TRIDONIC

DALI based lighting controls

sceneCOM L, XL

sceneCOM L, XL (multi-channel)

Product description

- Independent lighting control for up to 192 DALI control gears on 3 DALI lines
- Simple setup via WEB interface
- Cross DALI line control
- DALI emergency lighting control gear test scheduling and monitoring (with sceneCOM XL EM and sceneCOM XL EM Bac, up to 50 emergency gears)
- Complying with IEC 62034
- 5-year guarantee

Housing properties

- Casing: polycarbonate, white
- Type of protection IP20
- DIN rail mounting

Interfaces

- 3 DALI lines
- BACnet interface (sceneCOM XL EM Bac)
- Terminal blocks: screw terminals

Functions

- Addressing wizard
- Presence linking
- Local and downloadable backup
- $\bullet\,$ Freely programmable daily scheduling with calendar function
- Self-contained emergency luminaires
- Freely programmable shows
- RGB and Tunable White
- Scenes and zones



Wiring diagrams and installation examples, page $5\,$



TRIDONIC

DALI based lighting controls

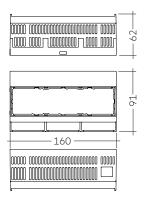


sceneCOM L, XL

sceneCOM L, XL (multi-channel)

Technical data

Rated supply voltage	110 – 240 V
Mains frequency	50 / 60 Hz
Power consumption	< 20 W
Ethernet interface	1 x RJ45
DALI interface	3 x
Max. current per channel	240 mA
Ethernet port	1 x 10/100 Mbit/s
Status indicators LED	Device status, DALI status
Operating Temperature at upright mounted	0 +50°C
Operating Temperature at flat mounted	0 +40°C
Mounting	DIN rail mounting, 35 mm
Casing Material	PC, halogen-free polycarbonate, non-flammable
Type of Protection	IP20
Dimensions L x W x H	160 x 91 x 62 mm



3			
Туре	Article number	Packaging carton	Weight per pcs.
sceneCOM L	28002680	36 pc(s).	0.37 kg
sceneCOM XL	28002681	36 pc(s).	0.37 kg
sceneCOM XL EM	28002682	36 pc(s).	0.37 kg
scanaCOM XI EM Bac	28002683	36 nc(e)	037 kg





sceneCOM UPB4

Product description

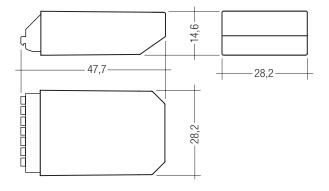
DALI input controller

- 4 independent inputs for floating contacts
- For connecting standard momentary-action switch or switches
- Multiple UPB4s possible on the DALI line
- Power supply via DALI line
- Connection wires according to the terminal colours with 25 cm length included
- 5-year guarantee



Technical data

Supply via	DALI cable
Current draw	6 mA
Input	4 momentary-action switches
Output	DALI
Ambient temperature ta	0 +60 °C
Storage temperature	-25 +80 °C
Turn on time	≤ 6 s
Humidity	20 90 % (non-condensing)
Type of protection	IP20
Mounting	Mounting box 60 x 61 mm (ø x D)
Casing material	PC, halogen-free polycarbonate, non-flammable
Dimension L x W x H	47.7 x 28.2 x 14.6 mm



Type	Article number	Packaging, carton	Weight per pc.
UPB4 sC	28002684	125 pc(s).	0.012 kg

SORIES

basicDIM DGC Sensor 5DPI 14f

Product description

- Light measurement and motion detection
- Can be remote controlled
- Light measurement and motion detection can be deactivated

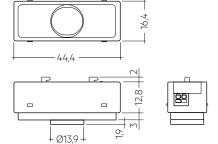
Technical data

Supply via	DALI cable
Current draw	6 mA
\varnothing of detection range, mounted at a height of 2.5 m	4.5 m
Swivel design	no
Detection angle	84°
Light measurement at the sensor head ①	10 – 650 lx
Infra-red control range	5 m
Max. mounting height	5 m
Operating temperature	0 +50 °C
Storage temperature	-25 +55 °C
Type of protection	IP20

 $[\]ensuremath{^{\oplus}}$ The measured value at the sensor head corresponds to approx. 15 to 2,000 lux on the surface measured.







