### Object data:

Type: open-plan office with daylight

Room dimensions:

L 14,00 x W 14,00 m

Ceiling height: 3,00 m (clear height)

### Lighting:

3 luminaire groups with electronic ballasts

### Product listing:

6 pcs. PD11-DALILINK-FLAT

1 pcs. DALI LINK power supply

1 pcs. DALI LINK push-button interface

### Master device setting:

Follow-up time R1: > 5 min

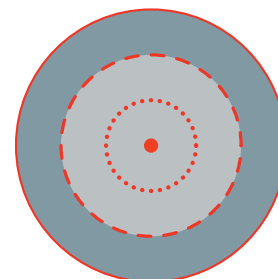
Switch-on threshold R1: 500 Lux or individually with remote control

### Operation mode:

Master/slave operation at workstations (see wiring diagram PD11-DALILINK-FLAT)

The master device must always be mounted at the darkest spot of the area illuminated by the group.

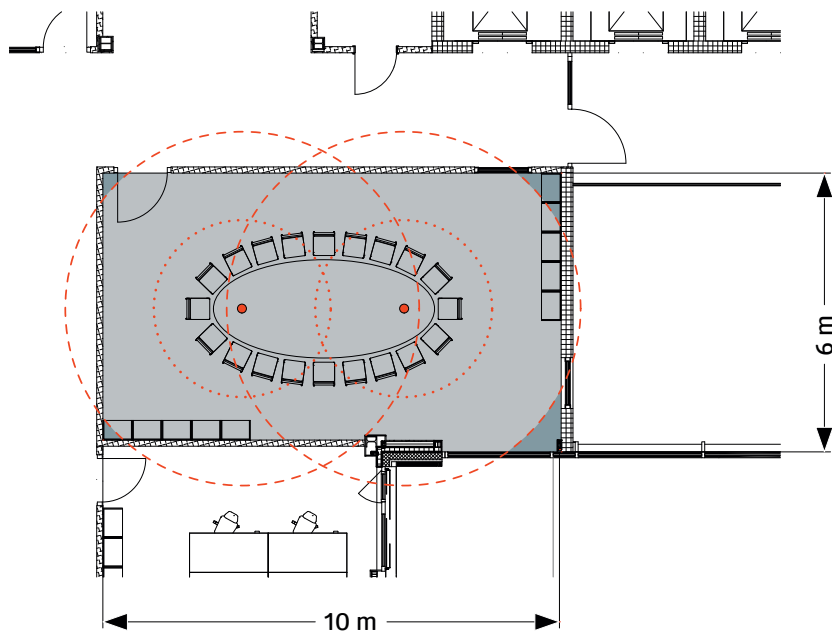
### Detection range Type „PD11“



- across Ø 9 m
  - - - frontally Ø 6 m
  - ..... seated activity Ø 3 m
- for a mounting height of 2,50 m

Please note that the detection range changes depending on the mounting height!

# Planning example conference room with PD11



Detector for  
● Lighting group 1

Mounting height = 3,00 m

## Use case:

In a conference room, the lighting should be controlled visually inconspicuously depending on presence and daylight. Despite the automatic control, it should be possible to influence the current switching status manually via a button or a remote control. The occupancy detectors are to be mounted on the ceiling.

## Recommendation:

PD11 devices as DALI LINK. The two devices operate in master-slave mode on one lighting group. The DALI LINK push-button interface and the DALI LINK app allow further scene control, e.g. for presentations or for accentuating the table. In particular, the integration of decorative lighting is facilitated.

Depending on the incidence of daylight, the lighting close to the window can be set in a separate regulated lighting group (via offset).

## Alternative:

- DALI Compact with the PD2-DALI/DSI or a PD4, see the next example.
- DALISYS (see example 2).

## Note:

The PD11 design occupancy detector blends almost invisibly into the ceiling with only 0.85 mm visible height. By installing two occupancy detectors, the entire conference table can be covered with the "seated activity" detection areas. Even small movements are reliably detected.

