

# Low-Profile Microwave Detector (313)

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 Helvar 303 Infrared 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 Toolbox.

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.

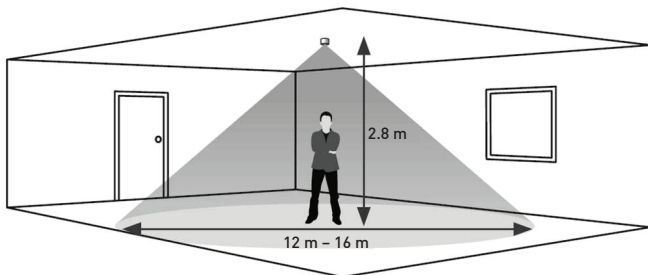
## Key Features

- 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 303 IR (infrared) handset (available separately).
- The Status LEDs flash red to indicate the following:

Valid setting received	
Identify active	

= Red LED

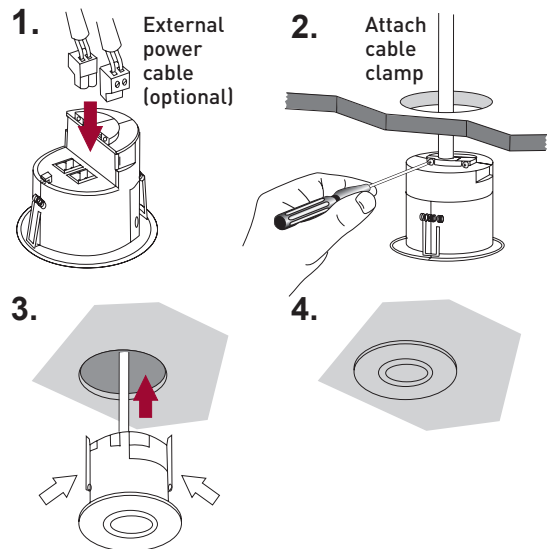
## Detection Pattern



Sensitivity set to maximum

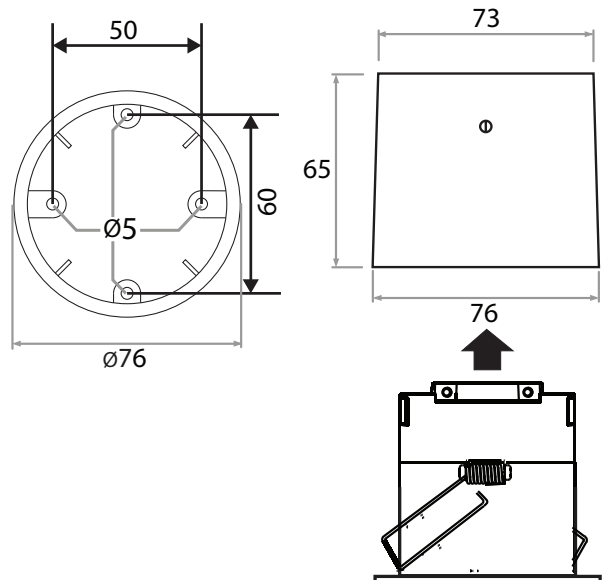


## Installation: Mounting hole



## Installation: Surface back box SBB-A

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



## Technical Data

### Connections

**External power / DALI:** Removable terminal block  
Wire size: 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.*

### Remote control functions

**Use Helvar 303 remote control 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)  
100 mm (with protective cover) (incl. 50 mm for cabling)  
**Material (casing):** Flame retardant ABS and PC/ABS  
**Finish/Colour:** Matt / White RAL 9003  
**Weight:** 90 g  
**IP code:** IP30

### Operating conditions

**Ambient temperature:** 0 °C to +35 °C  
**Relative humidity:** Max. 90 %, noncondensing  
**Storage temperature:** –10 °C to +70 °C

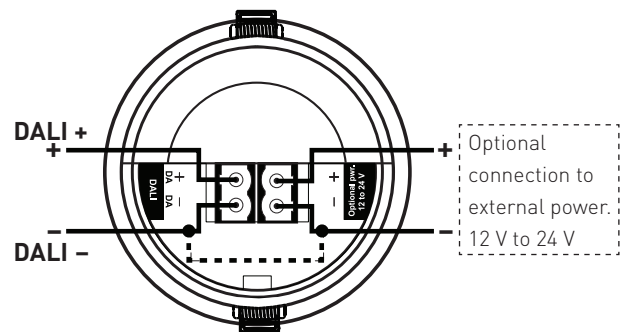
### Conformity and standards

**EMC emission:** EN 61000–6–1  
**EMC immunity:** EN 61000–6–3  
**Safety:** EN 60730–1  
**Environment:** Complies with WEEE and RoHS directives.

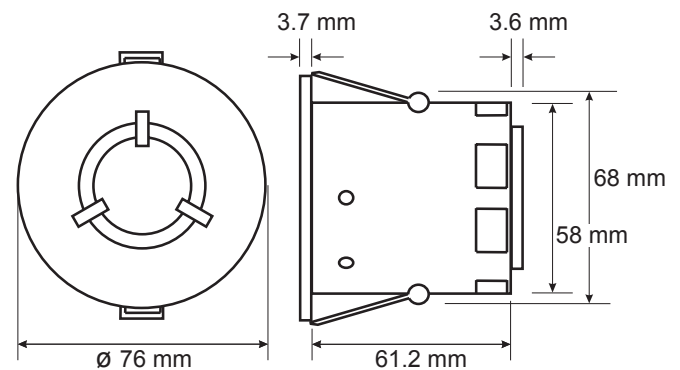
### Version information

**Software version:** 6  
**Hardware version:** Rev. 4

### Connections



### Dimensions



**Hole diameter:  $\varnothing$  68 mm**