Ordering data

Туре	Article number	Packaging, carton	Weight per pc.
basicDIM DGC Sensor 5DPI 14f Luminaire installation	28000933	40 pc(s).	0.06 kg
basicDIM DGC Sensor 5DPI 14f black Luminaire installation	28001696	40 pc(s).	0.06 kg

ACCES-

5DPI 14f Mounting Kit

Product description

- Mounting frame for attaching all 5DP 14f sensor directly to the luminaire housing
- Shutter for preventing movement detection in one direction
- Glow wire test with 750 °C according to EN 61347-1





Туре	Article number	Packaging carton	Weight per pc.
5DPI 14f mounting kit	28001558	100 pc(s).	0.004 kg
5DPI 14f mounting kit black	28001575	100 pc(s).	0.004 kg

SORIES

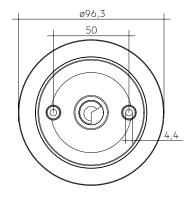
ACU Sensor Housing 14rs IP20

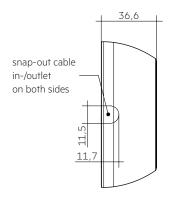
Product description

- Mounting frame for wired 5DP 14f sensors allowing direct mounting to the ceiling
- Easy "click in" installation of the sensor
- IP20
- Casing: plastic, white
- UV stabilized plastic
- DALI MSensor 5DPI 14 is powered via DALI circuit, basicDIM DGC Sensor 5DPI 14f powered via control unit
- Optional shutter for reduction of movement detection area allowing to decrease the movement detection area from 360° to 240°
- Mounting kit with screws and decorative plugs
- 0.5 mm wiring for the sensor
- Two 3 x 1.5 mm² clamps with cable management (2 entry points on oppsite sides)
- Glow wire test with 750 °C according to EN 61347-1









Туре	Article number	Packaging carton	Weight per pc.
ACU Sensor Housing 14rs IP20	28001872	57 pc(s).	0.054 kg

SORIES

basicDIM DGC Sensor 5DPI 14rc

Product description

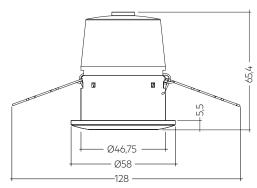
- Light measurement and motion detection
- Can be remote controlled
- Light measurement and motion detection can be deactivated

Technical data

Ø of detection range, mounted at a height of 2.5 m	4.5 m
Swivel design	no
Detection angle	84°
Light measurement at the sensor head ①	10 – 650 lx
Infra-red control range	5 m
Max. mounting height	5 m
Operating temperature	0 +50 °C
Storage temperature	-25 +55 °C
Type of protection	IP20

① The measured value at the sensor head corresponds to approx. 15 to 2,000 lux on the surface measured.





Туре	Article number	Packaging, carton	Weight per pc.
basicDIM DGC Sensor 5DPI 14rc Ceiling installation	28000934	63 pc(s).	0.06 kg

1. Standards

IEC 60950-1

EN 55022

EN 55024

EN 61547

EN 61000-4-3

EN 61000-6-1

EN 61000-6-3

IEC 61347-2-11

2. Common

2.1 Description

sceneCOM is a lighting management system designed to easily control your luminaires. The sceneCOM web application allows the automation of up to 192 luminaires with one sceneCOM control device.

The sceneCOM web application is therefore suitable for smaller buildings or individual floors of a building.

Besides the functional lighting in a building, self-contained emergency luminaires can also be used in a sceneCOM system.

3. Interfaces / communication

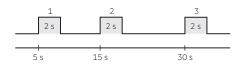
3.1 Device LED

Status-LED	Description
Green, intermittently flickering	Fault-free operation
Off	No mains voltage (L, N)
Red	Serious internal error

3.2 DALI LED

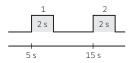
Status-LED	Description
Green, intermittently flickering	Fault-free operation
Green, flashing on/off every 0.5 s	Test mode
Orange, flashing on/off every 0.5 s	Addressing or DALI initialisation
Off	No mains voltage (L, N)
Red	More than 64 DALI-compliant devices connected
Red, intermittently flickering	DALI control line short-circuited or more than 120 DALI loads
Red-green, intermittently flickering	Lamp failure

3.3 Function switch



Orange phase	Function
1	Restart the sceneCOM.
2	Delete the addresses and short addresses of all control gear and input devices connected to the 3 DALI control lines.
3	Reset the IP address to the factory setting (10.10.40.254).