## Object data:

Type: Meeting room with daylight  
Room dimensions: L 10,00 x W 6,00 m  
Ceiling height: 3,00 m (clear height)

## Lighting:

1 luminaire group with electronic ballasts

## Product listing:

2 pcs. PD11-DALILINK-FLAT  
1 pcs. DALI LINK power supply  
1 pcs. DALI LINK push-button interface

## Master device setting:

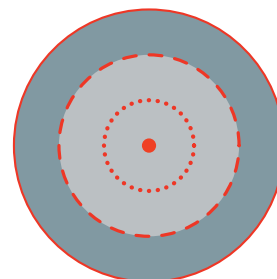
Follow-up time R1: mind. 5 min  
Switch-on threshold R1: 500 Lux

## Operation mode:

Master/slave circuit with optional pushbutton control (see wiring diagram PD11-DALILINK-FLAT)

The master device must always be mounted in the darkest area of the corridor.

## Detection range Type „PD11“



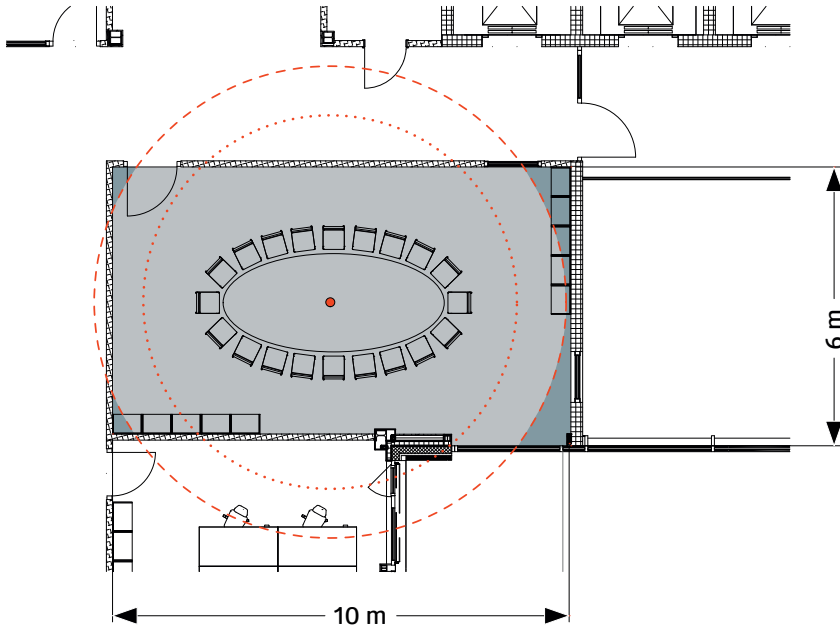
- across Ø 9 m
- - - frontally Ø 6 m
- ..... seated activity Ø 3 m

for a mounting height of 2,50 m

Please note that the detection range changes depending on the mounting height!



## Planning example conference room with PD4



Detector for  
● Lighting group 1

Mounting height = 3,00 m

### Use case:

In a conference room, the lighting is to be controlled according to presence and daylight. Despite the automatic control, it should be possible to influence the current switching status manually via a button or a remote control. The occupancy detectors are to be mounted on the ceiling.

### Recommendation:

PD4 device as DALI Compact. The lighting is controlled by a PD4-M-DALI/DSI-1C-FC which, in the 1C version, has an additional relay which cuts off the power to the DALI lighting when not in use, thus reducing DALI standby consumption.

All parameters are configured directly on the detector via IR remote control or smartphone adapter; the DALI luminaires are addressed directly via broadcast and dimmed accordingly. A push-button control (on / off / dimming) is possible.

### Alternative:

- PD4-M-DALI/DSI without cut-off relay
- PD4-M-DUO-DALI/DSI for two lighting groups (near and far from windows)
- DALI LINK (see previous example)
- DALISYS (see example 2)

### Note:

By mounting the PD4, the entire room can be covered with just one device.

### Object data:

Type: Meeting room with daylight  
Room dimensions: L 10,00 x W 6,00 m  
Ceiling height: 3,00 m (clear height)

### Lighting:

1 luminaire group with electronic ballasts

### Product listing:

1 pcs. LUXOMAT® PD4 master device

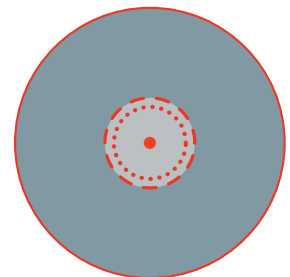
### Master device setting:

Follow-up time R1: mind. 5 min  
Switch-on threshold R1: 500Lux  
Follow-up time R2: optional

