

elitedali™ - for Niagara

smart lighting controls

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

elitedali MSensor Datasheet

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
The sensor head can be swivelled through 15°.



boxes.

elitedali-MSensor remote surface, Type 04

Ideal for surface mounting thanks to stylish housing.



elitedali MSensor Datasheet

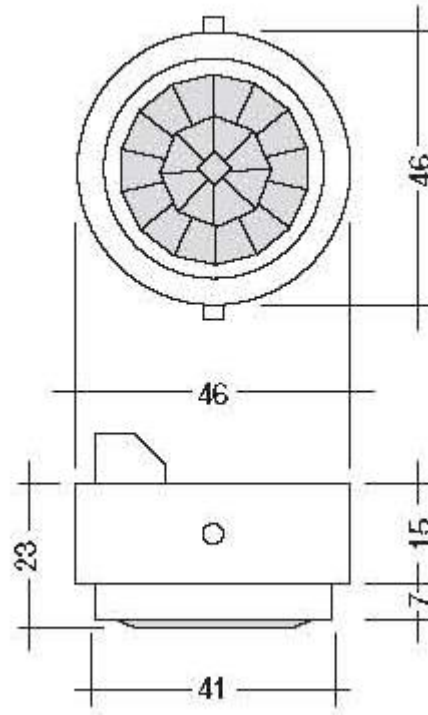
Type			01	02	03	04
Part number:			elitedali.TMSen/01	elitedali.TMSen/02	elitedali.TMSen/03	elitedali.TMSen/04
Power supply:	Via the DALI bus	mA	6	6	6	6
Detection:	Detection range, mounted at a height of 2.5 m	∅ m	5	5	5	5
	Increase in detection area at 2.5 m mounting	m	cannot be swivelled	2	2	cannot be 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
Ambient conditions:	Operating temperature	°C	0 to +50	0 to +50	0 to +50	0 to +50
	Type of protection	–	IP20	IP20	IP20	IP20
Ambient conditions:			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

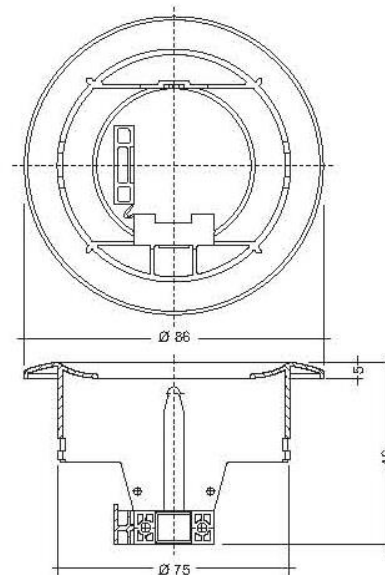
Product has been developed in accordance with, EN 61547, EN 61347-2-11, EN 55015.

elitedali MSensor Datasheet

MultiSensor Package style/01 Integrated

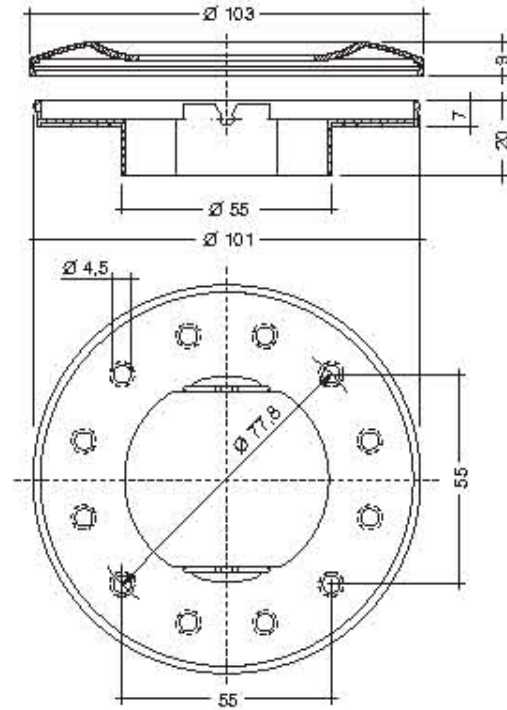
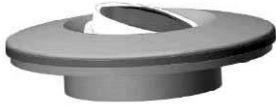


