Tilting Microwave Detector (314)

The 314 Tilting 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. The adjustable sensor head allows the area of detection to be optimised for the required application.

This product is compatible with Helvar's lighting system design and control software: Designer, and 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 back box (available separately).

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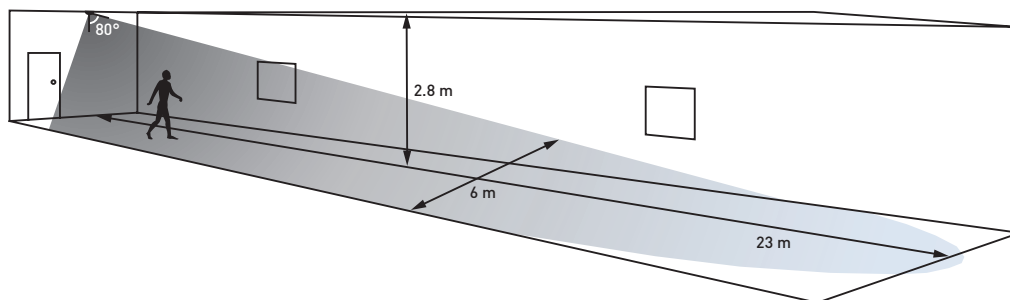
Key Features

- 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).

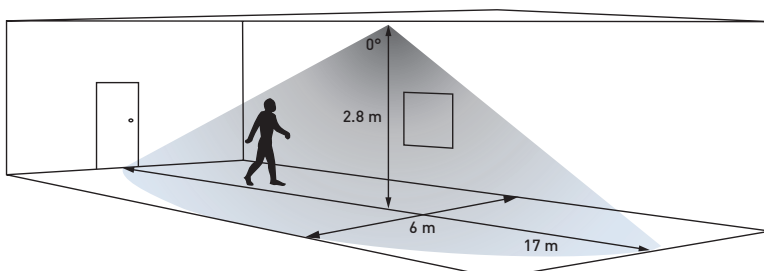- The Status LEDs flash red to indicate the following:

Valid setting received	⊛R
Identify Active	⊛R ⊛R ⊛R ⊛R ⊛R ⊛R

⊛R = Red LED

Detection Pattern

80°

2.8 m

6 m

23 m

Detector head position at 80° to the vertical for large offices or classrooms, and for corridor and aisles. Sensitivity set to maximum.

0°

2.8 m

6 m

17 m

Detector head position at 0° to the vertical for open plan areas and offices. Sensitivity set to maximum.

Technical Data

Connections

External power / DALI:	Removable terminal block Wire section: 0.5 mm² – 1.5 mm² solid or stranded
Cable rating:	All cables must be mains rated.

Power

DALI supply input:	13 V to 22.5 V
DALI consumption:	40 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; 0.5 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

Model	Frequency
314	10.687 GHz China, Hong Kong, India, Malaysia, Middle East, Singapore, United Kingdom
314/R2	10.525 GHz Australia, Europe except for Austria, France, Germany, Ireland, Portugal, Slovakia, Switzerland and the United Kingdom
314/R3	9.900 GHz France, Portugal, Switzerland

Mechanical data

Mounting hole diameter:	78 mm
Bezel diameter:	85 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:	Matt / White RAL 9003
Weight:	124 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 immunity:	EN 61000-6-1
EMC emission:	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

Dimensions (mm)

Protective cover

3.5   3.5   70   78   ⌀ 85   92

Hole diameter: ⌀ 78 mm