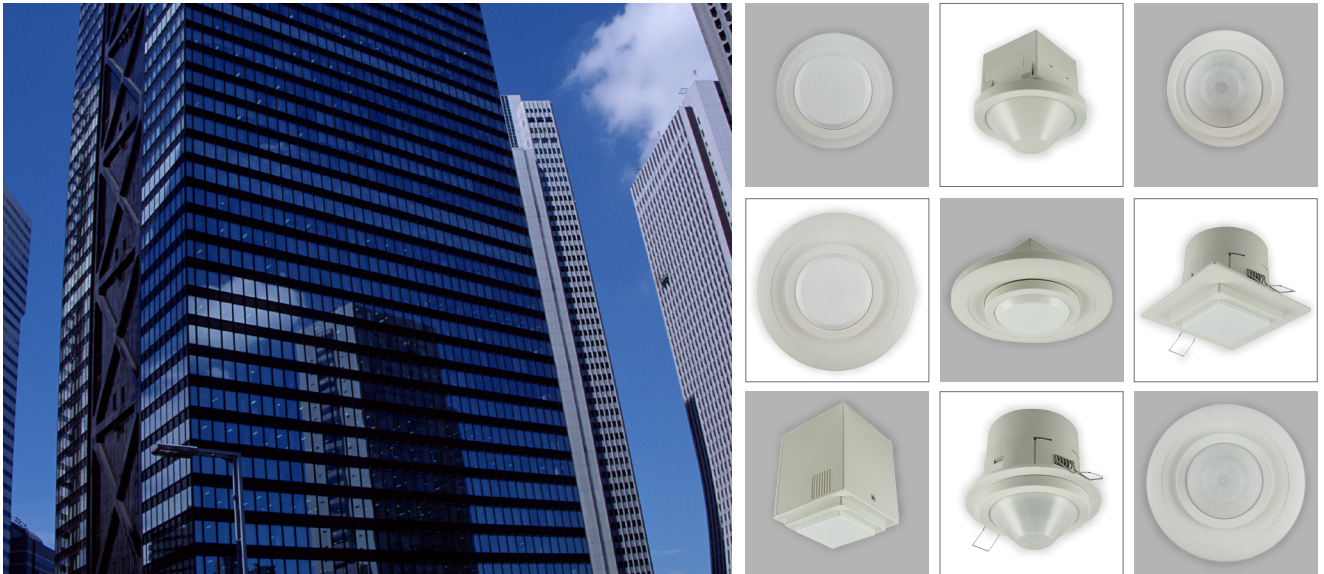


LOS-300 series

Line Voltage Occupancy Sensor



OVERVIEW

The LOS-300 series member of the TRANS family is a line voltage switching occupancy sensor designed for all-purpose energy efficient lighting control.

This occupancy sensor employs a cutting edge quad element pyroelectric infrared sensor to provide omni-directional sensing capability of the occupants presence and movement. Rotary DIP switches make the sensor setting easier, faster and more accurate than the conventional analog potentiometer.

Like all sensors in the TRANS family, the LOS-300 series is available with various mounting options and interchangeable lenses. This provides a second-to-none design and complete installation flexibility. The sensor is designed to operate in the coldest of environments, down to $-40^{\circ}\text{C}/^{\circ}\text{F}$.

The LOS-300 series comes with an optional ambient light sensor (ALS) to inhibit the lighting if ambient light levels are higher than required. The LOS-300 is designed to provide complete occupancy sensing for automatic lighting control, ease of use, and the simplest installation possible.

FEATURES

- Omni-directional quad element infrared sensor
- 100~277VAC universal line voltage powered
- Frequency detection zero-cross relay switching
- Rotary DIP switch for quick and easy setting
- Walk test and sensor operation LED indicator
- Direct lead wires for easy wiring connection
- Available with or without photocell sensor
- Available with variety of mounting options
- Available with interchangeable lens options

APPLICATION

Light Control

The LOS-300 series occupancy sensor can be used to directly control the connected light, or other loads, by sensing the presence and movements of the occupant. Various control modes can be achieved by different wiring connections. Basic wiring diagrams are included. Consult with an IR-TEC team member if a more complex wiring diagram is required.

