

traluxSENSE SFI 30 PIR 3DP BK WH

DALI-2 multi-sensor



Product description

- _ DALI-2 PIR motion detector for DALI track systems
- _ 2-in-1: PIR motion sensor and daylight sensor
- _ Super-compact mini format
- _ Easy installation by plugging into the power track, no additional wiring necessary
- _ 5 years guarantee (conditions at <https://www.tridonic.com/en/int/services/manufacturer-guarantee-conditions>)

Housing properties

- _ Casing: polycarbonate, black or white
- _ Type of protection IP20

Note

- _ Tridonic DALI MSensor G3 family sensors are developed according to DALI Standard EN 62386-101 Ed.2, also known as DALI-2. To be able to use the sensor in such installation, an application controller is necessary.

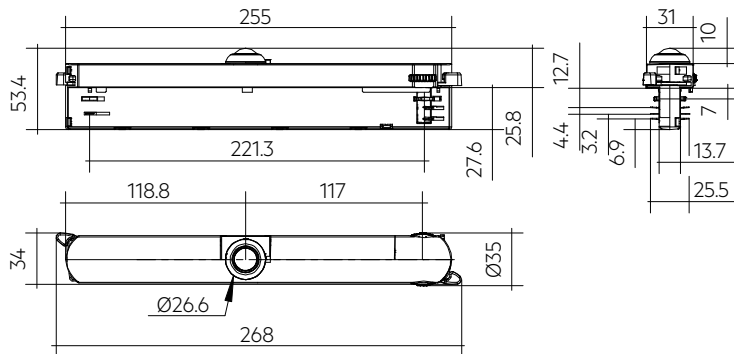
Website

<http://www.tridonic.com/28006397>



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**Ordering data**

Type	Article number	Suitable for	Colour	Dimensions L x W x H	Packaging, carton	Weight per pc.
traluxSENSE SFI 30 PIR 3DP WH	28006397	In-track	White	261.5 x 53.4 x 35 mm	4 pc(s).	0.093 kg
traluxSENSE SFI 30 PIR 3DP BK	28006398	In-track	Black	261.5 x 53.4 x 35 mm	4 pc(s).	0.093 kg

Technical data

Sensor type	PIR sensor
Supply via	DALI
Supply voltage ^①	9.5 – 22.5 V
Current consumption typ.	8 mA
Current consumption max.	20 mA
Starting time ^②	≤ 30 s
Supported operating modes	0
Mounting height	2.5 – 3.5 m
Mounting	In-track
Detection range for light measurement ^③	1 – 1,000 lx
Light measurement resolution	10 lx
Min. temperature difference between ambient temperature and detected object	± 4 °C
Ambient temperature ta	-20 ... +50 °C
Humidity	20 ... 90 % not condensed
tc point	55 °C
Storage temperature ts	-25 ... +60 °C
Housing material body	PC polycarbonate
Housing material lens	HDPE
Housing colour body	White (similar to RAL 9016), Black (similar to RAL 9005)
Housing colour lens	Milky white to slightly translucent
Type of protection	IP20
Lifetime	up to 50,000 h
Guarantee (conditions at www.tridonic.com)	5 Year(s)

Approval marks**Standards**

EN 55015, EN 61547, EN 61347-1, EN 61347-2-11, EN 62386-101, EN 62386-103, EN 62386-303, EN 62386-304, EN 62386-351

① Uin acc. IEC 62386-101.

② Starting time is the time until the PIR element of the sensor is ready and delivers correct values.

③ The measured value by the sensor is typically 2-4 times less than the lux value measured on the surface below the Sensor.

1. Standards

EN 55015
EN 61547
EN 61347-1
EN 61347-2-11
EN 62386-101
EN 62386-103
EN 62386-303
EN 62386-304
EN 62386-351

1.1 DALI note



Sensor is only applicable for DALI-2 installations according to EN 62386-101 Ed.2.

Following table shows the instances and which values they provide.

DALI instances	
Instance number	Explanation
0	Occupancy sensor DALI Part 303
1	Light sensor DALI Part 304

1.2 D4i note

D4i luminaire-mounted control devices (part 351) = Type B

1.3 Glow wire test

according to EN 61347-2-11 passed for temperatures up to 850°C housing and 650°C lens.

2. Common

This sensor provides measurement of ambient light, occupancy detection via PIR sensor.

