



# Light is universal Control by demand

**Light is OSRAM** 

**OSRAM** 

# Light management for efficiency and comfort

Today, it is becoming increasingly important to design lighting systems precisely for their intended use. With the functionalities offered by control devices in combination with sensors and wireless communication, the demands placed on light management are also growing. Despite the complexity of the technologies, installation, commissioning and operation must nevertheless remain intuitive, simple and flexible. Use the latest lighting technology

from OSRAM to meet your customers' requirements! Choose from our wide product portfolio of controllers, LED drivers and sensors. Depending on the size, degree of connectivity and complexity of the project, all options are available: from manual switching and dimming of individual luminaires to the control of luminaire groups to Human Centric Lighting (HCL) solutions and comprehensive building control.

#### What do you achieve with modern light management?



#### Reduce energy costs

The use of light and presence sensors significantly reduces power consumption. In case no person is present, the light is switched off or dimmed down to the desired level in safety-relevant areas. An automatic daylight-dependent control system supplies only as much artificial light as necessary.



#### Increase the individual lighting comfort

Even with simple control solutions, individual luminaires or groups of luminaires can be adapted to the individual needs of users so that optimum light is available in every work area.



#### **Use Tunable White and Human Centric Lighting**

With Tunable White systems, the light color can be adapted to different requirements, RGB/RGBW systems create ambience and achieve decorative effects. Human Centric Lighting (HCL) concepts are developed to make use of the biological effects of light. The lighting supports people's day-night rhythm to improve well-being, sleep quality and performance. Brightness and light color are automatically adapted to the course of the day.



#### **Create wireless networks**

Thanks to the wireless communication between the luminaires, you can also upgrade existing installations to the state of the art in lighting technology – without any additional wiring. The commissioning, configuration and control of the lighting system by smartphone via app brings further advantages.

# Always the right solution: from BASIC to PROFESSIONAL

Parallel to the new possibilities of intelligent lighting control, lighting systems increasingly focus on people's needs. Light creates a pleasant room climate and improves concentration during work, it can be individually adjusted to each visual task, it can motivate, have a relaxing effect and enhance performance. HCL concepts will therefore become more and more important in the future. In addition to

these diverse requirements, most projects also have other objectives: cost reduction through energy-efficient, low-maintenance and future-proof installations, greater flexibility through wireless communication and programming of control devices, and greater ease of operation and lighting comfort. With our products, you can put together an efficient and economical system for every project.

#### For every demand from starter package to sophisticated complete system

#### BASIC

Manual dimming and switching Touch DIM®, DALI PCU, DALI MCU

Manual dimming, switching and color temperature setting DALI MCU TW

#### **ADVANCED**

- + Control of groups (switching, dimming), also via app DALIeco BT, DALI ACU BT
- + Automatic wireless systems (switching, dimming, Tunable White, scenes) OT BLE DIM (CV, BT); up to 4 channels RGBW, TW

#### **PROFESSIONAL**

- + Real-time clock for time-of-day-dependent color temperature control (HCL)

  DALIeco BT RTC
- + Automatic building control (wired and app control, Tunable White, scenes, energy management)
  DALI PRO



#### **BASIC**

#### **Application areas**

Single-room solution

#### **Functions**

- Manual switching and dimming
- Tunable White solutions
- Color temperature setting with DT8 LED drivers
- Storage of light value

#### **Products**

**Touch DIM®:** Control via pushbutton with LED driver **DALI PCU:** Pushbutton control via DALI interface for up to 25 DALI control gears/luminaires, can be extended to a total of 4 devices

**DALI MCU:** Rotary dimmer, control of up to 25 DALI control gears/luminaires, can be extended to a total of

**DALI MCU TW:** Rotary dimmer as entry-level product for Tunable White, control of up to 25 DALI control gears/luminaires, can be extended to a total of 4 devices

#### Your benefits

- Easy installation
- Plug-and-play, no commissioning
- Modernization of existing installations
- Energy saving
- Higher lighting comfort







#### **ADVANCED**

#### **Application areas**

Single-room solution with wider range of functions

#### Functions

- Control of luminaire groups (switching, dimming)
- Set-up of automatic systems (switching, dimming, Tunable White, scenes)
- Control via smartphone and app
- HCL solutions (BLE DIM)
- Switching, dimming, color temperature setting with DT8 LED drivers
- Storage and recall of lighting scenes
- Daylight and presence-dependent brightness regulation
- Max. number of DALI LED drivers: 32

