

# 5640 ActiveAhead Node Multisensor

ActiveAhead Node Multisensor is a member of the truly intelligent wireless lighting control solution Helvar ActiveAhead®. It can be used as a wireless sensor to control nearby other ActiveAhead nodes in the Bluetooth® mesh network. It also connects standard DALI devices to the ActiveAhead system offering flexible options for the installation. Node Multisensor offers addressed local DALI control line which allows individually set light output levels for the connected DALI luminaires to suit the space and scene needs. In addition to the DALI luminaires, also relays, dimmers and additional Helvar DALI system sensors can be connected to the DALI control line.

The ActiveAhead Node Multisensor is mains powered and includes an inbuilt DALI power supply unit to power the local DALI control line. This makes the design and installation easy as wiring is simple. The unit can be flush mounted to a ceiling using the included spring clips. Surface mounting accessories are available (sold separately) when unit is to be mounted onto a solid surface.

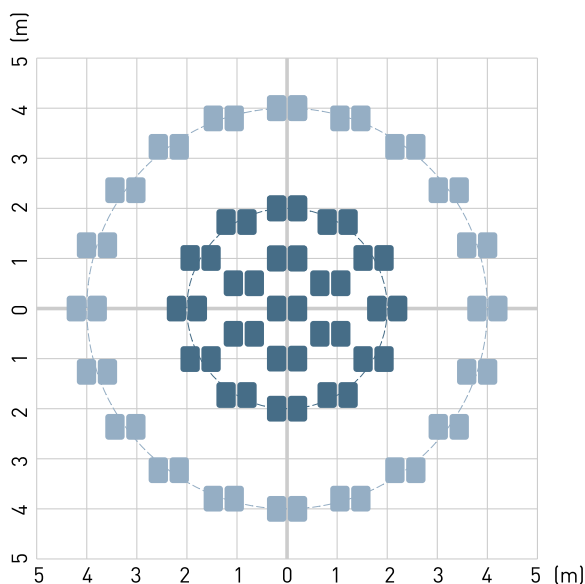
The connected ActiveAhead nodes share information, such as movement detections, through the mesh network, and a mobile app allows you to configure the system where needed. Thanks to its smart software algorithm, Helvar ActiveAhead is able to learn how the space is used to predict the connected luminaires operation accordingly. Learning is based on the data that the node receives from locally connected sensors and from other ActiveAhead nodes in the network. Since it never stops learning, the ActiveAhead Node Multisensor will adapt to any future changes in its environment, such as a wall installation or removal.



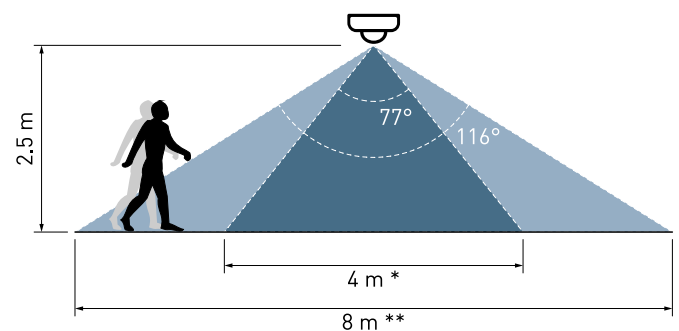
## Key Features

- Use as a wireless sensor on the Helvar ActiveAhead mesh network and / or connect DALI devices into the network.
- Offers local addressed DALI control line.
- Customisation via mobile app.
- Quick and simple installation with mains power and inbuilt DALI power supply unit.

## Detection pattern



## Detection coverage



\* = small movement

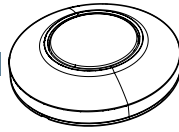
\*\* = big movement

# Installation Diagram

ActiveAhead Mobile App



Mains in

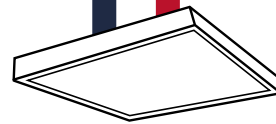
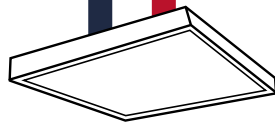


