GLS-ODT-C-1000

Dual-Technology Ceiling Mount Occupancy Sensor, 1000 Sq. Ft.

- > *Ceiling mount occupancy sensor*
- > *Dual-technology motion detection*
- > *360 degree, 1000 square feet coverage*
- > *Discreet, low-profile appearance*
- > *Extremely accurate and reliable sensing*
- > *Microprocessor-controlled self-adapting operation*
- > *Fully-digital circuitry for low cost and high reliability*
- > *Built-in ambient light recognition*
- > *Control system interface via Cresnet[2] or Versiport I/O input*
- > *EMerge Alliance® Compatible*

Crestron Green Light® sensors deliver a powerful and cost-effective solution for reducing energy costs and enhancing the functionality of lighting and environmental systems. The GLS-ODT-C-1000 is a low-profile ceiling mount occupancy sensor designed for medium-sized areas up to 1000 square feet to detect when the room is occupied. Advanced self-adaptive, dual-technology motion sensing affords extreme reliability for control of lighting, climate control and other devices in the room.

Dual-Technology Occupancy Sensing

Achieving consistent and dependable occupancy sensing is accomplished using a combination of ultrasonic and passive infrared technologies. Ultrasonic motion detection achieves high sensitivity to small movements over a large area, while passive infrared ensures superior immunity to false triggering from air currents, inanimate objects, or movement in an adjacent corridor. The GLS-ODT-C-1000 allows independent sensitivity adjustment of each sensor type for optimum performance in any space.

Self-Adaptive Adjustment

Under the control of its internal microprocessor, the GLS-ODT-C-1000 continually analyzes occupancy behavior and environmental conditions in the room, adjusting itself for optimal functionality so lights turn on and stay on while the room is occupied, and remain off when no one is present. Sensor sensitivity and delayed-off time adjustments are optimized automatically based on day-to-day use of the room to prevent false-on and off conditions. A walk-thru mode provides specialized behavior in instances of brief occupancy, turning lights off quickly when a person enters and exits the room within a period of 2.5 minutes.

Ambient Light Recognition

A built-in photocell is included for detection of natural daylight in the room. When enabled, the photocell can override the occupancy sensor if the ambient light level is above a set threshold, preventing lights from turning on when there is sufficient daylight in the room.

Versatile Installation

The GLS-ODT-C-1000 is designed to achieve a discreet, nearly hidden appearance when installed on a typical drywall or drop-tile ceiling. Hardware is included for fast and simple mounting to either surface, or to a standard 4-inch octagon box. Its simple 3-wire interface allows for direct connection to a Crestron control system via a single Versiport I/O input port, with 24 Volt power taken from the Cresnet control bus[1].

Cresnet® Option

Cresnet provides a simpler solution for configuring and wiring sensors as part of any complete Crestron system. Cresnet is the communications backbone for Crestron lighting dimmers, keypads, touchpanels, shade controllers, thermostats, and many other devices. This flexible 4-wire bus provides data communications and 24 Volts DC power for all of the devices on the Cresnet network. Using the optional GLS-SIM Sensor Integration Module, the GLS-ODT-C-1000 becomes a full-featured Cresnet device, streamlining the total lighting system. Additional features enable quick and easy setup for use with a Crestron IPAC or iLux® system.

Emerge Alliance Registered

This device is EMerge Alliance® registered and designed to work within a 24VDC room-level power distribution system. The EMerge Alliance is a non-for-profit open industry association leading the rapid adoption of safe DC power distribution in commercial buildings through the development of Emerge Alliance standards[3]. Crestron is a proud member and supporter of the Alliance. For more information about Crestron Solutions for EMerge Alliance Applications visit: www.crestron.com/emerge.

