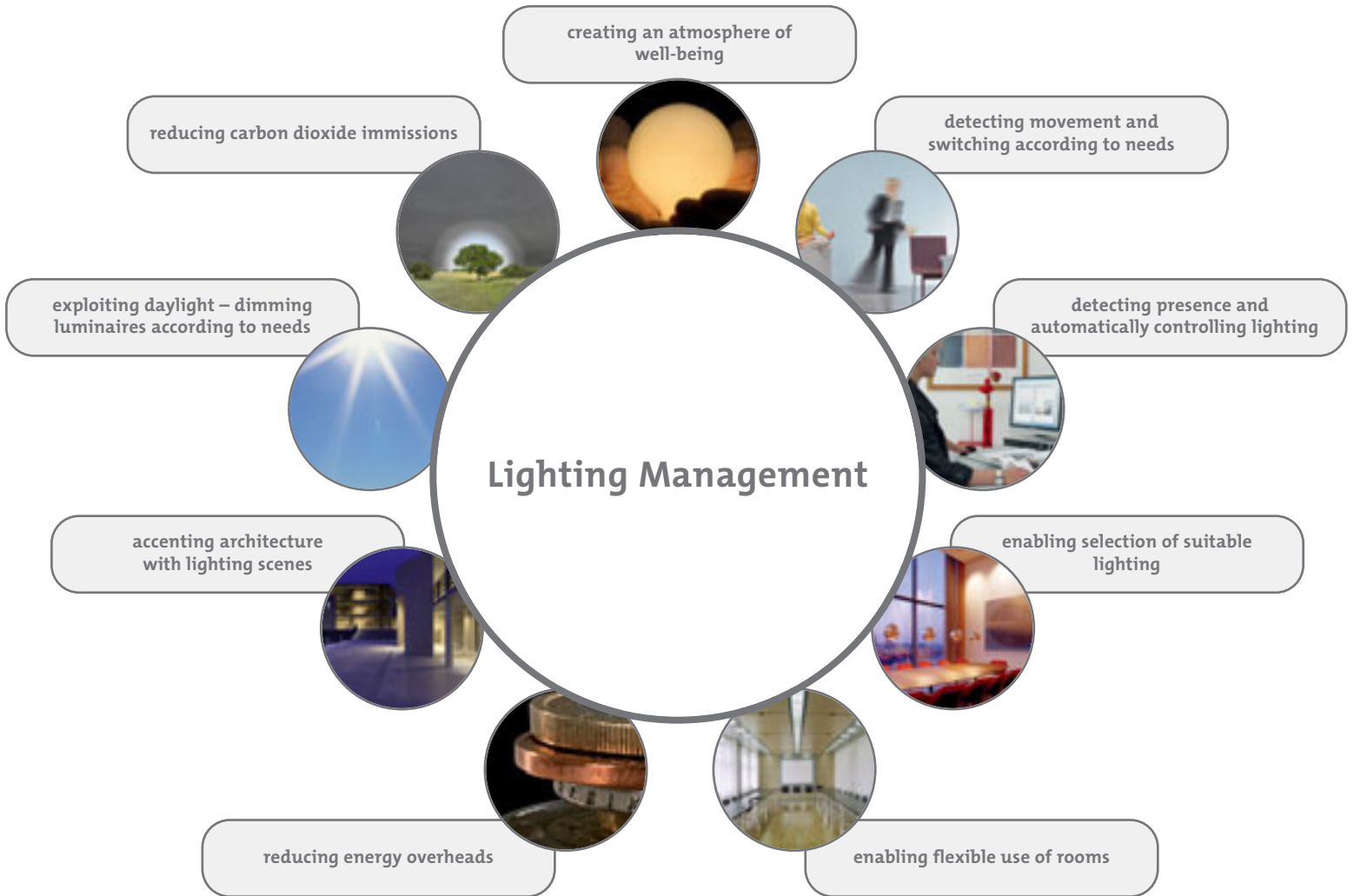


# Lighting Tools Interior

Chapter 11  
Lighting management

# This is what lighting management achieves



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**Professional – Single and Multi-Line System**


Professional  
function

Page 11.2



Professional  
operating  
elements

Page 11.6



Professional  
sensors

Page 11.12



Professional  
repeaters and  
converters

Page 11.14



Professional  
controllers

Page 11.18

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**digidim – Single and Multi-Line System**


digidim  
function

Page 11.20



digidim  
operating  
elements

Page 11.26



digidim  
sensors

Page 11.30



digidim  
repeaters and  
converters

Page 11.32



digidim  
relays and  
dimmers

Page 11.36



digidim  
power supply

Page 11.42



digidim software  
and interface for  
Single-Line System

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digidim software  
and router for  
Multi-Line System

Page 11.40

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**Single Room System – Multi-Sensor**


Multi-Sensors  
function

Page 11.44



Multi-Sensors  
sensors

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Multi-Sensors  
operating  
elements

Page 11.49

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**Single Room System – button and rotary control**


Button control of  
DALI luminaires

Page 11.54



Button control of  
1...10V luminaires

Page 11.58



Rotary control of  
DALI luminaires

Page 11.62

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**Single Room System – Constant Light Unit for 1...10V Luminaires**


Constant light  
unit  
function

Page 11.66



Constant light unit  
for 1...10V  
luminaires

Page 11.68



Constant light unit  
for DUS IP20  
trunking system

Page 11.69

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**Luminaires with integral Multi-Sensor**


Novaluna® S  
Page 11.70



Novaluna® P  
Page 11.70



Tecario® recessed  
Page 11.70



Tecario® surface-  
mounted  
Page 11.70



Hexal®  
Page 11.70

## Professional – single and Multi-Line System

Lighting management systems for indoor applications contribute significantly to the energy-efficient operation of lighting installations. In addition, such systems ensure that requirements for light quality and flexibility of the lighting with regard to room use are guaranteed.

The DALI Professional system is suitable for complex applications for controlling areas and storeys, for daylight-dependent control and dynamic light control. With multi-sensors for movement recognition and daylight detection, constant light controls can be implemented that switch on lighting during presence and maintain it at a constant, pre-set level.

The DALI Professional control unit here enables the regulation of four lines, each with 16 groups and 16 scenes. Up to 64 DALI-compatible end devices can be connected to each line so that one controller enables a total of up to 256 addresses to be triggered.

Various capacitive operating panels of glass and an LCD touch panel are available as input devices. The 5.7" TFT display has 16 million colours and can be adapted according to function and display. Images and colours can be individually stored. Design is implemented via a free, Windows-based touch panel software. An exchangeable outer frame with a sophisticated appearance rounds off the attractive and functional design of the input device. A button interface with four zero-potential inputs enables the integration of customer-specific switches, keys, sensors and other on/off control devices.

Configuration and commissioning of the controller is especially convenient with a free, Windows-based PC software via USB interface. Plug and play setting is pre-configured for immediate use without commissioning procedure for example on building sites.

### Housing technology

The individual components of the Professional system are available partly with differing construction forms. Depending upon application, they can be integrated in flush mounted sockets, in luminaires or in the distribution box, or with use of a supplementary housing in the intermediate ceiling.




is 300 metres | four DALI lines can be operated on one controller | the controller also assumes power supply for connected DALI lines | common cable routing of connection cables for the DALI interface and 230V supply cable is permissible when isolation conditions are complied with | star or line wiring is permissible for cable routing.

### Electrics

A DALI line consists of a maximum of 64 participants. The repeater counts as one device, independent of the number of devices it controls | the DALI consumers can be grouped in up to 16 groups and 16 scenes | power devices such as converters or repeaters require a 230V connection | the maximum cable length of a DALI line

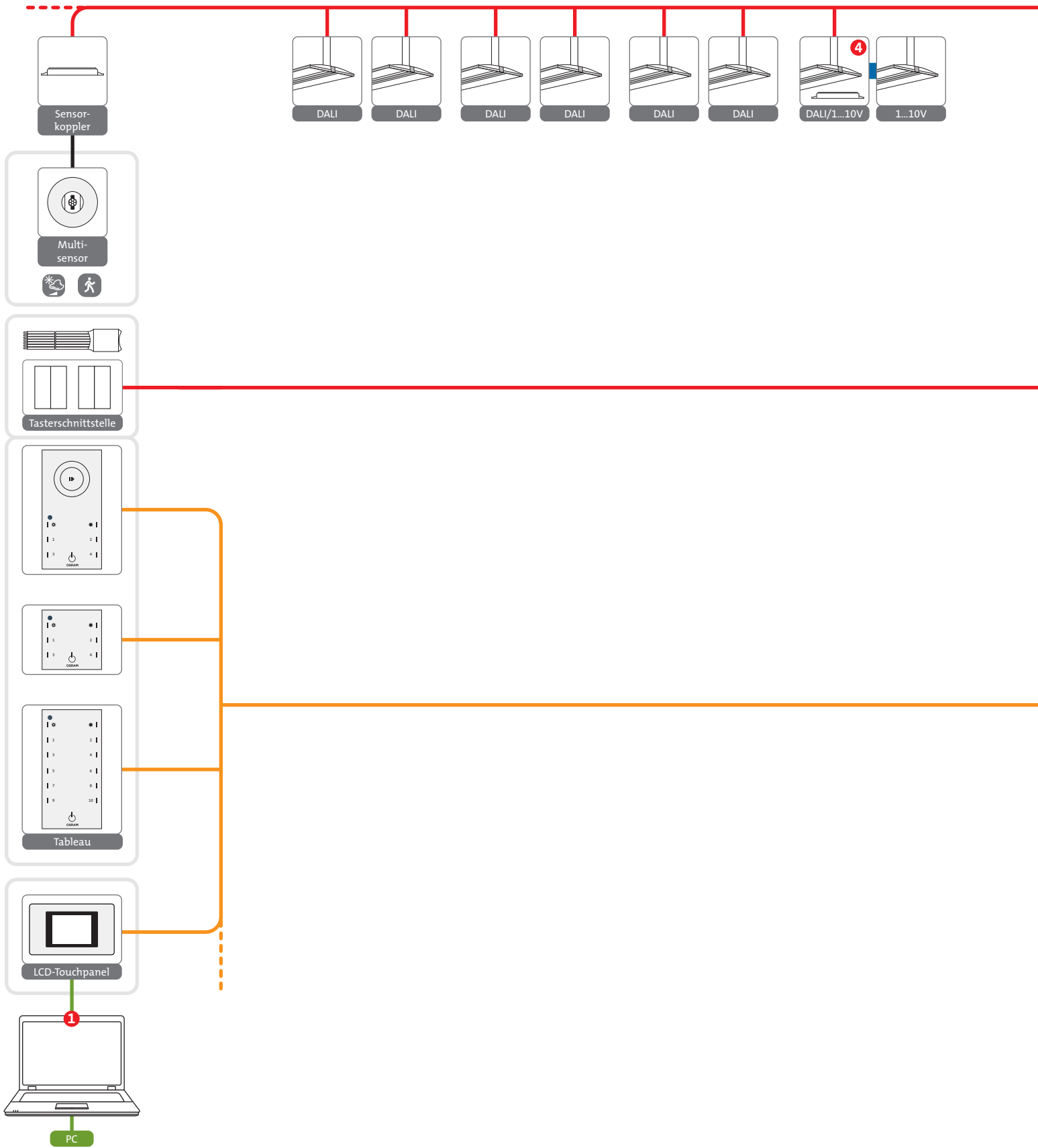


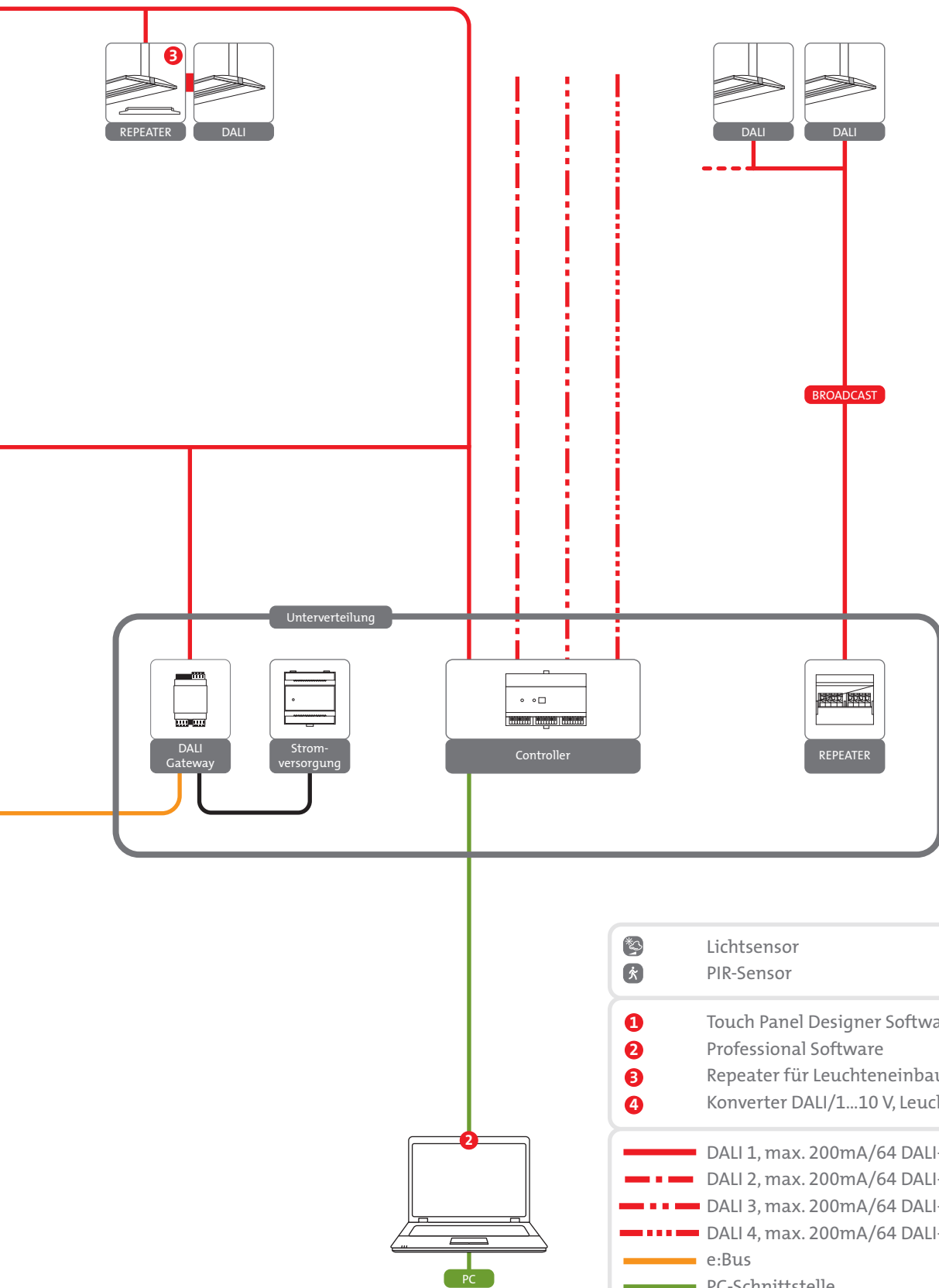


-  PIR sensor for movement detection
-  Light sensor for detection of daylight component
-  Connection of customer-specific buttons



### Professional | Single and Multi-Line System





|          |   |
|----------|---|
|          | Lichtsensoren                           |
|          | PIR-Sensoren                            |
| <b>1</b> | Touch Panel Designer Software           |
| <b>2</b> | Professional Software                   |
| <b>3</b> | Repeater für Leuchteneinbau, broadcast  |
| <b>4</b> | Konverter DALI/1...10 V, Leuchteneinbau |
|          | DALI 1, max. 200mA/64 DALI-Adressen     |
|          | DALI 2, max. 200mA/64 DALI-Adressen     |
|          | DALI 3, max. 200mA/64 DALI-Adressen     |
|          | DALI 4, max. 200mA/64 DALI-Adressen     |
|          | e-Bus                                   |
|          | PC-Schnittstelle                        |
|          | konventionelle Verdrahtung              |
|          | 1...10 V Technik                        |





**Professional - operating elements | LCD touch panel**

LCD touch panel | calling of functions ON, OFF, dimming and scenes | 5.7" high resolution LCD touch screen, 16 million colours | customer-specific, configurable user interface with Touch Panel Designer software\* | USB-A connection for configuration PC | configuration of button assignment via DALI Professional software\*\* | communication with the e:Bus DALI gateway via e:Bus telegram | power supply via e:Bus DALI gateway | wiring of e:Bus: AWG 16 (1.3mm), twisted pair | max. cable length: 100m | installation of LCD touch panel in recessed box\*\*\* | LCD touch panel housing of sheet steel, galvanised | design frame of plastic, glossy black

Protection rating: IP20  
 Insulation class: II  
 Temperature range: 0°C...+40°C  
 e:Bus input: screw terminal, 2-pole, max. 1.5mm<sup>2</sup>, pluggable  
 e:Bus current consumption: I= 300mA  
 Power consumption: max. 7W

