digidim

Helvar

Low-Profile Microwave Detector (313, 313B)

CE

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.

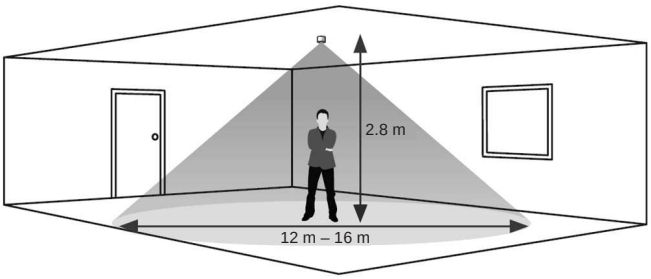
Key Features

- 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



Sensitivity set to maximum

Technical Data

Connections

External power / DALI:	Removable terminal block Wire section: 0.5 mm² – 2.5 mm² 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 (incl. 50 mm for cabling):	80 mm (without protective cover) 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.

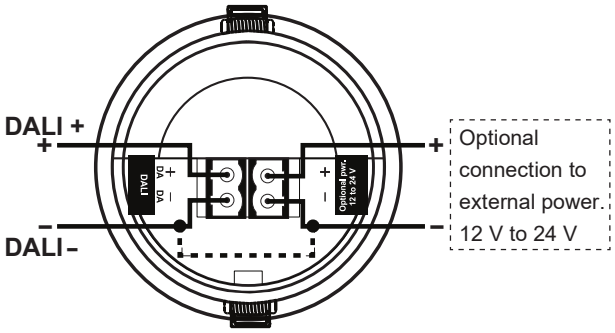
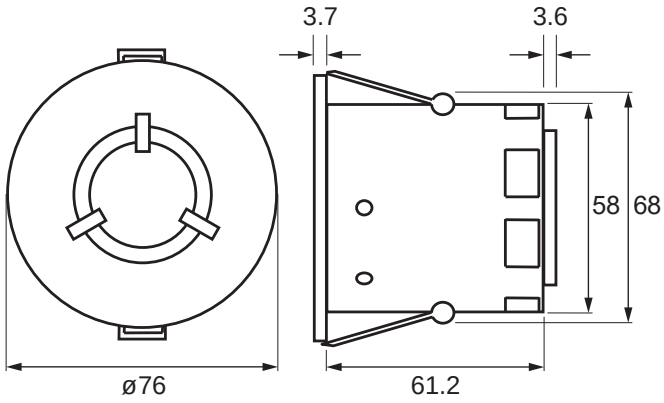
Version information

Software version:	6
Hardware version:	Rev. 4

Software compatibility

Designer:	4.1 or later
Toolbox:	2.2.16 or later

Connections



Dimensions (mm)