

# GLS-OIRLCL-C-CN

## Ceiling Mount Passive Infrared Occupancy & Daylight Sensor, Cresnet®

- > Flush ceiling mount occupancy or vacancy sensor
- > Passive infrared (PIR) motion detection
- > Fully digital circuitry, highly accurate and reliable performance
- > 450 square feet (42 m<sup>2</sup>) rectangular detection pattern
- > Vacancy-only mode with grace occupancy
- > Adjustable sensitivity and timeout
- > Short timeout “walk-through” mode
- > Built-in closed-loop photosensor for daylight harvesting
- > Monitors ambient light level from natural and artificial light sources
- > Enables automation of lighting, shading, HVAC, and AV equipment
- > Reduces wasteful energy consumption
- > Maintains consistent lighting levels
- > Reports room usage to Crestron Fusion®
- > Miniaturized construction for a nearly hidden appearance
- > Installs quickly in a one-inch (25 mm) diameter hole
- > IP64 dust-proof and splash-proof
- > Cresnet® wired control system interface
- > 24 Volts DC powered via Cresnet
- > Color-coded flying lead connections
- > Easy setup via software or IR remote (sold separately)

Crestron® occupancy sensors and daylight sensors offer a powerful, cost-saving solution for reducing energy consumption and enhancing system functionality. As part of a complete Crestron system, they can be used to enable automation of lighting, shading, HVAC, and AV equipment in a conference room, classroom, office, hallway, or other space. Using Crestron sensors, room lighting can automatically turn on when the room is occupied, turn off when it is vacant, and dim to a lower level when there is sufficient natural daylight from windows and skylights. Sensors can also be used to enhance the capabilities of a room scheduling, asset management, or energy monitoring solution through integration with the [Crestron Fusion®](#) Enterprise Management service.

The GLS-OIRLCL-C-CN serves dual functions as a passive infrared occupancy sensor and closed-loop photocell daylight sensor (photosensor). It can also operate in vacancy-only mode, and is designed to cover an area up to 450 square feet or 42 square meters. Miniaturized construction affords a nearly hidden appearance when installed in a drywall or drop-tile ceiling. It communicates with a Crestron control system via the Cresnet® network. Setup and configuration is accomplished using [Crestron Toolbox](#) software or the optional IR remote (model [GLS-REMOTE-ODT/OIR](#), sold separately).

### Passive Infrared Occupancy Sensing

Passive infrared (PIR) technology employs a highly sensitive specialized lens that divides the field-of-view into 64 detection zones. The sensor detects motion when a warm body passes between zones, achieving dependable motion detection with superior immunity to false triggering



from vibrations, inanimate objects, or movement in an adjacent corridor. The detection sensitivity can be set to one of three levels for optimum performance. Timeout can be set to one of six settings ranging from 30 seconds to 30 minutes, preventing the sensor from turning off lights or reporting vacancy during moments when the room is occupied but no one is moving. In addition, a “walk-through” mode (Short Timeout) can be enabled to temporarily override the Timeout setting on occasions when the room is only occupied briefly for 90 seconds or less.

### Vacancy Only Mode with Grace Occupancy

The GLS-OIRLCL-C-CN can be configured to sense vacancy only. In this mode, lighting and other equipment must be turned on manually but shuts off automatically after the room is vacated. The “grace occupancy” feature ensures that if the lights turn off while someone is in the room, they can be turned back on by simply waving a hand within a 15 second grace period.

### Daylight Sensing

Its built-in photocell enables the GLS-OIRLCL-C-CN to function as a closed-loop photosensor as part of a complete daylight harvesting solution. By monitoring the ambient light level in the room, electrical lighting can be dimmed automatically when sufficient natural daylight is available. Daylight harvesting enables organizations to improve energy efficiency by taking advantage of natural sunlight from windows and skylights while maintaining consistent lighting levels throughout the day for a more comfortable workspace.

### Room Usage Monitoring

Through integration with the [Crestron Fusion](#) Enterprise Management service, occupancy sensors can be leveraged to log room usage based on occupancy, and to maximize efficiency for room scheduling by reporting if a room is occupied or vacant. In the event no one has shown up for a scheduled meeting, the meeting can be cancelled automatically, making the room available to others.