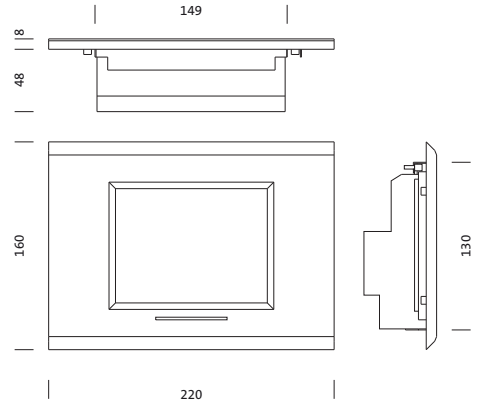
\* Touch Panel Designer software can be downloaded for free at [www.osram.de](http://www.osram.de)  
 \*\* DALI Professional software can be downloaded for free at [www.osram.de](http://www.osram.de)  
 \*\*\* please order recessed box separately

IP 20  

| Type            | Wt. (kg) | Order No. |
|-----------------|----------|-----------|
| LCD touch panel | 0.8      | 5LZ904741 |

Mandatory accessories (for details see page 11.10 and 11.19)

| Type                             | Wt. (kg) | Order No.   |
|----------------------------------|----------|-------------|
| e:Bus DALI gateway               | 0.1      | 5LZ904732   |
| Recessed box for cavity ceilings | 0.1      | 5LZ904741HW |
| Recessed box for solid walls     | 0.1      | 5LZ904741MW |





### Professional - operating elements | operating panel

Operating panel | calling of functions ON, OFF, dimming and scenes | configuration of button assignment via DALI Professional software\* | activation of operating elements via capacitive touch sensors | display of functional states via integral LEDs | communication with the e-Bus DALI gateway via e-Bus telegram | power supply via e-Bus DALI gateway | wiring of e-Bus: AWG 16 (1.3mm), twisted pair | max. cable length: 100m | modular design of operating elements consists of mounting plate and touchpad | installation in recessed switch box\*\* | mounting plate of aluminium | satin glass touchpad surface

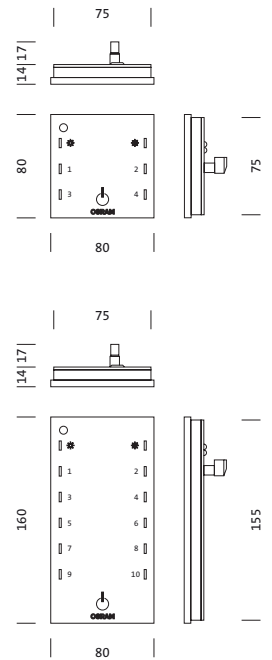
Protection rating: IP20

Insulation class: III

Temperature range: 0°C...+40°C

e-Bus input: screw terminal, 2-pole, max. 1.5mm<sup>2</sup>, plug-gable

e-Bus current consumption: I= 18mA



\*DALI-PRO software can be downloaded for free at [www.osram.de](http://www.osram.de)  
 \*\*D= 60mm, h= 40mm

IP 20  

| Type             | Wt. (kg) | Order No. |
|------------------|----------|-----------|
| Operating panel  |          |           |
| 6 keys           | 0.1      | 5LZ904742 |
| 12 keys          | 0.2      | 5LZ904743 |
| 6 keys, jogwheel | 0.2      | 5LZ904744 |

Mandatory accessories (for details see Page 11.10)

| Type               | Wt. (kg) | Order No. |
|--------------------|----------|-----------|
| e-Bus DALI gateway | 0.1      | 5LZ904732 |

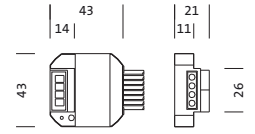


**Professional - operating elements | push button interface**

Push button interface | connection of customer-specific push buttons and switches | function of buttons and switches can be freely configured with DALI Professional software\* | communication to controller via DALI | supply of push button interface via DALI | 4 zero-potential button inputs | installation in recessed switch box | plastic housing, grey

- Protection rating: IP20
- Insulation class: III
- Temperature range: 0°C...+45°C
- DALI input: plug-in terminal, 2-pole, max. 2.5mm<sup>2</sup>
- DALI output: plug-in terminal, 2-pole, max. 2.5mm<sup>2</sup>
- Push button input: A= 0.22mm<sup>2</sup>, colour-coded in pairs, L= 280mm, conductors with wire end sleeve
- DALI current consumption: I= 6mA

\*DALI-PRO software can be downloaded for free at [www.osram.de](http://www.osram.de)  
 \*\*D= 60mm, h= 60mm



| Type                  | Wt. (kg) | Order No. |
|-----------------------|----------|-----------|
| Push button interface | 0.4      | 5LZ904731 |







**Professional - operating elements | e:Bus DALI gateway**

e:Bus DALI gateway | communication interface between e:Bus and controller | power supply of operating panels and touch panels | bi-directional communication between e:Bus components and controller | wiring of e:Bus: AWG 16 (1.3mm), twisted pair | max. cable length: 100m | for installation in distribution box | plastic housing, grey

Protection rating: IP20

Insulation class: II

Temperature range: 0°C...+50°C

Sub-units: 3

DALI input: plug-in terminal, 2-pole, max. 2.5mm<sup>2</sup>

DALI output: plug-in terminal, 2-pole, max. 2.5mm<sup>2</sup>

e:Bus input: plug-in terminal, 2-pole, max. 2.5mm<sup>2</sup>

e:Bus output: plug-in terminal, 2-pole, max. 2.5mm<sup>2</sup>

Power supply input: plug-in terminal, 2-pole, max. 2.5mm<sup>2</sup>

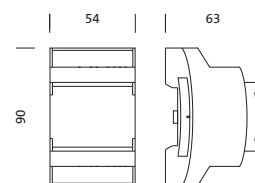
Power supply output: plug-in terminal, 2-pole, max. 2.5mm<sup>2</sup>

Mains voltage: rated voltage = 24VDC\*

e:Bus supply: I = 800mA

Power consumption: max. 24W

\* please order power supply separately



IP 20  

| Type               | Wt. (kg) | Order No. |
|--------------------|----------|-----------|
| e:Bus DALI gateway | 0.1      | 5LZ904732 |

Mandatory accessories (for details see page 11.11)

| Type         | Wt. (kg) | Order No. |
|--------------|----------|-----------|
| Power supply | 0.2      | 5LZ904734 |





### Professional - operating elements | power supply

Power supply | for e:Bus DALI gateway | rotary switch for setting output voltage\* | for installation in distribution box | plastic housing, black

Protection rating: IP20

Insulation class: II

Temperature range: -20°C...+55°C

Sub-units: 3

Mains: screw terminal, max. 2.5mm<sup>2</sup>

Secondary: screw terminal, max. 2.5mm<sup>2</sup>

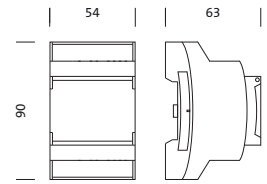
Mains voltage: rated voltage UN = 100-240V/AC 50Hz

Secondary voltage: rated sec. voltage Us = 24V/DC

Secondary current: Isec = 1300mA

Power consumption: max. 38W

\*Setting range of output voltage Us = 22.2...26.4V/DC



IP 20  

| Type         | Wt. (kg) | Order No. |
|--------------|----------|-----------|
| Power supply | 0.2      | 5LZ904734 |

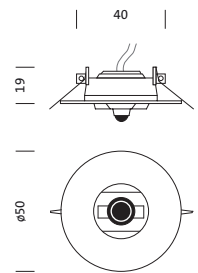




**Professional - sensors | Multi-Sensor**

Multi-Sensor | PIR sensor, light sensor | sensor head can be inclined to 30° | installation height 2m<h<4m | supply and data transmission via sensor coupler | for ceiling recessing | tool-free fixing with spring clips | plastic housing, white

Protection rating: IP20  
 Insulation class: III  
 Temperature range: -5°C...+45°C  
 Pre-assembled cable with RJ10 pin jack (4p4c), length approx. 280mm  
 Incl. connection cable with RJ10 pin jacks at both ends and distributor element with twin RJ10 pin jack insert and 4-pole screw terminal  
 Ceiling cut-out: DA= 42...48mm  
 Ceiling thickness: 1...30mm  
 Distance of intermediate ceiling: min. 100mm



| Type         | Wt. (kg) | Order No. |
|--------------|----------|-----------|
| Multi-Sensor | 0.1      | 5LZ904733 |

Mandatory accessories (for details see page 11.13)

| Type           | Wt. (kg) | Order No. |
|----------------|----------|-----------|
| Sensor coupler | 0.4      | 5LZ904721 |

Optional accessories (for details see page 11.19)

| Type                                 | Wt. (kg) | Order No.    |
|--------------------------------------|----------|--------------|
| Surface-mounted box for Multi-Sensor | 0.1      | 5LZ904733DAW |





### Professional - sensors | sensor coupler

Sensor coupler | communication interface between Multi-Sensor and controller | for connection of a Multi-Sensor | supply of sensor coupler via DALI cable strain relief of sensor and DALI lines| for installing in ceiling | plastic housing, white

Protection rating: IP20

Insulation class: II

Temperature range: 0°C...+50°C

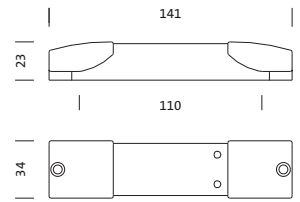
DALI input: plug-in terminal, 2-pole, max. 1.5mm<sup>2</sup>

DALI output: plug-in terminal, 2-pole, max. 1.5mm<sup>2</sup>

Sensor input: RJ10 socket

DALI current consumption: I= 5mA

Distance of intermediate ceiling: min. 100mm



IP 20  

Type  
Sensor coupler

Wt. (kg)  
0.4

Order No.  
5LZ904721



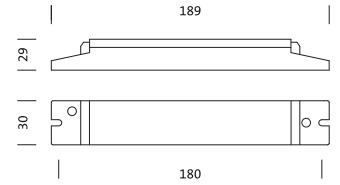


**Professional Repeater | repeater for installation in luminaire**

DALI Repeater | for single- and multi-line system | for constructing DALI systems with more than 64 ECG on one DALI-Line | broadcast control of ECG DALI | querying of switching condition, dimming status and lamp failures of ECG connected to the Repeater | extensions for DALI cable | plastic housing, grey | for installation in luminaires or for ceiling recessing with use of supplementary housing

Protection rating: IP20  
 Insulation class: II  
 Temperature range: 0°C..+50°C  
 DALI power supply:  $I_{sec} = \text{max. } 130\text{mA}$   
 DALI input: plug-in terminal 2-pole  $A \leq 1.5\text{mm}^2$   
 DALI output: plug-in terminal 2x 2-pole  $A \leq 1.5\text{mm}^2$   
 Mains voltage:  $U_N = 100..240\text{V} / \text{AC } 50..60\text{Hz}$   
 Mains connection: plug-in terminal 3-pole  $A \leq 1.5\text{mm}^2$

IP 20   



| Article  | Version                   | Wt. (kg) | Order No. |
|----------|---------------------------|----------|-----------|
| Repeater | for mounting in luminaire | 0.1      | 5LZ904002 |

- please order supplementary housing for lay-in ceiling mounting separately if required

Accessories (for details see Page 11.19)

| Article  | Wt. (kg) | Order No. |
|--|----------|-----------|
| Case, placed in ceiling void in the cavity ceiling | 0.1      | 5LZ904605 |





### Professional – Repeater | Repeater for installation in distribution box

DALI Repeater | for single- and multi-line system | for constructing DALI systems with more than 64 ECG on one DALI-Line | broadcast control of ECG DALI | querying of switching condition, dimming status and lamp failures of ECG connected to the Repeater | extensions for DALI cable | reduction of stand-by consumption of connected ECG with On/Off via integrated load contact | plastic housing, grey | for installation in distribution box

Protection rating: IP20

Insulation class: I

Temperature range: 0°C..+50°C

DALI power supply:  $I_{sec} = \text{max. } 130\text{mA}$

DALI input: plug-in terminal 2x 2-pole  $A \leq 2.5\text{mm}^2$

DALI output: plug-in terminal 2-pole  $A \leq 2.5\text{mm}^2$

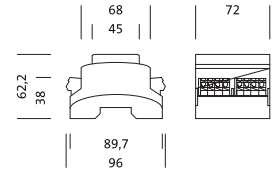
Switching capacity: 1x switching contact:  $I_{max} = 6\text{A}$  (ohm) | Number of ECGs: 4..12 ECGs, manufacturer-dependent

Load output: plug-in terminal 2-pole  $A \leq 2.5\text{mm}^2$

Mains voltage:  $U_N = 100..240\text{V} / \text{AC } 50..60\text{Hz}$

Mains connection: plug-in terminal 3-pole  $A \leq 2.5\text{mm}^2$

IP 20   



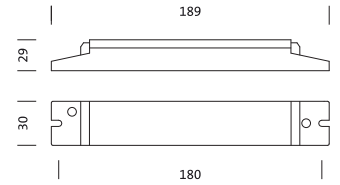
| Article  | Version                         | part units | Wt. (kg) | Order No. |
|----------|---------------------------------|------------|----------|-----------|
| Repeater | for distribution board mounting | 4 TE       | 0.1      | 5LZ904001 |





**Professional – Converter | Converter 1...10V  
for installation in Luminaire**

Professional Converter| for single- and multi-line system | conversion of DALI-Signals into 1...10V | switching of output between logarithmic and linear characteristic curve | brightness modification and On/Off switching | Touch DIM operation: On/Off of ECGs via load contact | dimming of ECG (1...10V) via interface | housing of sheet steel, white | for installation in luminaire



Protection rating: IP20  
 Insulation class: I  
 Temperature range: 0°C..+50°C  
 DALI input: plug-in terminal 2-pole  $A \leq 1.5\text{mm}^2$   
 1..10V output:  $I_{\text{max}} = 100\text{mA}$   
 1..10V output: plug-in terminal 2-pole  $A \leq 1.5\text{mm}^2$   
 Switching capacity: 1x switching contact:  $I_{\text{max}} = 5\text{A}$  (ohm) | Number of ECGs: 10..30 ECGs, manufacturer-dependent  
 Switching output: plug-in terminal 1-pole  $A \leq 1.5\text{mm}^2$   
 Mains connection:  $U_N = 230\text{V} / \text{AC } 50..60\text{Hz}$   
 Mains connection: plug-in terminal 3-pole  $A \leq 1.5\text{mm}^2$

IP 20

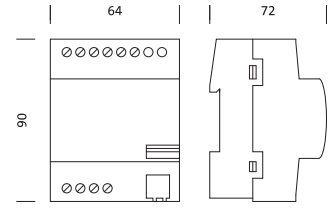
| Article   | Version                                 | Wt. (kg) | Order No. |
|-----------|---|----------|-----------|
| Converter | DALI/1...10V, for mounting in luminaire | 0.2      | 5LZ904201 |





**Professional – Converter | for installation in distribution box**

Professional Converter | converts DALI-Signals into 1...10V | switching of output between logarithmic and linear characteristic curve | dimming of ECG (1...10V) via interface; on/off of ECGs via load contact | plastic housing, grey| for installation in distribution box



- Protection rating: IP20
- Insulation class: II
- Temperature range: 0°C..+45°C
- DALI input: screw terminal 2-pole A ≤ 1.5mm<sup>2</sup>
- Touch DIM input: screw terminal 1-pole A ≤ 1.5mm<sup>2</sup>
- 1..10V output: I<sub>max</sub> = 100mA
- 1..10V output: screw terminal 2-pole A ≤ 1.5mm<sup>2</sup>
- Switching capacity: 1x switching contact: I<sub>max</sub> = 10A (ohm); 8A (cap.); 5A (ind.) | Number of ECGs: 10-30 ECGs, manufacturer-dependent
- Switching output: screw terminal 1-pole A ≤ 1.5mm<sup>2</sup>
- Mains connection: U<sub>N</sub> = 230V / AC 50..60Hz
- Mains connection: screw terminal 2x 2-pole A ≤ 1.5mm<sup>2</sup>



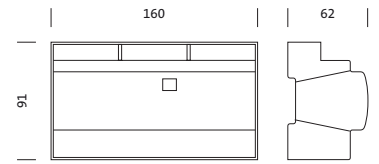
| Article   | Version                                     | part units | Wt. (kg) | Order No. |
|-----------|---|------------|----------|-----------|
| Converter | DALI/1...10V, for distribution box mounting | 4 TE       | 0.2      | 5LZ904202 |





**Professional - controllers | Controller**

Controller | for construction of DALI lighting control with up to 4 DALI lines\* | parameterising of groups, scenes and sequences with DALI software\*\* | USB interface Type B for parameterising the controller | simple use of lighting system in building site mode possible\*\*\* | 4 relay contacts, zero-potential\*\*\*\* | display of operating state via LEDs | for installation in distribution box | plastic housing, grey



Protection rating: IP20

Insulation class: I

Temperature range: 0°C...+40°C

Sub-units: 9

DALI output 1...4: plug-in terminal, 2-pole, max. 2.5mm<sup>2</sup>

Switching output: plug-in terminal, 3-pole, max. 2.5mm<sup>2</sup>

Switching output: 4x switching output I<sub>max</sub> = max.

5A/230V (ohms); number of ECGs dependent on type (cap.)

