

5640 ActiveAhead Node Multisensor

ActiveAhead Node Multisensor is a member of the truly intelligent wireless lighting control solution Helvar ActiveAhead®. It connects standard DALI devices to the ActiveAhead system offering a flexible room or space solution. 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, additional DALI-2 sensors and DALI-2 wall panels can be connected to the DALI control line. It can also be used as a wireless sensor to control nearby other ActiveAhead nodes in the Bluetooth® mesh network.

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.

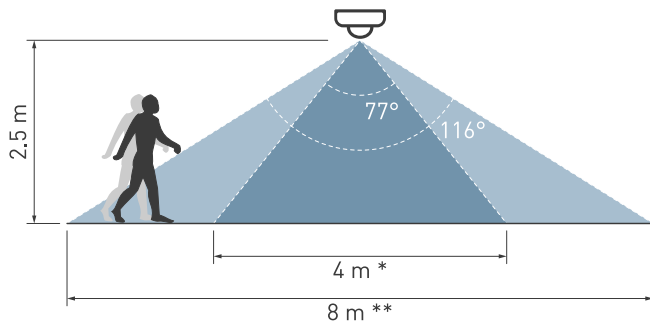


Key Features

- Scalable and easy to setup room solution
- Offers local addressed DALI control line
- Customisation via mobile app
- Quick and simple installation with mains power and inbuilt DALI power supply unit

Detection

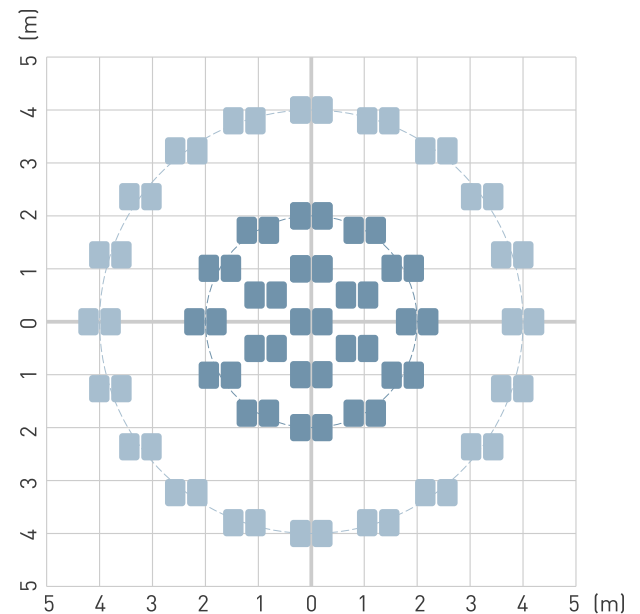
Detection Coverage



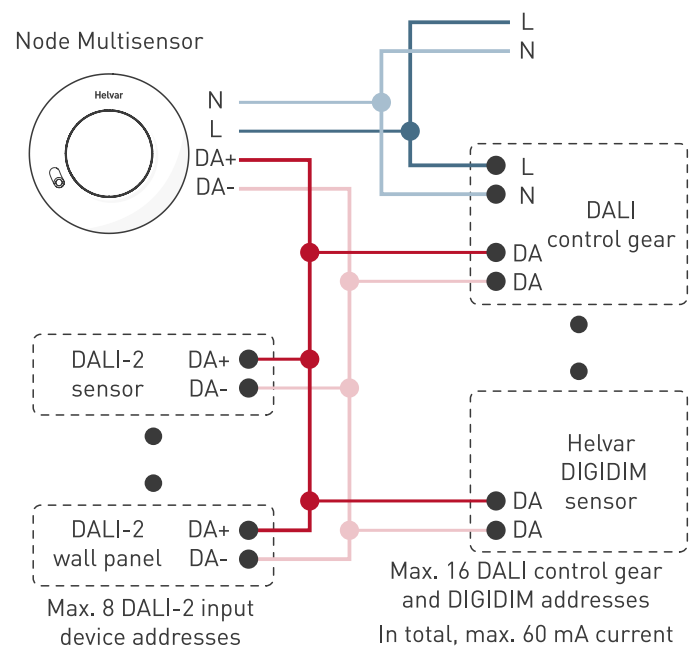
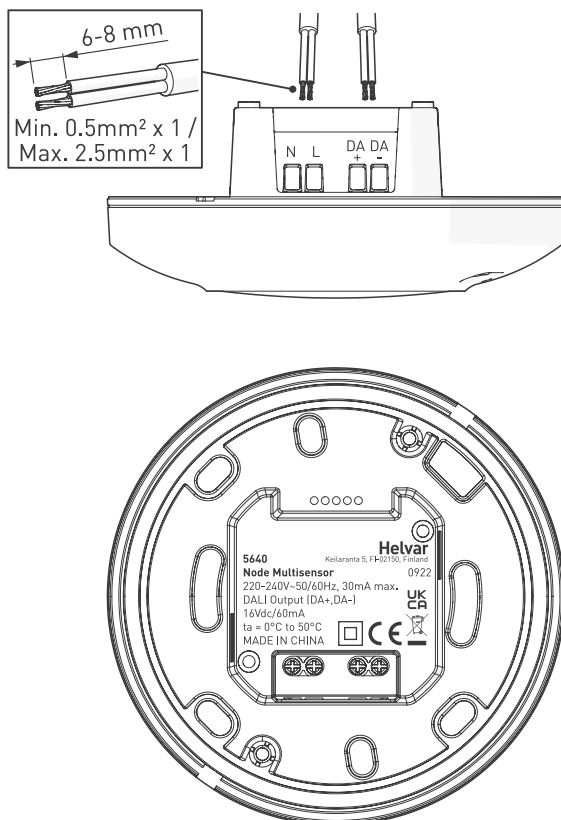
* = small movement

