

# OEC-U, Standard Ultrasonic



- Complete no-gap coverage
- Adjustable sensitivity and time delay
- Time delay adjustable from 15 seconds to 30 minutes
- Manual override switch turns lights ON in case of sensor malfunction
- NEMA WD7 Guide robotic method utilized to varyify coverage pattern

## Specifications:

**Technology:** Ultrasonic (US)

**Power Requirements:** 10-30 VDC from Greengate Switchpack or Greengate system. Maximum current needed is 25mA per sensor.

### Output:

- Open collector output to switch up to ten Greengate Switchpacks.

**Time Delays:** Adjustable from 15 seconds (for testing) to 30 min.

**Frequency:** 32kHz

### Operating Environment:

- Temperature: 60°F to 80°F (15°C to 26°C)
- Relative humidity: less than 90%, non-condensing
- For indoor use only

**Housing:** Medium impact injection molded housing. ABS resin complies with UL94V0. Paintable off-white.

### Size:

- 2-5/16"D x 6-1/8"W x 1-5/8"H (58.7mm x 155.6mm x 41.3mm)

**LED lamp:** Green LED: OEC-U-0501 only  
Red LED: All other sensors

**Wire Guard:** ACWG-E

**Warranty:** Five year

Catalog #	Type
Project	
Comments	
Prepared by	Date



Adjustable Sensitivity

One hole mounting for fast installation  
Teflon insulated pigtails are fire-rated for ceiling plenums

## Overview

The Standard ceiling sensors offer a wide range of basic ultrasonic occupancy sensors. They can be used to control lighting or small fans in rooms and corridors of various shapes and sizes. These models activate a switchpack to turn the loads on and off. Ultrasonic sensors are ideal in spaces where you need increased sensitivity to minor motion (like a hand waving) in larger spaces (>500 sq. ft.). Ceiling sensors are typically used in large or small spaces where wall switch sensor can not be used due to switch location, room orientation or furniture placement.

## Operation

The sensor produces a low intensity, inaudible sound. It detects changes in the acoustic waves caused by motion, such as reaching for a telephone, turning the pages of a book, walking into a room, turning in a swivel chair, etc. The sensor does not respond to audible sound. When the sensor detects motion, the relay in the connected Switchpack is closed and the lights are turned ON. If no motion occurs within a pre-set period of time, the lights are turned OFF. To ensure continuous light when people are present, the timing can be set from 15 seconds (for installer testing) to 30 minutes.

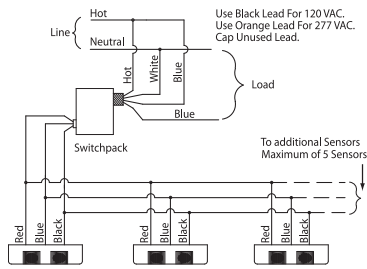
## Application

offices	storage rooms	partitioned areas
conference rooms	large open areas	corridors/hallways

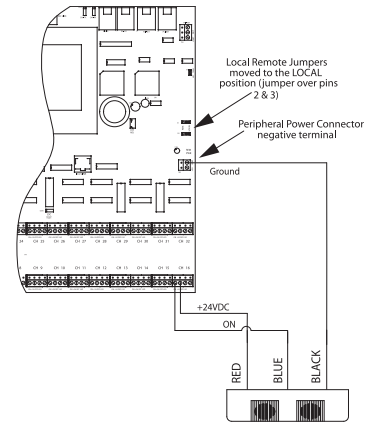
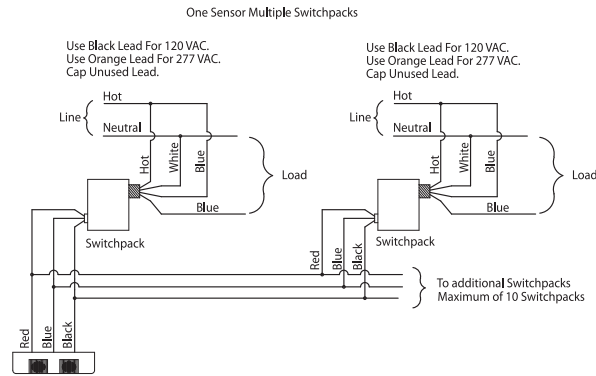
## Ordering

