

## Low-Profile Microwave Detector (313, 313B)

The 313 Low-Profile Microwave Detector provides occupancy detection for the automatic control of DALI lighting loads.

The unit 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 Toolbox. It can also be controlled using a Helvar infrared remote handset.

The unit can be mounted into a ceiling or wall void, or onto a solid surface using Helvar's SBB-A or SBB-AB back boxes (available separately).

From hardware revision 4, the Low-Profile Microwave Detector can be used with a Helvar 401, 402 or 403 or a generic 12 V to 24 V power supply unit.



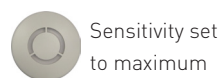
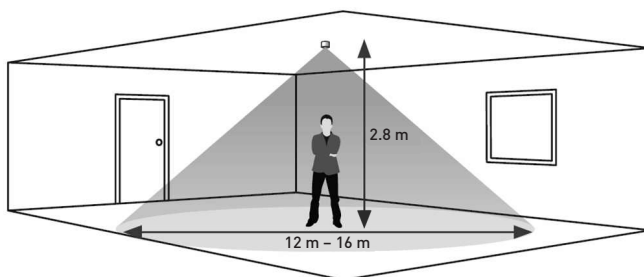
### Key Features

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

Valid setting received	
Identify active	

= Red LED

### Detection Pattern



## Technical Data

### Connections

**External power / DALI:** Removable terminal block  
Wire section: 0.5 mm<sup>2</sup> – 2.5 mm<sup>2</sup>  
solid or stranded

**Cable rating:** All cables must be mains rated.

### Power

**DALI supply input:** 13 V to 22.5 V

**DALI consumption:** 20 mA  
Note: DALI consumption is less than 2 mA when external power is supplied to the unit.

**(Optional) External power:** 12 V to 24 V; 0.3 W

### Remote control functions

**Use Helvar infrared remote handset to:** – Recall lighting scenes 1–4.

- Adjust light levels.
- Store current level.
- Install preset levels for scenes 1–4.

Note: Adjust sensitivity using Designer, or Toolbox (not by remote control unit).

Factory setting for sensor sensitivity: 9 (maximum).

### Microwave operating frequency

**Frequency:** 5.8 GHz

### Mechanical data

**Mounting hole diameter:** 68 mm

**Bezel diameter:** 76 mm

**Recommended clearance depth** 80 mm (without protective cover)  
(incl. 50 mm for cabling): 100 mm (with protective cover)

**Material (casing):** Flame retardant ABS and PC/ABS

**Finish/Colour:** **313:** Matt / White RAL 9003  
**313B:** Matt / Anthracite Grey RAL 7016

**Weight:** 90 g

**IP code:** IP30

### Operating conditions

**Ambient temperature:** 0 °C to +50 °C

**Relative humidity:** Max. 90 %, noncondensing

**Storage temperature:** –10 °C to +70 °C

### Conformity and standards

**EMC emission:** EN 61000-6-1

**EMC immunity:** EN 61000-6-3

**Safety:** EN 60730-1

**Environment:** Complies with WEEE and RoHS directives.

### Version information

**Software version:** 6

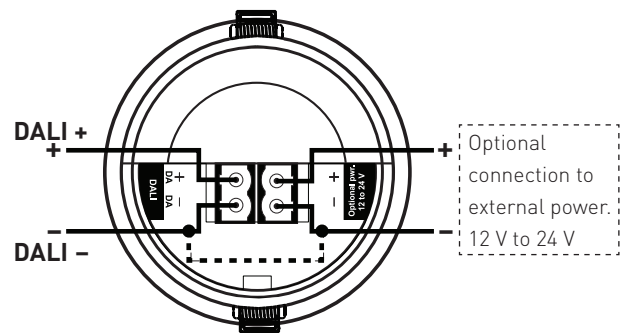
**Hardware version:** Rev. 4

### Software compatibility

**Designer:** 4.1 or later

**Toolbox:** 2.2.16 or later

## Connections



## Dimensions (mm)

