elitedali MSensor3 Datasheet

Introduction

CNS's elitedali **MSensor3** manufactured by Coopers/Fifth Light Technology Inc., for the North American market, is available as a licensed option for **elite**dali **Multidrop for Niagara** solution, version v2.0.6 and later.

The DALI® MSensor3 with its built-in intelligence gives a DALI smart lighting system the important ability to detect movement in a room and to measure the lighting levels. This information when used with **elite**dali **for Niagara** offers highly automated lighting control including constant light level or daylight harvesting, maximising the use of natural light to minimise expense of energy to achieve required light levels. Additionally, information from the sensor may be used to affect control of other devices and sub-systems connected to Niagara building and lighting control platforms.

Retractive spring clips enable the sensor to be mounted easily from below within thin perforated-metal ceilings and thicker plaster ceilings.

The MSensor3 connects to the DALI bus via polarity insensitive flying leads.

Features

- Licensed option on a per JACE/Niagara platform basis, see page 6
- Fully compatible to be used with any DALI Ballast which conforms to current DALI Open Standards
- All device settings (timers, sensitivity and groups) programmable seamlessly through **elite**dali **for Niagara** software, no manual adjustments needed
- Powered directly from the DALI network
- Simple fitting and wiring directly to DALI network with non-twisted, non-shielded and non-polarized plenum rated wires
- Sharing sensor data with third party automation systems significantly reduces total bill of materials
- Daylight sensing, occupancy detection
- Two options available for either 1,200 or 600 sq. ft., coverage at 8ft mounting height
- Available for two different mounting configurations
- Ultra low profile and small diameter create an aesthetic design
- Robust communication interface withstands connection to power lines (up to 347V)
- 3 year standard warranty

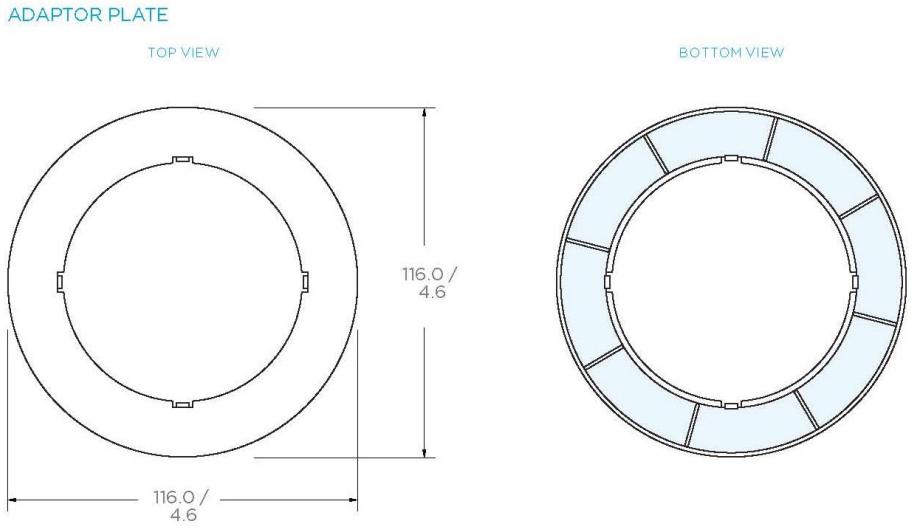
Mounting Options

Fixing Options

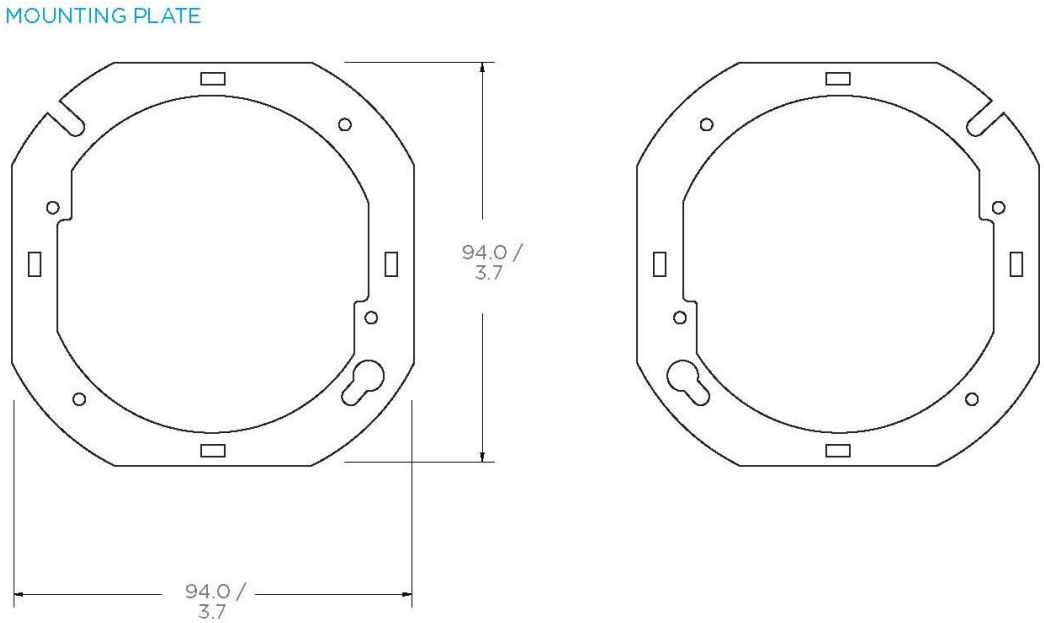
The DALI MSensor3 is designed to be installed into ceiling tile or onto a junction box. To install into ceiling tile, use a 3” hole saw to cut a mounting hole and use the side flanges to hold the DALI Multi-Sensor into place.