Mains voltage: rated voltage UN = 240V/AC 50...60Hz

Mains connection: plug-in terminal, 3-pole, max. 2.5mm<sup>2</sup>

Power consumption: max. 25W

\*max. 200mA/64 DALI addresses per DALI line

\*\* DALI Controller software can be downloaded for free at: [www.osram.de](http://www.osram.de)

\*\*\*with building site mode the DALI lines and relays can be switched and dimmed via buttons on the controller without sensors and operating elements

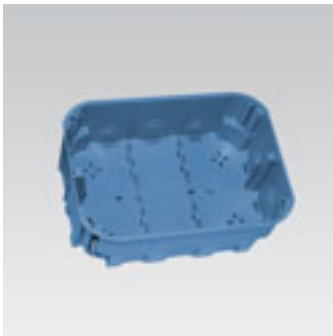
\*\*\*\*relay contact selectable between break, make or changeover contacts via wiring

IP 20  

| Type       | Wt. (kg) | Order No. |
|------------|----------|-----------|
| Controller | 0.4      | 5LZ904711 |



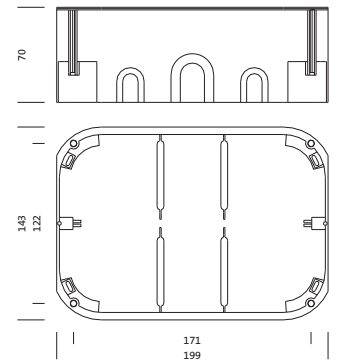
Professional Mounting Accessories



**Recessed box for cavity ceilings**

Recessed box | for LCD touch panel | installation in cavity ceiling | on-site fixing of recessing box with fixing clamps\* | pre-stamped cable infeeds | screw fastening of LCD touch panel | plastic housing, blue

\* thickness of drywall >10mm

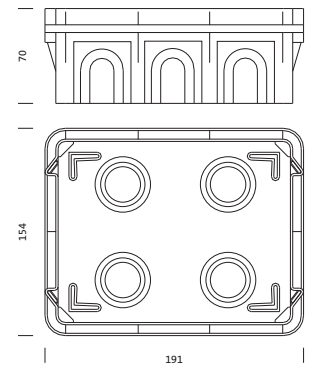


| Type                             | Wt. (kg) | Order No.   |
|----------------------------------|----------|-------------|
| Recessed box for cavity ceilings | 0.2      | 5LZ904741HW |



**Recessed box for solid walls**

Recessed box | for LCD touch panel | installation in solid wall | pre-stamped cable infeeds | screw fastening of LCD touch panel | plastic housing, blue

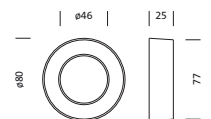


| Type                         | Wt. (kg) | Order No.   |
|------------------------------|----------|-------------|
| Recessed box for solid walls | 0.2      | 5LZ904741MW |

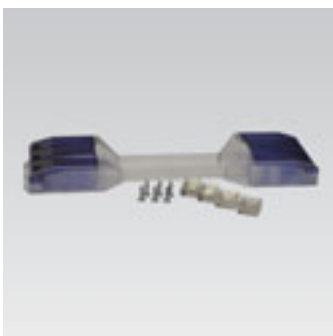


**Surface-mounted housing**

Surface-mounted housing | for Multi-Sensor | pre-stamped cable infeed | plastic housing, white



| Type                    | Wt. (kg) | Order No.    |
|-------------------------|----------|--------------|
| Surface-mounted housing | 0.1      | 5LZ904733DAW |



**Housing for ceiling recessing**

for DALI repeater luminaire installation | plastic housing, transparent | with integral cable strain relief for mains and control side

| Type                      | Order No. |
|---------------------------|-----------|
| Housing for DALI repeater | 5LZ904605 |



## digidim – Single and Multi-Line System

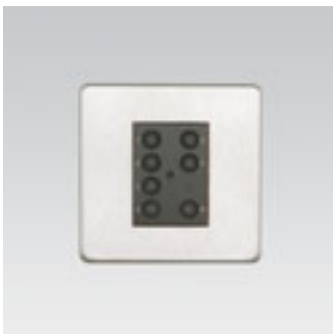


Lighting management systems for indoor applications contribute significantly to the energy-efficient operation of lighting installations. In addition, such systems ensure that requirements for light quality and flexibility of the lighting with regard to room use are guaranteed..

### Single-Line System

The digidim Single-Line System represents a lighting management system for a single DALI sub-network that covers small to mid-sized applications. With digidim, up to 63 DALI-compatible end devices can be integrated. The DALI consumers can be combined in up to 16 groups and can be commonly switched and dimmed within these groups. Up to 15 various scenes can be saved per ECG.

The individual system configuration for building technology or the electrician is implemented via the Toolbox system software, and settings are input to the system via the AV interface.



### Multi-Line System

The digidim Multi-Line System enables the connection of DALI sub-networks with routers via TCP/IP ethernet. One router has two sub-networks, in each of which up to 64 DALI-compatible end devices can be connected. Up to 128 scenes are possible for each sub-network. With networking of the routers, multi-line control and regulation of the lighting system is possible.

Parameterising of the digidim router is via ethernet on a PC or laptop using the system software (Designer).



**The digidim system consists of the input, output and configuration function levels.** Various modular operating panels or (as in the case of the Single-Line System) an LCD touch panel are available as input devices. These feature an additional IR receiver enabling use of a remote control.

Constant light control can be implemented via Multi-Sensors for detection of movement and daylight control that switch on lighting during presence and maintain it at a constant, pre-set level. A mini button control device with four zero-potential inputs forms the interface to customer-specific switches, push buttons, sensors and other input-output control devices. An AV interface is used for connection to the building technology PC. Controllable devices consist of luminaires with ECG DALI, converters for signal conversion from DALI to 1..10V, dimmer units for control of ohmic loads, and blind control and relay units with zero-voltage switch contacts.

### Housing

The individual components of the digidim system are available partly with differing construction forms. Depending upon application, they can be integrated in flush mounted sockets, in luminaires or in the distribution box, or with use of a supplementary housing in the intermediate ceiling.

### Electrics

A DALI line consists of a maximum of 64 participants. The repeater counts as one device, independent of the number of devices it controls | the DALI consumers can be grouped in up to 16 groups | for operation, a DALI standard-compatible power supply is required; this is limited to max. 250mA. Only the touch panel requires

a supplementary power supply | power devices such as dimmers, converters or repeaters require a 230V connection | the maximum cable length of a DALI line is 300 metres | two DALI lines can be operated on one router | a maximum of 100 routers can be interconnected via ethernet | the router is also used for power supply of the two connected DALI lines | common cable routing of connection cables for the DALI interface and 230V supply cable is permissible when isolation conditions are complied with | cable routing can be either as star or line wiring