DALI Out

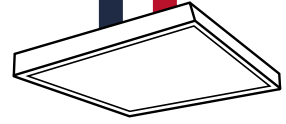
Mains



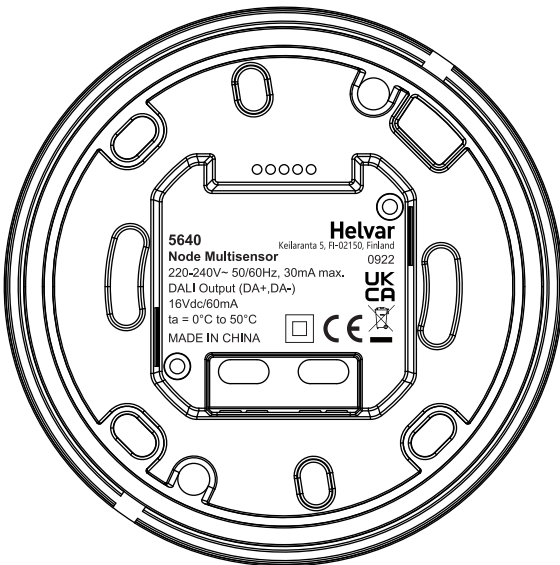
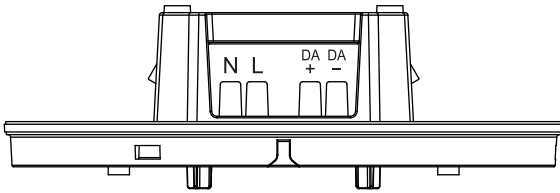
Helvar DALI sensor (optional)



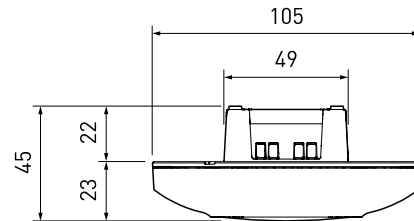
DALI Luminaires (optional)



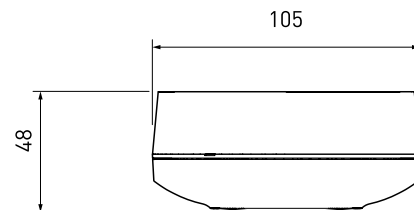
## Connections



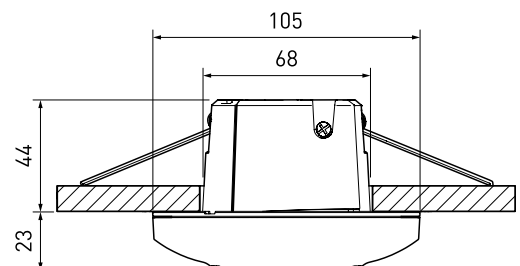
## Dimensions (mm)



Standard



w/ Surface-Mounted Box (accessory)



w/ Recess Spring Mount (included)

## Technical Data

Supported DALI device types	
DT0 Fluorescent lamp control gear	
DT4 Incandescent lamp dimmer	
DT6 LED lamp control gear	
DT7 Switching (relay) control gear	
DT8 Colour control gear (colour temperature Tc only)	
Helvar DALI system sensors: 320, 321, 322, 341 and 342	

Connections	
Mains:	Wire section: 0.5 mm <sup>2</sup> – 2.5 mm <sup>2</sup> solid or stranded
DALI cable:	Wire section: 0.5 mm <sup>2</sup> – 2.5 mm <sup>2</sup> solid or stranded
Cable stripping length:	6 mm – 8 mm


  

Electrical data	
Input voltage:	220 V – 240 VAC, 50 – 60 Hz
Input current:	Max. 30 mA
Input power:	Max. 3.5 W
Output current for DALI:	Typical 60 mA (Max. 250 mA)

Sensors	
Light sensor:	For bright-out function
Presence detector:	Passive infrared (PIR)
Max. recommended mounting height:	4 m



  

Wireless Connectivity	
Frequency:	2.4 GHz
Technology:	Bluetooth Mesh
Antenna Pattern:	Omnidirectional
Max distance between Nodes:	15 m in free space
	Note: To ensure proper operation the mesh network must consist of a minimum 10 ActiveAhead Nodes.

Order Codes	
5640:	Colour: White (RAL 9003)
5640B:	Colour: Black (RAL 9005)
Delivered with Recess Spring Mount and PIR detection mask.	
Accessories (sold separately):	
5002 Surface-Mounted Box, White	
5002B Surface-Mounted Box, Black	


  

Operating and storage conditions	
Number of connected DALI devices:	Max 16 addresses or 60 mA
	Note: The total number of connected devices is limited by the addresses, the DALI current consumption limitation.
Operating temperature:	0 °C to +50 °C  Note: The temperature difference between the detection target and the background must be at least 4 °C.
Relative humidity:	Max. 90 %, noncondensing
Storage temperature:	-40 °C to +70 °C
Max. DALI cable length	300 m

Mechanical data	
Dimensions:	105 mm x 45 mm 105 mm x 48 mm with surface box 105 mm x 67 mm with flush mount
Material (casing):	Polycarbonate
Weight:	130 g / 177 g (with packaging)
Safety class:	Class II IP20 with EU standard junction box or spring clip box IP54 with surface mounting box

Conformity and standards	
Conformity:	
EMC:	EN 55015, EN 61547
Safety:	EN 61347-1, EN 61347-2-11
RED:	EN 300 328, EN 301 489-1, EN 301 489-17
Isolation mains to DALI:	Basic isolation
Environment:	Complies with REACH and RoHS directives.