5641 ActiveAhead Node Multisensor High Bay

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 and additional DALI system sensors can be connected to the DALI control line.

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.
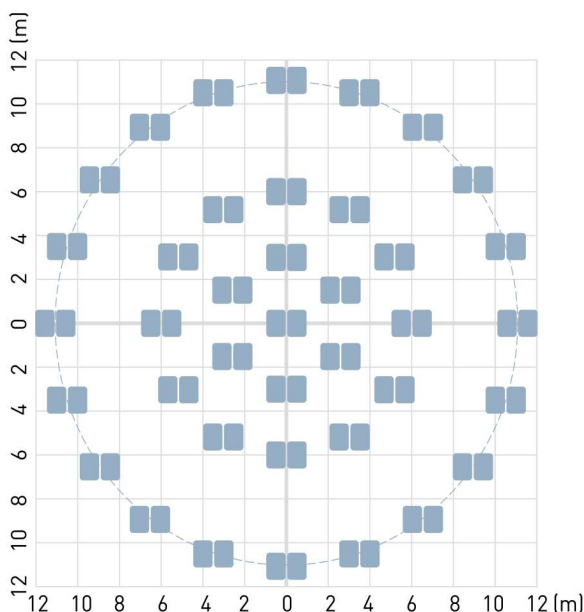
The connected ActiveAhead nodes share information, such as movement detections, through the mesh network, and a mobile app allows you to configure the system where needed. Thanks to its smart software algorithm, ActiveAhead is able to learn how the space is used to predict the connected luminaires operation 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.
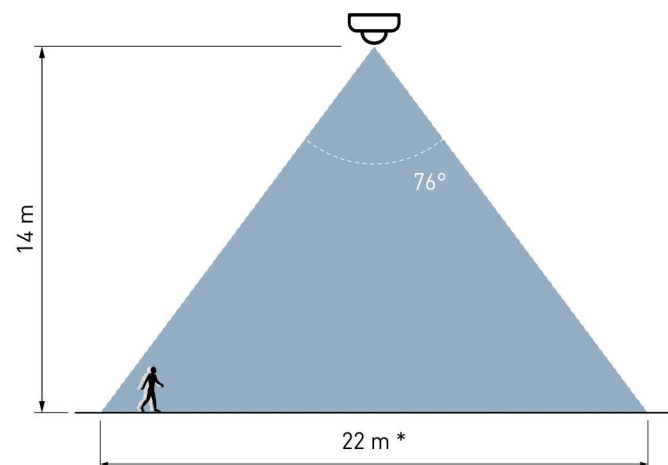
Key Features

