5641 ActiveAhead Node Multisensor High Bay

ActiveAhead Node Multisensor High Bay 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 solution for high bay applications. Node Multisensor High Bay 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 High Bay 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 surface mounted to a solid surface using the included surface mount box. Flush mounting accessories are available (sold separately) when unit is to be flush mounted to a ceiling using spring clips.

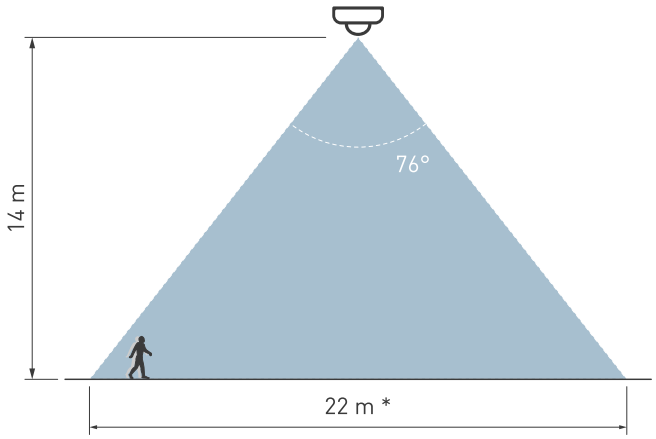
The connected ActiveAhead nodes share information, such as movement detections, through the mesh network, and a mobile app allows you to configure the system where needed. Thanks to its smart software algorithm, Helvar ActiveAhead is able to learn how the space is used to predict the connected luminaires 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 High Bay will adapt to any future changes in its environment, such as a wall installation or removal.

