

5634 ActiveAhead Node Sense

The ActiveAhead Node Sense is a member of the truly intelligent wireless lighting control solution Helvar Active-Ahead®. This extremely compact and sophisticated unit contains light and PIR sensors as well as a radio antenna and processor. The Node Sense design allows for multiple mounting options within a luminaire and excellent communication in all directions using a Bluetooth® Mesh network to communicate wirelessly. Once installed the ActiveAhead Node Sense has the ability to continuously learn from the space usage and adapt the lighting accordingly.

The cable is already wired to the unit meaning easy and quick luminaire assembly. No additional Node is required, simply plug the connector of the cable directly into a Helvar Components Freedom LED driver or an ActiveAhead Adapter DA.

Once installed, configuration can be easily done using the ActiveAhead mobile app.

The product is available in white and dark grey and comes with a variety of cable lengths.

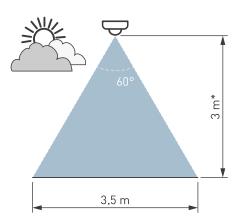


- 1. Light sensor
- 2. Sensor
- 3. Radio antenna

Key features

- · Combined light and PIR sensors with built in radio and connecting antenna
- Fitted a cable with connector for fast luminaire assembly
- Small and inconspicuous, the compact unit does not change the appearance of the luminaire
- Part of the ActiveAhead self-learning wireless lighting control solution

Constant Light Coverage

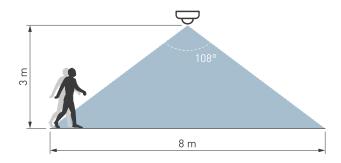


* = Light sensor max. mounting height: 3 m



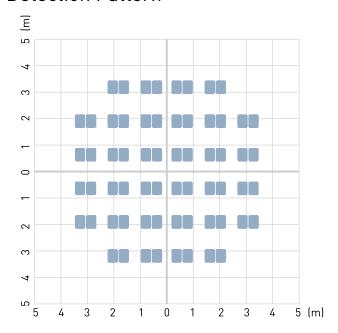
Detection

Detection Coverage



PIR sensor max. mounting height: 4 m

Detection Pattern



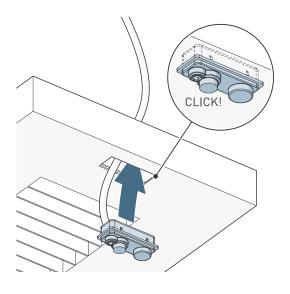
Detection Pattern at floor level for 2.5 m mounting height

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 at an angle.

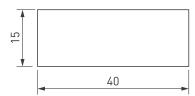
Mounting

The ActiveAhead Node Sense can be mounted to a luminaire in three ways:

1) When mounting from outside in, carefully push the unit into the cutout until it 'clicks' into place and sits flush with the luminaire casing.

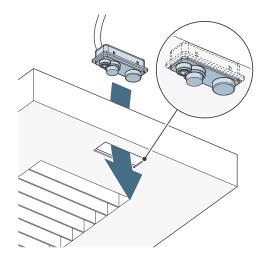


Cutout dimensions (mm)

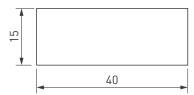




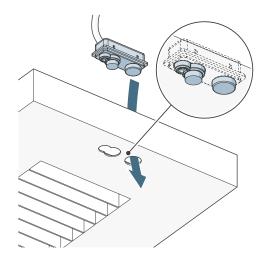
2) When mounting from inside out, ensure the face of the unit sits level with the luminaire casing and secure the Node in place.



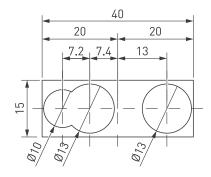
Cutout dimensions (mm)



3) When mounting with drilled cut-outs make sure the light sensor, PIR sensor and radio antenna all sit correctly within their allocated areas.

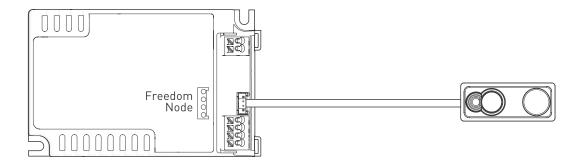


Cutout dimensions (mm)



Connections

Connecting the Node Sense to a Helvar Components Freedom LED Driver.

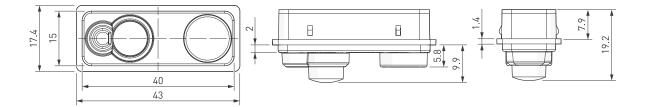


Note: Ensure connector securely 'clicks' into place when plugged in correctly.

Note: If the sensor is connected to non-SELV control gear, the luminaire must be Class I.



Dimensions (mm)



Technical Data

Connections

ActiveAhead: Flexible cable terminated with

a four-way, locking connector.

Electrical Data

Power Consumption: 60 mW, max 70 mW

Input Voltage: 3.3 V

Wireless Connectivity

Operating frequency 2402–2480 MHz

range:

Transmission power: Max. 0 dBm

Technology: Bluetooth® Mesh

Antenna Pattern: Omnidirectional

Max distance between 15 m in free space

Nodes:

Note: To ensure proper operation the mesh network must consist of a minimum 10 ActiveAhead Nodes.

Order Codes

5634 Length: 80 mm, Colour: White

5634-150 Length: 150 mm, Colour: White

5634B Length: 80 mm, Colour: Grey

5634B-150 Length: 150 mm, Colour: Grey

Accessories (sold separately):

5693 ActiveAhead Node Sense Circular

Holder

5694 ActiveAhead Node Sense

Rectangular Holder

Operating conditions

Ambient temperature: 0 °C to +40 °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: $-20 \, ^{\circ}\text{C}$ to $+70 \, ^{\circ}\text{C}$ Illuminance: $5 \, \text{lx}$ to $5000 \, \text{lx}$

Mechanical data

Dimensions: $43 \times 17.4 \times 19.2 \text{ mm}$

Material (casing): Fire-retardant plastic.

Colour: White (RAL 9003)

Grey (RAL 7016)

IP rating: IP30

Weight: 22 g

Conformity and standards

Conformity:

EMC emission: EN 55015

EMC immunity: EN 61547

RED: EN 300 328, EN 301 489-1,

EN 301 489-17

Safety: EN 61347-2-11

Environment: Complies with WEEE, RoHS

and REACH directives.