Sensor is created for following main applications:

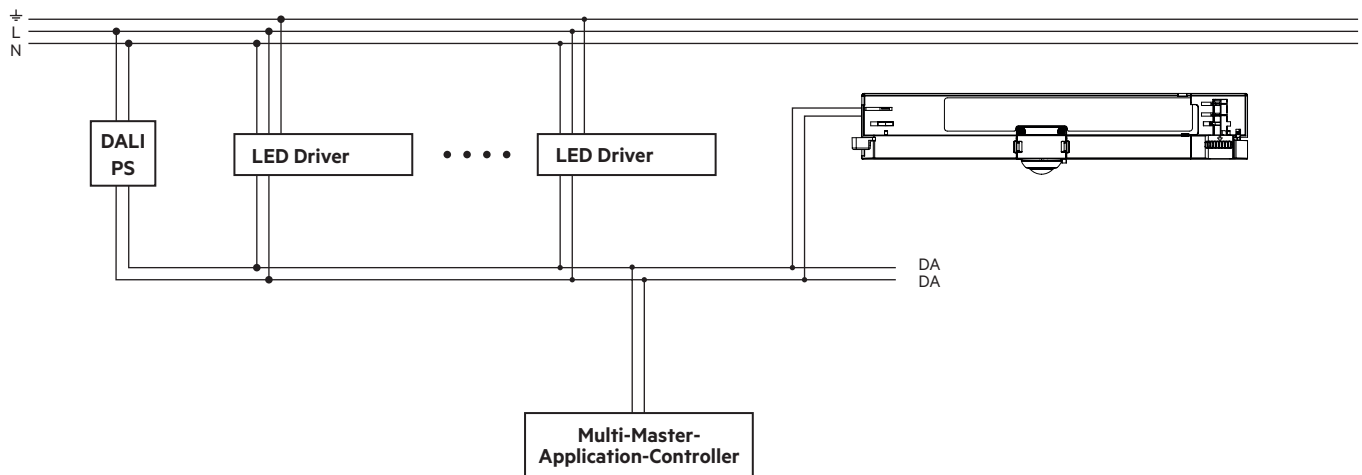
Low height buildings such as

- Office applications
- Factory buildings
- Storage buildings and warehouses
- Corridors, passages and Garages

3. Installation

- The Sensor must not be connected to the mains. It is supplied directly via the DALI power supply.
- DALI is not SELV.
The installation instructions for mains voltage therefore apply.
- Please ensure that the detection range of the sensor lies in the lighting area of the controlled luminaires.
- Please ensure that the detection ranges of the sensors do not overlap.
This may have influence to the lighting control.
- When installed at a height other than the recommended installation height, the sensor might show different characteristics.
Heaters, fans, printers and copiers located in the detection zone may cause incorrect occupancy detection.
- Avoid direct illumination of the light source on the sensor including housing.
- Do not use aggressive detergents to clean the e.g. sensor lens. Always make sure that the used detergent does not harm the sensor materials.

3.1 Wiring



3.2 Compatible tracks

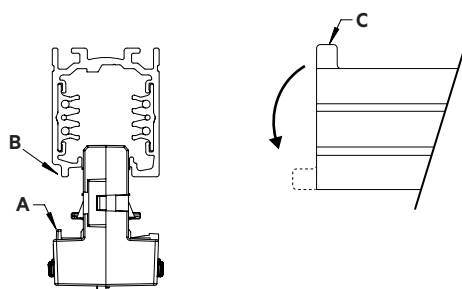
Manufacturer	Type
NORDIC ALUMINIUM	GLOBAL Trac Pulse
Stucchi	9000A Series
Powergear	PRO-0610; PRO-R610



Tridonic has no control or responsibility on any future or past possible changes made by different manufactures that could affect the compatibility between tracks and adapters.

3.3 Adapter mounting into the track

Insert the adapter into the track, so that the mechanical key (A) in the adaptor matches the groove (B) in the track. Rotate of about 90° the lever of the cam (C) until it reaches the locking position.
To open rotate the lever the opposite direction.