- Use as a wireless sensor on the 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.
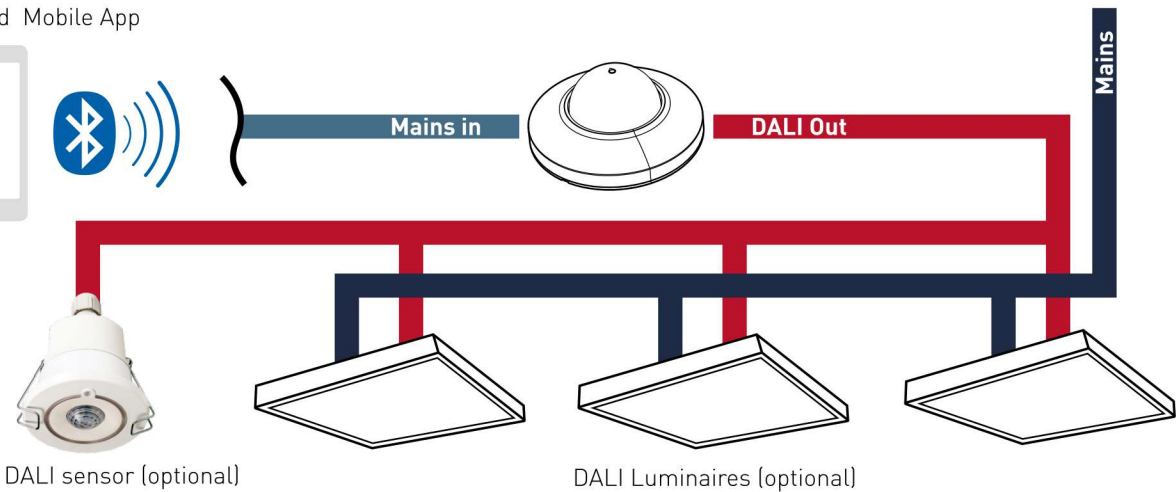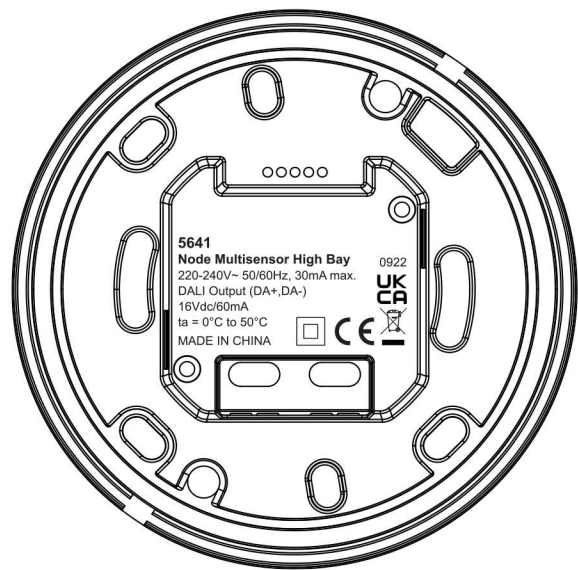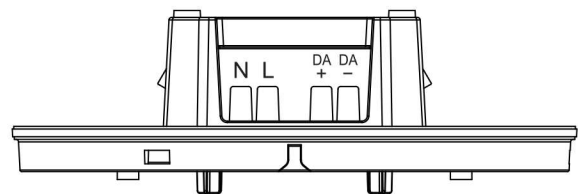
Detection pattern

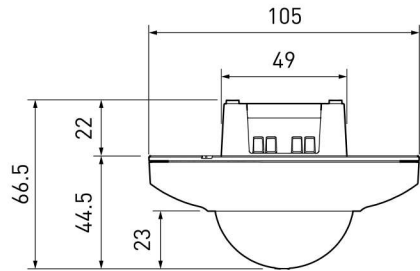## Detection coverage

* = big movement

Installation Diagram
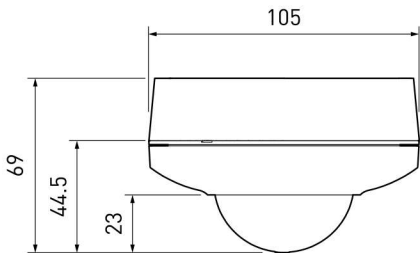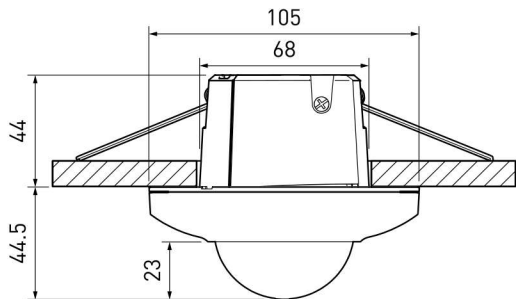
ActiveAhead Mobile App

Mains in

DALI Out

Mains

DALI sensor (optional)

DALI Luminaires (optional)

Connections

N L   DA DA
       + −

5641
Node Multisensor High Bay   0922
220-240V~ 50/60Hz, 30mA max.
DALI Output (DA+,DA-)
16Vdc/60mA
ta = 0°C to 50°C
MADE IN CHINA

UK CA
CE

Dimensions (mm)

105
49
22
66.5
44.5
23

Standard

105
69
44.5
23

w/ Surface-Mounted Box (included)

105
68
44
44.5
23

w/ Recess Spring Mount (accessory)

5641 ActiveAhead Node Multisensor High Bay: Datasheet
Data is subject to change without notice.

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2022-09-22

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)

DALI system sensors: 320, 321, 322, 341 and 342

Connections

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

5641:	Colour: White (RAL 9003)
5641B:	Colour: Black (RAL 9005)

Delivered with Surface-Mounted Box and PIR detection mask.

Accessories (sold separately):

5001 Recess Spring Mount

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 × 66.5 mm 105 mm x 69 mm with surface box 105 mm 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 UKCA
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.