PIR sensor for movement detection



Light sensor for detection of daylight component



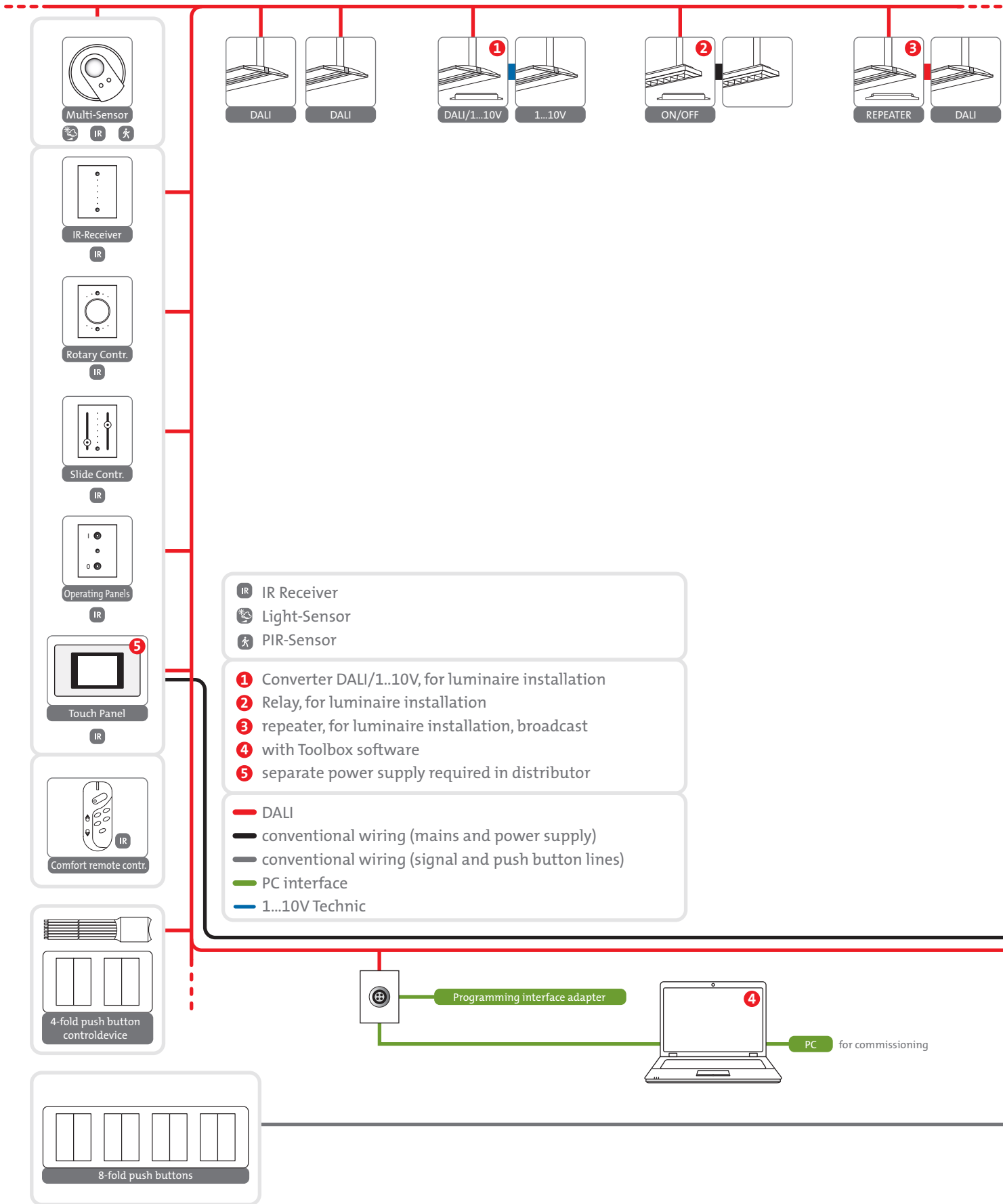
Connection of customer-specific buttons

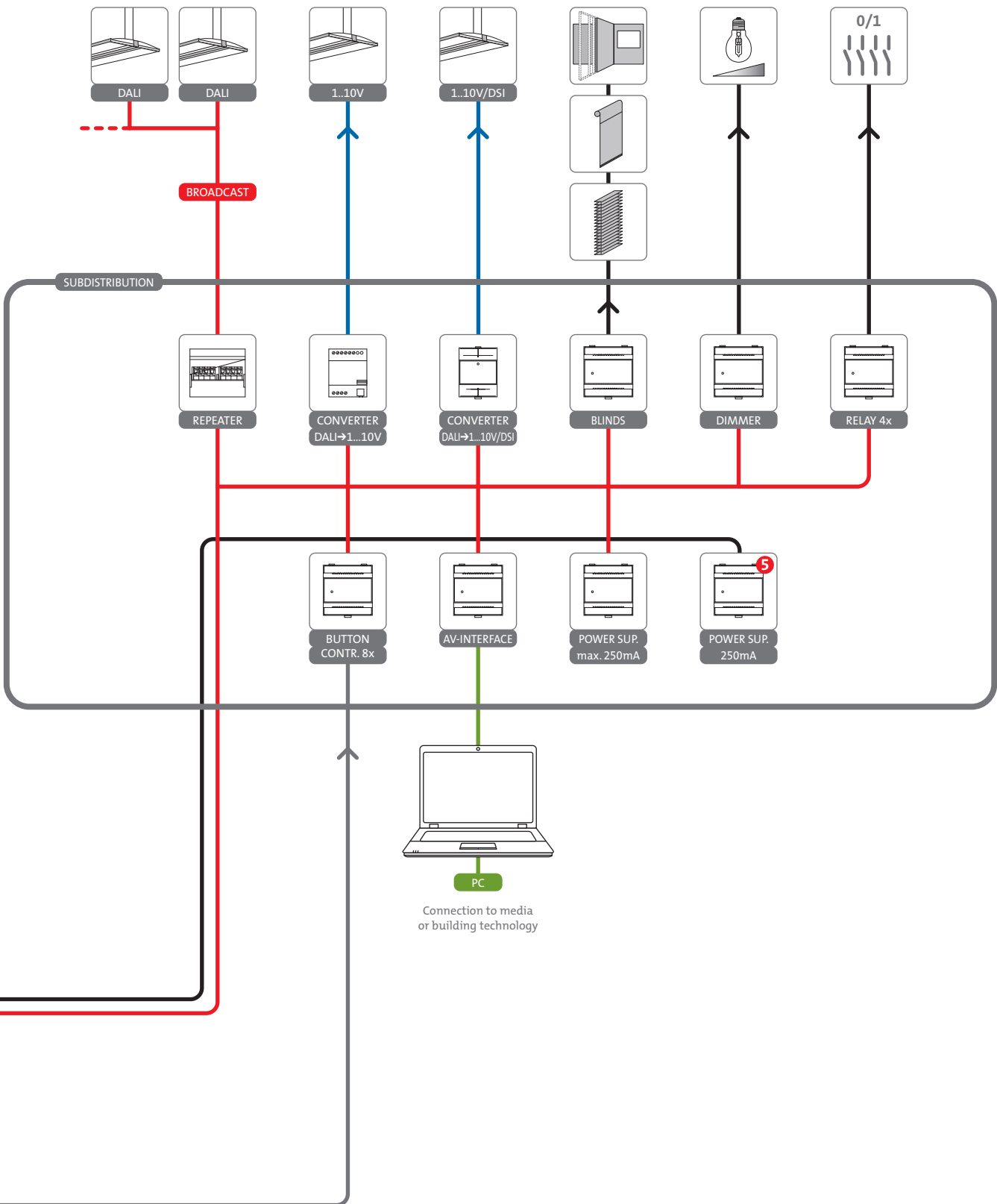


IR receiver for remote control

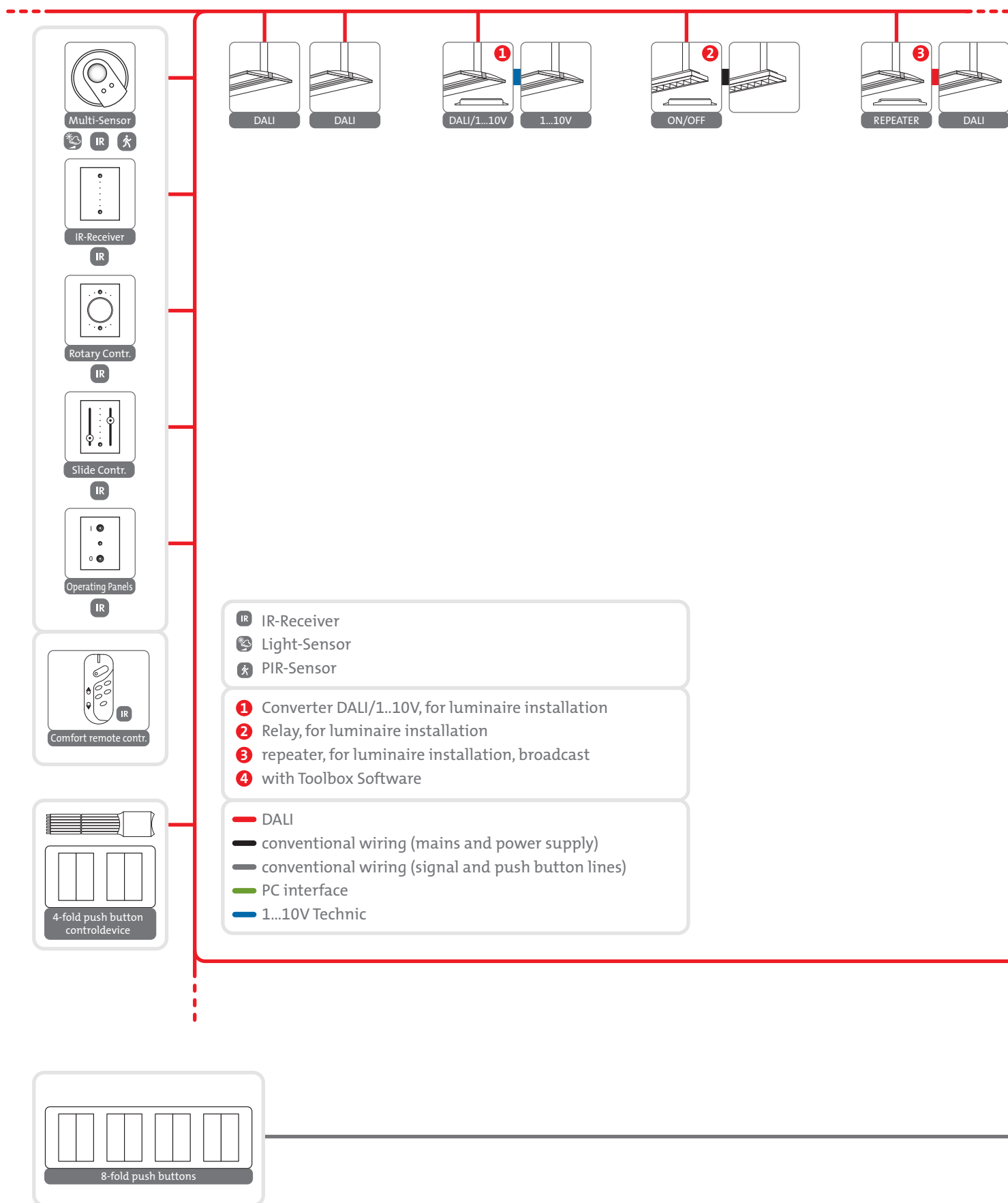


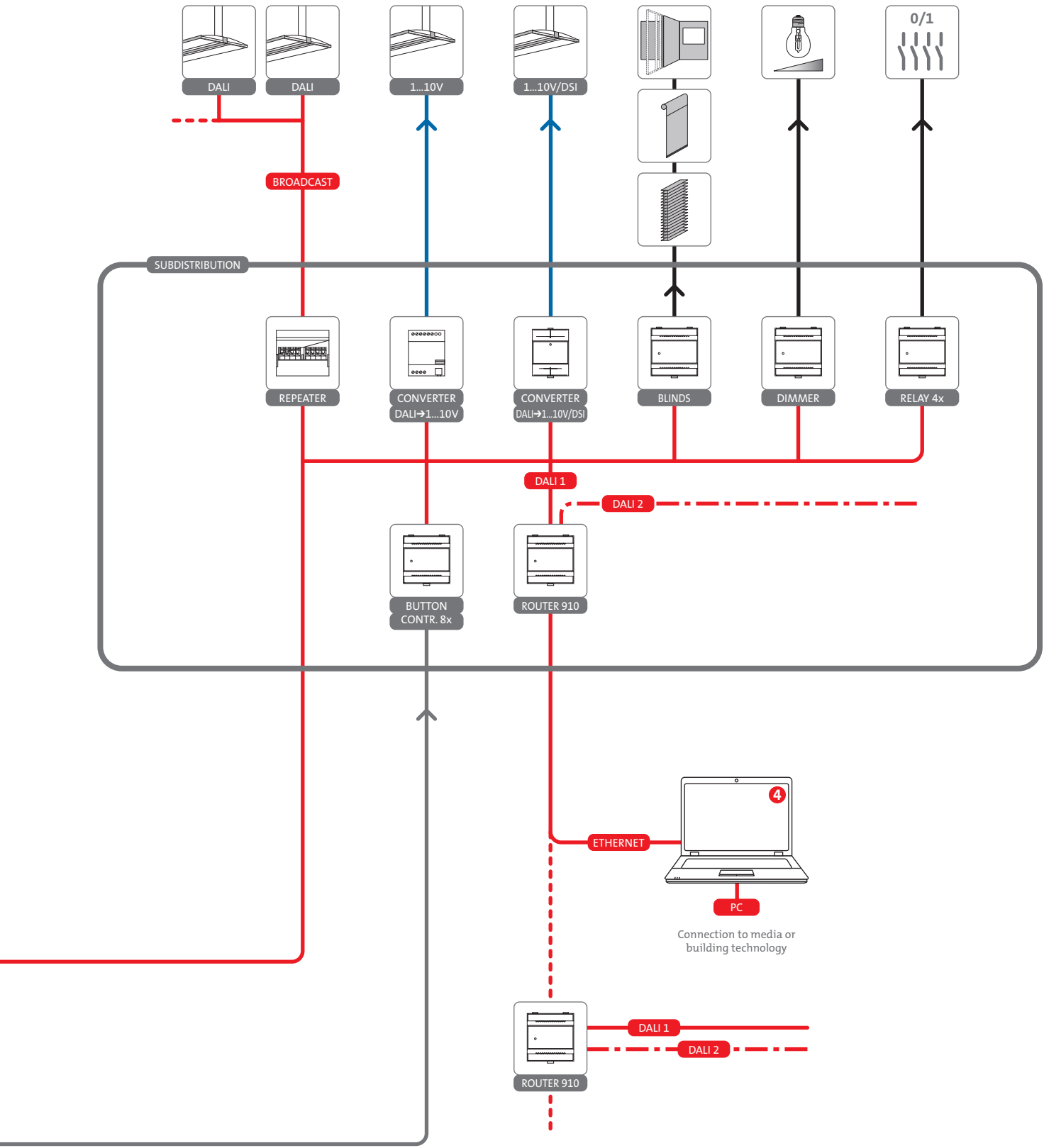
# digidim | Single line system





# digidim | Multi-line system

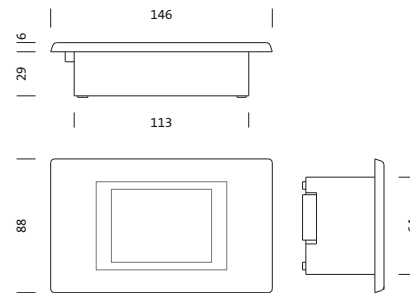






**digidim - operating elements | LCD touch panel**

digidim LCD touch panel with 3.5" LCD colour screen | for single-line system | for manual control and automatic scene changing as well as programming | integrated IR receiver, integrated astronomical real time clock | 5 pre-programmed screen displays, graphics and language can be adapted by user | with USB connection for transmission and saving of customer-specific system settings to the PC | removable frame of stainless steel, satin-finish | for installing in Helvar recessed box



IR

Protection rating: IP20  
 Insulation class: I  
 Temperature range: 0°C..+40°C  
 DALI input/output: screw terminal 2x 2-pole A≤ 1.5mm<sup>2</sup>  
 (incl. software for graphic adaptation with PC | incl. USB cable | incl. recessing box of sheet steel, galvanised, Lx Wx H= 127 x 48 x 75mm; with PE connection; incl. fixing material for touch panel)  
 - separate power supply required for touch panel



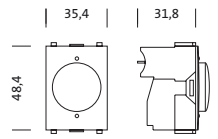
| Article     | Wt. (kg) | Order No.  |
|-------------|----------|------------|
| touch panel | 2.0      | 5LZ9059242 |

- please additionally order one power supply per touch panel

**Mandatory accessories (for details see page 11.38)**

| Article      | Wt. (kg) | Order No. |
|--------------|----------|-----------|
| power supply | 0.1      | 5LZ905402 |





### digidim - operating elements | operating panel | for switch box installation

digidim operating panel | for single and multi-line system | ON/OFF, either bright/dark or calling up of scenes | with IR receiver | modular construction with 2 plastic covers, graphite and white | for installing in walls with recessed box\*

Protection rating: IP30

Insulation class: I

Temperature range: +0°C..+50°C

DALI current consumption: I= 10mA

DALI input/output: screw terminal 2x 2-pole A5

1.5mm<sup>2</sup>

(incl. grey and white cover)

\* suitable for recessing boxes in accordance with DIN and UK standard | with 3-gang frame: twin device connection box required

IR

IP 30   

| Article | Version                    | Wt. (kg) | Order No. |
|---------|----------------------------|----------|-----------|
| tableau | ON/OFF                     | 0.1      | 5LZ905121 |
| tableau | bright/dark, 2x pushbutton | 0.1      | 5LZ905122 |
| tableau | bright/dark, 1x rotary     | 0.1      | 5LZ905100 |
| tableau | bright/dark, 1x slider     | 0.1      | 5LZ905110 |
| tableau | bright/dark, 2x slider     | 0.1      | 5LZ905111 |
| tableau | 0/1/2/3/4                  | 0.1      | 5LZ905124 |
| tableau | 0/1/2/3/4/5/6/7            | 0.1      | 5LZ905126 |
| tableau | 0/1/2/3/4/bright/dark      | 0.1      | 5LZ905125 |
| tableau | ir receiver                | 0.1      | 5LZ905170 |

- please order frame or blank cover separately

- with use in a single-line system please additionally order a power supply for all components

- with use in a single-line system please order a supplementary common power supply for all components

### Mandatory accessories (for details and further accessories see page 11.43)

| Article                       | Wt. (kg) | Order No.  |
|-------------------------------|----------|------------|
| single frame, stainless steel | 0.1      | 5LZ905203S |
| triple frame, stainless steel | 0.2      | 5LZ905203D |
| single frame, plastic, white  | 0.1      | 5LZ905200S |
| triple frame, plastic, white  | 0.2      | 5LZ905200D |



**digidim - operating elements | IR remote control**

digidim infrared remote control | for single and multi-line system | control and setting of basic system functions: ON/OFF, brighter/darker, selection of pre-set lighting scenes, dimming of lighting scene | channel setting via selection switch in battery compartment | housing of plastic, graphite

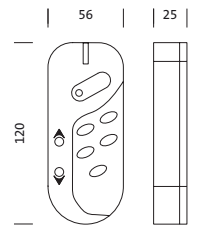
Temperature range: 0°C..+40°C

Range: max. 5m

Frequency: 36kHz

7 operating keys | 4 light scenes  
(incl. two LR03/AAA batteries)

IR receiver integrated in the following system components: IR receiver | multi-sensor | touch panel | all operating panels



IR



| Article                | Wt. (kg) | Order No. |
|------------------------|----------|-----------|
| comfort remote control | 0.1      | 5LZ905303 |





### digidim - operating elements | push button interface | for switch box installation

digidim push button interface | for single and multi-line system | for connecting 4 customer-specific push buttons or switches | ON/OFF, either bright/dark or calling up of scenes | DALI input/output | for wall installation\*

Protection rating: IP20

Temperature range: 0°C..+40°C

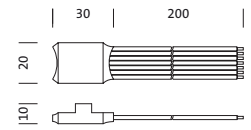
DALI current consumption: 10mA

DALI input/output: 2x conductor, A= 1.2mm<sup>2</sup>

4x push button/switch inputs: 5x conductors (T1..T4, Com), A= 1.2mm<sup>2</sup>

\* suitable for recessing boxes in accordance with DIN and UK standard

IP 20  



| Article               | Wt. (kg) | Order No. |
|-----------------------|----------|-----------|
| push button interface | 0.1      | 5LZ905444 |

- with use in a single-line system please additionally order a power supply for all components



### digidim - operating elements | push button interface | for installation in distribution box

digidim push button interface | for connecting 8 customer-specific push buttons or switches | ON/OFF, either bright/dark or calling up of scenes | DALI input/output, according to version additionally with IR receiver or 1..10V interface | for installation in distribution box

Protection rating: IP30

Insulation class: I

Temperature range: 0°C..+40°C

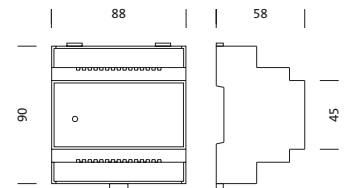
DALI current consumption: 10mA

DALI input/output: screw terminal 2x 2-pole A≤ 1.5mm<sup>2</sup>

8x push button/switch inputs: screw terminal 9-pole (T1..T8, Com), A≤ 1.5mm<sup>2</sup>

- a common power supply is required for all components of a single line system (exception: touch panel requires a supplementary power supply)

IP 30   



| Article   | part units | Wt. (kg) | Order No. |
|---|------------|----------|-----------|
| push button interface, digidim - single line system | 4 TE       | 0.1      | 5LZ905440 |
| push button interface, digidim - multi-line system  | 4 TE       | 0.1      | 5LZ905942 |

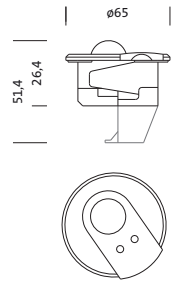
- please order power supply separately if required



**digidim - sensors | multi-sensor | for ceiling mounting**

digidim multi-sensor | for single and multi-line system  
 | brightness and movement sensor; IR receiver for remote control; push button input for manual control | with DALI input/output | plastic housing, white | for installation in ceilings

Protection rating: IP30  
 Insulation class: I  
 Temperature range: 0°C..+50°C  
 Mounting height: H= 3m  
 Detection range of light sensor: 100°  
 Measuring range of light sensor: 5..5000lx  
 Detection range for movement: 85° | 3m  
 DALI input/output: screw terminal 2x 2-pole A≤ 1.5mm<sup>2</sup>  
 Push button input: screw terminal 2-pole A≤ 1.5mm<sup>2</sup>  
 Ceiling cut-out/ceiling thickness:  
 DA= 52mm/d= 0.5..2mm | DA= 55mm/d> 2mm



IP 30

| Article            | Wt. (kg) | Order No. |
|--------------------|----------|-----------|
| <b>multisensor</b> | 0.1      | 5LZ905312 |

- with use in a single-line system please additionally order a power supply for all components

Accessories (for details see page 11.43)

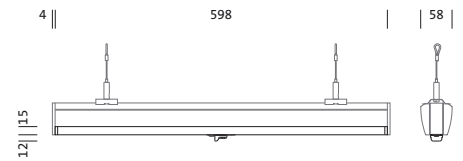
| Article                 | Wt. (kg) | Order No.    |
|-------------------------|----------|--------------|
| <b>bulkhead housing</b> | 0.1      | 5LZ905312DAW |





### digidim - sensors | multi-sensor | for Modario® trunking system

digidim multi-sensor for Modario® trunking system | for single and multi-line system | PIR sensor, light sensor and IR receiver for remote control | with DALI input/output\*\* | for mounting to 10-pole Modario® trunking rail; can be positioned in module size 299mm\* | housing of sheet steel, pure white (similar to RAL 9010); sensor housing of plastic, white; twist lock catches with metal clips for rapid fixing to trunking rail



Protection rating: IP20

Insulation class: I

Temperature range: 0°C..+50°C

Mounting height: H= 3m

Detection range of light sensor: 100°

Measuring range of light sensor: 5..5000lx

Detection range for movement: 85° | 3m

DALI input/output: screw terminal 2x 2-pole A<sub>s</sub> 1.5mm<sup>2</sup>

Push button input: screw terminal 2-pole A<sub>s</sub> 1.5mm<sup>2</sup>

Ceiling cut-out/ceiling thickness:

DA= 52mm/d= 0.5..2mm | DA= 55mm/d> 2mm

#### Electrical

Sensor module for operation with DALI power supply | wired ready for connection with 3-pole connection system, suitable for 10-core wired Modario® trunking rail | control of luminaire inserts with ECG DALI

\*\* earth conductor connection >PE<; DALI output on wire >5< and >7<



| Article             | Module size | Mounting height | Wt. (kg) | Order No.  |
|---------------------|-------------|-----------------|----------|------------|
| digidim Multisensor | 2 x SE      | 3m              | 0.3      | 5TR305DMDL |

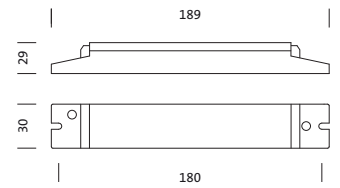
- with use in a single-line system please additionally order a power supply for all components





**digidim - repeater and converter | repeater | for installation in luminaire**

DALI repeater | for single and multi-line system | for constructing DALI systems with more than 64 ECGs on one DALI line | broadcast control of ECG DALI | querying of switching condition, dimming status and lamp failures of ECG connected to the repeater | extension of DALI cable | plastic housing, grey | for installation in luminaires or for ceiling recessing with use of supplementary housing



Protection rating: IP20

Insulation class: II

Temperature range: 0°C..+50°C

DALI power supply:  $I_{SEC} = \text{max. } 130\text{mA}$

DALI input: plug-in terminal 2-pole  $A \leq 1.5\text{mm}^2$

DALI output: plug-in terminal 2x 2-pole  $A \leq 1.5\text{mm}^2$

Mains voltage:  $U_N = 100..240\text{V} / \text{AC } 50..60\text{Hz}$

Mains connection: plug-in terminal 2-pole  $A \leq 1.5\text{mm}^2$



| Article  | Version                   | Wt. (kg) | Order No. |
|----------|---------------------------|----------|-----------|
| repeater | for mounting in luminaire | 0.1      | 5LZ904002 |

- please order supplementary housing for lay-in ceiling mounting separately if required

Accessories (for details see page 11.43)

| Article  | Wt. (kg) | Order No. |
|--|----------|-----------|
| case, placed in ceiling void in the cavity ceiling | 0.1      | 5LZ904605 |





**digidim - repeater and converter | repeater | for installation in distribution box**

DALI repeater | for single and multi-line system | for constructing DALI systems with more than 64 ECGs on one DALI line | broadcast control of ECG DALI | querying of switching condition, dimming status and lamp failures of ECG connected to the repeater | extension of DALI cable | reduction of stand-by consumption of connected ECG with On/Off via integrated load contact | plastic housing, grey | for installation in distribution box

