

# elitedali™ - for Niagara

smart lighting controls

[www.elitedali.com](http://www.elitedali.com)

## elitedali MSensor Datasheet

### Introduction

**CNS's elitedali MultiSensor** combines presence detection with daylight measurement for DALI Open Standards intelligent lighting networks. This unit is manufactured by Tridonic AG and especially configured to work seamlessly with **CNS's elitedali Multidrop** Solutions for Niagara.



The DALI MultiSensor offers daylight-dependent control and presence detection. With its built-in intelligence it gives a DALI system the important ability to detect movement in a room and to measure the lighting levels. This information when used with **elitedali for Niagara** offers highly automated lighting control including constant light level or light harvesting maximising the use of natural light to minimise expense of energy to achieve required light levels. Retractive spring clips enable the sensor to be mounted easily from below within thin perforated-metal ceilings and thicker plaster ceilings while the body incorporates integral cable-retention clips

The intelligent sensor connects to the DALI bus via a rear mounted polarity insensitive terminals.

### Features

- ◆ Fully compatible for use with any DALI Ballast which conforms to current DALI Open Standards IEC 62386
- ◆ Seamless connectivity, commissioning, control, management and analytics via **CNS's elitedali** solutions for Niagara
- ◆ Powered directly from the DALI network and simple fitting and wiring to DALI network
- ◆ Available in four different mounting configurations
- ◆ Detects presence, absence and light level
- ◆ Measures light levels calibrated to be accurate within 2%
- ◆ CE, RoHS

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### Specifications

#### **elitedali-MSensor integrated, Type 01**

Ideal for integrating in luminaires thanks to its compact design.



#### **elitedali-MSensor remote ceiling, Type 02**

Ideal for suspended ceilings.  
Easy to install thanks to its spring clips.  
The sensor head can be swivelled through 15°.



#### **elitedali-MSensor in wall, Type 03**

Ideal for mounting in standard European flush-type boxes. The sensor head can be swivelled through 15°.



#### **elitedali-MSensor remote surface, Type 04**

Ideal for surface mounting thanks to stylish housing.



## elitedali MSensor Datasheet

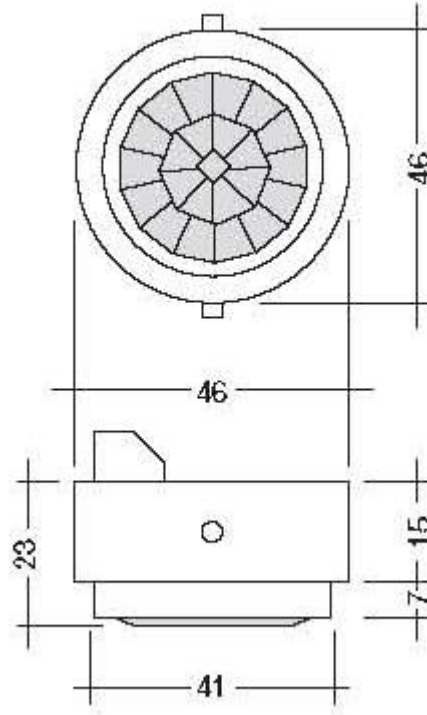
Type			01	02	03	04
<b>Part number:</b>			elitedali.TMSen/01	elitedali.TMSen/02	elitedali.TMSen/03	elitedali.TMSen/04
<b>Power supply:</b>	Via the DALI bus	mA	6	6	6	6
<b>Detection:</b>	Detection range, mounted at a height of 2.5 m	∅ m	5	5	5	5
	Increase in detection area at 2.5 m mounting	m	cannot be swivelled	2	2	cannot be swivelled
	height, swivelled at 15°					
	Swivel range	°	–	±15	±15	–
	Detection angle	°	360	360	360	360
	Light measurement at the sensor head *	lx	5–500	5–500	5–500	5–500
	Range of the remote control	m	5	5	5	5
<b>Ambient conditions:</b>	Operating temperature	°C	0 to +50	0 to +50	0 to +50	0 to +50
	Type of protection	–	IP20	IP20	IP20	IP20
<b>Ambient conditions:</b>			integrated	remote ceiling	in wall	remote surface