SPECIFICATIONS

Sensing

Sensor Technology: Dual-Technology Passive Infrared and Ultrasonic 40 kHz
Auto-Adjustment: Microprocessor-based self-adaptive
Ambient Light Recognition: Built-in photocell for ambient light override
Coverage Area: 1000 sq. ft.
Coverage Pattern: 360 degrees
Major Motion Area: 46 x 23 feet
Minor Motion Area: 34 x 17 feet

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Memory

Built-in non-volatile memory retains all settings in case of power loss

LED Indicators

IR: (1) Red LED, indicates infrared motion
Ultrasonic: (1) Green LED, indicates ultrasonic motion

Controls (Behind Cover)

Ultrasonic Range: (1) Green adjustment knob;
Adjusts sensitivity of ultrasonic motion sensor;
Adjustment Range: 0% to 100% (50% factory default)
Infrared Range: (1) Red adjustment knob;
Adjusts sensitivity of infrared motion sensor;
Adjustment Range: 0% to 100% (75% factory default)
Delayed-Off Time: (1) Black adjustment knob;
Adjusts delayed-off time duration;
Adjustment Range: 30 seconds to 30 minutes (10 minutes factory default, 6 seconds in test mode)
Ambient Light Threshold: (1) Blue adjustment knob;
Adjusts threshold for ambient light override;
Adjustment Range: 100 to 3000 Lux (3000 Lux factory default)
DIP Switch A: (1) 4-position DIP switch
1: Enables single-technology mode;
2: Selects infrared or ultrasonic when in single-technology mode;
3: Disables auto-adapting;
4. Disables walk-thru mode
DIP Switch B: (1) 4-position DIP switch
1: Forces control signal output high (room lights on);
2: Forces control signal output low (room lights off);
3: Enters or exits Test Mode (toggle "on" then "off");
4: Disables both LED indicators

Connections

Power: (1) Red 6" flying lead, 24 AWG;
+24 Volt DC power input
Common: (1) Black 6" flying lead, 24 AWG;
Power and control signal common
Occupancy: (1) Blue 6" flying lead, 24 AWG;
Occupancy sensor control signal output;
Provides 24 Volts DC high logic signal when occupancy is detected;
Short circuit protected;
Connects to a GLS-SIM Integration Module[2], or to a Versiport I/O control port on any Crestron control system
Occupancy w/Photocell: (1) Gray 6" flying lead, 24 AWG;
Occupancy sensor control signal output with ambient light override;
Provides 24 Volts DC high logic signal when occupancy is detected and ambient light is below set threshold;
Short circuit protected;
Used instead of the blue "Occupancy" connection when ambient light override is desired

Environmental

Temperature: 32° to 104°F (0° to 40°C)
Humidity: 0% to 95% RH (non-condensing)

Power Requirements

Current Consumption: 32 mA @ 24 Volts DC
Cresnet Power Usage: 1 Watt[1]

Housing

Construction: High-impact injection-molded plastic, white
Mounting: Surface mount directly to drop-tile or drywall, 4" octagon box (1.5" minimum depth), or round fixture box (Wiremold® V5738 or equivalent)

Dimensions

Height: 1.55 in (3.94 cm)
Diameter: 4.20 in (10.67 cm)

Weight

5.0 oz (142 g)

Standards & Certifications

CUL/US Listed 9034, ANCE Compliant, NOM 057, California Title 24 Code Compliant, ASHRAE Standard 90.1 Compliant, FCC Compliant

MODELS & ACCESSORIES

Available Models

GLS-ODT-C-1000: Crestron Green Light® Dual-Technology Ceiling Mount Occupancy Sensor, 1000 Sq. Ft.

Available Accessories

GLS-SIM: Crestron Green Light® Sensor Integration Module

Notes:

1. Power may be taken from Crestnet bus regardless of interface method.
2. Cresnet communication requires GLS-SIM Sensor Integration Module (sold separately).
3. Information regarding the EMerge Alliance can be found at www.emergealliance.org

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 www.crestron.com/salesreps or by calling 800-237-2041.

Specifications subject to change without notice. Crestron is not responsible for errors in typography or photography.

COVERAGE DIAGRAMS