### Operation mode:

Master circuit with optional push-button control (see wiring diagram PD4-M-DALI/DSI)

### Detection range Type „PD4“

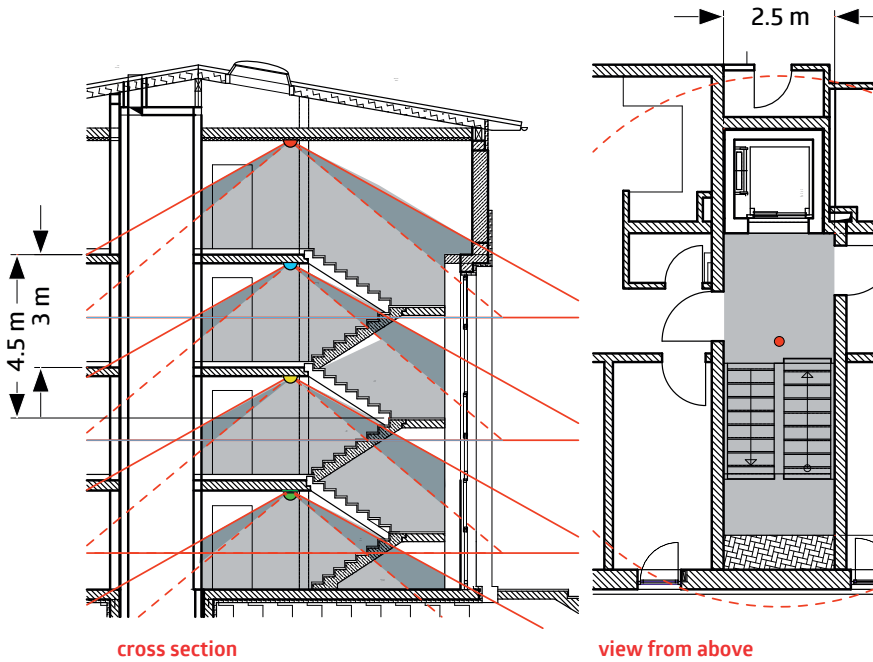


—————	across	Ø 24 m
- - - - -	frontally	Ø 8 m
.....	seated activity	Ø 6,4 m

for a mounting height of 2,50 m

Please note that the detection range changes depending on the mounting height!

# Planning example staircase with PD11



- Detector for
- Lighting group 1
- Lighting group 2
- Lighting group 3
- Lighting group 4

Mounting height = 3,00 m

## Use case:

In the stairwell of a multi-family house, four lighting groups (3 floors/1 basement floor) are to be controlled automatically by occupancy detectors. The devices should be mounted on the ceiling.

## Recommendation

PD2 devices in DALI LINK version. Each detector regulates one lighting group, that of its floor.

Similar to DALISYS, the DALI LINK devices can send each other a signal so that the neighbouring detectors on the floor above and below also switch on.

This makes the staircase appear to be completely illuminated. However, the staircase never needs to be completely illuminated, the light follows and guides the user as needed. The switch-off pre-warning can be replaced by a gradual dimming if necessary.

## Alternative:

- DALISYS
- DALI Compact e.g. with a PD2-M-DALI/DSI, but here the advantage of the „anticipatory“ switch-on is missing.

## Object data:

Type: Staircase with 3 floors with daylight and one basement floor without daylight  
 Room dimensions: L 6,50 x W 2,50 m  
 Ceiling height: 3,00 m (clear height)

## Lighting:

4 lighting groups (one lighting group per floor). DALI LINK thus ends with 16 floors, DALISYS must be used for more floors.

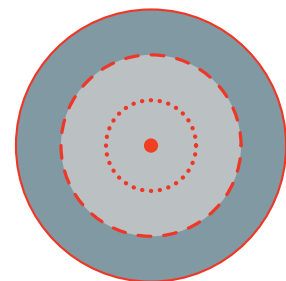
## Product listing:

- 4 pcs. PD11-DALILINK-FLAT
- 1 pcs. DALI LINK power supply
- 1 pcs. DALI LINK push-button interface

## Master device setting:

- Group 1-3:
  - Follow-up time R1: 5 min
  - Switch-on threshold R1: 300 Lux
  - Follow-up time R2: optional
- Group 4:
  - Follow-up time R1: 5 min
  - Switch-on threshold R1: Day (Symbol "Sun")
  - Follow-up time R2: optional