MultiSensor Package style/02 Remote Ceiling

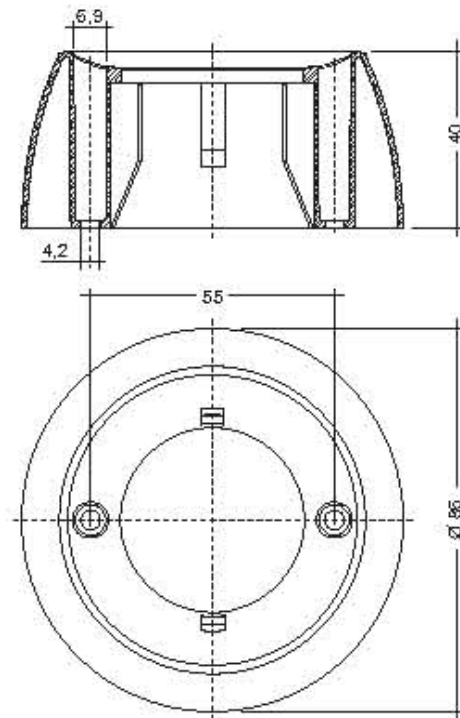


elitedali MSensor Datasheet

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.

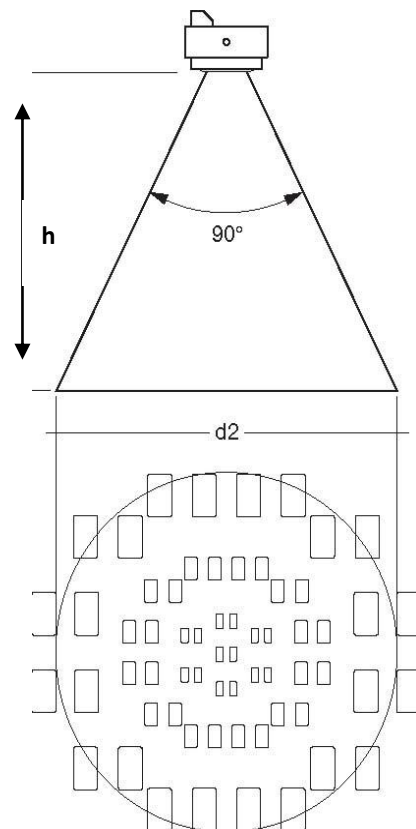
Presence Detector

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.



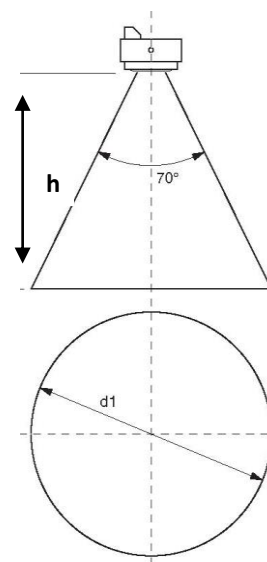
elitedali MSensor Datasheet

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:
 $d = 2 * \tan(0.5 * \alpha) * h$

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.

elitedali MSensor Datasheet

Contact Details

Control Network Solutions Ltd

Studio 7, Intec 2, Intec Business Park, Wade Road
BASINGSTOKE,
Hampshire, RG24 8NE, England

Tel: +44 (0) 1256 818700
Fax: +44 (0) 1256 812520
Email: Sales@control-network-solutions.co.uk
Web: elitedali.com
Twitter: twitter.com/elitedali
LinkedIn: [elitedali for Niagara AX Group](#)

eLighting, **elitedali**, **eDIM**, **CeP**, *elitedali*, *CeP* and *eDIM* are the trademarks of Control Network Solutions lighting control family of products and solutions for Tridium's Niagara Framework platforms. Tridium, Niagara AX, Niagara4, JACE and Niagara AX Framework are the registered trademarks of Tridium Inc. DALI is the registered trademark of the DALI.ag.org Standards organisation.

No part of this publication may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, in part or in whole, without written prior permission of Control Network. We reserve the right to make changes without notice to any products herein as part of its continued product development and improvements. We do not assume any liability arising out of the application or use of any product or circuit described herein.