# iDim

# OB-1101 iDim Orbit

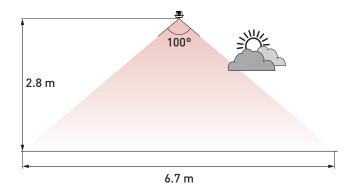
The OB-1101 iDim Orbit with single movement detector is a standalone, flush-mounted sensor that provides easy installation and configuration of lighting control applications. It contains:

- A passive infrared (PIR) movement detector
- A light sensor
- A Bluetooth® Smart™ module for configuration via a smartphone or tablet
- A time clock for profile scheduling
- A DALI power supply with two DALI broadcast outputs
- A mains relay for switched load control
- A functional extra-low voltage (FELV) manual switch interface
- A status LED that flashes green each time a valid setting is received

The PIR movement detector enables the sensor to switch the lights on when a room is occupied, and off when it is unoccupied. In addition, a switch can be connected to the sensor for manual control.

The unit has out-of-box functionality for configuration-free operation. It uses removable connector blocks for simple, screwless termination of mains, DALI and switch-input cables. The sensor's settings can be customised via an Apple iOS mobile app that is available from the App Store. For information, see the *iDim Orbit App Configuration Guide*. The sensor is designed to be recessed in a ceiling void.

# **Daylight Harvesting Coverage**



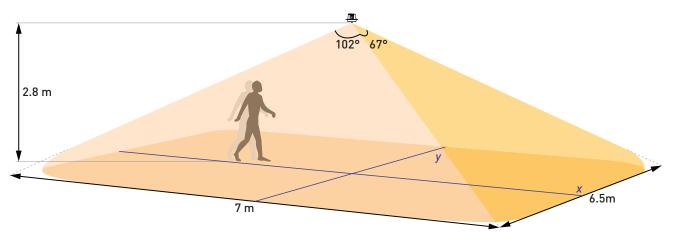
# Light sensor Freedom in lighting X Status LED PIR movement detector

Helvar

# **Key Features**

- Presence and absence detection modes.
- Movement detection area of up to 7 m × 6.5 m at 2.8 m mounting height. For details, see the 'Presence Detection Coverage' section below.
- Three independently configurable control outputs (2 × DALI broadcast and 1 × mains relay).
- Daylight harvesting for energy efficiency.
- Seven-day scheduler allowing two sensor behaviour profiles per day.
- Manual control through switch inputs.
- Manual control of DALI channels can be altered within the app to suit different switch types.
- Easy installation over two-part mains and DALI connectors with screwless terminations and built-in strain relief
- Configuration via iOS devices. The app includes a library of application profiles for classrooms and offices, as well as custom profiles.
- Backup and sharing of profiles via cloud services and email.

# **Presence Detection Coverage**





Technical Data freedom in lighting

#### **Connections**

Mains: 4-pole removable connector block with

strain relief

Cable diameter: 9 mm - 13 mm mains

rated

Cable section: 0.5 mm<sup>2</sup> – 4 mm<sup>2</sup> solid;

0.5 mm<sup>2</sup> - 2.5 mm<sup>2</sup> stranded

**Power** 

Mains supply: 100 VAC – 240 VAC (nominal)

85 VAC - 264 VAC (absolute)

50 Hz - 60 Hz

Power Nominal: 0.9 W consumption: Maximum: 2.5 W

**DALI power:**  $2 \times 40$  mA DALI power supply

 $2 \times 2$ -pole removable connector blocks

with strain relief

Cable diameter: 3.8 mm – 8.2 mm

mains rated

Cable section:  $0.25 \text{ mm}^2 - 1.5 \text{ mm}^2$  solid;  $0.25 \text{ mm}^2 - 1.0 \text{ mm}^2$  stranded

External protection:

Max. 16 A Type C MCB

**Relay loads:** Limited by external protective device. **Switch inputs:** 5 × retractive (momentary) switch plus

common input.

Switch inputs are functional extra-low

voltage (FELV).

Cable section: 0.08 mm<sup>2</sup> – 1.5 mm<sup>2</sup> solid; 0.08 mm<sup>2</sup> – 1.0 mm<sup>2</sup> stranded.

Max. length: 50 m.

Communications: DALI broadcast

#### Mechanical data

Mounting hole 83 mm – 86 mm

diameter:

**Recommended** 115 mm plus cable bending radius

clearance depth:

Material (casing) Flame-retardant ABS

Colour: White RAL 9003

**Weight:** 255 g **IP code:** IP40

# **Operating conditions**

Ambient 0 °C to +50 °C

**temperature:** Note: The temperature difference

between the detection target and the background must be at least 4 °C.

Relative humidity: Max. 90 %, noncondensing

Storage  $-10 \, ^{\circ}\text{C} \, \text{to} + 70 \, ^{\circ}\text{C}$ 

temperature:

## Conformity and standards

**EMC:** EN 301489-1

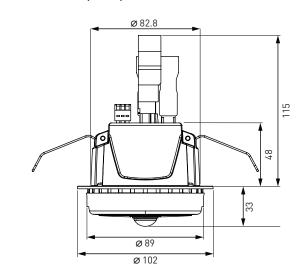
EN 55015 EN 61547

**Safety:** IEC 60669-2-5

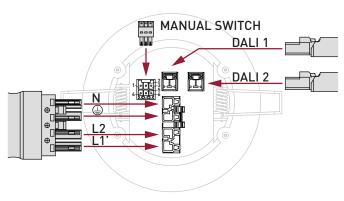
**Environment:** Complies with WEEE and RoHS directives.

FCC: Contains FCC ID: T7VPAN17.

# Dimensions (mm)



#### **Connections**



N: Neutral Earth L2: Live in L1':Switched live

#### Input function (selectable in the app)

Switch input*	Single-pole switch	Double-pole switch <sup>†</sup>
1	Common	Common
2	DALI 1 switch control <sup>‡</sup>	DALI 1 on/raise
3	DALI 1 switch control <sup>‡</sup>	DALI 1 off/lower
4	Relay on/off	(Single-pole switch only)
5	DALI 2 switch control <sup>‡</sup>	DALI 2 on/raise
6	DALI 2 switch control <sup>‡</sup>	DALI 2 off/lower

- \* Switch inputs are functional extra-low voltage (FELV).
- <sup>†</sup> Two-position, centre-biased retractive switch.
- Switch control enables on/off and dimming control from a single-pole retractive switch.
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