#### **Products**

**DALI ACU BT, DALIECO BT:** Easy switching, dimming and color temperature setting via smartphone/Bluetooth, control of standard and Tunable White LED drivers **OT BLE DIM (CV, BT):** LED dimmers without gateway and additional wiring, control via smartphone/Bluetooth

#### Your benefits

- Easy installation and commissioning
- Intuitive configuration and control
- Convenient app control
- Easy digital, tool-free maintenance
- Economical set-up of HCL systems (BLE DIM)
- Energy saving









#### **PROFESSIONAL**

#### **Application areas**

Floor solution, work environment (production + office)

#### **Functions**

- Automatic switching and dimming of luminaire groups
- Convenient control via app
- RGB control (DALI PRO)
- Color temperature setting
- Dimming
- Storage and recall of scenes
- Automatic sequences: create/start/pause
- Freely configurable app for control (Android/iOS)
- Daylight and presence-dependent brightness regulation
- Daylight simulation (HCL)
- Max. number of DALI LED drivers: 32<sup>1)</sup>, 256<sup>2)</sup>, 1.024<sup>3)</sup>

#### **Products**

DALI PROFESSIONAL: Intuitive control via app or standard pushbutton, daylight simulation with real-time control, connection of DALI light and presence sensors **DALI PRO Control App:** Switching and dimming with status display, arrangement in groups, recall of static scenes or dynamic sequences, control element for RGB and Tunable White

DALIeco BT RTC: For real-time-controlled HCL solutions (2 channels via DT8 LED drivers (TW))

#### Your benefits

- Easy installation
- Commissioning via parameterization with modules using "drag & drop" (without programming with DALI PRO)
- Convenient app control
- Modernization without rewiring
- Economical set-up of HCL systems
- Integration into building management systems via new interfaces: KNX networking in the building and data exchange (DALI PRO)
- Maximum efficiency through comprehensive energy management system









DALIeco Controller

# The combination makes the difference

Controllers, LED drivers, sensors – each of our products is designed for efficiency, performance and ease of use. But it is only in the system that the components complement each other to form a perfectly coordinated whole. Find out which components fit best together.

	BASIC			ADVANCED	
Controller	1 DALI PCU Pushbutton controller	2 DALI MCU Digital rotary dimmer	3 DALI MCU TW Digital rotary dimmer Tunable White	4 DALI ACU BT DALI controller with Bluetooth interface	5 DALIeco BT DALI controller with Bluetooth interface
Functions	STATE OF THE STATE	0	0	CORAN OLD COUNTY OF THE COUNTY	
Number of DALI ECGs	to 4 DALI PCU,	25 (up to 100 with up to 4 DALI MCU, flexible extension via DALI repeater)	25 (up to 100 with up to 4 DALI MCU TW)	32	32
Plug-and-play function supported with OSRAM DALI sensors	•	<b>♠</b>	<b>(</b>	•	•
Daylight-dependent regulation				*	<u></u>
Presence detection				•	•
Groups				•• 1	1
Scenes				<b>=</b>	<b>=</b>
Tunable White			4	4	4
Timer function					
Supports RGB/RGBW					
App control					
Time-of-day-dependent control (color temperature, HCL)					

**Tunable White** 

**Timer function** 

App control

Supports RGB/RGBW

#### Time-of-day-dependent control (color temperature, HCL) Scenes PROFESSIONAL Stand-alone sensors 7 DALIeco BT **D** LUXeye<sup>®</sup> 6 OT BLE DIM 8 DALI PRO A LS/PD LT2 LI B Touch DIM® C LUXeye® Constant-voltage RTC **CONT-4 RTC** UF + OTi...UF LS/PD LI + OTi... Sense CM KIT + Sense dimmer with DALI controller with Controller (9TE) LUXeye® Sense CM KIT + LUXeye® Bluetooth interface Bluetooth interface DALI BT Sense 10A BT il • • an an el i Many E C-C(18 OTH | BEAL (3) Corresponding to the number of 10 A 256 (up to 1,024 with 2 2 20 up to 240 W 32 up to 4 controllers) circuit breakers type B • • \*\* \*\* **\*** \*\* \*\* \*\* • **(**) 4 **(**) 4 (RGBW) (RGB) **5** \*\* \*\*(

