

5644 Node Multisensor D4i R44

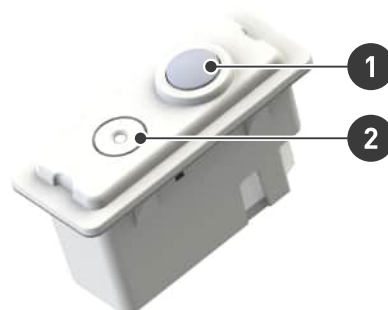
The ActiveAhead Node Multisensor D4i R44 is a member of the truly intelligent wireless lighting control solution Helvar

ActiveAhead®. It combines radio for connecting to the ActiveAhead mesh network, processor for running ActiveAhead lighting control logic, PIR sensor for movement detections and a light sensor for daylight harvesting. This radio sensor follows the Zhaga Book 20 mechanical dimensions for a rectangular sensor which suits to a 44x17 mm slot on a luminaire.

The Node Multisensor D4i design allows for multiple mounting options within a luminaire and excellent radio communication in all directions. Once installed the ActiveAhead Node Multisensor D4i can continuously learn from the space usage and adapt the lighting accordingly. Further configuration can be easily completed using the ActiveAhead mobile app.

The Node Multisensor D4i works with D4i LED drivers as well as other standard DALI-2 and DALI LED drivers. It offers addressed local DALI control line which allows individually set light output levels for the connected DALI LED drivers. The Node Multisensor D4i is powered by the DALI bus.

The front side of the Node Multisensor D4i R44 IP variant is IP65 rated allowing it to be used in applications such as parking garages.



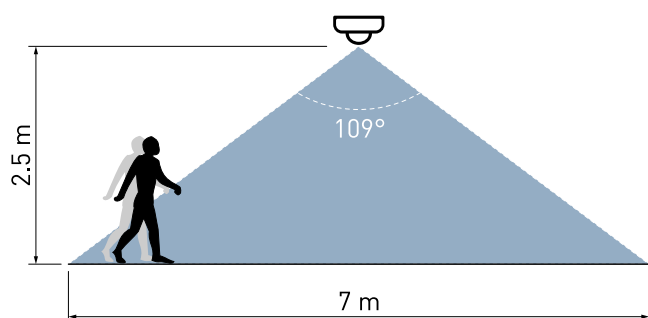
1. PIR sensor
2. Light sensor

Key Features

- Small D4i multisensor with inbuilt radio for wireless Helvar ActiveAhead luminaires
- Certified D4i control device
- Fits to a standard Zhaga Book 20 based rectangular 44 x 17 mm luminaire slot
- IP variant offers IP65 rated front side