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Auxiliary Options

LOS-300**S**xx – Ambient light sensor integrated
LOS-300**N**xx – No ambient light sensor integrated

Mounting Options

The LOS-300**X**x series can be mounted into the ceiling, attached to a fixture or mounted into a junction box. The mounting options are available by combining a specific mounting bracket (if applicable) from the chart below. The bracket will be shipped with the sensor when ordered with the respective code. Codes F and W allow the LOS-300**X**x to be directly integrated with OEM light fixtures in any environment.

| Code | Mounting Option | Mounting Bracket |
|------|------------------|------------------|
| F | Fixture snap-in | --- |
| W | Wet location | --- |
| E | Fixture external | EMB-300 |
| C | Junction box | CMB-300 |
| R | Recess mount | RMB-300 |
| Q | Recess mount | QMB-300 |

Lens Options

The LOS-300**X**x series is available with the following lens options which provide different coverage at different mounting heights (H). When adding the lens code, the lens is then shipped with the sensor.

| Type | Lens | Shape | Mounting Height | Coverage |
|------|------------|--------|----------------------|-----------|
| A | Standard | Cone | 2.4~4.5m (8~15 ft.) | 2X height |
| B | Extra Wide | Cone | 2.4~3.0m (8~10 ft.) | 6X height |
| C | High bay | Cone | 4.5~9.0m (15~30 ft.) | 3X height |
| D | Standard | Round | 2.4~6.0m (8~20 ft.) | 2X height |
| E* | Standard | Square | 2.4~6.0m (8~20 ft.) | 2X height |
| F | Extra Wide | Dome | 2.4~6.0m (8~20 ft.) | 4X height |

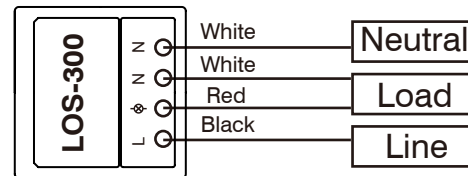
* Not available with mounting option C

Example: LOS-300SRB

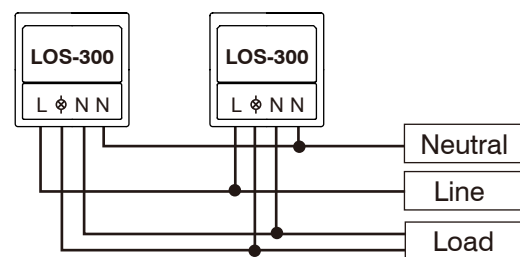
This sensor would come with an ambient light sensor, bracket for recessed mounting and lens with extra wide detection. Specific mounting bracket or lens may be order separately if needed. For help selecting sensors with proper mounting and lens options, please visit www.irtec.com, send your inquiry to sales@irtec.com or contact an IR-TEC team member directly.

Wiring Diagram

A. Single sensor control



B. Multiple sensors control



LOS-300S Front



LOS-300N Front



Sensor Back

SPECIFICATIONS

| | |
|---------------------|---|
| Power supply | 100~277VAC, 50/60Hz |
| Maximum load | 800W |
| Infrared sensor | Omni-directional quad element |
| Zero crossing | Automatic frequency detection |
| Detectable speed | 0.3~3m/sec. (1~10 ft./sec.) |
| Mounting height | Subject to the lens type applied |
| Detection range | Subject to the lens applied and height |
| Ambient light level | LOS-300Sxx: 8 levels selectable |
| Delay time setting | 10"/30"/1'/3'/5'/10'/20'/30' selectable |
| Op. humidity | Max. 95% RH |
| Op. temperature | -40°C~55°C (-40°F~131°F) |
| Dimensions | 48 x 48 x 40mm (1.90"x1.90"x1.57"mm) |