Functions

Groups

Plug-and-play function supported

Daylight-dependent regulation

with OSRAM DALI sensors

Presence detection

<sup>&</sup>lt;sup>1</sup> Broadcast without app, maximum of 4 groups with app <sup>2</sup>With Casambi app <sup>3</sup> Up to 4 x 16 groups <sup>4</sup> Possible in combination with OSRAM OTI DALI...TW LED drivers <sup>5</sup> Only change of color temperature, no brightness change

# The right components

#### **Controllers**

#### BASIC





#### **Pushbutton controller**

- Manual dimming and switching of DALI luminaires via standard pushbutton
- Integrated DALI supply
- Integration into flush device boxes
- Parallel connection of up to 4 devices

Product reference	GTIN (EAN)	Dimensions
DALI PCU	4052899955622	48 x 48 x 22



# Digital rotary dimmer

- Manual dimming and switching of DALI luminaires
- Integrated DALI supply
- Parallel connection of up to 4 devices
- Combination with covers of various manufacturers

Product reference	GTIN (EAN)	Dimensions
DALI MCU	4008321189721	80 x 80 x 50



# 3 DALI MCU TW Digital rotary dimmer Tunable

- Intuitive manual dimming, switching and color temperature setting of DALI luminaires with DALI Device Type 8 (DT8)
- Parallel connection of up to 4 devices
- Individual setting of minimum brightness level and color temperature range

Product reference	GTIN (EAN)	Dimensions
DALI MCU TW	4052899465916	80 x 80 x 50

#### ADVANCED



#### 

- Configuration and control via pushbutton and/or app
- Control of standard white or Tunable White light according to DALI Device Type 8 (DT8)
- Individual addressing of up to 4 groups
- Supports OSRAM DALI sensors
- Integration into flush device boxes

Product reference	GTIN (EAN)	Dimensions
DALI ACU BT	4052899544819	49 x 48 x 22



# DALI controller with Bluetooth interface

- Configuration and control via pushbutton and/or app
- Control of standard white or Tunable White light according to DALI Device Type 8 (DT8)
- Individual addressing of up to 4 groups
- Supports OSRAM DALI sensors
- For luminaire integration or independent mounting with CI KIT

Product reference	GTIN (EAN)	Dimensions
DALIeco BT	4052899988781	108 x 30 x 21
ECO CI KIT (optional)	4008321392091	-



#### 

- Control of LED modules in white, Tunable White, RGB or RGBW colors
- Supports systems based on the Casambi lighting control system
- Very low maintenance requirements

Product reference	GTIN (EAN)	Dimensions
OT BLE DIM	4052899557833	172 x 42 x 20

#### **PROFESSIONAL**



#### 🔼 DALIeco BT RTC 🕑 🔅 🗓 🔥 🗲 DALI controller with **Bluetooth interface**



Like DALleco BT, plus:

- Real-time clock for time-of-daydependent automatic control of brightness and color temperature (HCL)
- Intuitive manual dimming, switching and color temperature setting
- 4 configurable timers



### 8 DALI PRO CONT-4 RTC 🔅 🗓 🔥



- Extremely flexible and configurable in many details
- Easy and intuitive control via app
- Connection of up to 4 DALI PROFESSIONAL controllers
- Extremely flexible, convenient configuration with PC software
- Supports DALI sensors

Product reference	GTIN (EAN)	Dimensions
DALIeco BT RTC	4062172016537	108 x 30 x 21

Product reference	GTIN (EAN)	Dimensions
DALI PRO CONT-4 RTC	4008321710871	90 x 160 x 62

#### Stand-alone sensors



#### A LS/PD LT2 LI UF + OTi...UF • 🔑 🔆 🚺

- Light and presence sensor for direct connection of up to 2 OTi DALI ... UF LED drivers
- Extremely slim design
- Setpoint for daylight-dependent control can be stored
- Square detection area

Product reference	GTIN (EAN)	Dimensions
LS/PD LT2 LI UF (+ OTiUF)	4052899984615	50.2 x 20.7 x 16.5



Mounting height	2	2.5	3	4
Presence	3	3.7	4.4	-
Motion	4	5	6	6.5



#### B Touch DIM® LS/PD LI + OTi... ◆ 🔆 🗓

- Light and presence sensor for direct connection to OSRAM LED drivers with Touch DIM® function
- Setpoint for daylight-dependent control can be stored
- Additional control via pushbutton possible

Product reference	GTIN (EAN)	Dimensions
Touch DIM LS/PD LI (+ OTi)	4008321023025	63 x 29 x 21