Protection rating: IP20

Insulation class: I

Temperature range: 0°C..+50°C

DALI power supply:  $I_{SEC} = \text{max. } 130\text{mA}$

DALI input: plug-in terminal 2x 2-pole  $A \leq 2.5\text{mm}^2$

DALI output: plug-in terminal 2-pole  $A \leq 2.5\text{mm}^2$

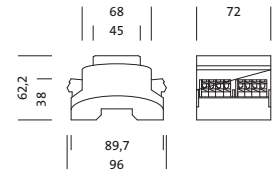
Switching capacity: 1x switching contact:  $I_{max} = 6\text{A}$  (ohm) | Number of ECGs: 4..12 ECGs, manufacturer-dependent

Load output: plug-in terminal 2-pole  $A \leq 2.5\text{mm}^2$

Mains voltage:  $U_N = 100..240\text{V} / \text{AC } 50..60\text{Hz}$

Mains connection: plug-in terminal 3-pole  $A \leq 2.5\text{mm}^2$

IP 20   



| Article  | Version                         | part units | Wt. (kg) | Order No. |
|----------|---------------------------------|------------|----------|-----------|
| repeater | for distribution board mounting | 4 TE       | 0.1      | 5LZ904001 |

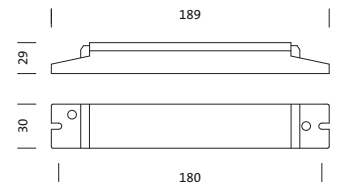


**digidim - repeater and converter | 1..10V converter | for installation in luminaire**

DALI converter | for single and multi-line system | conversion of DALI signals to 1..10V | switching of output between logarithmic and linear characteristic curve | brightness modification and on/off switching | Touch DIM operation: on/off of ECGs via load contact | dimming of ECG(1..10V) via interface | housing of sheet steel, white | for installation in luminaire

Protection rating: IP20  
 Insulation class: I  
 Temperature range: 0°C..+50°C  
 DALI input: plug-in terminal 2-pole  $A \leq 1.5\text{mm}^2$   
 1..10V output:  $I_{\text{max}} = 100\text{mA}$   
 1..10V output: plug-in terminal 2-pole  $A \leq 1.5\text{mm}^2$   
 Switching capacity: 1x switching contact:  $I_{\text{max}} = 5\text{A}$  (ohm) | Number of ECGs: 10..30 ECGs, manufacturer-dependent  
 Switching output: plug-in terminal 1-pole  $A \leq 1.5\text{mm}^2$   
 Mains connection:  $U_N = 230\text{V} / \text{AC } 50..60\text{Hz}$   
 Mains connection: plug-in terminal 3-pole  $A \leq 1.5\text{mm}^2$

IP 20   



| Article   | Version                               | Wt. (kg) | Order No. |
|-----------|---------------------------------------|----------|-----------|
| converter | DALI/1-10V, for mounting in luminaire | 0.2      | 5LZ904201 |





**digidim - repeater and converter | 1..10V converter | for installation in distribution box**

digidim converter | for single and multi-line system | conversion of DALI signals to 1..10V or to DSI signals | control of max. 50 ECGs; with switching contact output for ECG(1..10V); manual selection of various DALI groups via rotary switch | plastic housing, grey | for installation in distribution box

Protection rating: IP30

Insulation class: I

Temperature range: 0°C..+40°C

DALI current consumption: I= 2mA

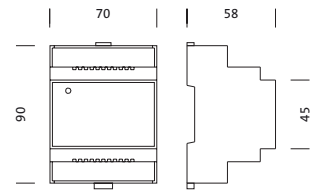
DALI input: screw terminal 2x 2-pole A $\leq$  1.5mm<sup>2</sup>

1..10V output: screw terminal 2-pole A $\leq$  1.5mm<sup>2</sup>

Mains connection: U<sub>N</sub>= 85..264V / AC 45..65Hz

Mains connection: screw terminal 3-pole A $\leq$  1.5mm<sup>2</sup>

IP 30   



| Article   | Version   | part units | Wt. (kg) | Order No. |
|-----------|---|------------|----------|-----------|
| converter | DALI/1-10V/DSI, for distribution board mounting | 4 TE       | 0.1      | 5LZ905472 |

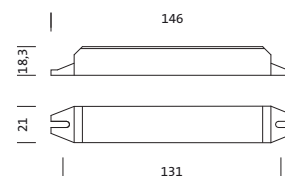




**digidim - relay and dimmer | relay module | for installation in luminaire**

digidim relay module | single and multi-line system | for switching of loads | 1 relay contact | plastic housing, grey | for installation in luminaire

Protection rating: IP30  
 Insulation class: I  
 Temperature range: 0°C..+50°C  
 DALI current consumption: I= 2mA  
 DALI input/output: plug-in terminal 2-pole A $\leq$  1.5mm<sup>2</sup>  
 Switching capacity: 1x switching contact: I<sub>max</sub>= 2A (ohm) | Number of ECGs: manufacturer-dependent  
 Switching output: plug-in terminal 1-pole A $\leq$  1.5mm<sup>2</sup> ('L' bridged internally)  
 Mains connection: U<sub>N</sub>= 220..240V / AC 50..60Hz  
 Mains connection: plug-in terminal 3-pole A $\leq$  1.5mm<sup>2</sup>



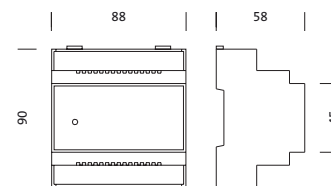
| Article    | Version                   | Wt. (kg) | Order No. |
|------------|---------------------------|----------|-----------|
| relay unit | for mounting in luminaire | 0.1      | 5LZ905491 |



**digidim - relay and dimmer | relay module | for installation in distribution box**

digidim relay module | for single and multi-line system | for switching of loads | 4 relay contacts, can be individually programmed | plastic housing, grey | for installation in distribution box

Protection rating: IP30  
 Insulation class: I  
 Temperature range: 0°C..+40°C  
 DALI current consumption: I= 2mA  
 DALI input/output: screw terminal 2x 2-pole A $\leq$  1.5mm<sup>2</sup>  
 Switching capacity: I<sub>max</sub>= 10A (ohm); 8A (cap.); 5A (ind.)  
 Number of ECGs: manufacturer-dependent  
 Switching output: screw terminal 4x 2-pole A $\leq$  1.5mm<sup>2</sup>  
 Mains connection: U<sub>N</sub>= 220..240V / AC 50..60Hz  
 Mains connection: screw terminal 3-pole A $\leq$  1.5mm<sup>2</sup>



| Article    | Version                         | part units | Wt. (kg) | Order No. |
|------------|---------------------------------|------------|----------|-----------|
| relay unit | for distribution board mounting | 4 TE       | 0.3      | 5LZ905494 |





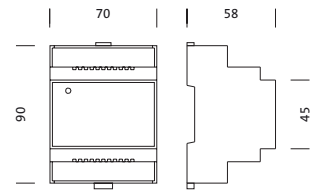
### digidim - relay and dimmer | dimmer | for installation in distribution box

digidim universal dimmer | single and multi-line system | inverse or forward phase control of loads without DALI input; manual selection via DIP switch | manual selection of various DALI groups via rotary switch | protected against electrical and thermal overload | plastic housing, grey | for installation in distribution box

Protection rating: IP30  
 Insulation class: II  
 Temperature range: 0°C..+40°C  
 DALI current consumption: I= 2mA  
 DALI input/output: screw terminal 2x 2-pole A<sub>s</sub> 1.5mm<sup>2</sup>  
 Load: P<sub>max</sub>= 1000W (ohm)  
 Load output: screw terminal 1-pole A<sub>s</sub> 1.5mm<sup>2</sup>  
 Mains voltage: U<sub>N</sub>= 90..264V / AC 48..62Hz  
 Mains connection: screw terminal 2-pole A<sub>s</sub> 1.5mm<sup>2</sup>

IP 30   

| Article | Version                         | part units | Wt. (kg) | Order No. |
|---------|---------------------------------|------------|----------|-----------|
| dimmer  | for distribution board mounting | 4 TE       | 0.2      | 5LZ905452 |



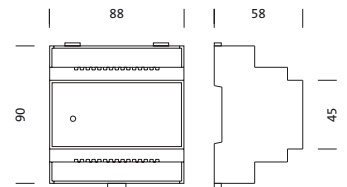
### digidim - relay and dimmer | blind control module | for installation in distribution box

digidim blind control module | for single and multi-line system | 2 independent, zero-voltage switching outputs with internal mutual locking (e.g. motor clockwise/counterclockwise rotation) | plastic housing, grey | for installation in distribution box

Protection rating: IP30  
 Insulation class: I  
 Temperature range: 0°C..+40°C  
 DALI current consumption: I= 2mA  
 DALI input/output: screw terminal 2x 2-pole A<sub>s</sub> 1.5mm<sup>2</sup>  
 Switching capacity: S= 550VA per switching output  
 Switching output: screw terminal 2x 2-pole A<sub>s</sub> 1.5mm<sup>2</sup>  
 Mains connection: 220..240V AC/50..60Hz  
 Mains connection: screw terminal 3-pole A<sub>s</sub> 1.5mm<sup>2</sup>

IP 30   

| Article           | Version                         | part units | Wt. (kg) | Order No. |
|-------------------|---------------------------------|------------|----------|-----------|
| blinds controller | for distribution board mounting | 4 TE       | 0.3      | 5LZ905490 |



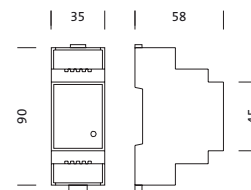


**digidim - power supplies | power supply | for installation in distribution box**

digidim power supply | for single-line system or digidim touch panel\* | plastic housing, grey | for installation in distribution box

Protection rating: IP30  
 Insulation class: I  
 Temperature range: 0°C..+40°C  
 DALI power supply:  $I_{sec}$  = max. 250mA  
 DALI connection: screw terminal 2x 2-pole  $A \leq 1.5\text{mm}^2$   
 Mains voltage:  $U_N = 85..264\text{V} / \text{AC } 45..65\text{Hz}$   
 Mains connection: screw terminal 3-pole  $A \leq 1.5\text{mm}^2$

\* one power supply required for each digidim touch panel; a common power supply is also required for all further components in the single line system



IP 30

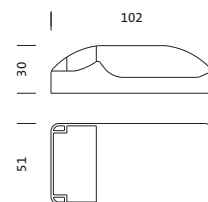
| Article      | part units | Wt. (kg) | Order No. |
|--------------|------------|----------|-----------|
| power supply | 2 TE       | 0.1      | 5LZ905402 |



**digidim - power supplies | power supply | for ceiling lay-in mounting**

Power supply | for single-line system | common cable strain relief of mains and DALI cables | housing of plastic | independent mounting, e.g. ceiling lay-in mounting

Protection rating: IP20  
 Temperature range: 0°C..+50°C  
 DALI power supply:  $I_{sec}$  = max. 200mA  
 Mains voltage:  $U_N = 100..240\text{V} / \text{AC } 50..60\text{Hz}$



IP 20

| Article      | Wt. (kg) | Order No. |
|--------------|----------|-----------|
| power supply | 0.1      | 5LZ906202 |





**digidim - software and interfaces for single-line systems | Toolbox software**

digidim Toolbox software | for single-line system | for designing, programming and maintenance | online and offline programming; offline simulation; backup and recovery of the system | Toolbox software CD

(incl. interface cable and programming interface)

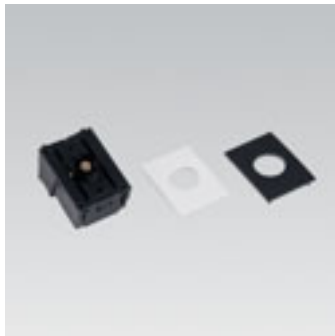
**System requirements:**

Pentium III (or higher)  
Windows 98; XP; Vista; 2000  
RAM: min. 512MB RAM  
Serial interface

| Article                 | Wt. (kg) | Order No. |
|-------------------------|----------|-----------|
| <b>toolbox software</b> | 0.1      | 5LZ905502 |

**Mandatory accessories (for details see page 11.43)**

| Article                              | Wt. (kg) | Order No.  |
|--------------------------------------|----------|------------|
| <b>single frame, stainless steel</b> | 0.1      | 5LZ905203S |
| <b>triple frame, stainless steel</b> | 0.2      | 5LZ905203D |
| <b>single frame, plastic, white</b>  | 0.1      | 5LZ905200S |
| <b>triple frame, plastic, white</b>  | 0.2      | 5LZ905200D |

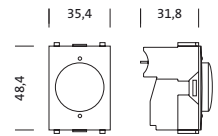


**digidim - software and interfaces for single-line systems | programming interface | for switch box installation**

digidim programming interface | for single-line system | for commissioning, maintenance and recovery | for connecting interface cable to PC with Toolbox software | for installing in walls with recessed box\*

Protection rating: IP30  
 Insulation class: I  
 Temperature range: 0°C..+50°C  
 DALI input/output: screw terminal 2x 2-pole A≤ 1.5mm<sup>2</sup>  
 (as supplementary interface | for PC with digidim Toolbox software)

\* for recessing boxes in accordance with DIN or UK standard



| Article | Version          | Wt. (kg) | Order No. |
|---------|------------------|----------|-----------|
| tableau | programming unit | 0.1      | 5LZ905180 |

- please order frame or blank cover separately  
 - with use in a single-line system please additionally order a power supply for all components

Mandatory accessories (for details see page 11.43)

| Article                       | Wt. (kg) | Order No.  |
|-------------------------------|----------|------------|
| single frame, stainless steel | 0.1      | 5LZ905203S |
| triple frame, stainless steel | 0.2      | 5LZ905203D |
| single frame, plastic, white  | 0.1      | 5LZ905200S |
| triple frame, plastic, white  | 0.2      | 5LZ905200D |





digidim - software and interfaces for single-line systems | AV interface | for installation in distribution box

digidim AV interface | for single-line system | connection of a digidim system to RS232 input of a PC | RS232 (RX, TX, GND) | electrical isolation between digidim system and RS232 input | plastic housing, grey | for installation in distribution box

Protection rating: IP30

Temperature range: 0°C..+40°C

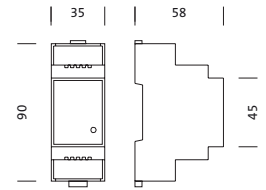
DALI current consumption: 15mA

DALI input/output: screw terminal 2x 2-pole A<sub>s</sub>

1.5mm<sup>2</sup>

RS232: screw terminal 3-pole A<sub>s</sub> 1.5mm<sup>2</sup>

IP 30  



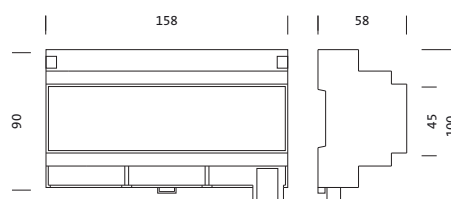
| Article      | Version                         | part units | Wt. (kg) | Order No. |
|--------------|---------------------------------|------------|----------|-----------|
| av interface | for distribution board mounting | 2 TE       | 0.1      | 5LZ905503 |

- with use in a single-line system please order a supplementary common power supply for all components



**digidim - software and router for multi-line systems | router | for installation in distribution box**

digidim router | for multi-line system | for control of 2 separate DALI lines (max. 2x64 DALI participants) | programming of up to 128 scenes | connection of several routers is possible via ethernet network technology | incl. integrated power supply for DALI components | plastic housing, white | for installation in distribution box



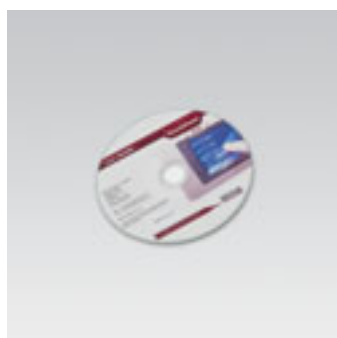
Insulation class: I  
 Protection rating: IP30  
 Temperature range: 0°C..+40°C  
 DALI power supply:  $I_{sec} \leq 250\text{mA}$  (per DALI line)  
 DALI connection: screw terminal 2-pole  $A \leq 2.5\text{mm}^2$  (per DALI line)  
 Mains voltage:  $U_N = 85..264\text{V} / \text{AC } 45..65\text{Hz}$   
 Mains connection: screw terminal 3-pole  $A \leq 2.5\text{mm}^2$   
 Ethernet connection via RJ45 plug connector  
 Ethernet connection: CAT5 cable,  $l \leq 100\text{m}$



| Article       | part units  | Wt. (kg) | Order No.        |
|---------------|-------------|----------|------------------|
| <b>router</b> | <b>9 TE</b> | 0.3      | <b>5LZ905910</b> |

Mandatory accessories (for details see below)

| Article                  | Wt. (kg) | Order No.            |
|--------------------------|----------|----------------------|
| <b>designer software</b> | 0.1      | <b>5LZ9059300049</b> |



**digidim - software and router for multi-line systems | designer software**

digidim designer software | for multi-line system, for networking several routers | for designing, programming and maintenance | online and offline programming; offline simulation; backup and recovery of the system | monitoring, protocol and reporting of system events

Software license (download, usage and update of software)  
 System requirements:  
 Pentium III (or higher)  
 Windows 98; XP; Vista; 2000  
 RAM: min. 512MB RAM  
 10/100 ethernet  
 Software license (for download, use and update)

| Article                  | Wt. (kg) | Order No.            |
|--------------------------|----------|----------------------|
| <b>designer software</b> | 0.1      | <b>5LZ9059300049</b> |

## digidim Housing Accessories

**Frame**

for digidim operating panel | programming interface and blank cover | material: satin stainless steel or white plastic

Type

3-fold frame

Order No.

stainless steel, satin

5LZ905203D

plastic, white

5LZ905200D

single frame

stainless steel, satin

5LZ905203S

plastic, white

5LZ905200S

**Blank cover for digidim frame (not shown)**

2 covers of plastic; graphite and white

Type

Blank cover for digidim frame  
graphite and white

Order No.

