DALI CS Corridor

Datasheet Combi Sensor Module

DALI sensor module for presence detection and lighting control

Art.Nr. 86459432 Art.Nr. 86459432-IP65



DALI CS Corridor Combi Sensor Module

Overview

- Sensor module for DALI lighting systems
- Movement detection (PIR)
- Light intensity measurement
- Constant light control
- Time hysteresis to compensate for short-term fluctuations in brightness
- Setting option for basic brightness

- Simple configuration via DALI bus line using the DALI Cockpit PC software tool
- Direct power supply via DALI line
- Version for indoor and outdoor use IP65
- Multimaster capable: several DALI CS modules can be used within one DALI-line

Specifications, Characteristics

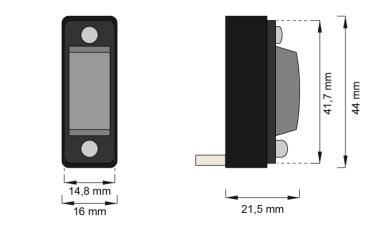
Туре	DALI CS Corridor	DALI CS Corridor IP65
Article number	86459432	86459432-IP65

Electrical Data:

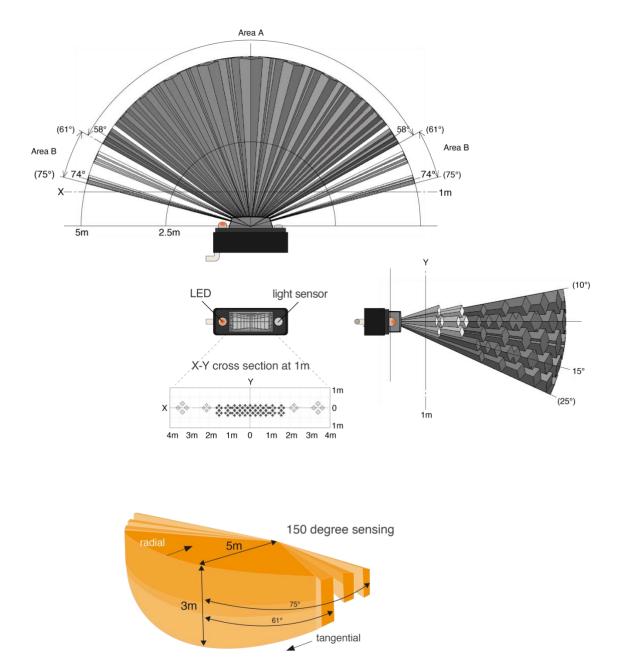
Power supply	Via DALI line	
Typ. Current		
consumption on DALI	3.5 mA	
line		
Input / Output	DALI	

Technical DATA

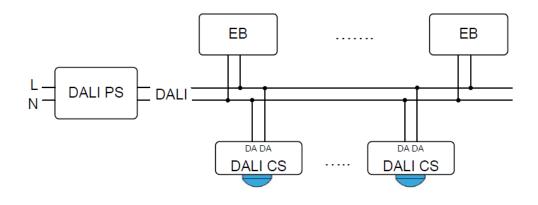
Motion sensor type	PIR		
Lens	Hammerhead		
Max. detection area	5m		
Zones	88+16		
Detection angle	horizontal: ±75°; vertikal: +10°/-25°		
Min. Temp. difference:	>4°C		
Light sensor	range: 0-2500lux		
	resolution: 1lux		
Function	configurable		
Ambient temperature	-20°C-70°C		
Protection class	IP20	IP65	
suitable ambient	indoor	outdoor	
mounting	surface		
Connection cable length	350mm		
housing size	44x16x21,5mm		



Dimensions sensor head



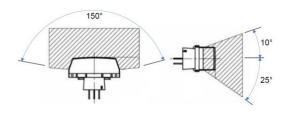
Detection area: Horizontally Wide Detection type



Typical application: multiple sensors in one DALI line

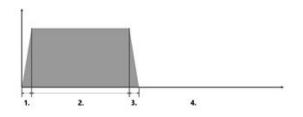
Mounting and installation

- The DALI CS Corridor module is connected to the DALI line. It is powered directly by the DALI signal line (that is supplied by an adequate bus power supply like the DALI PS). A typical value for the current consumption is 3.5mA.
- The DALI line input is polarity free and protected against overvoltage.



Cycle of movement detection

The motion detection is always processed according to the following schedule:



Procedure motion detection

States:

- 1: Fade In Time
- 2: Hold On Time
- 3: Fade Time
- 4: Basic Brightness

If motion is detected the sensor switches the "to be controlled area" to the defined light level. As long as movement is detected or the hold-on time is running (2), the light level

Motion detection

A temperature difference between the moving object and environment of at least 4°C is required. Heat sources such as heaters or copy machines may have a negative influence on the motion detection.

Sensing range

The DALI CS Corridor has a "hammerhead lens" with a detection range of up to 5m and an asymmetrical alignment. The horizontal detection angle is up to 150°, while the vertical is asymmetrical (+ 10°, -25°). The lens is particularly recommended for wall mounting e.g. in corridors.

stays on, either at a fixed brightness value or controlled by a constant light control algorithm (selectable in DALI Cockpit Software).

After this state has elapsed, the system switches to the basic brightness value (fixed value, no constant light control).

States 1 and 3 only describe transitions between the states.

Light sensor

Light measurement

The CS Corridor module also has a light sensor included. The light sensor measures the reflected illuminance in a range from 0 to 2500 lux. The resolution is 1 lux.

The incident light is assessed using the spectral light sensitivity curve of the human eye and thus comparable to the subjective visual perception of brightness.

Combined senor behaviour

In order to take the influence of fluctuations in ambient light into account there are two methods available: time hysteresis and basic brightness. This means that the dependencies between the time sequence and brightness can be defined.

Basic brightness

If the current brightness is above a defined threshold, the lighting is switched off; If it is lower, it is switched on to an alternative dimming value.

Time hysteresis

Light is only switched if the brightness value is above or below the brightness threshold value for a defined time.

Factory pre-sets

Effective Range	Broadcast
On Command	DAP 100%, without
	Fading
Hold On Time	5min
Basic Brightness	0%
Brightness	100lux
Threshold	
Constant Light Control	Off; operating mode: movement triggered
control	light control
Time Hysteresis:	1min
Front-LED	deactivated

Purchase Order Information

Art.Nr. 86459432: DALI CS Corridor, wide range sensor module (motion/brightness), black, luminaire build in, 44x16x21,5mm

Art.Nr. 86459432-IP65: DALI CS Corridor, wide range sensor module (motion/brightness), potted for outdoor use, black, luminaire build in, 44x16x21,5mm

Additional Information and Equipment

DALI-Cockpit – free configuration tool from Lunatone for DALI systems https://www.lunatone.com/en/product/dalicockpit/

Lunatone DALI products http://www.lunatone.com/en/

Lunatone datasheets and manuals https://www.lunatone.com/en/downloads-a-z/

Contact

Technical Support: support@lunatone.com

Requests: sales@lunatone.com

www.lunatone.com



Disclaimer

Subject to change. Information provided without guarantee. The datasheet refers to the current delivery.

The function in installations with other devices must be tested for compatibility in advance.