Catalog #	Recommended Room Size	Field of View
OEC-U-0501	Up to 500 sq.ft.	One Way (180°)
OEC-U-1001	500 - 1,000 sq.ft.	One Way (180°)
OEC-U-2000	1,000 - 2,000 sq.ft.	Two Way (360°)
<b>Hallways</b>		
OEC-U-0100-H	Up to 100 linear ft.	Two Way (360°)
OEC-U-0051-H	Up to 50 linear ft.	One Way (180°)

## One Switchpack Multiple Sensors



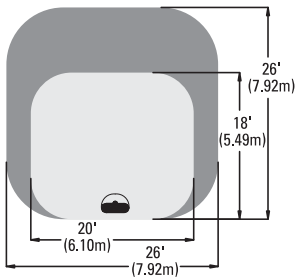
## Multiple Switchpacks One Sensor



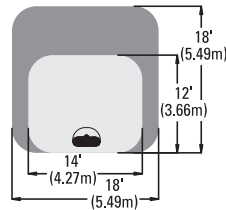
## Coverage

Minor Coverage Major Coverage

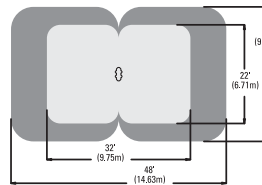
### OEC-U-0501 No Partitions



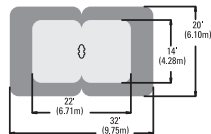
### OEC-U-0501 Partition Heights of 49" to 71"



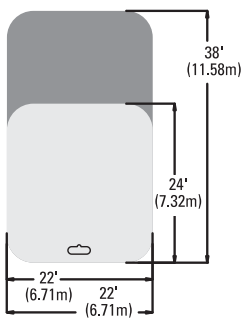
### OEC-U-2000 No Partitions



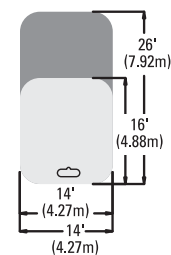
### OEC-U-2000 Partition Heights of 49" to 71"



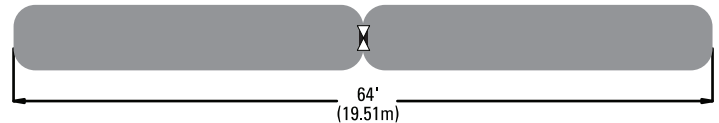
### OEC-U-1001 No Partitions



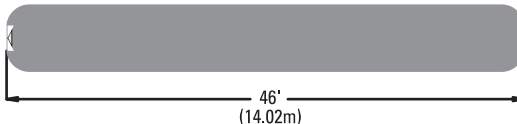
### Partition Heights of 49" to 71"



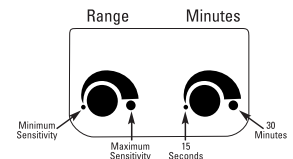
### OEC-U-0100-H



### OEC-U-0051-H



All coverage patterns verified using NEMA WD-7 testing guidelines. Dimensions are in feet (meters). Products tested at 10' (3.048m) height.



## Mounting

### Maximum Mounting Height- 12ft.

**SENSOR:** Pass wires through the threaded mounting post and interlock to the backplate. The Sensor mounts to normal ceiling tile through a single 3/4" hole. When mounted, the Sensor's slotted grills must point along the path where motion is to be detected. An Adapter Plate (ACMP) is available to allow mounting to a standard fixture ring and junction box.

The threaded mounting post may be cut down if it is too long to fit into the junction box.

**CAUTION:** Finger-tighten the nut to avoid stripping the mounting post.

**SWITCHPACK:** Designed to be mounted externally to any junction box. When mounted, the line connections are inside the box and the Class 2 wiring exits via the rear of the switchpack housing. In areas where Class 2 wiring is not permitted, the switchpack can be mounted internally to any standard electrical box.