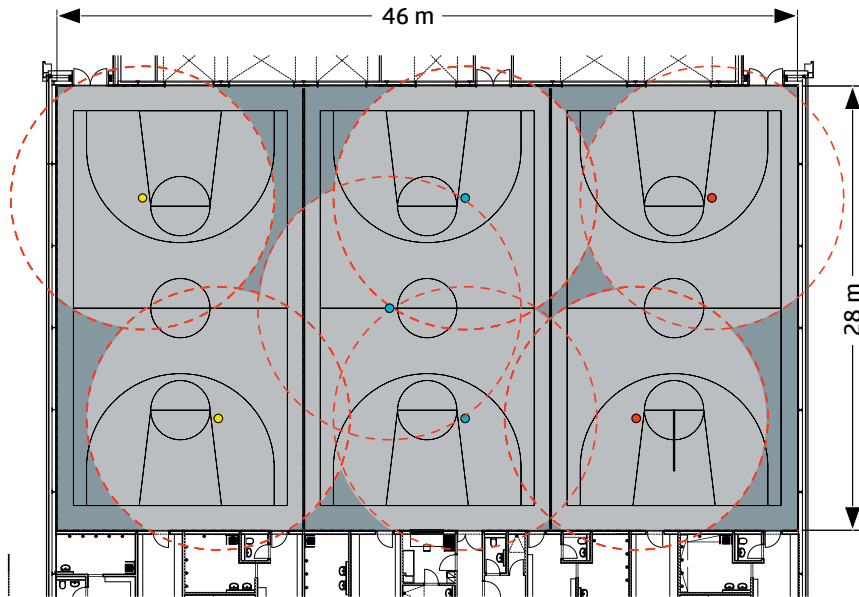
## Detection range Type „PD11“



- across Ø 9 m
  - - - frontally Ø 6 m
  - ..... seated activity Ø 3 m
- for a mounting height of 2,50 m

Please note that the detection range changes depending on the mounting height!

## Planning example three-field gymnasium with PD4



Detector for  
 ● Lighting group 1  
 ● Lighting group 2  
 ● Lighting group 3

Mounting height = 6,00 m - 8,00 m

### Use case:

Automatic lighting control with occupancy detectors is to be implemented in a three-field gymnasium with variable partitions. In each of the three hall areas, a luminaire group is formed and individually switched.

Despite the automatic control, it should be possible to influence the current switching status manually using a push-button as well as a remote control.

### Recommendation

For use in individual halls, two detectors with different brightness set values, 300 lux or 500 lux, are programmed for each part of the hall using DALISYS software. The detector deactivated as master is assigned the slave function.

In order to be able to use the entire hall without partition walls, the detector in the centre of the hall (Hall 2) is assigned the brightness set value of 1,000 lux as master and the other detectors function as slaves. A „Guided Light“ orientation light can optionally be set in adjacent but unoccupied parts of the hall. Several parts of the hall or the entire hall can be interconnected as required. The brightness can be selected either separately for each part of the hall or for the entire hall.

### Alternative:

- DALI Compact: A specific wiring diagram is required for DALI Compact; this can be obtained from us on request.

### Note:

Scenarios can be stored in the lighting control system so that lighting is optimally controlled depending on use (with partitions in the small halls or without partitions in the large hall).

### Object data:

Type: Three-field gymnasium  
 Room dimensions: L 46,00 x W 28,00 m  
 Ceiling height: 6,00 - 8,00 m, reflective floor

### Lighting:

1 luminaire group with electronic ballasts per hall area

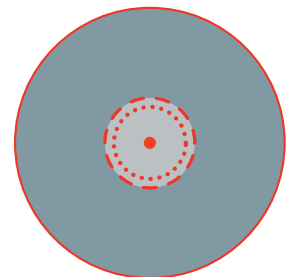
### Product listing:

- 7 pieces PD4-DALISYS-SM alternatively PD4-DALISYS-GH-SM
- 5 pieces PBM-DALISYS-4W
- 2 pieces PS-DALISYS-USB-REG
- 1 piece ROUTER-DALISYS-REG
- 7 wire baskets for PD4 occupancy detectors

### Master device setting:

Follow-up time R1: mind. 5min  
 Switch-on threshold R1: 300 - 500Lux  
 Follow-up time R2: optional