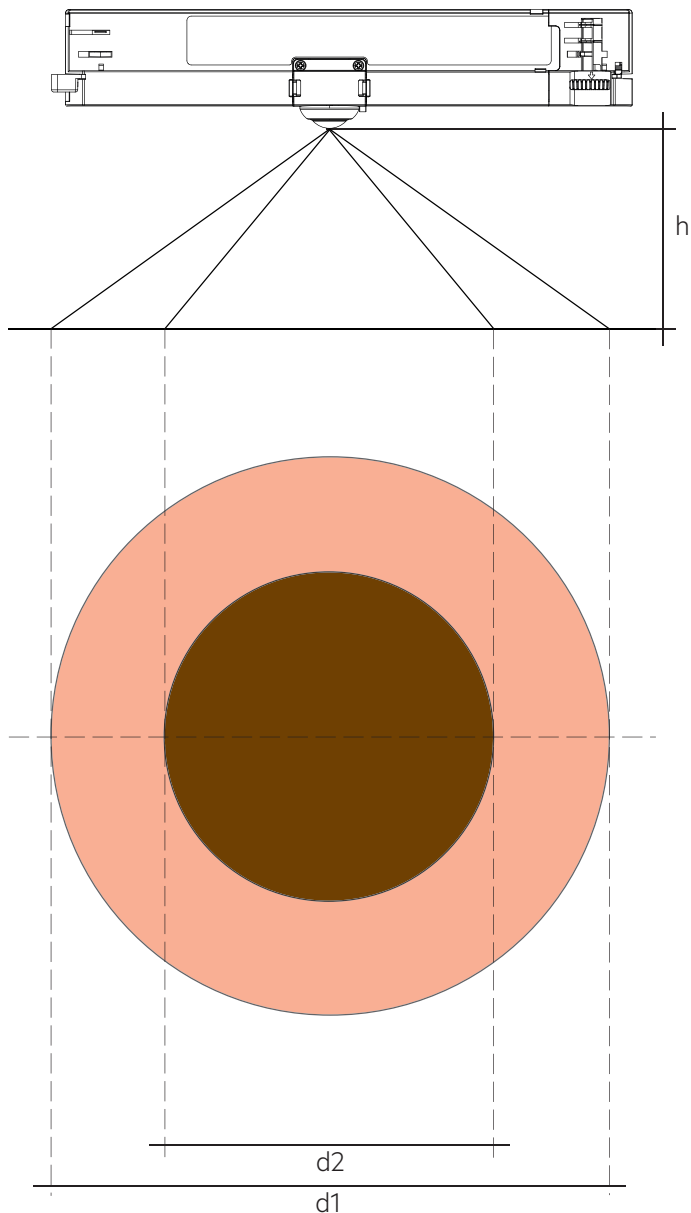
4. Sensor function

4.1 Occupancy / motion detection

For occupancy detection PIR technology is used. The PIR Lens is made to detect moving people in areas such as office, open space or corridors with the following performance criteria:

- Ceiling height from 2 to 3.5 m
- Movement of human body
- Movement speed ≥ 1.0 m/s

4.2 Detection area



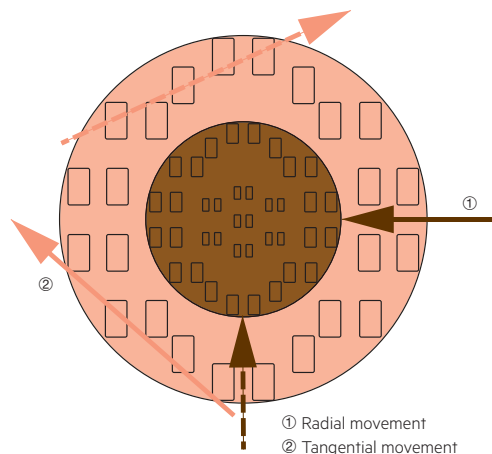
Reaction time of the sensor (time between occupancy detected and event information sent to DALI Bus) is ≤ 25 ms.

The reaction time of the system can be extended by factors such as the amount of data on the bus, the number of connected devices or the control device used (Application Controller).

