iDim

OB-1501 iDim Orbit

The OB-1501 iDim Orbit with five movement detectors is a standalone, flush-mounted sensor that provides easy installation and configuration of lighting control applications. It contains:

- Five passive infrared (PIR) movement detectors
- 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 detectors enable 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 Guide.*

The sensor is designed to be recessed in a ceiling void.

Helvar

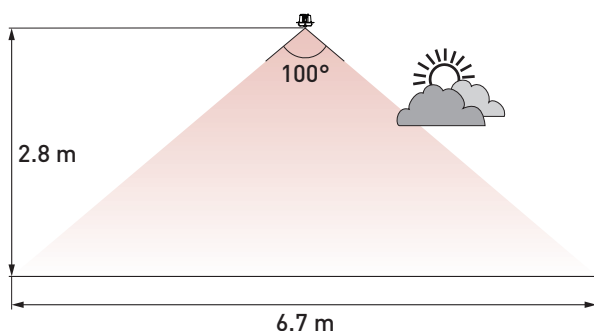*freedom in lighting*

CE

PIR movement detectors

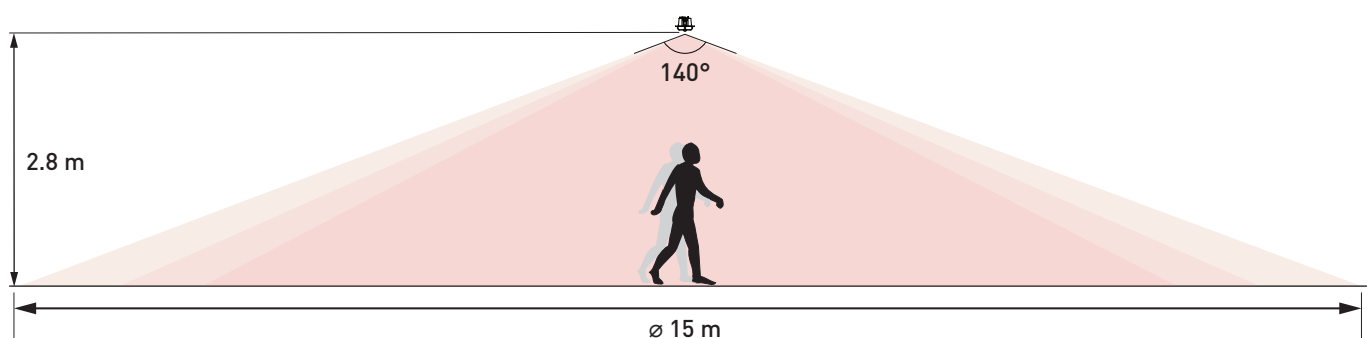Status LED   Light sensor

Key Features

- Presence and absence detection modes.
- Up to 15 m diameter movement detection at 2.8 m mounting height.
- Possibility of extending the movement detection area by connecting a remote sensor with a normally open, volt-free signal relay output to the manual switch interface.
- To alter the shape of the detection area, individual movement detectors can be enabled or disabled from the app.
- 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 files for classrooms and offices, as well as custom profiles.
- Backup and sharing of profiles via cloud services and email.

Daylight Harvesting Coverage

100°

2.8 m

6.7 m

Presence Detection Coverage

140°

2.8 m

ø 15 m

Technical Data

Connections

Mains:	4-pole removable connector block with strain relief Cable diameter: 9 mm – 13 mm mains rated. Cable section: 0.5 mm² – 4 mm² solid; 0.5 mm² – 2.5 mm² stranded.

Power

Mains supply:	100 VAC – 240 VAC (nominal) 85 VAC – 264 VAC (absolute) 50 Hz – 60 Hz
Power consumption:	Nominal: 0.9 W Maximum: 2.5 W
DALI power:	2 × 40 mA DALI power supply 2 × 2-pole removable connector blocks with strain relief Cable diameter: 3.8 mm – 8.2 mm mains rated. Cable section: 0.25 mm² – 1.5 mm² solid; 0.25 mm² – 1.0 mm² 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 mm² – 1.5 mm² solid; 0.08 mm² – 1.0 mm² stranded. Max. length: 50 m.
Communications:	DALI broadcast

Mechanical data

Mounting hole diameter:	83 mm – 86 mm
Recommended clearance depth:	115 mm plus cable bending radius
Material (casing)	Flame-retardant ABS
Colour:	White RAL 9003
Weight:	261 g
IP code:	IP40

Operating conditions

Ambient temperature:	0 °C to +50 °C *Note: The temperature difference between the detection target and the background must be at least 4 °C.*
Relative humidity:	Max. 90 %, noncondensing
Storage temperature:	–10 °C to + 70 °C

Conformity and standards

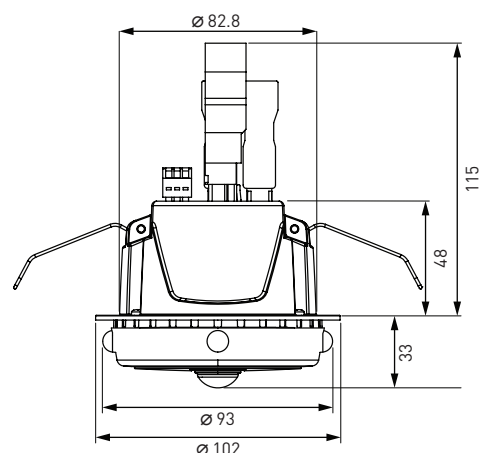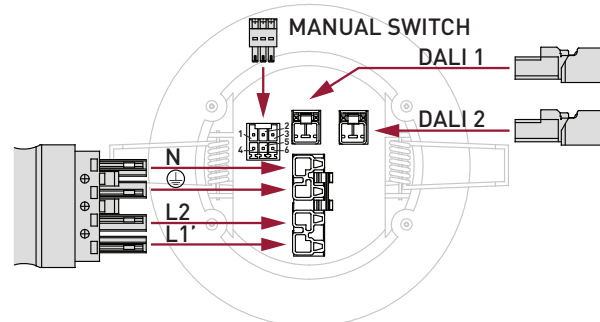|	
EMC:	EN 55015 EN 61547
RED:	EN 300328 EN 301489-17
Safety:	EN 60669-2-5
Environment:	Complies with WEEE and RoHS directives.
FCC:	Contains FCC ID: T7VPAN17.

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†
1	Common	Common
2	DALI 1 switch control‡	DALI 1 on/raise
3	DALI 1 switch control‡	DALI 1 off/lower
4	Relay on/off	(Single-pole switch only)
5	DALI 2 switch control‡	DALI 2 on/raise
6	DALI 2 switch control‡	DALI 2 off/lower

*   Switch inputs are functional extra-low voltage (FELV).

†   Two-position, centre-biased retractive switch.

‡   Switch control enables on/off and dimming control from a single-pole retractive switch.