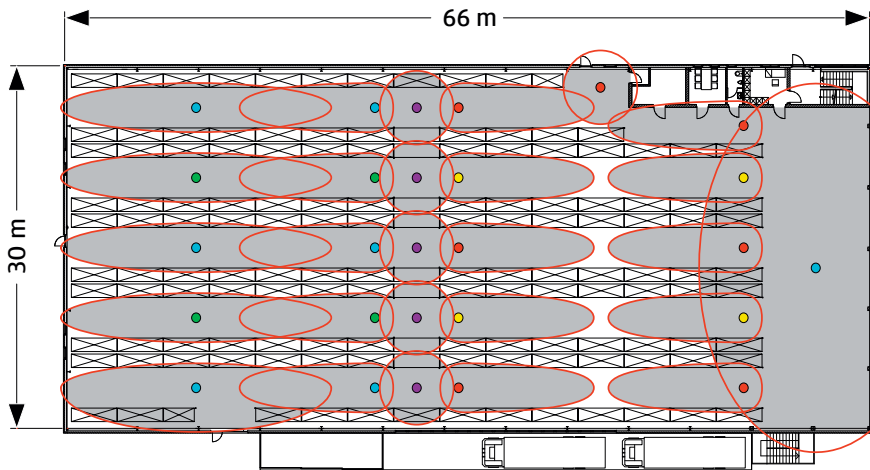
### Detection range Type „PD4“



— across                    Ø 24 m  
 - - - - - frontally            Ø 8 m  
 ..... seated activity      Ø 6,4 m  
 for a mounting height of 2,50 m

Please note that the detection range changes depending on the mounting height!

# Planning example high-bay warehouse with PD4-GH



Detector for

- Lighting group 1-3
- Lighting group 4-7
- Lighting group 8-9
- Lighting group 10-11
- Lighting group 12

Mounting height = 10,00 m

## Use case:

In a warehouse, the light is to be switched on automatically by occupancy detectors. Each aisle is to be monitored and switched individually so as not to waste energy unnecessarily.

## Recommendation:

Use of PD4-M-DALI/DSI-GH, DALI Compact detectors at the points where „Master“ is indicated. Important: One slave detector per shelf aisle, see „Notes“ for installation recommendations. The devices of the „main axes“ should have a longer follow-up time, in the rack aisles the follow-up time can be shorter, since one is immediately detected when the rack aisle is entered or driven on. Depending on the desired comfort, a permanent orientation light of 10% can be set, for example. The external light sensor of the PD4-M-DALI/DSI-GH ensures good light control even at high mounting heights.

Zones 1-3 should be equipped with normal PD4-DALI masters as traffic can come from all directions.

For roofed loading areas, a detector with IP54 base can also be used outdoors.

## Note:

For optimum detection, a PD4-GH detector is mounted at each end of the aisle, when this is open on both sides. One PD4-GH detector is placed at the open end of the one-sided open aisles and a second one in the middle.

In order to avoid unwanted switching in the aisles when using the main aisle, the detectors

at the head ends of the aisles on this side should be restricted with blinds.

The luminaire group in the corridor is controlled by PD9 detectors.

## Object data:

Type: High bay warehouse with daylight

Warehouse dimensions:

L 66,00 x W 30,00m

Ceiling height: 10,00m

## Lighting:

12 luminaire groups with electronic ballasts

## Product listing:

3 pcs. PD4-M-DALI/DSI-SM

1 pcs. surface mount base IP54

PD2/PD4-SM

7 pcs. PD4-M-DALI/DSI-GH

5 pcs. PD4-S-GH

## Master device setting:

Follow-up time R1: > 5 min

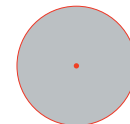
Switch-on threshold R1: 500 Lux or individually with remote control

## Operation mode:

Master/slave operation for luminaire groups in the individual aisles and passageways (see wiring diagrams PD4-M-1C-GH and PD9-M-1C-GH).

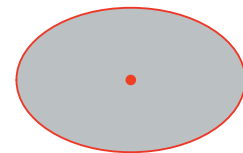
The master device must always be mounted at the darkest spot of the area of its luminaire group.