①The measured value on the sensor head is equivalent to approximately 15 to 2,000 lux on the reference surface

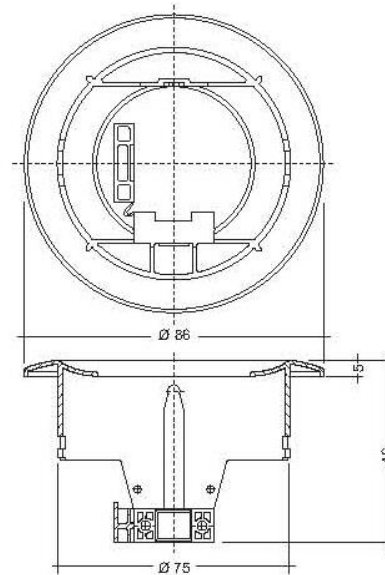
Product has been developed in accordance with, EN 61547, EN 61347-2-11, EN 55015.

## elitedali MSensor Datasheet

MultiSensor Package style/01 Integrated

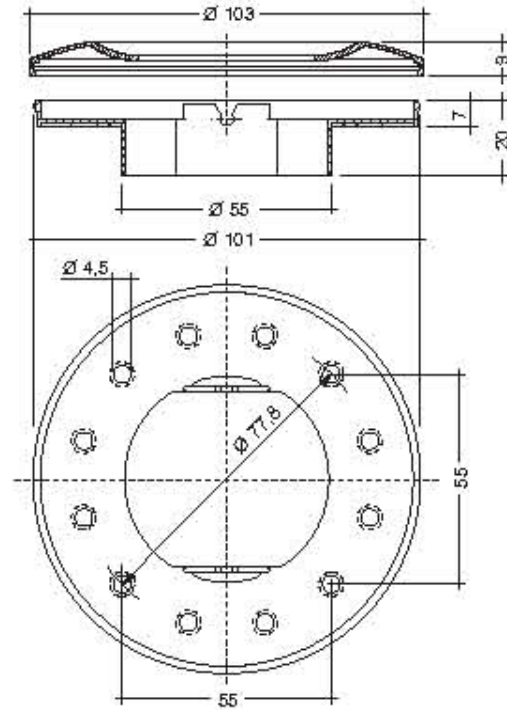
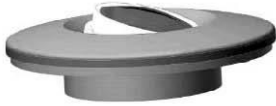


MultiSensor Package style/02 Remote Ceiling

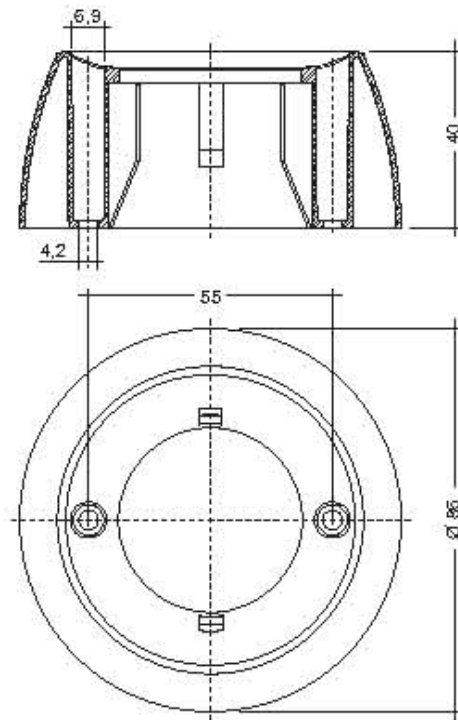


**elitedali MSensor Datasheet**

MultiSensor Package style/03 In Wall



MultiSensor Package style/04 Remote Surface



**Note:** All dimensions are in millimetres.

## elitedali MSensor Datasheet

### User Information

The **elitedali MultiSensor** combines a passive infra-red presence detector, daylight (photocell) sensor. The operation of each of the two "sensors" is handled through the elitedali for Niagara system software.