** = big movement

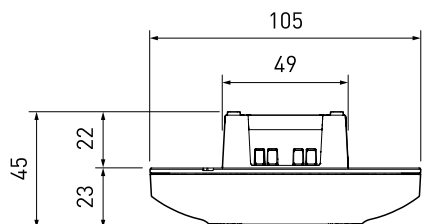
Detection Pattern



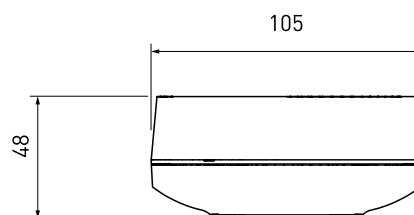
Connections



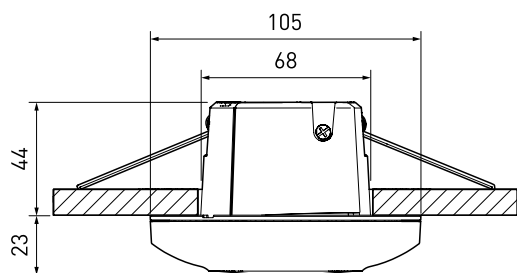
Dimensions (mm)



Standard



w/ Surface-Mounted Box (accessory)



w/ Recess Spring Mount (included)

Technical Data

Supported DALI device types

- DT0: Fluorescent lamp control gear
- DT1: Self-contained emergency control gear
- DT4: Incandescent lamp dimmer
- DT5: Analog-to-digital converter, Conversion to DC (0/1-10 V)
- DT6: LED lamp control gear
- DT7: Switching (relay) control gear
- DT8: Colour control gear (colour temperature T_c only)
- Part 301 Push buttons
- Part 303 Occupancy sensors
- Part 304 Light sensors
- Helvar DIGIDIM system sensors: 320, 321, 322, 341 and 342

Note: Supported device types depend on the software version of the Node Multisensor.

Operating and storage conditions

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| Number of connected DALI devices: | Max. 16 DALI control gear and DIGIDIM addresses |
| | Max. 8 DALI-2 input device addresses |
| | In total, max. 60 mA current consumption |

Note: The total number of connected devices is limited by the addresses and the DALI current consumption limitation.

Note: There must be only one ActiveAhead Node on one DALI line.

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| Max. DALI cable length: | 300 m |
| Operating temperature: | 0 °C to +50 °C |

Note: The temperature difference between the detection target and the background must be at least 4 °C.

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| Relative humidity: | Max. 90 %, noncondensing |
| Storage temperature: | -40 °C to +70 °C |

Connections

Mains:	Wire section: 0.5–2.5 mm ² solid or stranded
DALI cable:	Wire section: 0.5–2.5 mm ² solid or stranded

Electrical data

Input voltage:	220–240 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) Other DALI power supply units must not be present on the DALI line.
Isolation mains to DALI:	Basic isolation

Sensors

Light sensor:	Closed loop reflected light SW version 1.20 and older: For bright-out function
Presence detector:	Passive infrared (PIR) detects moving temperature differences
Max. recommended mounting height:	4 m

Wireless Connectivity



Operating frequency range:	2402–2480 MHz
Transmission power:	Max. 0 dBm
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.

Mechanical data

Dimensions:	105 x 45 mm 105 x 48 mm with surface box 105 x 67 mm with flush mount
Material (casing):	Polycarbonate
Weight:	170 g / 250 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 emission / immunity:	EN 55015 / EN 61547
Safety:	EN 61347-1, EN 61347-2-11
RED:	EN 300 328, EN 301 489-1, EN 301 489-17
Environment:	Complies with WEEE, RoHS and REACH directives.

Order Codes

5640000	Colour: White (RAL 9003)
5640001	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