These MSensor3 units can be mounted using either:

Flush ceiling mount, recommended or it can be installed onto a junction box using the adaptor plate and mounting plate shown below. Secure the mounting plate onto the junction box and then snap the adaptor plate to the mounting plate. The DALI Multi-Sensor snaps into the adaptor plate (with the side flanges removed) in two possible orientations that are 180° apart.



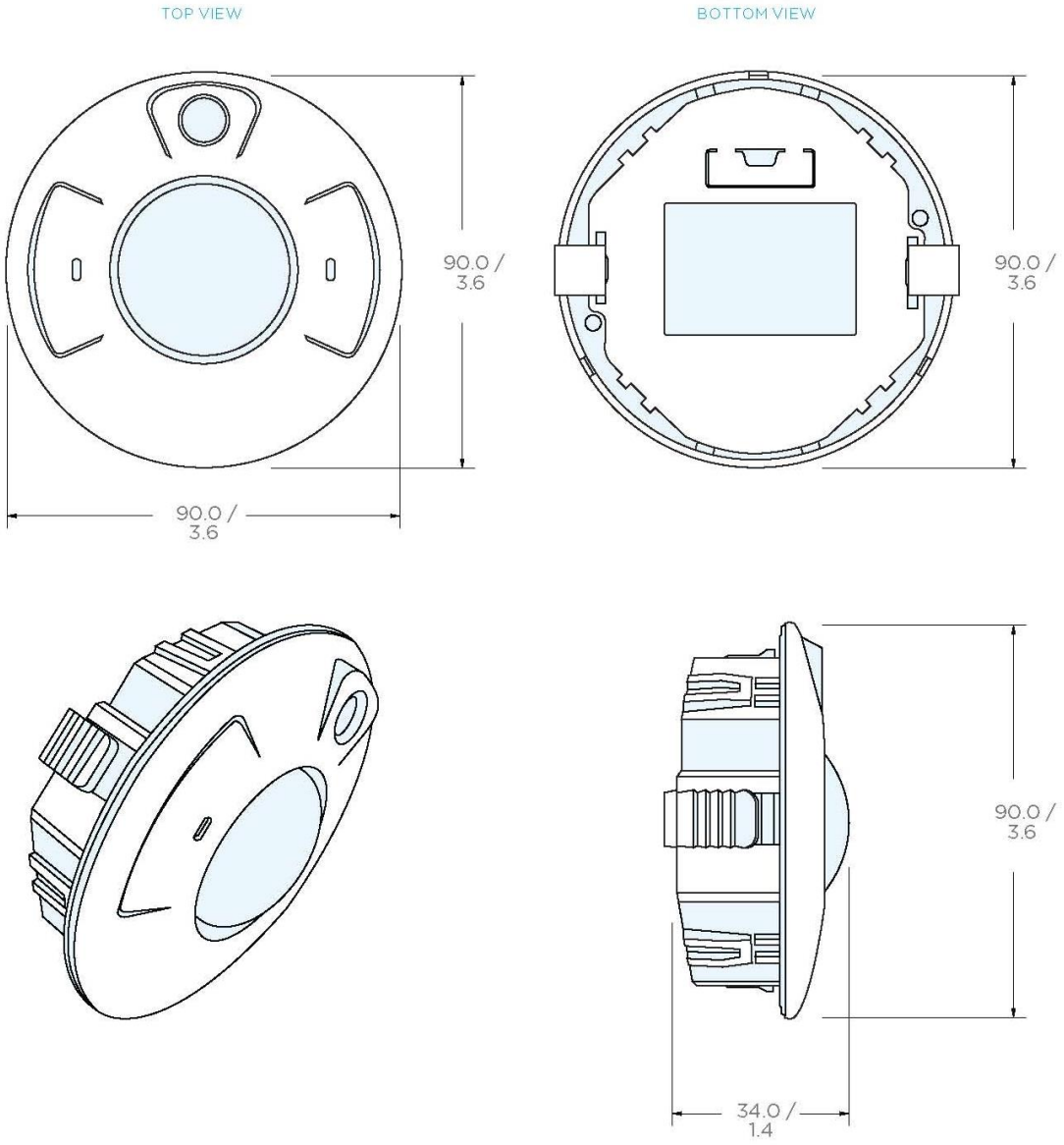
Mounting Option: 4” octagon junction box