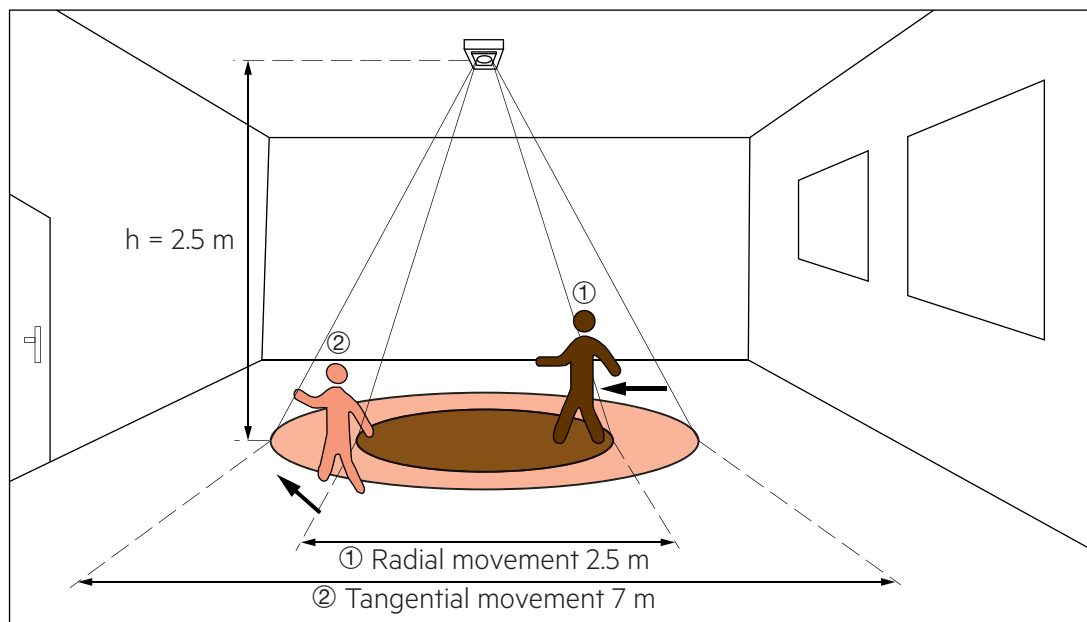
The point at which the light responds must therefore not be equated with the outer detection range.

h = Height	d1 = Tangential movements	d2 = Radial movements
	Diameter	Diameter
2.0 m	6.0 m	2.0 m
2.5 m	7.0 m	2.5 m
3.0 m	8.0 m	3.0 m
3.5 m	9.0 m	3.5 m

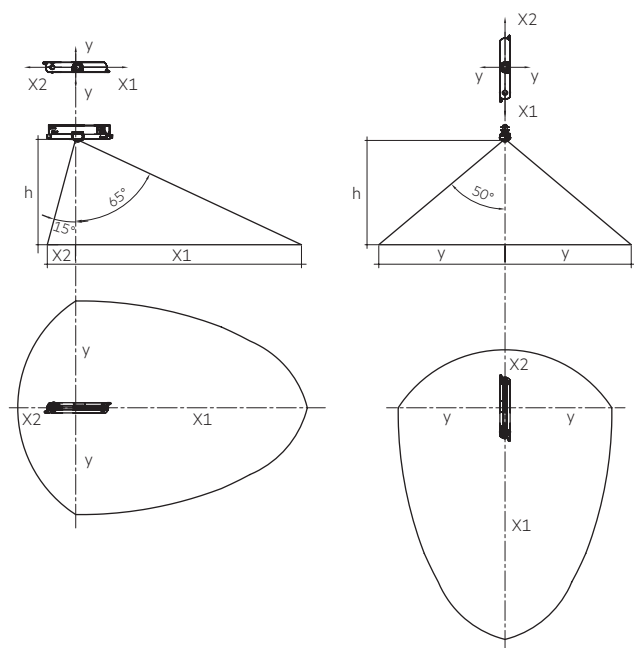
Schematic illustration of radial / tangential movements:



Detection example at 2.5 m mounting height:



4.3 Light measurement



h	X1	X2	y
2.0 m	5.3 m	0.67 m	2.5 m
2.7 m	5.8 m	0.73 m	2.8 m
3.0 m	6.4 m	0.81 m	3.1 m
4.0 m	8.5 m	1.08 m	4.1 m

4.4 Status LED's

There is a LED built in to indicate different status information to the user.

Event	Blinking sequence	LED Color
DALI command „identify device“	500 ms on / 500 ms off for 15 s	Red

5. Configuration

Optimized for the operation in conjunction with the Tridonic application controller sceneCOM S.

For commissioning and configuration the App „sCS commissioning“ (sceneCOM S) is provided by Tridonic. App can be installed on iOS and Android devices. Compatible with Android 6.0 / iOS 10 or later, devices with a min. screen size of 20 cm diagonal and a min. resolution of 1024 x 768 pixels.

Android:



iOS:



6. Miscellaneous

6.1 Disposal of equipment



Return old devices in accordance with the WEEE directive to suitable recycling facilities.

6.2 Additional information

Additional technical information at www.tridonic.com → Technical Data

Guarantee conditions at www.tridonic.com → Services

Lifetime declarations are informative and represent no warranty claim. No warranty if device was opened.