<u>†</u>	
2.5	
	3.3

Mounting height	2	2.5	3	4	5
Presence	2.5	3.3	4	5	_
Motion	4.5	5.3	6	7	7



#### C LUXeye® Sense DALI BT \* 🕑 🔆 🖠

- Lighting control with integrated sensor technology and app connection via Bluetooth for the control of **DALI** luminaires
- Automatic start of light regulation after voltage is applied

Product reference	GTIN (EAN)	Ø	Height
LUXeye Sense DALI BT*	4052899957411	95	81



Mounting height	2	2.5	3	4	5
Presence	4	5	6	7	_
Motion	4.8	6	6	8	10



#### 🗖 LUXeye® Sense 10A BT\* 🕑 🔆 🗓

- Lighting control with integrated sensor technology and app connection via Bluetooth for the switching of luminaires
- Automatic start of daylight-dependent switching after voltage is applied

Product reference	GTIN (EAN)	Ø	Height
LUXeye Sense 10A BT*	4052899957428	95	81

2.5	
	5.0

Mounting height	2	2.5	3	4	5
Presence	4	5	6	7	-
Motion	4.8	6	6	8	10

CI. optional

LI

#### **OSRAM DALI sensors**

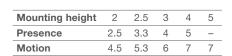


#### DALI LS/PD LI

#### Sensor for light management systems

- Compact housing design for luminaire integration
- Presence detection angle adjustable between 40...90° via integrated shutters
- Integrated daylight sensor
- Power supply via DALI
- Compatible with several OSRAM DALI controls

Product reference	GTIN (EAN)	Dimensions
DALI LS/PD LI	4052899043954	48 x 15 x 17





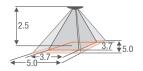
LI

#### LS/PD DALI LI UF

#### Sensor for light management systems

- Installation depth of only 11 m
- Square detection area
- Snap-on shutters

P	roduct reference	GTIN (EAN)	Dimensions
L	S/PD DALI LI UF	4052899984608	50 x 21 x 16



Mounting height	2	2.5	3	4
Presence	3	3.7	4.4	-
Motion	4	5	6	6.5



#### DALI Sensor Coupler HF LS LI + HF LS LI Sensor Sensor and controller for light management systems

- Optimized detection type for corridors with a height of up to 8m
- HF detection allows for integration into damp-proof luminaires

1	approx. 35°
max. 8 m	approx. 80°
•	

Product reference	GTIN (EAN)	Dimensions
DALI Sensor Coupler HF L	S LI 4052899141728	118 x 30 x 21
HF LS LI Sensor	4052899921481	56x28x21
ECO CI KIT (optional)	4008321392091	_

Mounting height	4	6	8	10
Presence	-	-	-	_
Motion	6.7	10	13.4	_
Vehicles	6.7	10	13.4	16



#### DALI Sensor Coupler E + external sensor Sensor and controller for light management systems

- Converts general external sensor signals into DALI
- Can be used with motion detectors with switching output
- Switched mains voltage L'

Product reference	GTIN (EAN)	Dimensions
DALI Sensor Coupler E	4052899230491	118x30x21
ECO CI KIT (optional)	4008321392091	_



Range of third-party sensor



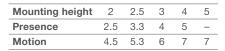
#### DALI LS/PD CI

#### Sensor for light management systems

- Housing design for ceiling integration (Ø 68 mm)

2.5	
<del>\</del>	3.3

Product reference	GTIN (EAN)	Ø	Height
DALI LS/PD CI	4052899930292	80	55



CI

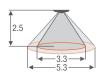
**LI,** optional CI



## DALI PRO Sensor Coupler + LS/PD MULTI 3 CI + ECO CI KIT

- Suitable for architecture due to particularly small design (< 50 mm)</li>
- Power supply via DALI
- Connection of light and presence sensors to DALI systems

Product reference	GTIN (EAN)	Dimensions		
DALI PRO Sensor Coupler	4008321379269	118x30x21		
LS/PD MULTI 3 CI	4008321916648	50 x 50 x 25		
ECO CI KIT (optional)	4008321392091	_		



CI

CM

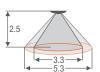
Mounting height	2	2.5	3	4	5
Presence	2.5	3.3	4	5	_
Motion	4.5	5.3	6	7	7



#### LS/PD AP KIT + DALI LS/PD LI

- Small housing design
- Presence detection angle adjustable between 40...90° via integrated shutters
- Power supply via DALI

