

ED-SENS

Sensor (infrared, PIR), surface-mount

Art. no. 22154506

Multi-sensor for use with occupancy detector and IRTOUCH infrared remote control

Application

The ED-SENS multisensor is a ceiling-mounted unit combining the functions of an occupancy sensor and a receiver for the IRTOUCH infrared remote control (part no.: 22 154 450). Up to 3 individually configurable remote-control groups can be incorporated in the LITECOM, DIMLITE and LITENET systems.

Design notes

- The sensor is intended for use in the DALI-based LITECOM, LUXMATE DIMLITE and LUXMATE LITENET system. It does not work with other systems.
- Power is supplied via the DALI line.
- It can only be used with the IRTOUCH infrared remote control (22154450).
- When used in a DIMLITE installation: connect directly to the Control-IN input; commissioning is performed automatically by the AUTO-Setup function. The IRTOUCH remote control can be used to assign individual ED-SENS sensors to specific groups.
- When used in a LITECOM installation: addressing and commissioning via the LITECOM web interface
- When used in a LITENET installation: multi-sensor connection directly on a DALI line of the LITENET netlink CCD (22169263). Use the IRTOUCH infrared remote control for commissioning (22 154 450).
- The sensor must be positioned on the ceiling so as to ensure that the workstation user's hands are in the centre of the sensor range and not hidden by the screen, the user's back, etc.
- The detection ranges of several sensors mounted side-by-side can overlap. Heat sources must be avoided within the detection range (printers, copiers, fax machines etc.).
- Switched lights, fan heaters, fans etc. and printers or copiers located in the detection range can trigger incorrect detection of a person in the room.
- The infrared reception range depends on the circumstances in the room. Reception characteristics are changed by reflections from bright walls, furniture or floors. Dark materials absorb infrared radiation.
- Infrared transmitters such as laptops, PDAs or mobile phones with enabled IR interface, as well as plasma screens may interfere with communication between IRTOUCH and ED-SENS.
- Current consumption equivalent to 4 DALI loads (8mA)



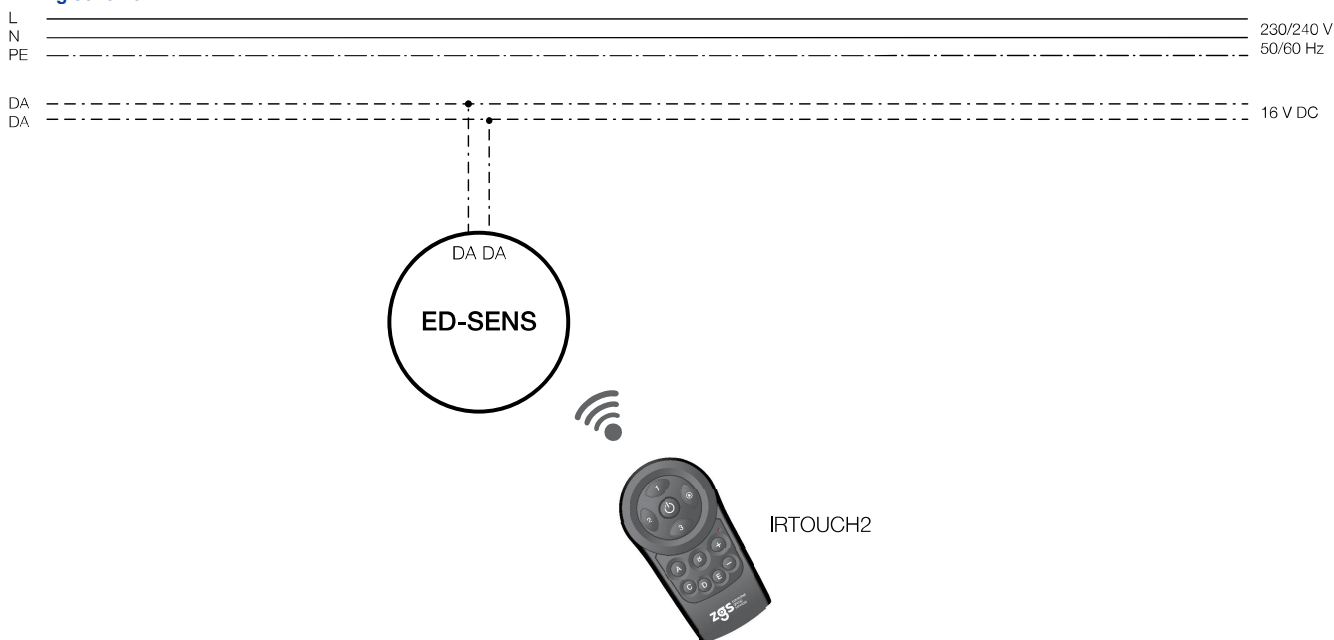
Functional description

The ED-SENS sensor detects

- whether or not people are in the room
- signals from the IRTOUCH infrared remote control (22154 450)

This information is passed to the higher-level light management control centre. In DIMLITE and EMOTION installations, the PIR and manual control functions can be used to run lighting scenes and to dim specific luminaire groups manually.

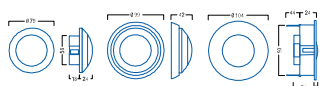
Wiring scheme



Mounting and installation instructions

- Ceiling installation in Euro/standard box, single, includes accessories for surface-mount or recessed ceiling installation. External cable strain relief must be provided for connections.
- If the occupancy sensor is not mounted at the optimum height (2.5m), its characteristic will change. When mounted higher, its sensitivity is reduced; at a lower height its range is reduced.
- Keep the lens away from direct artificial light and sunlight.
- For industrial applications, single-core shielded cable is recommended.
- Air convection in cavity ceilings can trip the occupancy sensor incorrectly. In such cases, insulate the ceiling installation location with wool or the like.

Dimension



Technical data

Power supply	via DALI control line (16V DC) for DIMLITE: via Control-In line (14 V DC)
Current consumption	4 DALI loads (8 mA)
Inputs	DALI control wiring
Presence detection	passive infrared, 4-way component
Presence monitoring range	circular, Ø 8m for walking persons and Ø 6m for seated persons, mounting height 2.5m
IR receive range	circular, radius approx. 5m for direct sight
IR log	RSTEP, 38 kHz
Installation	on the ceiling (surface-mounted, flush-mounted / inserted or in Euro box, 1x, dimensions according to DIN 0606 (diameter 60mm, depth 42mm))
Terminals	0,5-1,5 mm ²
Housing material	plastic, halogen-free
Protection type	IP40
Protection class	Class II (double-insulated)
Lens	Poly IR2
Permissible ambient temperature t_a	0 °C ... +50 °C
relative humidity	0–75 %, non-condensing
Storage temperature t_s	-20–+70 °C
Weight	Approx. 0.3 kg

Label/connections