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## Cresnet®

The GLS-OIRLCL-C-CN interfaces with a Crestron control system via Cresnet. Cresnet is a simple 4-wire network bus that provides the communications backbone for a system of Crestron sensors, lighting dimmers and switches, motorized shades, thermostats, keypads, and other devices. The GLS-OIRLCL-C-CN is also powered by 24 Volts DC from the Cresnet network.

## Ceiling Flush Mount Installation

The GLS-OIRLCL-C-CN installs easily in a typical drywall or drop-tile ceiling. Simply drill a one-inch (25 mm) diameter hole and insert the sensor. Integrated compression clips hold the sensor in place. Once installed, it achieves a very discreet and flush appearance against a white ceiling.

*Note 1: The motion detection pattern is rectangular. The sensor should be positioned and oriented accordingly to achieve the desired performance within the space.*

*Note 2: Some functions described in this spec sheet may require custom commissioning of the control system by an authorized Crestron system programmer.*

## SPECIFICATIONS

### Motion Sensing

**Sensor Technology:** Passive infrared, 64 detection zones  
**Detection Area:** 450 sq ft (42 m<sup>2</sup>)  
**Detection Pattern:** Rectangular 18.57 x 24.34 ft (5.66 x 7.42 m) with 8.2 ft (2.5 m) ceiling height  
**Maximum Ceiling Height:** 16.4 ft (5 m)

### Light Sensing

**Sensor Technology:** Closed-loop photocell  
**Light Sensitivity:** 0 to 1000 lux (0 to 93 foot-candles)  
**Field of View:** 360° hemispherical

### Controls & Indicators

**LED:** (1) Bi-color red/green LED, indicates detection of motion and other functions during setup (may also be enabled to indicate detection of motion during normal operation if desired)  
**Beep Tone:** Indicates detection of motion and other functions during setup

### IR Remote (Sold Separately):

**OCC/VAC/EXIT SETUP:** Enters or exits occupancy or vacancy setup mode  
**TIMEOUT:** Selects 0.5, 2, 5, 10, 15, or 30 minutes  
**SHORT TIMEOUT:** Enables or disables “walk-through” mode, which temporarily sets timeout to 60 seconds if occupancy is detected for less than 90 seconds  
**LED:** Enables or disables visible indication of motion detection during normal operation  
**PIR SENSITIVITY:** Selects high, medium, low, or off  
**SET ID:** Enables network ID to be set using the numeric keypad  
**RESET:** Restores factory settings  
**FORCE VAC:** Puts sensor into vacant state

### Connections

(4) Flying leads, color-coded for connection to the Cresnet control network

### Power

**Cresnet Power Usage:** 1 Watt (42 mA @ 24 Volts DC)  
**Power Consumption:** 625 mW

### Environmental

**Storage Temperature:** -4° to 158° F (-20° to 70° C)  
**Operation Temperature:** -4° to 140° F (-20° to 60° C)  
**Humidity:** 15% to 85% RH (non-condensing)  
**Ingress Protection:** IP64 rated per IEC 60529  
**Heat Dissipation:** <3.4 BTU/hr

### Construction

**Housing:** Plastic, cylindrical, white finish  
**Mounting:** Flush ceiling mount in drywall or ceiling tile, 1 inch (25 mm) diameter hole required

### Dimensions

**Diameter:** 1.50 in (38 mm)  
**Depth:** 2.15 in (55 mm)  
Protrudes 0.2 in (5 mm) from ceiling surface

### Weight

1 oz (27 g)

### Compliance

IC, CE, FCC Part 15 Class B digital device

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## MODELS & ACCESSORIES

### Available Models

**GLS-OIRLCL-C-CN:** Ceiling Mount Passive Infrared Occupancy & Daylight Sensor, Cresnet®

### Available Accessories

**GLS-REMOTE-ODT/OIR:** IR Remote for GLS Occupancy Sensors

**CRESNET-NP Series:** Cresnet® Control Cable, Non-Plenum

**CRESNET-P Series:** Cresnet® Control Cable, Plenum

### Notes:

This product may be purchased from an authorized Crestron dealer. To find a dealer, please contact the Crestron sales representative for your area. A list of sales representatives is available online at <http://www.crestron.com/salesreps> or by calling 800-237-2041.

The specific patents that cover Crestron products are listed online at: <http://patents.crestron.com>.

Certain Crestron products contain open source software. For specific information, please visit <http://www.crestron.com/opensource>.

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