5LZ905150

**Housing for ceiling recessing**

for DALI repeater luminaire installation | plastic housing, transparent | with integral cable strain relief for mains and control side

Type

Housing for DALI repeater  
for ceiling recessing

Order No.

5LZ904605

**Surface-mounted ceiling box for Multi-Sensor**

plastic housing, white

Type

Surface-mounted ceiling box for Multi-Sensor

Order No.

5LZ905312DAW

## Single room system - Multi-Sensor

Multi-Sensors enable the daylight-dependent control of indoor lighting and respond to the presence of people in the detection range. They ensure that with presence and under consideration of the daylight component, lighting level requirements are complied with at all times. They therefore contribute significantly to the energy-efficient operation of lighting installations.

The Multi-Sensors are designed as isolated solutions for self-sufficient lighting control and are suitable for ceiling recessing or ceiling surface-mounting. The Multi-Sensor has a PIR sensor for movement detection, a light sensor for detection of the lighting level and an IR receiver for the remote control. The lighting level can be influenced via remote control or manually with a push button. This enables lighting installations equipped with ECG DALI to be simply operated.

### Electrics

System consists of Multi-Sensor as basis version and Multi-Sensor as networked version and common system components Multi-Sensor with integrated power supply for DALI | the DALI control line must be approved for mains voltage; control wire and 230V mains in common cable is permissible when isolation conditions are complied with (cable must be approved for mains supply)

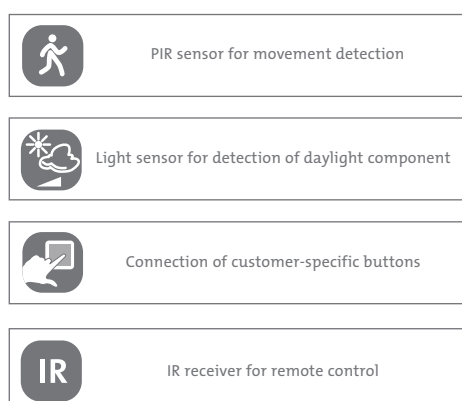
#### Function of Multi-Sensor, basis version:

One Multi-Sensor for two DALI lines | max. of 15 DALI participants (luminaires, button interfaces or PIR expansion sensors) distributed on both DALI lines

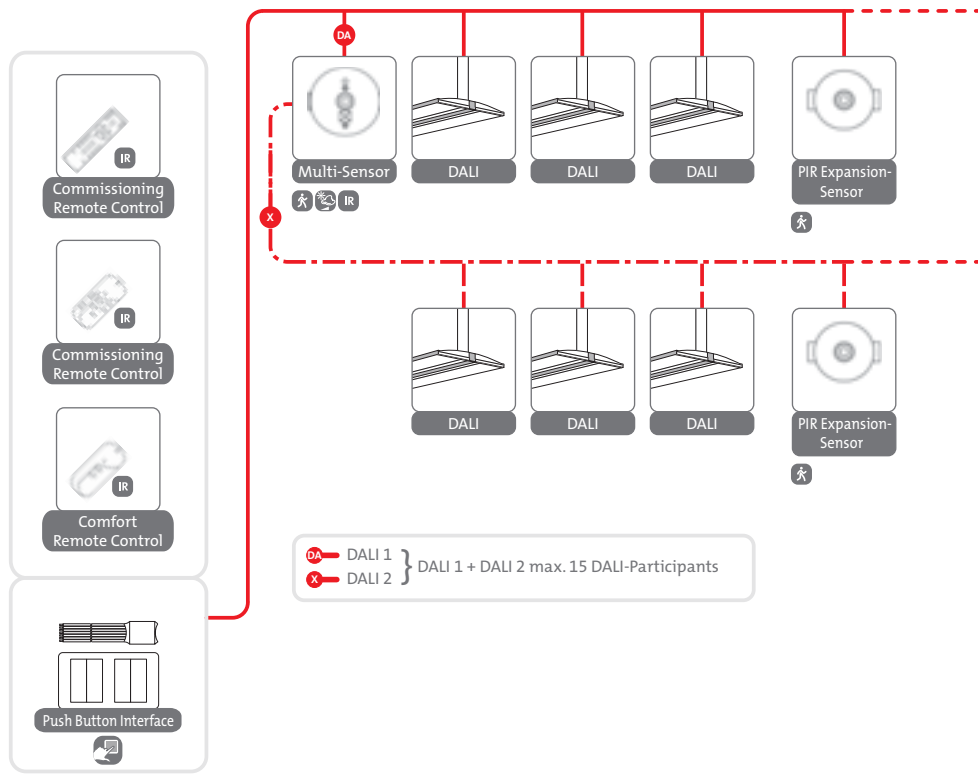
#### Function of Multi-Sensor, networked version:

Max. of 22 Multi-Sensors each for one DALI line (1 DALI line = 1 sensor unit) with max. 15 DALI participants per sensor unit (luminaires, button interfaces or PIR expansion sensors) | sensor units are interconnected via a communication bus

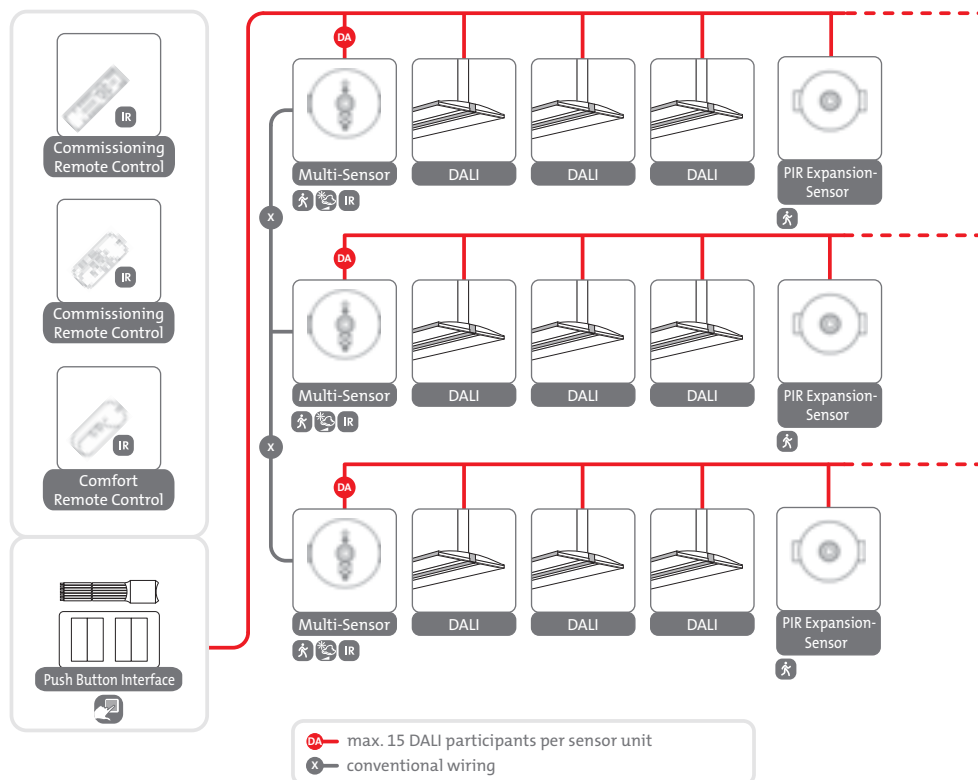
- + constant lighting level under consideration of presence of people and daylight in room
- + expansion of movement detection possible via PIR expansion sensors
- + nominal value setting and comfort functions possible via remote control
- + manual control of lighting system via on-site push buttons and remote control
- + isolated solution for self-sufficient lighting control



### Multi-Sensor, basis version



### Multi-Sensor, networkable version



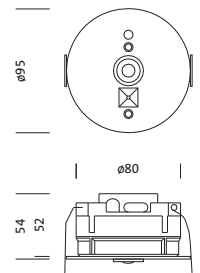


single room system - multi-sensor | multi-sensor - basic version

Multi-sensor as part of basic equipment | fully automatic operation, sensor-controlled  
 ON/OFF/bright/dark; or manual operation  
 ON/OFF/bright/dark via comfort remote control\* | with PIR sensor, light sensor and IR receiver for remote control | for 2 DALI lines (broadcast) | output DALI1 and DALI2 with specified dimming difference (window-corridor) | setting of reference brightness value and delay period at sensor | 10 modes with pre-set functional spectrum; can be configured via commissioning remote control | plastic housing, white | for installation in ceilings; ceiling surface-mounting possible with supplementary surface-mounted housing

Protection rating: IP20  
 Insulation class: II  
 Temperature range: 5°C..+50°C  
 Mounting height: H≤ 3.5m  
 Measuring range of light sensor: 250..1000lx  
 Detection range for movement: all-round, can be limited with shield  
 DALI output: Number of ECGs: max. 15 ECG DALI  
 DALI output: screw terminal 2x 2-pole A≤ 1.5mm<sup>2</sup>  
 Mains voltage: U<sub>N</sub>= 100..240V / AC 50..60Hz  
 Mains connection: screw terminal 2-pole A≤ 1.5mm<sup>2</sup>  
 Ceiling cut-out/ceiling thickness:  
 DA= 80mm/d≤ 30mm

\* operation can be integrated via on-site push button and push button interface



| Article     | Version       | Wt. (kg) | Order No. |
|-------------|---------------|----------|-----------|
| multisensor | basic version | 0.1      | 5LZ914001 |

Accessories (for details see page 11.48 ff.)

| Article                                      | Wt. (kg) | Order No. |
|--|----------|-----------|
| ceiling box, multisensor                     | 0.1      | 5LZ914003 |
| comfort remote control, 2 pushbuttons        | 0.1      | 5LZ914009 |
| wall bracket                                 | 0.1      | 5LZ914010 |
| push button interface                        | 0.1      | 5LZ914008 |
| PIR extension sensor                         | 0.1      | 5LZ914004 |
| ceiling box, PIR extension sensor            | 0.1      | 5LZ914005 |
| commissioning remote control, 10 pushbuttons | 0.1      | 5LZ914006 |
| commissioning remote control, 27 pushbuttons | 0.1      | 5LZ914007 |





### single room system - multi-sensor | multi-sensor - networkable version

Multi-sensor in networkable version | fully automatic operation, sensor-controlled ON/OFF/bright/dark; or manual operation ON/OFF/bright/dark via comfort remote control\* | with PIR sensor, light sensor and IR receiver for remote control | for 1 DALI line (broadcast) | expanded movement detection in the DALI line via PIR expansion sensors | setting of reference brightness value and delay period at sensor | 10 modes with pre-set functional spectrum; can be configured via commissioning remote control | plastic housing, white | for installation in ceilings; ceiling surface-mounting possible with supplementary surface-mounted housing

Protection rating: IP20

Insulation class: II

Temperature range: 5°C..+50°C

Mounting height: H≤ 3.5m

Measuring range of light sensor: 250..1000lx

Detection range for movement: all-round, can be limited with shield

DALI output: screw terminal 2-pole A≤ 1.5mm<sup>2</sup>

Mains voltage: U<sub>N</sub>= 100..240V / AC 50..60Hz

Mains connection: screw terminal 2-pole A≤ 1.5mm<sup>2</sup>

Ceiling cut-out/ceiling thickness:

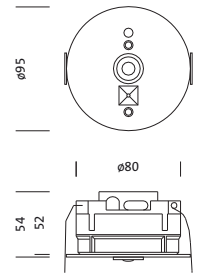
DA= 80mm/d≤ 30mm

Networking of max. 22 multi-sensors via communication input

Communication input: screw terminal 2-pole A≤ 1.5mm<sup>2</sup>

\* operation can be integrated via on-site push button and push button interface

IP 20   



| Article     | Version               | Wt. (kg) | Order No. |
|-------------|-----------------------|----------|-----------|
| multisensor | network-ready version | 0.1      | 5LZ914002 |

Accessories (for details see page 11.48 ff.)

| Article                                      | Wt. (kg) | Order No. |
|--|----------|-----------|
| ceiling box, multisensor                     | 0.1      | 5LZ914003 |
| comfort remote control, 2 pushbuttons        | 0.1      | 5LZ914009 |
| wall bracket                                 | 0.1      | 5LZ914010 |
| push button interface                        | 0.1      | 5LZ914008 |
| PIR extension sensor                         | 0.1      | 5LZ914004 |
| ceiling box, PIR extension sensor            | 0.1      | 5LZ914005 |
| commissioning remote control, 27 pushbuttons | 0.1      | 5LZ914007 |





### single room system - multi-sensor | PIR expansion sensor

PIR expansion sensor | for expanding the PIR detection range in a DALI line | plastic housing, white | for installation in ceilings; ceiling surface-mounting possible with supplementary surface-mounted housing

Protection rating: IP20

Insulation class: II

Temperature range: 5°C..+50°C

Mounting height: H ≤ 3.5m

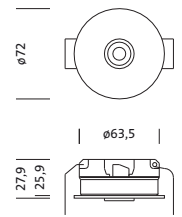
Detection range for movement: all-round, can be limited with shield

DALI output: screw terminal 2x 2-pole A ≤ 1.5mm<sup>2</sup>

Ceiling cut-out/ceiling thickness:

DA= 80mm/d ≤ 30mm

IP 20   



| Article              | Wt. (kg) | Order No. |
|----------------------|----------|-----------|
| PIR extension sensor | 0.1      | 5LZ914004 |

#### Accessories

| Article                           | Wt. (kg) | Order No. |
|-----------------------------------|----------|-----------|
| ceiling box, PIR extension sensor | 0.1      | 5LZ914005 |





single room system - multi-sensor | push button interface

Push button interface | for connecting 4 customer-specific push buttons | assignment of push buttons to four fixed lighting groups, ON/OFF/bright/dark for each | DALI output | for wall installation\*

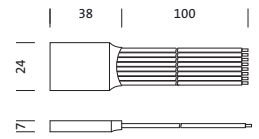
Protection rating: IP20

Temperature range: 0°C..+40°C

DALI input/output: 2x conductor, A= 0.5mm<sup>2</sup>

4x push button input: 6x conductors (T1..T4, 2x Com), A= 0.5mm<sup>2</sup>

\* suitable for recessing boxes in accordance with DIN and UK standard



IP 20  

| Article               | Wt. (kg) | Order No. |
|-----------------------|----------|-----------|
| push button interface | 0.1      | 5LZ914008 |





single room system - multi-sensor | comfort remote control

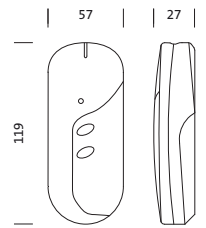
IR comfort remote control for users | ON/OFF/brighter/darker | setting of group addresses via selection switch in battery compartment | plastic housing, white

Temperature range: 5°C..+50°C

Range: max. 5m

2 operating keys

9 group addresses can be set (incl. two LR03/AAA batteries)



IP 20  

| Article                | Version       | Wt. (kg) | Order No. |
|------------------------|---------------|----------|-----------|
| comfort remote control | 2 pushbuttons | 0.1      | 5LZ914009 |

- please order wall bracket separately if required

Accessories

| Article      | Wt. (kg) | Order No. |
|--------------|----------|-----------|
| wall bracket | 0.1      | 5LZ914010 |





### single room system - multi-sensor | commissioning remote control

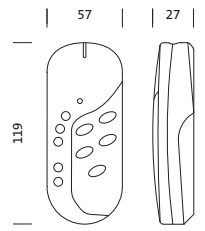
IR commissioning remote control | setting of basic system functions: lighting level, assignment of luminaires across two lighting groups, test function for PIR detection range, starting of the 100h burn-in function | housing of plastic, graphite

Temperature range: 0°C..+40°C

Range: max. 5m

10 operating keys

(incl. two LR03/AAA batteries)



IR

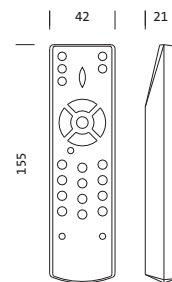
IP 20  

| Article                      | Version        | Wt. (kg) | Order No. |
|------------------------------|----------------|----------|-----------|
| commissioning remote control | 10 pushbuttons | 0.1      | 5LZ914006 |



single room system - multi-sensor | commissioning  
remote control | extended functions

IR commissioning remote control with expanded functions | setting of basic and advanced system functions: lighting level, assignment of luminaires across four lighting groups, test function for PIR detection range, selection of pre-specified modes, behaviour with mains voltage return, system resetting | housing of plastic, graphite



IR

Temperature range: 0°C..+40°C

Range: max. 5m

26 operating keys

(incl. two LR03/AAA batteries)

IP 20  

| Article                      | Version        | Wt. (kg) | Order No. |
|------------------------------|----------------|----------|-----------|
| commissioning remote control | 27 pushbuttons | 0.1      | 5LZ914007 |





## Single room system - push button operation of DALI luminaires

Repeaters enable the setting and saving of customer-specific lighting scenes for indoor areas.