Product reference	GTIN (EAN)	Dimensions
LS/PD AP KIT	4052899173385	65 x 65 x 34
DALI LS/PD LI	4052899043954	48 x 15 x 17



Mounting height	2	2.5	3	4	5
Presence	2.5	3.3	4	5	-
Motion	4.5	5.3	6	7	7



#### **DALI HIGHBAY ADAPTER**

- DALI light sensor for on-top ceiling mounting
- Adjustable sensitivity (up to a height of 13 m)

Product reference	GTIN (EAN)	Dimensions
DALI HIGHBAY ADAPTER	4008321774132	139 x 118 x 37



#### DALI HIGHBAY ADAPTER + HIGH BAY SENSOR

- DALI light sensor and motion detector
- Suitable for great installation heights

Product reference	GTIN (EAN)	Dimension	
DALI HIGHBAY ADAPTER	4008321774132	139 x 118 x 3	
		Ø	Height
HIGH BAY SENSOR	4008321410078	116	40



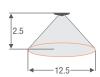
Mounting height	4	6	8	10	13
Presence	_	-	_	_	_
Motion	10	12	12	12	-
Vehicles	10	12	12	12	18



#### **DALI HIGHBAY ADAPTER + VISION SENSOR**

- DALI light sensor and motion detector
- Very wide detection area

Product reference	GTIN (EAN)	Dimension	
DALI HIGHBAY ADAPTER	4008321774132	139×118×3	
		Ø	Height
VISION SENSOR	4008321957047	116	40



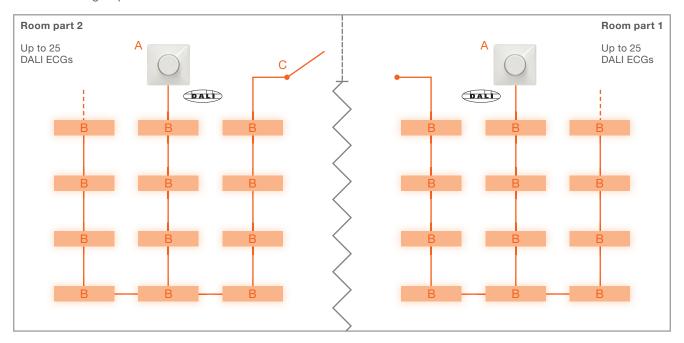
Mounting height	2	2.5	3	4	4.5
Presence	-	-	-	_	_
Motion	12.5	15.5	19	21	21

# Application examples

#### 1. DALI PCU/DALI MCU/DALI MCU TW - for BASIC applications

Conference room with partition wall (room parts can be operated separately or together)

**Description:** Large conference room that can be divided into two rooms by a partition wall. Both room parts can be operated separately via the DALI MCU or, if it is a large room, both room parts can be operated via both DALI MCU as a common group.



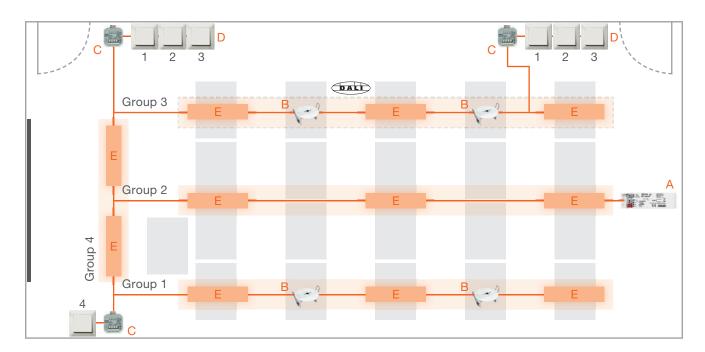
#### **Products:**

- A 2 DALI MCU (or DALI MCU TW)
- B 24 DALI ECGs (luminaires)
- C Relay switch

#### 2. DALI ACU BT/DALIeco BT - for ADVANCED applications

#### Classroom

**Description:** Classroom regulation with manual control via pushbuttons. The luminaires are divided into up to 4 groups, which are sensor-controlled when switched on.



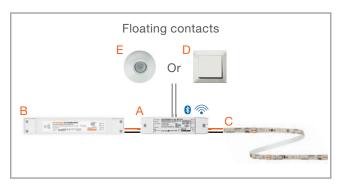
#### **Products:**

- A 1 DALIeco BT or DALI ACU BT
- B 4 DALI LS/PD CI
- C 3 DALI PRO PB Coupler
- D 7 pushbuttons
- E 11 standard DALI ECGs (luminaires)

#### 3. OT BLE DIM - for ADVANCED applications (decorative lighting)

#### **Hotel lobby**

**Description:** The lobby area is to be illuminated individually. Via indirect lighting in different colors, it provides a feel-good atmosphere.