## Detection range Type „PD9-GH“

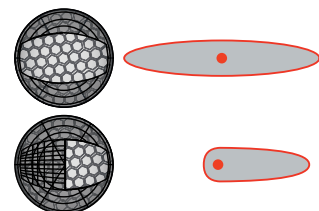


across  $\varnothing$  6 m  
for a mounting height of 2,50 m

## Detection range Type „PD4-GH“



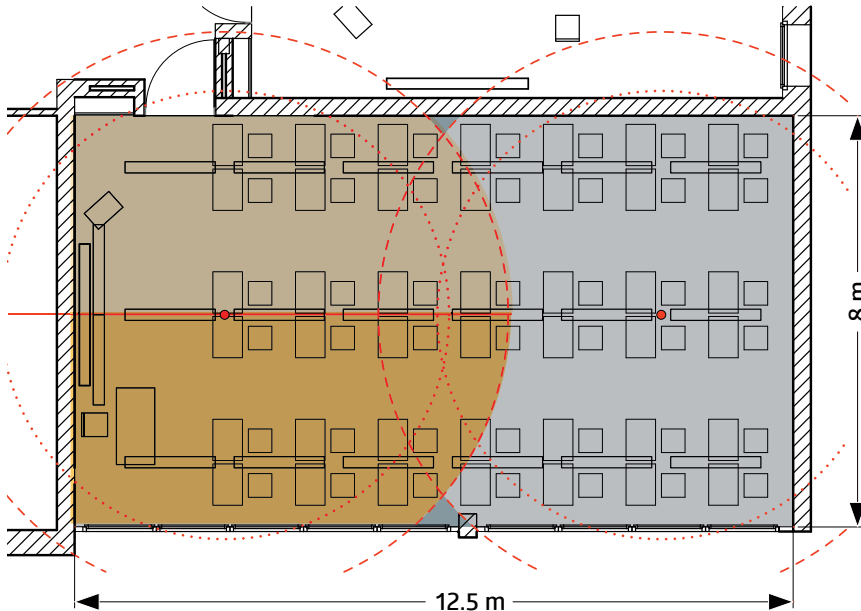
across / frontally  $\varnothing$  30 m  
for a mounting height of 14,00 m - 16,00 m



The detection range can be optimally adapted by means of blinds.

Please note that the detection range changes depending on the mounting height!

# Planning example classroom with PD4-DAA4G



## Use case:

In a classroom with a window front, three light bands and separate blackboard lighting, the lighting in three DALI groups is to be controlled according to presence and daylight. The difference in brightness between the wall and window sides is to be compensated so that the same brightness prevails at each pupil's desk. In addition, the air conditioning system is to be activated according to presence. Despite the automatic control, it should be possible to influence the current switching status manually via push-button or remote control app. The occupancy detector is to be mounted on the ceiling.

## Recommendation

DALI compact system with a PD4-M-DAA4G. It may make sense not to switch the air-conditioning system directly with the detector's relay, but simply to place a „presence signal“ (room occupied) on a building management system and then switch the air-conditioning system (depending on occupancy) via the building management system. It is also possible to switch the ventilation and, if necessary, the heating to occupancy-dependent, and the presence information can also be used for further evaluations.

## Alternative:

- DALISYS: A wide range of additional functions are possible here, e.g. connection of emergency lighting, evaluation functions, e-mail notification and remote configura-

tion. Another recommendation is a mixed installation. DALI Compact for cost reasons for the classroom, corridors and other areas in DALISYS.

## Note:

With the PD4-DAA4G, the three light bands in the room can be operated as individual DALI groups. Offset values are used to compensate for brightness differences. The panel lighting can be switched as the fourth DALI group. In addition, the air-conditioning system is automatically controlled via a relay channel. Despite the automatic control, the current switching status can be overridden manually via push-button or remote control app.

## Object data:

Type: Classroom with one window side  
Room dimensions:  
L 12,50 x W 8,00 m  
Ceiling height: 3,00 m

## Lighting and HVAC:

4 DALI groups with electronic ballasts  
1 relay channel for air conditioning

## Product listing:

1 pcs. LUXOMAT® PD4-Master-DAA4G  
1 pcs. LUXOMAT® PD4-Slave-DAA4G

## Master device setting:

Follow-up time DALI-Group 1-4: > 5 min  
Switch-on threshold :DA1 - DA4: 500Lux  
Main lighting: full automatic

- Light sensor 1
- Light sensor 2

- Detector for Lighting group 1

Mounting height = 3,00 m

(DALI group 1-3)