The repeater is designed as an isolated solution for self-sufficient lighting control, and according to design can be installed in luminaires, in intermediate ceilings or in distribution boxes. This enables all luminaires equipped with ECG DALI to be simply operated.

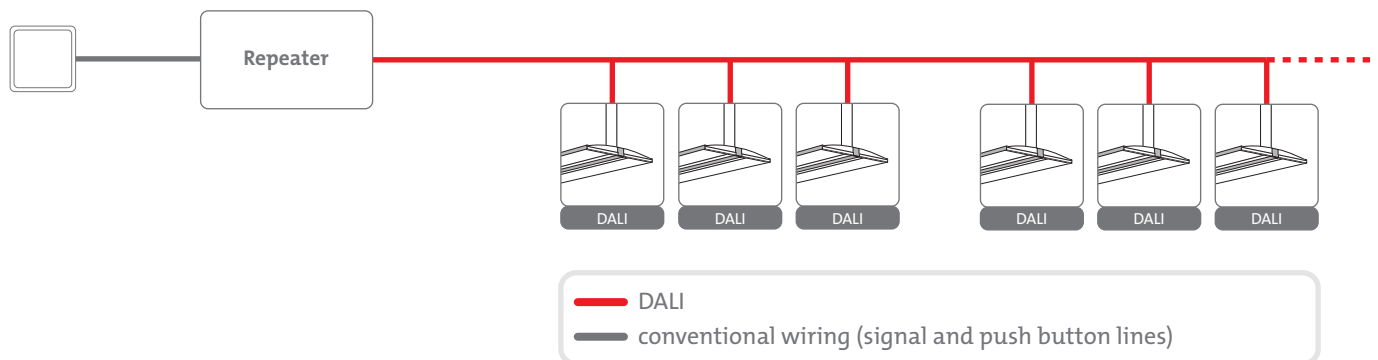
### Electrics

Repeater wired ready for connection | with 8-pole or 9-pole connection terminal: 2-pole for mains connection (+ 1-pole for PE with insulation class I devices); 1-pole for button input; 4-pole for DALI output (with possibility of through-wiring to next luminaire); 1-pole for internal relay contact (switch-off of standby consumption of luminaires) | the DALI control line must be approved for mains supply; control wire and 230V mains in common cable is permissible when isolation conditions are complied with (cable must be approved for mains supply)


Possible cable length:

- DALI output: 300m (total cable length)
- Push button input: 100m

- + ON/OFF with short press; bright/dark with press and hold
- + saving of a customer-specific lighting scene
- + isolated solution for self-sufficient lighting control
- + for maximum of 64 DALI luminaires in an isolated system
- + for integration of customer-specific push buttons of any manufacturer





 connection of customer-specific push buttons





single room system - push button operation of DALI luminaires | repeater | for installation in luminaire

DALI repeater with push button interface | for control with on-site push buttons | ON/OFF, bright/dark | broadcast control of max. 64 ECG DALI | plastic housing, grey | for installation in luminaires or for ceiling recessing with use of supplementary housing

Protection rating: IP20

Insulation class: I

Temperature range: 0°C..+50°C

DALI power supply:  $I_{sec}$  = max. 130mA

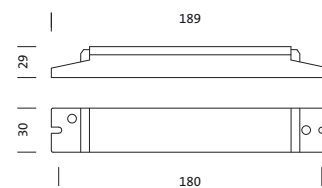
DALI input: plug-in terminal 2-pole  $A \leq 1.5\text{mm}^2$

DALI output: plug-in terminal 2x 2-pole  $A \leq 1.5\text{mm}^2$

Mains voltage:  $U_N = 100..240\text{V} / \text{AC } 50..60\text{Hz}$

Mains connection: plug-in terminal 3-pole  $A \leq 1.5\text{mm}^2$

IP 20   



| Article  | Version                   | Wt. (kg) | Order No. |
|----------|---------------------------|----------|-----------|
| repeater | for mounting in luminaire | 0.1      | 5LZ904002 |

- please order supplementary housing for lay-in ceiling mounting separately if required

Accessories (for details see page 11.43)

| Article  | Wt. (kg) | Order No. |
|--|----------|-----------|
| case, placed in ceiling void in the cavity ceiling | 0.1      | 5LZ904605 |



single room system - push button operation of DALI  
luminaires | repeater | for installation in distribution  
box

DALI repeater with push button interface | for control  
with on-site push buttons | ON/OFF, bright/dark |  
broadcast control of max. 64 ECG DALI | plastic  
housing, grey | for installation in distribution box

Protection rating: IP20

Insulation class: I

Temperature range: 0°C..+50°C

DALI power supply:  $I_{sec}$  = max. 130mA

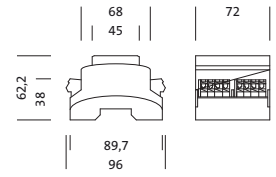
DALI input: plug-in terminal 2x 2-pole  $A \leq 2.5\text{mm}^2$

DALI output: plug-in terminal 2-pole  $A \leq 2.5\text{mm}^2$

Mains voltage:  $U_N = 100..240\text{V} / \text{AC } 50..60\text{Hz}$

Mains connection: plug-in terminal 3-pole  $A \leq 2.5\text{mm}^2$

IP 20   



| Article  | Version                         | part units | Wt. (kg) | Order No. |
|----------|---------------------------------|------------|----------|-----------|
| repeater | for distribution board mounting | 4 TE       | 0.1      | 5LZ904001 |



## Single room system - push button operation for 1...10V luminaires

Converters enable the setting and saving of customer-specific lighting scenes for indoor areas. The converter is designed as an isolated solution for self-sufficient lighting control, and according to design can be installed in luminaires or in distribution boxes. This enables all luminaires equipped with ECG dimmable (1...10V) to be simply operated.

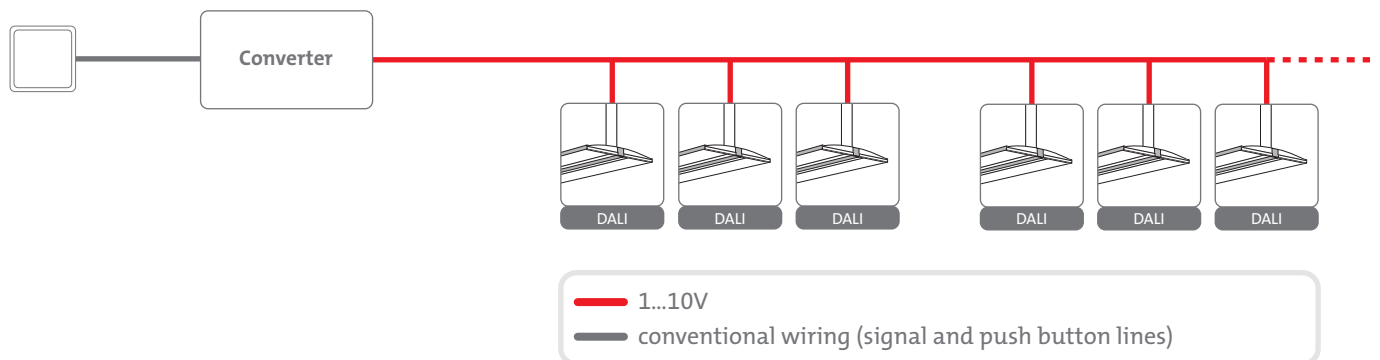
### Electrics

Converter wired ready for connection | with 6-pole or 7-pole connection terminal: 2-pole for mains connection (+ 1-pole for PE with insulation class I devices); 1-pole for button input; 2-pole for 1...10V output (brightness control of luminaires); 1-pole for internal relay contact (switching of luminaires or relays) | the 1...10V control line must be approved for mains supply; control wire and 230V mains in common cable is permissible when isolation conditions are complied with (cable must be approved for mains supply)

Possible cable length:

- 1...10V output: 100m (total cable length)
- Push button input: 100m

- + ON/OFF with short press; bright/dark with press and hold
- + saving of a customer-specific lighting scene
- + isolated solution for self-sufficient lighting control
- + for integration of customer-specific push buttons of any manufacturer





connection of customer-specific push buttons





single room system - push button operation for 1..10V  
luminaires | 1..10V converter | for installation in  
luminaire

DALI converter with push button interface | for control  
with on-site push buttons | ON/OFF/bright/dark |  
switching of output between logarithmic and linear  
characteristic curve | dimming of ECG(1..10V) via  
interface; on/off of ECGs via load contact | housing of  
sheet steel, white | for installation in luminaire

Protection rating: IP20

Insulation class: I

Temperature range: 0°C..+50°C

Push button input: plug-in terminal 1-pole  $A \leq 1.5\text{mm}^2$

1..10V output:  $I_{\text{max}} = 100\text{mA}$

1..10V output: plug-in terminal 2-pole  $A \leq 1.5\text{mm}^2$

Switching capacity: 1x switching contact:  $I_{\text{max}} = 5\text{A}$   
(ohm)

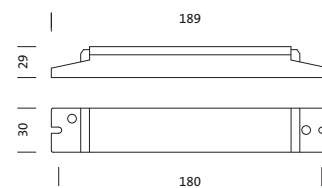
Number of ECGs: 10-30 ECGs, manufacturer-dependent

Switching output: plug-in terminal 1-pole  $A \leq 1.5\text{mm}^2$

Mains connection:  $U_N = 230\text{V} / \text{AC } 50..60\text{Hz}$

Mains connection: plug-in terminal 3-pole  $A \leq 1.5\text{mm}^2$

IP 20   



| Article   | Version                               | Wt. (kg) | Order No. |
|-----------|---------------------------------------|----------|-----------|
| converter | DALI/1-10V, for mounting in luminaire | 0.2      | 5LZ904201 |



single room system - push button operation for 1..10V  
luminaires | 1..10V converter | for installation in  
distribution box

DALI converter with push button interface | for control  
with on-site push buttons | ON/OFF, bright/dark |  
switching of output between logarithmic and linear  
characteristic curve | dimming of ECG(1..10V) via  
interface; on/off of ECGs via load contact | plastic  
housing, grey | for installation in distribution box

Protection rating: IP20

Insulation class: II

Temperature range: 0°C..+45°C

DALI input: screw terminal 2-pole  $A \leq 1.5\text{mm}^2$

Touch DIM input: screw terminal 1-pole  $A \leq 1.5\text{mm}^2$

1..10V output:  $I_{\text{max}} = 100\text{mA}$

1..10V output: screw terminal 2-pole  $A \leq 1.5\text{mm}^2$

Switching capacity: 1x switching contact:  $I_{\text{max}} = 10\text{A}$

(ohm); 8A (cap.); 5A (ind.) | Number of ECGs: 10-30

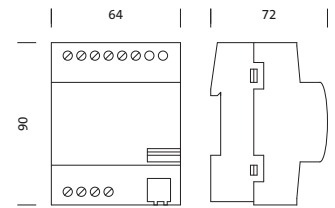
ECGs, manufacturer-dependent

Switching output: screw terminal 1-pole  $A \leq 1.5\text{mm}^2$

Mains connection:  $U_N = 230\text{V} / \text{AC } 50..60\text{Hz}$

Mains connection: screw terminal 2x 2-pole  $A \leq 1.5\text{mm}^2$

IP 20   



| Article   | Version                                     | part units | Wt. (kg) | Order No. |
|-----------|---|------------|----------|-----------|
| converter | DALI/1-10V, for distribution board mounting | 4 TE       | 0.2      | 5LZ904202 |



## Single room system - rotary operation of DALI luminaires

Rotary dimmers enable the setting and saving of customer-specific lighting scenes for indoor areas.

The rotary dimmer is designed as an isolated solution for self-sufficient lighting control and can be installed in a recessed box. This enables all luminaires equipped with ECG DALI to be simply operated.

### Electrics

Rotary dimmer wired ready for connection | with 4-pole connection terminal (2-pole for 'L' and 'N' + 2-pole for DALI control signal) | the DALI control line must be approved for mains supply; control wire and 230V mains in common cable is permissible when isolation conditions are complied with (cable must be approved for mains supply)

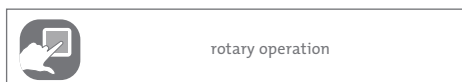
#### Switching type as active rotary dimmer:

Max. of 4 rotary dimmers possible per island | each rotary dimmer with mains connection | one rotary dimmer supplies max. of 25 DALI luminaires | common control of these luminaires via each rotary dimmer

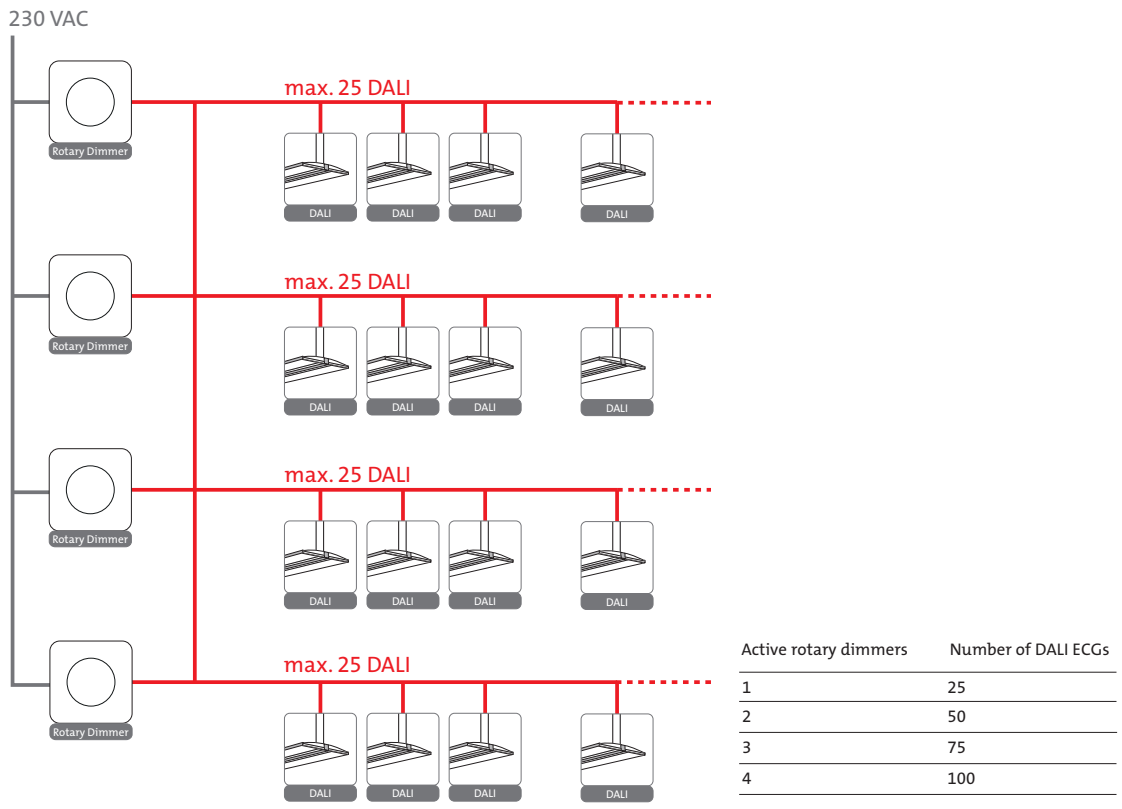
#### Switching type as passive rotary dimmer:

Max. of 4 rotary dimmers possible per island | one rotary dimmer as active rotary dimmer with mains connection (max. of three passive rotary dimmers supplied via DALI) | the active rotary dimmer supplies a max. of 25 DALI participants (luminaires or passive rotary dimmers) | common control of these luminaires via each rotary dimmer