3.4 Function switch



Orange phase	Function
1	Exit test mode for all outputs.
2	Delete the addresses and short addresses of all control gear and input devices connected to the corresponding DALI control line.

	max. 240 mA per DALI control line			
Device O . Status ·	DALI1 O Status	O Status	O Status	Ethernet (RJ45) Default IP 10.10.40.254
Function 110 – 240 V, 50/60 Hz max, 300 mA L N 7a: 0 – 50 °C O Made in Switzerland	Test DA DA	Test DA DA	Test DA DA	<u> </u>

4. Installation

4.1 Safety instructions



The device may only be used for the specified area of application.

Relevant health and safety regulations must be observed.

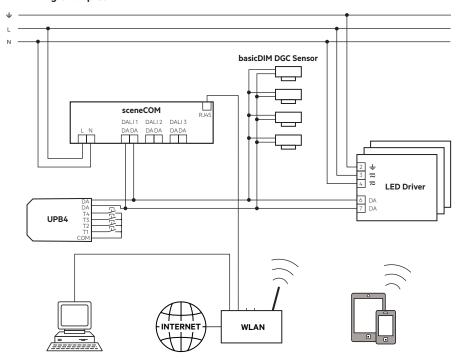
The voltage supply must be disconnected when the device is being assembled and installed.

Only qualified personnel may assemble, install and commission the device.

Protection class II can only be guaranteed when the terminal covering has been correctly installed.

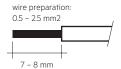
If a fault occurs, dangerous voltage levels may be present at the DALI terminals and on the DALI control line.

4.2 Wiring examples



4.3 Wiring type and cross section sceneCOM Controller

The wiring can be solid wire, stranded wire or stranded wire with end sleeve with a cross-section of 0.5 mm² to 2.5 mm².

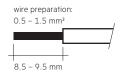


4.4 Wiring type and cross section UPB4

The wiring can be solid wire or stranded wire with end sleeve with a cross-section of $0.5\,\text{mm}^2$ to $1.5\,\text{mm}^2$.

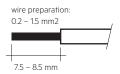
Maximum cable length between momentary-action switch and UPB4 is 50 cm. $\,$

Connecting wires are supplied inside the package.



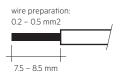
4.5 Wiring type and cross section basicDIM Sensor 5DPI 14rc

The wiring can be solid wire or stranded wire with a cross-section of 0.2 \mbox{mm}^2 to 1.5 $\mbox{mm}^2.$

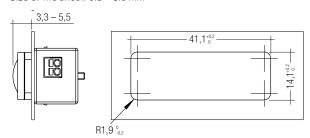


4.6 Wiring type and cross section basicDIM Sensor 5DPI 14f

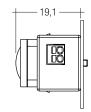
The wiring can be solid wire or stranded wire with a cross-section of 0.2 $\,\mathrm{mm^2}$ to 0.5 $\,\mathrm{mm^2}.$

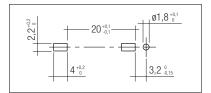


Size of the sheet: 0.8 - 3.0 mm

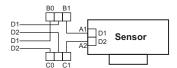


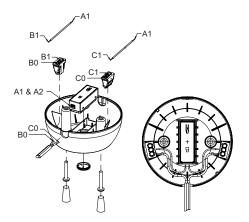
Size of the sheet: $0.6-0.8\,\text{mm}$





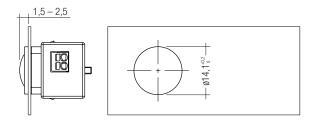
4.7 Wiring and mounting ACU Sensor Housing 14rs IP20





4.8 Mounting variants luminair installation sensor

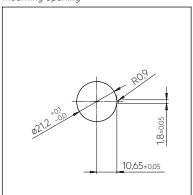
Size of the sheet: $0.8 - 1.8 \, mm$

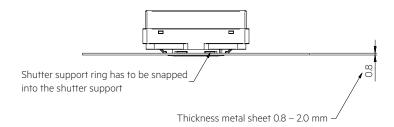


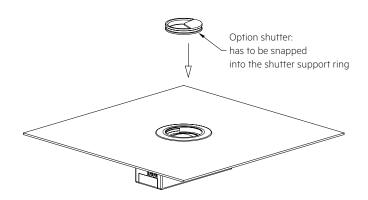
4.9 Mounting in luminaire housing with Mounting Kit:

Size of the sheet: 0.8 – 2.0 mm

Dimension drawing for needed mounting opening



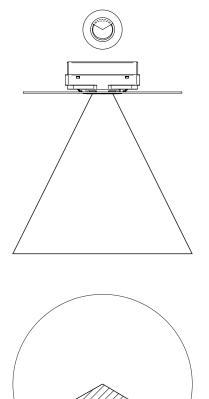




4.10 Mounting Kit mounting

4.11 Mounting Kit Shutter

Area which is masked by the shutter.