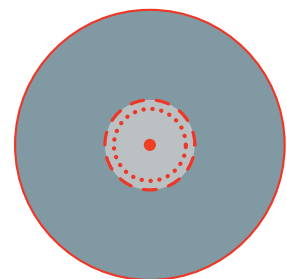
Panel lighting: semi-automatic (DALI group 4)

Follow-up time HVAC: 15 min

## Operation mode:

Standard mode (see wiring diagram PD4-M-DAA4G)

## Detection range Type „PD4“



- across Ø 24 m
  - - - frontally Ø 8 m
  - ..... seated activity Ø 6,4 m
- for a mounting height of 2,50 m

Please note that the detection range changes depending on the mounting height!



Intelligent building automation  
using sensors from B.E.G.



Basic – Economic solution  
for simple requirements



Standard – comprehensive solution  
for common requirements



Deluxe – premium solution  
for demanding applications



## New hardware\*

- Internal and external light sensors
- Noise sensor
- Temperature sensor
- Setting and reading of parameters via bidirectional smartphone app

## New software\*

- Sensor sensitivity individually adjustable
- Logic module
- Simulated presence
- Short occupancy
- Offset function
- Direction detection

\* version-dependent



## Remote controls

### The B.E.G. BLE-IR adapter for smartphones, the alternative to B.E.G. remote controls

Almost 15 years ago, B.E.G. was the first to offer a remote control-capable motion detector. Nowadays, almost all B.E.G. occupancy and motion detectors are remote control-capable. To make things easier, B.E.G. offers the remote control app.

What you need is a compatible Smartphone with internet connection and the B.E.G. LUXOMAT® remote control app, which is downloadable in the Google Play Store or the Apple Store. The update service ensures that the app is always up to date.

The app contains all current B.E.G. remote controls and therefore replaces more than 40 remote controls. The userfriendly navigation offers the possibility to search for the product to program or the respective remote control by name or part number. Therefore, the installer (or the user) quickly finds the right user interface.

The transmission to the respective detector works via the B.E.G. IR adapter for smartphones BLE-IR. The connection is bidirectional via Bluetooth Low Energy. The brightness measurement integrated in the adapter is transmitted cyclically to the compatible B.E.G. devices.



## Overview remote controls

Remote control	Part no.	PD2(N)	PD4(N)	PD9	PD11	PICO	Indoor 180
IR-PD-DALI-Mini	92112	PD2-M-DALI/DSI PD2N-DALISYS	PD4-M-DALI/DSI PD4-M-DALI/DSI-C PD4-M-DUO-DALI/DSI PD4N-DALILINK PD4N-DALISYS PD4-DALISYS-GH PD4-DALISYS-C	PD9-M-DALI/DSI PD9-M-DALI/DSI-GH	PD11-DALISYS-FLAT PD11-DALILINK-FLAT	PICO-DALISYS	-
IR-PD-DALI	92094	PD2-M-DALI/DSI	PD4-M-DALI/DSI PD4-M-DALI/DSI-C PD4-M-DUO-DALI	PD9-M-DALI/DSI	-	-	-
IR-PD-DALI-LD	92652	PD2-M-DALI/DSI	PD4-M-DALI/DSI PD4-M-DALI/DSI-K PD4-M-DUO-DALI	PD9-M-DALI/DSI	-	-	-
IR-PD4-TRIO-DALI	92104	-	PD4-M-TRIO-DALI	-	-	-	-
IR-PD-DALI-1C	92116	PD2-M-DALI/DSI-1C	PD4-M-DALI/DSI-1C	-	-	-	-
IR-PD-DALI-E	92122	PD2-M-DALI/DSI	PD4-M-DUO-DALI PD4-M-DALI/DSI	PD9-M-DALI/DSI	-	-	-
IR-Adapter für Smartphones	92726	all	all	all	all	all	all
BLE-IR-Adapter	93076	all	all	all	all	all	all



