

Low-Profile Microwave Detector



The 313 Low Profile Microwave Detector provides occupancy detection for the automatic control of DALI lighting loads. The unit can also be controlled using the 303 IR (infra-red) remote control handset.


The 313 detects movement using its highly sensitive microwave detector. It emits low-power microwave signals and measures the reflections as the signals bounce off moving objects.

When an area is no longer occupied, the load will switch off after a certain time. This time-out period is configured using Helvar's lighting system design and control software; Designer, or DIGIDIM Toolbox.

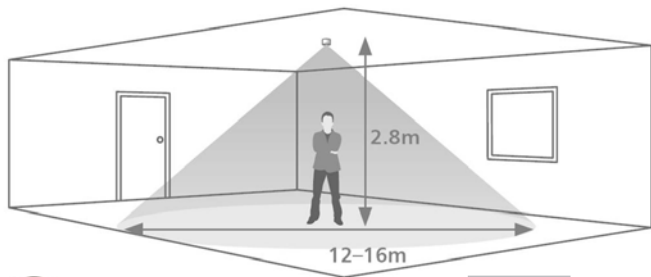
Key Features

- Microwave sensor detects movement within the detection range allowing load control in response to changes in room occupancy.
- IR Receiver receives control and programming commands from a 303 IR (infrared) handset (available separately).
- Status LEDs flash red to indicate the following:

Valid setting received	
Identify Active	

 = Red LED

Detection Pattern

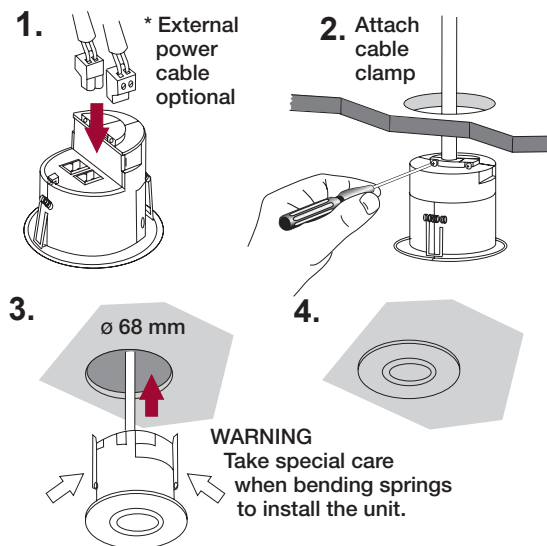


Installation Notes

- Position the sensor so that the occupants of the room are normally inside the detection zone.
- Do not install the sensor within 1 m of any lighting, forced air heating, or ventilation equipment.
- Do not fix the sensor to an unstable or vibrating surface.
- Install the unit as far away as possible from the surface of metal objects.
- The detection pattern illustrated is based on a mounting height of 2.8 m.
- A lower mounting height will decrease the overall size of the detection zone.

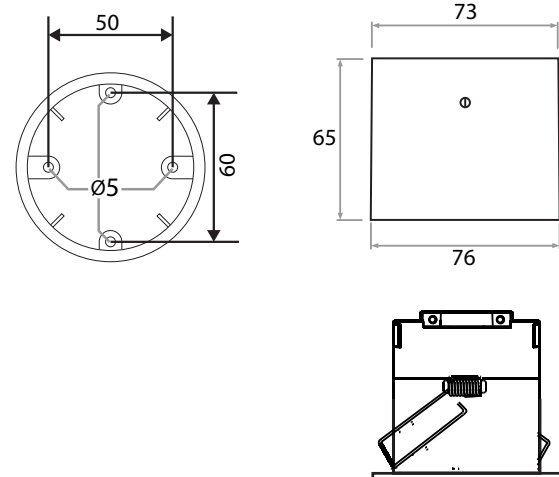


Installation: mounting hole



Installation: Surface back box SBB-A

Note: order the SBB-A surface mount box separately.



Technical Data

Connections

External power / DALI: Removable 2-pole connectors
Wire size: 0.5 mm² - 2.5 mm²
Solid or stranded

Power cable rating: All cables must be mains rated

Power

DALI Supply Input: 13 V to 22.5 V

DALI Consumption*: 20 mA

External Power (Optional): 12 V to 24 V, 0.5 W

* NOTE: DALI consumption is less than 2 mA when external power is supplied to the unit. If an external power supply is used, it should be a Helvar **401**, **402** or **403** power supply unit or Helvar **LL6-U-CC** LED driver.

Microwave Operating Frequency

Frequency: 5.8 GHz

Mechanical Data

Material (casing): Non-flammable ABS

Finish / Colour: Matt / White

Weight: 90 g

IP rating: IP 30

Mounting hole: 68 mm

Operating Conditions

Ambient Temperature: 0°C to +35°C

Storage Temperature: -10°C to +70°C

Relative Humidity: Max 95%, non-condensing

Conformity and Standards

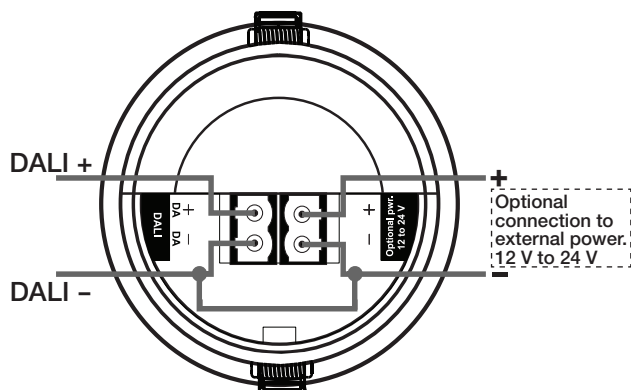
EMC: Immunity: EN 61000-6-1

Emissions: EN 61000-6-3

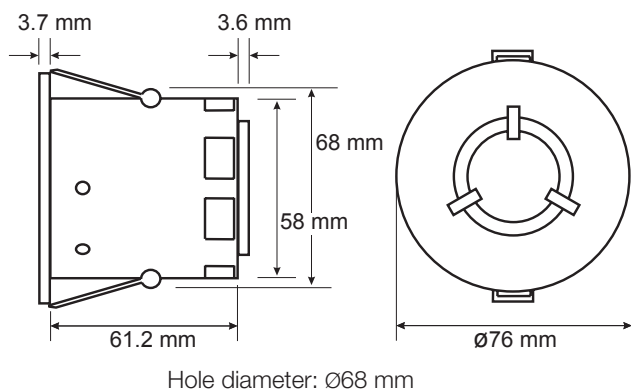
Safety: EN 60730-1

Environment: Complies with WEEE and RoHS directives

Connections



Dimensions



External power supply (optional)

Helvar DALI PSUs

If an external power supply is required, use a Helvar **401**, **402** or **403** power supply unit, or a Helvar **LL6-U-CC** LED driver. Contact your Helvar representative for further information.

Helvar 401



Helvar 403



Helvar 402



Helvar LL6-U-CC