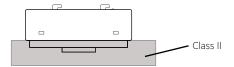


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4.12 Mounting in class II luminaire

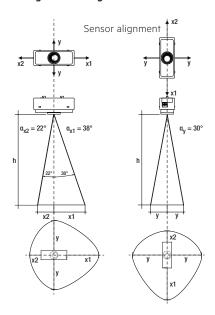
The Sensor provides basic insulation as required by IEC 62386-101 and defined in IEC 61347-1.

If the sensor is built in to a class II luminaire which has to provide double or reinforced insulation it has to be considered that the Sensor is not a class II device. Still the Sensor can be used for such projects as the front of the sensor is tested to fulfill the class II requirements for double or reinforced insulation.



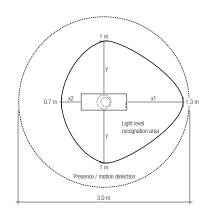
6. basicDIM DGC sensor functions

6.1 Light level recognition area



_ h *	x1	x2	У	d	
1.7 m	1.3 m	0.7 m	1.0 m	3.0 m	
2.0 m	1.6 m	0.8 m	1.2 m	3.6 m	
2.3 m	1.8 m	0.9 m	1.3 m	4.1 m	
2.5 m	2.0 m	1.0 m	1.4 m	4.5 m	
2.7 m	2.1 m	1.1 m	1.6 m	4.9 m	
3.0 m	2.3 m	1.2 m	1.7 m	5.4 m	
3.5 m	2.7 m	1.4 m	2.0 m	6.3 m	
4.0 m	3.1 m	1.6 m	2.3 m	7.2 m	

Example for light and motion detection area at height of 1.7 m:



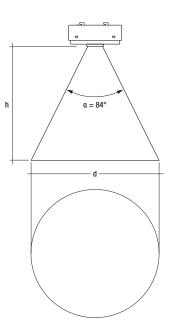
 The recommended maximum room height for office applications is 3 m and for corridor applications for example 4 m. Up to 2 m mounting height presence is detected and over 2 m motion is detected.

Calculation of the diameter (light area):

 $x1 = tan(\alpha_{x1}) \times h$ $x2 = tan(\alpha_{x2}) \times h$ $y = tan(\alpha_y) \times h$

Calculation of the diameter (motion area): d = 2 \times tan(0,5 \times α) \times h

5.2 Presence / motion detection



7. Functions

Function	sceneCOM L	sceneCOM XL	sceneCOM XL EM	sceneCOM XL EM Bac
Addressing	✓	✓	✓	✓
Addressing wizard	✓	√	✓	✓
System image	✓	✓	√	✓
Presence linking	✓	✓	✓	✓
Conditional scene recall	✓	✓	√	✓
BACnet	×	×	×	✓
Data backup	✓	✓	✓	✓
Installation test	✓	✓	√	✓
Calendar	✓	✓	✓	✓
Self-contained emergency luminaires	×	×	√	✓
Log	✓	✓	✓	✓
Shows	×	✓	√	✓
Special luminaires	×	√	✓	√
Scenes	✓	√	✓	✓
Faults	✓	√	✓	√
Daylight linking (with light sensor)	✓	✓	✓	✓
Zones	✓	√	✓	✓

The description of the individual functions is available via our WEB page: https://www.tridonic.com/com/en/products/scenecom-controller.asp#tab4

8. em-LINK v2

The em-LINK v2 software allows you to remotely monitor the status of all connected emergency gears from up to 100 sceneCOM controllers. It is accessible via WEB interface.

More information on the em-LINK v2 software can be found in it's manual or at www.tridonic.com/software.

9. Miscellaneous

9.1 Additional information

Additional technical information at $\underline{www.tridonic.com} \rightarrow \text{Technical Data}$

Guarantee conditions at <u>www.tridonic.com</u> \rightarrow Services

Life-time declarations are informative and represent no warranty claim. No warranty if device was opened.