Specifications

Mechanical

DIMENSIONS (MM/INCHES)



Electrical

Supply Voltage:	9.5VDC—22.VDC via DALI PSU
Supply Current:	3.75mA from DALI communications Bus
Communications Interface:	DALI (≤22VDC) communication bus
Electrical Connection:	Two wire DALI communication interface, Non-twisted, non-shielded, plenum rated pair
Material (casing):	Flame retardant polycarbonate
Compliance:	UL

User Information

Optical Performance

Occupancy Detection Coverage:	1,200/600 sq. ft. at 8’ mounting height
Occupancy Detection Technology:	Passive Infrared (PIR)
Lens Type:	Multi-level Fresnel 360^0
Daylight Sensing Range:	0 to 400 lux
Daylight Sensing Coverage:	Light input within 60^0 cone

LED Indication:

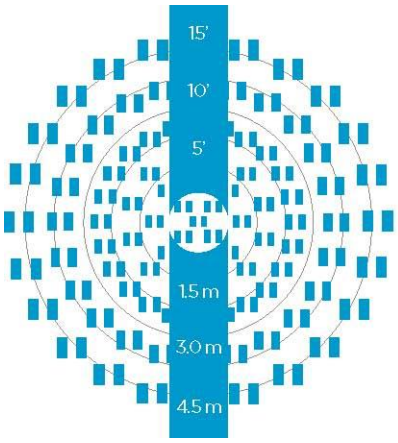
When operational the DALI MSensor3 will flash its LEDs red, approximately every 10 seconds.

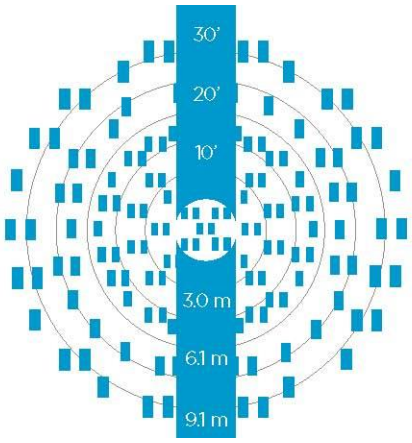
When occupancy is detected the blue LEDs will illuminate.

Electrical Connections

The DALI MSensor3 connects to the DALI communication bus using two low voltage DALI communication wires. The DALI communication wires are non-twisted, non-shielded, non-polarised and have a maximum length of 300M/984 ft. The DALI wires on the sensor are 18 AWG and rated for 600 V. The DALI MSensor3 does not require a connection to the line voltage since all commands to DALI ballasts, DALI relays and other DALI devices are handled through the DALI communication bus. All sensor current is drawn from the DALI communication bus, eliminating the need for power packs. The DALI MSensor3 can communicate to DALI devices on different DALI busses via the elitedali Multidrop for Niagara platform.

OCCUPANCY DETECTION COVERAGE PATTERN





@ 8ft mounting height

Model Coverage Area 600 sq. ft. **Coverage Area 1,200 sq. ft.**

Licensing Options

The Msensor 3 is a licensed option so it is **important** that when advising CNS of how many **elite**dali Connectivity Kits are required to be licensed to a suitable Niagara platform that at the same time **CNS is advised of how many MSensor 3 units need to be licensed to each Niagara platform.**

Order Details

Description:	Part No:
Coverage Area 600 sq. ft. @ 8ft mounting height	**elite**dali**.MSen3-06**
Coverage Area 1,200 sq. ft. @ 8ft mounting height	**elite**dali**.MSen3-12**

Additional **elite**dali compatible DALI products are also available, click here for more details.

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