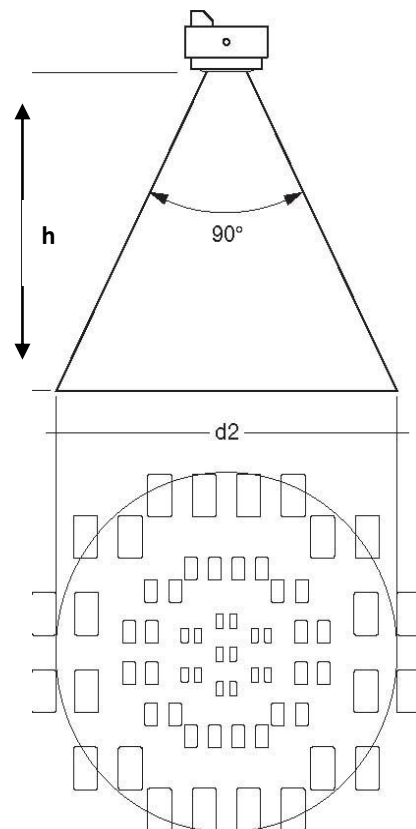
#### Presence Detector

The Presence Detector provides a "switchless" means of controlling lighting, offering fully automatic control of each lighting area covered.

The presence detector portion switches records presence, alerting the system software which controls lights according to occupation of the space.

The Presence Detection pattern is shown in this figure –

The detection field is twice the mounting height.



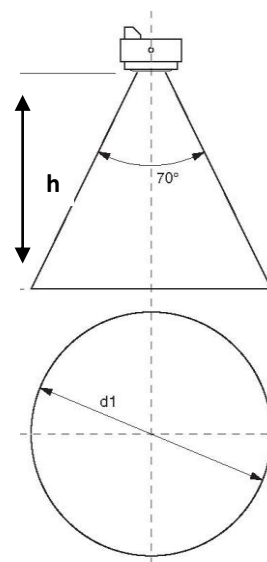
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### Light Level Measuring Photocell Sensor

The photocell sensor monitors the amount of natural light in an area, enabling the system to vary artificial light output from the luminaries according to the amount of required lighting set via the CNS's **elitedali** Niagara licensed software.

Light level recognition area





h*	d1	d2
1.7 m	2.4 m	3.4 m
2.0 m	2.8 m	4.0 m
2.3 m	3.2 m	4.6 m
2.5 m	3.5 m	5.0 m
2.7 m	3.8 m	5.4 m
3.0 m	4.2 m	6.0 m
3.5 m	4.9 m	7.0 m
4.0 m	5.6 m	8.0 m



**Note:** The recommended maximum room height for office applications is 3 m and for corridor applications for example 4 m. Calculation of the diameter:  
 $d=2*\tan(0.5*q)*h$

### Order Details

#### Description:

-  **DALI-MSensor integrated.....**
-  **DALI-MSensor remote ceiling.....**
-  **DALI-MSensor in wall.....**
-  **DALI-MSensor remote surface.....**

#### Part No:

- elitedali.TMSen/01**
- elitedali.TMSen/02**
- elitedali.TMSen/03**
- elitedali.TMSen/04**

### Licensing Options

The MSensor is a licensed option so it is **important** that when advising CNS of how many **elitedali** Connectivity Kits are required to be licensed to a suitable Niagara platform that at the same time **CNS is advised of how many MSensor units need to be licensed to each Niagara platform.**

Additional **elitedali** compatible DALI products are also available, [click here](#) for more details.

## Contact Details

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