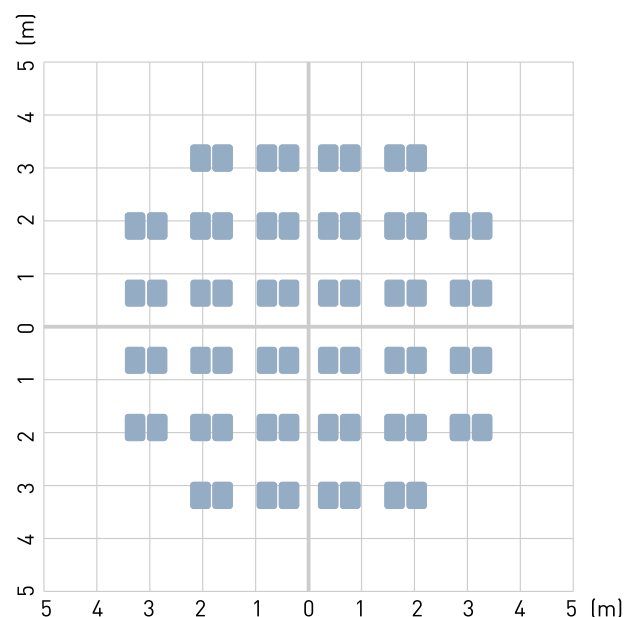
Detection

Detection Coverage



Max. recommended mounting height: 4 m

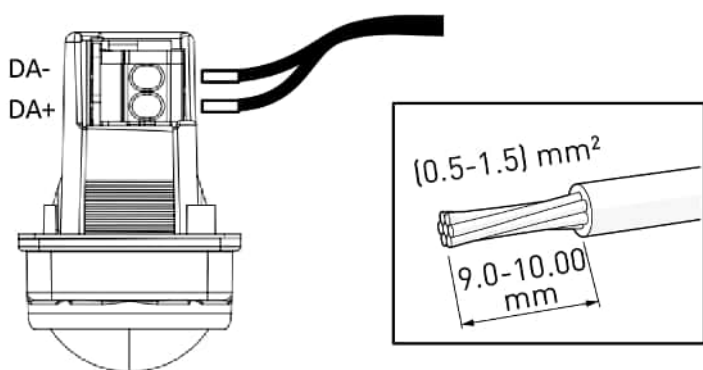
Detection Pattern



Detection Pattern at floor level for 2.5 m mounting height

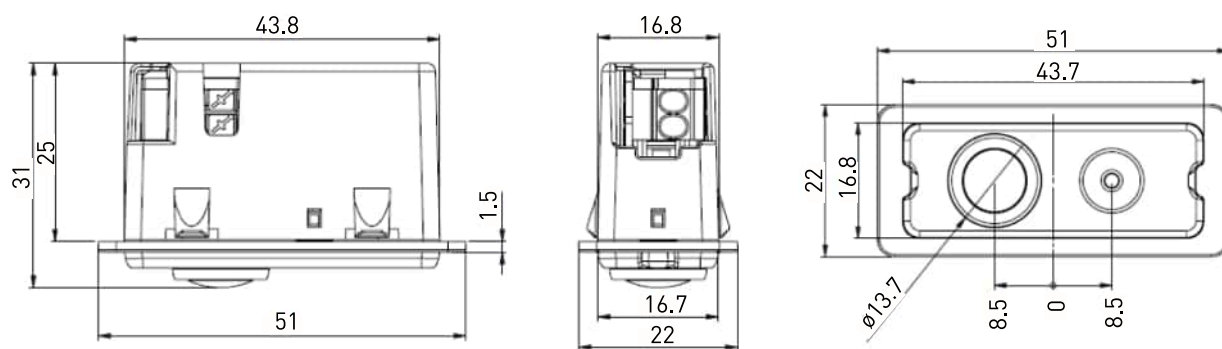
Detection range and sensitivity depends on the speed and size of the moving object as well as its temperature difference to the surroundings. Moving directionally towards the sensor will give worse detection than crossing the detection area on an angle.

Connections



Note: To remove DALI wiring, press down the release buttons.

Dimensions (mm)



Technical Data

Supported DALI device types

- DT1: Self-contained emergency control gear
- DT6: LED lamp control gear
- DT7: Switching (relay) control gear
- DT8: Colour control gear (colour temperature Tc only)
- Part 303 Occupancy sensors
- Part 304 Light sensors

Connections

- DALI:** Push-fit terminals for the DALI wires
- Wire section:** 0.5–1.5 mm² solid or stranded
- Cable rating:** All cables must be mains rated.

Electrical data

- DALI supply input:** 12.0–22.5 V
- DALI consumption:** Max. 25 mA

Operating and storage conditions

- Number of connected DALI devices:** Max 8 addresses or the DALI power supply limit
Note: There must be only one ActiveAhead Node on one DALI line.
- Operating temperature:** 5644000, 5644001: 0 °C to +50 °C
5644013: -20 °C to +50 °C
Note: The temperature difference between the detection target and the background must be at least 4 °C.
- Relative humidity:** Max. 85 %, noncondensing
- Storage temperature:** -20 °C to +70 °C



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.

Movement detection sensor

Technology:	Passive infrared (PIR) detects moving temperature differences
Detection coverage area:	38 m² @ 2.5 m mounting height achieved with: <ul style="list-style-type: none">- 8 C° temperature difference to target- 1.0 m/s movement speed- 700 x 250 mm object size
Max. recommended mounting height:	4 m



Light sensor

Technology:	Closed loop reflected light
Illuminance:	5 lx to 5000 lx
Max. recommended mounting height:	3 m

Mechanical data

Dimensions:	51 x 22 x 31 mm
Material (casing):	Fire-retardant PC/ABS blend
Colour:	White (RAL 9003) Black (RAL 9005) Grey (RAL 7035)
Weight:	14 g
IP rating:	5644000: IP30 5644001: IP30 5644013: IP65 front, IP30 back

Conformity and standards

Conformity:	 
EMC emission / immunity:	EN 55015 / EN 61547
Safety:	EN 61347-2-11
DALI:	IEC 62386, Part 351
Environment:	Complies with WEEE and RoHS directives.

Order Codes

5644000	Node Multisensor D4i R44 White
5644001	Node Multisensor D4i R44 Black
5644013	Node Multisensor D4i R44 IP Grey
5695G	Holder Batten R44 Grey