Multisensor with linked PIR (312)

The Multisensor is a compact unit containing sensors to provide energy-saving functions when used in a DALI system. It contains:

- A light sensor
- A passive infrared (PIR) movement detector
- An infrared receiver [for remote control]

The unit is push-fitted into a ceiling or luminaire housing. The light sensor measures the ambient-light level in the room. The PIR detector enables the system to detect when the room is occupied. Helvar infrared remote control can be used to set the required light levels and to carry out basic system programming.

Key Features

- Presence detection default time-out of 20 minutes.
- Programmable constant light control for energy efficiency.
- Complete control using the hand-held remote.
- A local switch can be fitted to provide ON/OFF and a manual dimming function.
- The multisensor’s programmable functions are set by five DIL switches at the back of the unit.
- These DIL switch settings can be overridden remotely by Helvar’s Toolbox or Designer software – no need for access to the Multisensor after installation.
- The coverage restrictor (provided) can be fitted to the Multisensor for more precise constant-light coverage.

Additional Functions

- The remote control handset can program most functions. Toolbox and Designer give full system access.
- Multiple linked PIR sensors connected in one system can communicate with each other and switch off the loads when all sensors are non-detecting.
- The automatic ON/OFF sequence of the presence detection system has three programmable steps [on, intermediate, off]. Users can define how the loads react to the automatic presence detection commands from the Multisensor.

PIR Automatic ON/OFF Sequence

| ON scene | Default: scene 16 (last level set by user) |
| INTERMEDIATE scene | Default: scene 14 |
| OFF scene | Default: scene 15 |

Constant Light Coverage without restrictor

Constant Light Coverage with restrictor

Presence Detection Coverage
Technical Data

Connections
DALI: Removable connector block
Wire size: 0.5 mm² – 1.5 mm² solid or stranded
Local control: 2 wires
Cable rating: All cables must be mains rated.
Maximum length: 50 m

Power
DALI supply input: 13 V to 22.5 V
DALI consumption: 15 mA

Sensors
Light sensor: For constant-light functions
Presence detector: PIR: Passive infrared presence detector
Infrared receiver: For remote control commands

Remote control functions
Infrared remote control: Constant-light level
Group creation and adjustment
Scene store and recall

Mechanical data
Mounting hole diameter: 52 mm (mounting surface 0.5 mm – 2 mm); 55 mm (mounting surface > 2 mm)
Bezel diameter: 65 mm
Recommended clearance depth: 80 mm (without cable cover); 100 mm (with cable cover, incl. 50 mm for cabling)
Material (casing): UL94V-0 nylon
Finish/Colour: Matt / White RAL 9003
Weight: 48 g without cable cover; 54 g with cable cover
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 55015
EMC immunity: EN 61547
Safety: EN 61347-2-11
Environment: Complies with WEEE and RoHS directives.