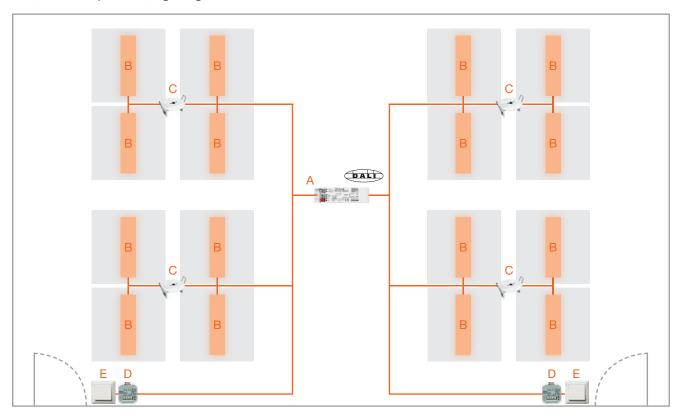
#### **Products:**

- A OT BLE DIM
- B LED driver (constant voltage 12...24 V)
- C FLEX TW/FLEX RGBW
- D Pushbutton
- E DALI HIGHBAY ADAPTER Smartphone with Casambi app

#### 4. DALIeco BT RTC – for PROFESSIONAL applications

#### Office

**Description:** An open-plan office is to be controlled manually via pushbuttons. Presence should also be detected and, in case of presence, light regulation should be based on an HCL curve.



#### **Products:**

- A 1 DALIeco BT RTC
- B 16 DALI LED drivers (DT8) (luminaires)
- C 4 DALI LS/PD CI
- D 2 PB Coupler
- E 2 pushbuttons

OSRAM BT Config and OSRAM BT Control App

#### 5. More efficiency and lower costs - save money with DALI PROFESSIONAL

#### What does the employer need?

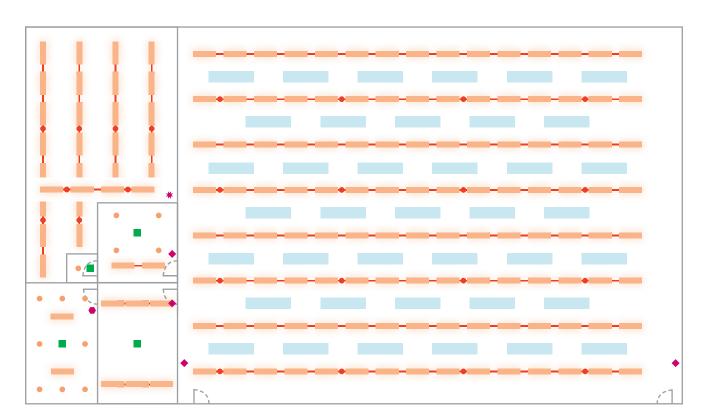
- One system for several rooms ready for flexible extension
- Light where it is needed
- Maximum energy savings

#### What helps the employees?

- Simple operation of the lighting
- Flexible light for different work steps

#### **Benefits:**

- One central control device for the entire hall
- High flexibility of the lighting system
- Operation via standard pushbuttons
- Convenient settings using a Windows®-based PC software (free of charge)
- Daylight-dependent and event-controlled regulation with presence function
- Central lighting control of several rooms possible (up to 256 luminaires)
- Flexibly extendible system thanks to DALI standard



#### **Products:**

- DALI PRO CONT-4 RTC (controller)
- LS/PD MULTI 3 CI (sensor for ceiling integration)
- DALI PRO Sensor Coupler
- DALI PRO PB Coupler (pushbutton coupler)
- HIGH BAY SENSOR
- DALI HIGHBAY ADAPTER

#### **Explanation:**

- Combined light sensor and motion detector HIGH BAY incl. DALI HIGHBAY ADAPTER
- Combined light sensor and motion detector LS/PD MULTI 3 CI incl. DALI PRO Sensor Coupler
- Luminaire
- Downlight
  - Daylight opening
- ◆ 4-fold pushbutton coupler DALI PRO PB Coupler
- DALI PRO Touch Panel
- ★ Controller DALI PRO CONT-4 RTC

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