Key Features

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

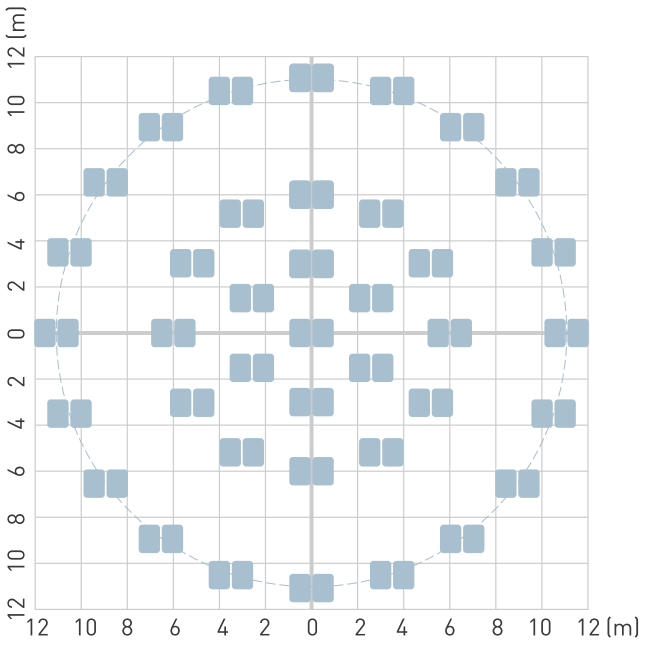
Detection

Detection Coverage

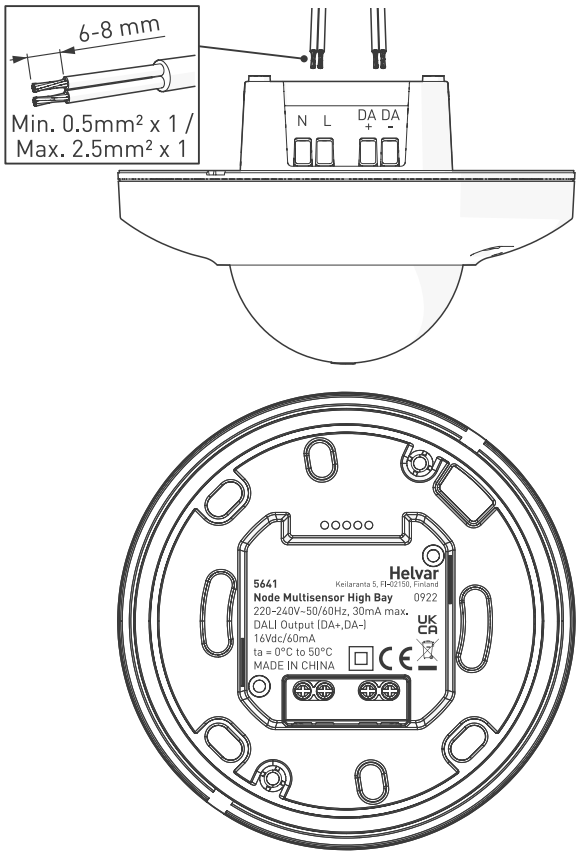


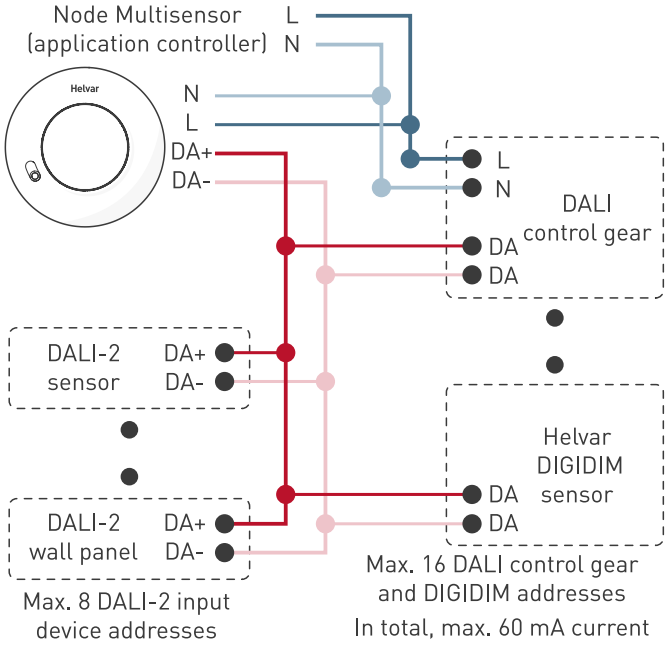
* = big movement

Detection Pattern

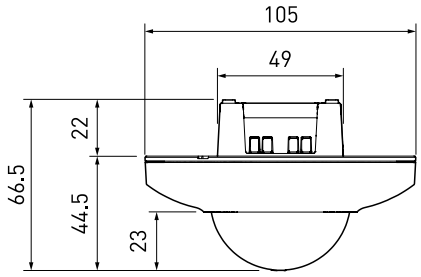


Connections

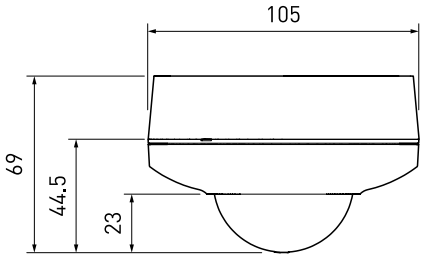




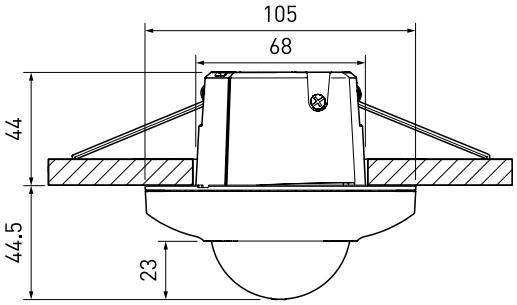
Dimensions (mm)



Standard



w/ Surface-Mounted Box (included)



w/ Recess Spring Mount (accessory)

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 Tc only)

Paer 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 High Bay.

Operating and storage conditions

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.

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.

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

Connections

Mains:	Wire section: 0.5–2.5 mm², solid or stranded
DALI cable:	Wire section: 0.5–2.5 mm², 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.

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:	14 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

5641000 :	Colour: White (RAL 9003)
5641001:	Colour: Black (RAL 9005)

Delivered with Surface-Mounted Box and PIR detection mask.

Accessories (sold separately):

5001:	Recess Spring Mount

Mechanical data

Dimensions:	105 × 66.5 mm 105 x 69 mm with surface box 105 x 88.5 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:	CE UK CA
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
Isolation mains to DALI:	Basic isolation
Environment:	Complies with REACH and RoHS directives.