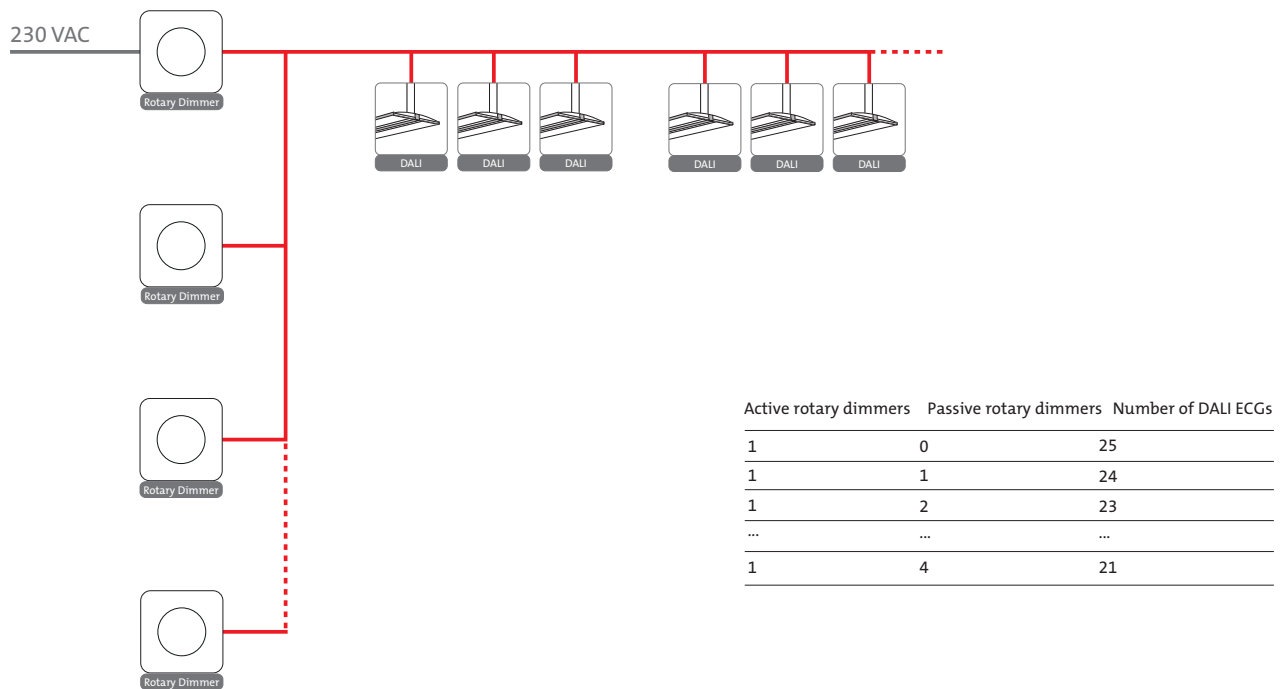
- + ON/OFF by pressing; bright/dark by rotating
- + saving of a customer-specific lighting scene
- + isolated solution for self-sufficient lighting control
- + up to 4 rotary dimmers in one island
- + standard cover can be replaced by common switch ranges from various manufacturers

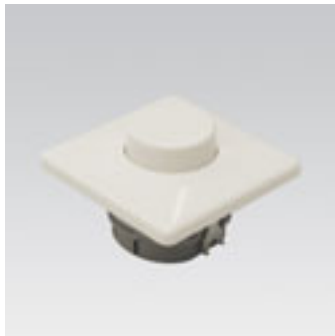


### Active rotary dimmer



### Passive rotary dimmer





single room system - rotary operation of DALI  
luminaires | rotary dimmer | for switch box installation

Rotary dimmer | ON/OFF, bright/dark, saving of switch-  
on brightness values | can be used as active or passive  
rotary dimmer | for installing in recessed boxes\* | incl.  
rotary button and frame of white plastic

Protection rating: IP30

Insulation class: II

Temperature range: +0°C..+50°C

DALI output: Number of ECGs: max. 25 ECG DALI

DALI output: screw terminal 2-pole  $A \leq 4\text{mm}^2$

Mains connection:  $U_N = 230\text{V} / \text{AC } 50..60\text{Hz}$

Mains connection: screw terminal 2-pole  $A \leq 4\text{mm}^2$

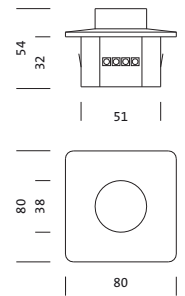
\* for recessing boxes according to DIN | compatible to switch ranges of various manufacturers:

Berker, programme: Q1 | K1 | S.1 | B.1 | Arsys

Gira, programme: System 55 | S-Color | area

Siemens, programme: Delta Profil | Delta Style | Delta i-system | Delta Vita

IP 20   



| Article       | Wt. (kg) | Order No. |
|---------------|----------|-----------|
| rotary dimmer | 0.1      | 5LZ902050 |





## Single room system - constant light unit for 1...10V luminaires

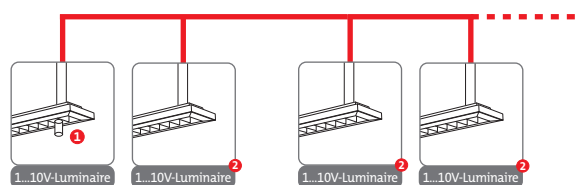
Constant light units enable the daylight-dependent control of indoor lighting and therefore contribute significantly to the energy-efficient operation of lighting installations. They ensure that under consideration of the daylight component, lighting level requirements are complied with at all times.

Both versions of the constant light unit are designed as an isolated solution for self-sufficient lighting control and are either clipped to the fluorescent lamp or integrated as with a luminaire insert into the DUS® rapid mounting trunking. This enables almost all luminaires equipped with ECG dimmable (1...10V) to be simply and economically upgraded.

### Electrics

Constant light unit wired ready for connection | for connection to 2-pole 1...10V connection terminal of luminaire (or suitable for 7-core wired DUS® trunking rail) | the 1...10V control line must be approved for mains supply; control wire and 230V mains in common cable is permissible when isolation conditions are complied with (cable must be approved for mains supply) | ON/OFF implemented via on-site installation.

- + constant lighting level under consideration of daylight component or foreign light in room
- + for new installations or for low-cost refurbishing of existing systems
- + isolated solution for self-sufficient lighting control (only one constant light unit permissible per isolated system)
- + simple commissioning: reference value setting with use of screwdriver at sensor



- ① 1...10V-Luminaire with optional constant light unit
- ② 1...10V-Luminaire



Light sensor for detection of daylight component

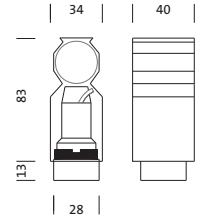


**single room system - constant light unit for 1..10V  
luminaires | for clipping to T16 and T26 lamps**

Constant light unit for clipping to lamp | for automatic  
brightness control | dimming of ECG(1..10V); ON/OFF  
via on-site installation | plastic housing, white;  
mounting clip of spring steel

Protection rating: IP20  
Insulation class: II  
Temperature range: +0°C..+45°C  
Mounting height: H= 3m  
Mounting location: to T16 or T26 lamp  
Measuring range of light sensor: 20..800lx  
Reference value setting: via potentiometer at sensor  
head  
Signal output: 1..10V, 2x conductor, A= 0.5mm<sup>2</sup>  
Number of ECGs: approx. 100 ECGs, manufacturer-  
dependent

IP 20  



| Article                | Version | Wt. (kg) | Order No. |
|------------------------|---------|----------|-----------|
| light constant control | 1..10V  | 1.1      | 5LZ9031   |



single room system - constant light unit for 1..10V  
luminaires | DUS® IP20 constant light unit insert | for  
mounting in trunking system

DUS® IP20 constant light unit insert for mounting to  
DUS® trunking rail | can be positioned in module size  
307mm\* | with light sensor for brightness control of  
ECG dimmable (1..10V) | housing of sheet steel, pure  
white (similar to RAL 9010); twist lock catches with  
metal clips for rapid fixing to trunking rail

Protection rating: IP20

Insulation class: I

Control range: E= approx.500Lx

Mounting height: h= 2.5..3m

\* system size: 1 system unit (1SE) = 307mm

**Electrical**

Constant light unit insert wired ready for connection, suitable for 7-core wired trunking rail | for brightness control of approx. 20 luminaire inserts, single or twin-lamp (approx. 10 Power Modules) with ECG dimmable(1..10V) | ON/OFF implemented via on-site installation

Reference value setting by using screwdriver at light sensor



| Article                         | Module size | Wt. (kg) | Order No.  |
|---------------------------------|-------------|----------|------------|
| luminaire insert, light control | 2 x SE      | 0.4      | 5LJ9056HPL |



## Luminaires with integrated Multi-Sensor

Luminaires with integrated Multi-Sensor enable the daylight-dependent control of indoor lighting and respond to the presence of people in the detection range. They ensure that with presence and under consideration of the daylight component, lighting level requirements are complied with at all times. They therefore contribute significantly to the energy-efficient operation of lighting installations. The Multi-Sensor luminaires are designed as an isolated solution for self-sufficient lighting control. They function as master luminaires that can control a defined number of further luminaires without sensors (slave luminaires).

The Multi-Sensor of the master luminaire has a PIR sensor for movement detection, a light sensor for detection of the lighting level and an IR receiver for the remote control. The lighting level can be influenced via remote control or manually with a push button. This enables lighting installations equipped with ECG DALI to be simply operated.

- + constant lighting level under consideration of presence of people and daylight in room
- + expansion of movement detection possible via PIR expansion sensors
- + nominal value setting and comfort functions possible via remote control
- + manual control of lighting system via on-site push buttons and remote control
- + isolated solution with a master luminaire for self-sufficient lighting control
- + integration of several slave luminaires possible





PIR sensor for movement detection



Light sensor for detection of daylight component



connection of customer-specific push buttons

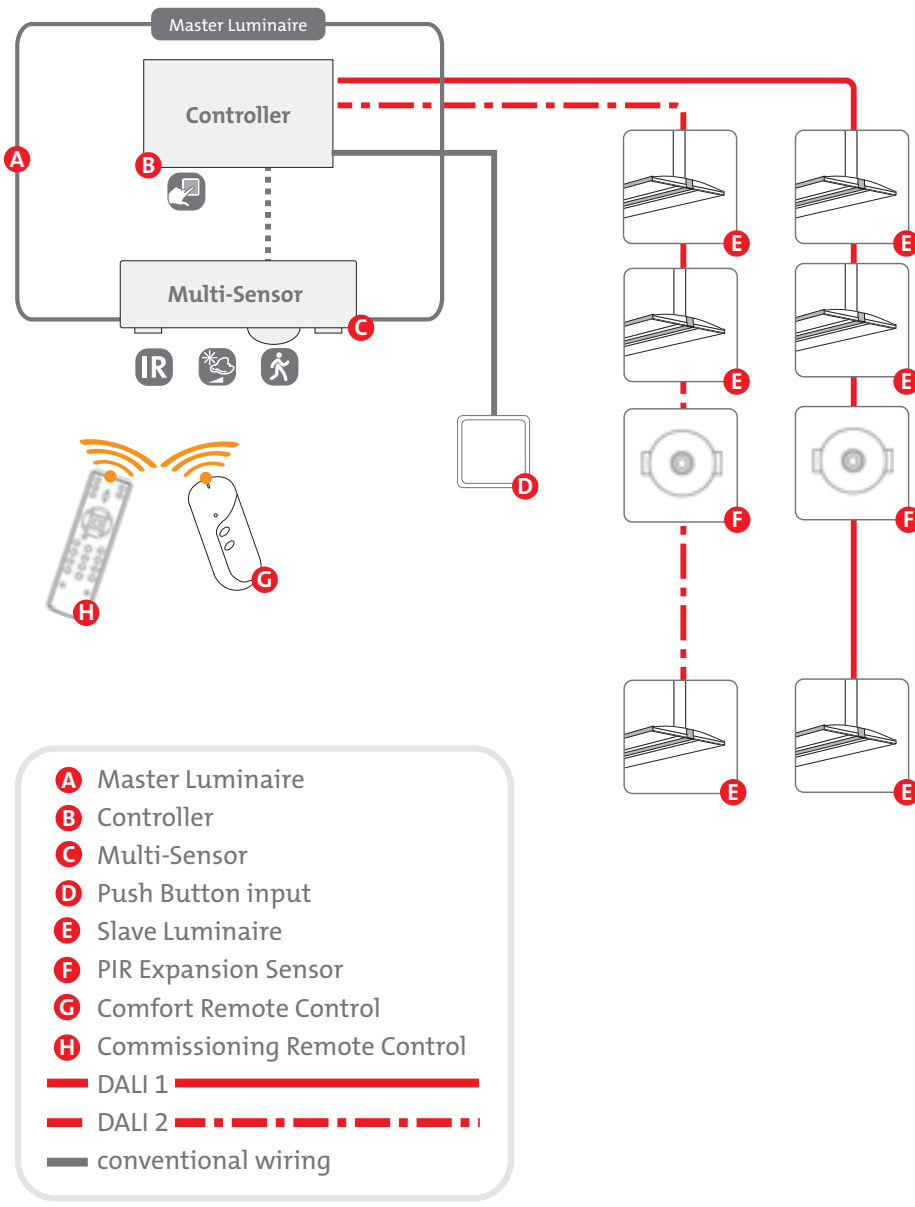


IR receiver for remote control



Luminaires with integrated Multi-Sensor

System overview



Luminaires

**B** Controller

- two DALI lines (DALI 1, DALI 2)
- max. 1 master and 10 slave luminaires
- 10 preset operating modes can be selected
- button input for connecting customer-specific push buttons

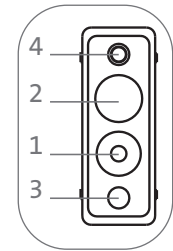
**E** Slave luminaire

- with DALI ECG
- controlled by master luminaire
- distributed across two DALI lines (max. 10 slave luminaires)
- any luminaire family

## Sensors

### C Multi-Sensor

- 1 Daylight sensor for detection of ambient brightness  
[minimum distance to window= 0.7 x MH]
- 2 PIR sensor for movement detection
- 3 IR receiver for parameterisation or for operation with IR remote controls
- 4 Service button for easier commissioning



### F PIR expansion sensor



- for expansion of movement detection
- distributable across DALI 1 and DALI 2
- maximum of two PIR expansion sensors per master luminaire; thus reduction of number of slave luminaires
- for ceiling recessing
- ceiling surface-mounting optionally possible with accessories

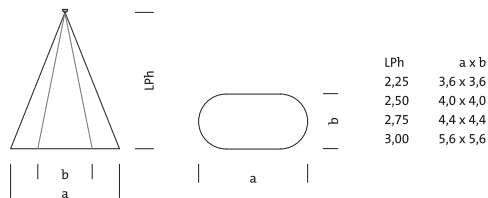
| Number of PIR expansion sensors | Number of slave luminaires |
|---------------------------------|----------------------------|
| 0                               | max. 10                    |
| 1                               | max. 9                     |
| 2                               | max. 8                     |

### Detection ranges for Multi-Sensor and PIR expansion sensor

Multi-Sensor and PIR expansion sensor have identical detection range for movement detection

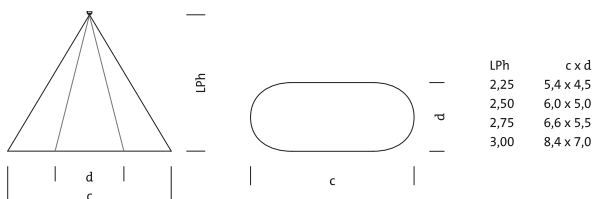
#### Seated detection

Detection Ranges - movement





#### Transverse detection

Detection Ranges - movement



## Operating components

- D** Push button input 
- connection of customer-specific push buttons
  - dimming of lighting system
  - ON/OFF of lighting system (dependent on set mode)  
(see modes table on page 10.47 for functions)
  - nominal value setting with commissioning via service button

- G** Comfort remote control 
- manual operation of lighting system by the user
  - ON/OFF/dimming
  - can be grouped in up to 7 functional groups

## Commissioning

### Simplified commissioning with service button on Multi-Sensor








































- simplified commissioning with service button on Multi-Sensor
- switching between mode 1 and mode 2  
(see modes table on page 10.47 for functions)
- nominal brightness value: approx. 600lx (factory setting; can be modified by customer-specific button at push button input)

### **H** Expanded commissioning with commissioning remote control

- commissioning with complete functional spectrum
- mode 1...10 settable  
(see modes table on page 10.47 for functions)
- setting of nominal brightness value
- setting of system behaviour following mains voltage return
- movement detection test mode with commissioning
- resetting to factory settings
- querying of saved operating modes



### Mode Table

| Modus  | Light   |   | DALI 1  |              |                              | DALI 2         |              |                              | Commissioning via   |
|--|---|---|---|--------------|------------------------------|----------------|--------------|------------------------------|---|
|  | On  | Off   | Daylight Control  | Delay Period | General Lighting/Orientation | Lighting level | Delay Period | General Lighting/Orientation |   |
| 1<br> |    |    |    | 15 min.      | –                            | DALI 1 +30%    | 15 min.      | –                            |    |
| 2  |    |    |    | 15 min.      | 120 min.                     | DALI 1 +30%    | 15 min.      | 120 min.                     |    |
| 3  |    |    |    | 15 min.      | –                            | DALI 1 +30%    | 15 min.      | –                            |    |
| 4  |    |    |    | 15 min.      | –                            | 30%            | 15 min.      | 120 min.                     |    |
| 5  |  |  |  | 15 min.      | –                            | 30%            | 15 min.      | –                            |  |
| 6  |  |  | –   | 15 min.      | 60 min.                      | –              | –            | –                            |  |
| 7  |  |  |  | 15 min.      | –                            | –              | 30 min.      | –                            |  |
| 8  |  |  | –   | 15 min.      | –                            | –              | 15 min.      | –                            |  |
| 9  |  |  |  | 15 min.      | ∞                            | DALI 1 +30%    | 15 min.      | ∞                            |  |
| 10   |  |  |  | 15 min.      | –                            | 30%            | 15 min.      | ∞                            |  |



Entry into detection range



Leaving of detection range



Daylight control



Button activation (via button input)



with service button (on multi-sensor)



with commissioning remote control



factory setting