# Product listing

## Stand-alone products

Part no.	Description	Prod.gr.	Page
92258	PD2-M-DALI/DSI-FC	24	16
92275	PD4-M-DALI/DSI-FC	24	17
92276	PD4-M-DUO-DALI/DSI-FC	24	26
92279	PD4-M-DALI/DSI-SM	24	17
92280	PD2-M-DALI/DSI-SM	24	16
92328	PD4-M-DALI/DSI-C-FC	24	18
92486	PD2-M-DALI/DSI-1C-FC	24	22
92488	PD4-M-DALI/DSI-1C-FC	24	24
92489	PD4-M-DALI/DSI-1C-SM	24	24
92530	PD4-M-DALI/DSI-C-SM	24	18
92591	PD4-M-DAA4G-FC	24	30
92698	PD2-M-DALI/DSI-HVAC-FC	24	23
92699	PD4-M-DALI/DSI-HVAC-FC	24	25
92721	PD4-S-DAA4G-FC	24	31
92743	PD4-M-DAA4G-SM	24	30
92750	PD4-M-TRIO-DALI/DSI-SM	24	27
92751	PD4-M-TRIO-2DALI/DSI-1C-SM	24	28
92755	PD4-M-TRIO-DALI/DSI-FC	24	27
92756	PD4-M-TRIO-2DALI/DSI-1C-FC	24	28
92759	PD4-S-DAA4G-SM	24	31
92790	PD4-M-TRIO-2R-1D-FC	24	29
92920	PD9-M-DALI/DSI-FC	24	20
92938	PD9-M-DALI/DSI-GH-FC	24	21
93006	PD4-M-HCL-FC	24	32
93007	PD4-M-HCL-SM	24	32
93015	PD4-M-DALI/DSI-GH-SM	38	19
93033	PD2-M-DALI/DSI-1C-SM	24	22

## Networked products

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92732	PBM-DALILINK-4W-BLE	24	37
92842	PBM-DALISYS-4W	24	51
92843	PS-DALISYS-USB-REG	24	53
92846	PS-DALILINK-FC	24	38
92847	SW-DALILINK-BLE-SMP	24	44
92849	RM-DALISYS-1C-REG	24	55
92850	ROUTER-DALISYS-REG	24	52
93023	VISTATION-DALISYS-REG	39	54
93025	PD4-BMS-GH-SM	38	61
93068	PD11-DALILINK-FLAT-FC	24	34
93189	PS-DALILINK-USB-REG	24	39
93308	LC-plus DALISYS 280	24	44
93311	PD4N-BMS	38	59
93329	PD2N-BMS-FC	38	58
93330	PD11-BMS-FLAT-FC	38	63
93332	PD4-BMS-C-FC	38	60
93337	PD2N-BMS-FM	38	58
93340	PD4N-DALISYS	24	46
93345	PD4-DALISYS-GH-SM	24	48
93357	PD4-BMS-C-SM	38	60
93368	PD2N-DALISYS-FM	38	45
93369	PD2N-DALISYS-FC	38	45
93370	PD4-DALISYS-C-SM	24	47
93377	PD4N-DALILINK	24	35
93378	PD4-DALISYS-C-FC	24	47
93397	Indoor 180-BMS without frame	38	64
93807	RM-DALILINK-1C-REG	24	42
93840	STARTERSET-DALI-LINK-SMALL-OFFICE	24	41
93908	PICO-DALILINK-FC	24	36
93909	PICO-DALISYS-FC	24	49
93924	PICO-BMS-FC	38	62

## Accessory

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39076	Central plate Indoor 180	6	64
92094	IR-PD-DALI	9	88
92104	IR-PD4-TRIO-DALI	9	88
92112	IR-PD-DALI-Mini	9	88
92116	IR-PD-DALI-1C	9	88
92122	IR-PD-DALI-E	9	88
92141	SM-Socket Indoor 180, pure white	6	64
92161	SM-Socket IP54 PD2/PD4-SM	6	16
92199	Wire basket BSK (Ø 200 x 90 mm)	6	16
92386	Socket IP54 PD4-TRIO-SM	6	27
92441	Wall holder PD4-SM	6	18
92467	Wire basket BSK (Ø 164 x 143 mm)	6	27
92537	Cover ring PD11 Ø 52 mm	6	34
92652	IR-PD-DALI-LD	9	88
92692	Cover ring PD11 Ø 100 mm	6	34
92726	IR-Adapter for smartphones	9	88
92832	In-wall mounting set 1 / PD11	6	34
92833	In-wall mounting set 2 / PD11	6	34
92993	Square design frame rectangular PD9-FC	6	20
92994	Square design frame rectangular PD11-FC	6	34
93076	BLE-IR-Adapter	9	88
93307	SM socle mounting set IP54 PD2N/4N-FM	6	35





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