OAC-P – MicroSet PIR Line Voltage Ceiling Sensor

Overview
The MicroSet Passive Infrared Line Voltage Occupancy Sensing Ceiling Sensor is a motion sensing lighting control that is used for energy savings and convenience. The sensor is available in both single and dual load control.

Features
- MicroSet self-adjusting time delay and sensitivity
- Built-in light level sensor
- Units available for control of single or two separate loads
- Products tested to NEMA WD 7-2011 Occupancy Motion Sensors Standard
## Specifications

**Technology**
Passive Infrared (PIR)

**Power Requirements**
- **120 VAC**
  - Incandescent/Tungsten - 0 to 800W, 50/60 Hz
  - Motor Load: ¼ HP @ 125 VAC

- **230 VAC**
  - Fluorescent/Ballast - 0 to 1200W, 50/60 Hz

- **277 VAC**
  - Fluorescent/Ballast - 0 to 2700W, 50/60 Hz

- **347 VAC**
  - Fluorescent/Ballast - 0 to 1500W, 50/60 Hz

**Time Delays**
Self-adjustable, 15 seconds/test (10 minutes Auto), or Selectable 5, 15, 30 minutes

**Coverage**
500 & 1,500 sq. ft.

**Light Level Sensing**
0 to 300 foot-candles

**Operating Environment**
- Temperature: 32°F - 104°F (0°C - 40°C)
- Relative humidity: 20% to 90%, non-condensing
- For indoor use only

**Housing**
Durable, injection molded housing. Polycarbonate resin complies with UL 94V-0

**Size**
1.42”H x 4.5”W (36.068mm x 114.3mm)

**Mounting**
Mounts directly to ceiling tile, to a 4” square box and round mud ring or to 4” octagon box

**LED Indicators**
Red LED for PIR detection

**Standards**
- FCC Compliant
- cULus Listed
- RoHS Compliant

## Description/Operation

The sensor is designed to detect motion from a heat-emitting source (such as a person entering a room) within its field-of-view and automatically switch lights ON. These sensors have multi-segmented lenses. For units to sense motion, the person must cross between two segments. The distance between segments increases the farther you are from the sensor, so motion has to be larger the farther you are from the unit. PIR sensors are considered line-of-sight sensors, meaning that the sensor must be able to have a direct line-of-sight to the person making the motion. The sensor includes self-adaptive technology that continuously self-adjusts sensitivity and time delay in real-time, maximizing the potential energy savings that are available in the particular application. The MicroSet Passive Infrared Line Voltage Ceiling Sensor has an ambient light level sensor. When enabled, the daylighting feature prevents lights from turning ON when the room is adequately illuminated by natural light.

## Applications

- Conference Rooms
- Open Office Areas
- Small Private Offices
- Common Areas
- Break Rooms
- Restrooms (Non-Partitioned)
- Utility Closets
Wiring Diagrams

Single Relay

AUTOMATIC MODE OPERATION:
1. WHEN SENSOR ACTIVATES, LOAD TURNS ON.
2. LOAD TURNS OFF WHEN SENSOR TIMES OUT.

LOAD
NEUTRAL
120-347 VAC
WHITE
BLUE
BLACK

Dual Relay

AUTOMATIC MODE OPERATION:
1. WHEN SENSOR ACTIVATES, BOTH LOADS TURNS ON.
2. LOADS TURN OFF WHEN SENSOR TIMES OUT.

LOAD A
NEUTRAL
120-347 VAC
WHITE
BLUE
BLACK
RED

LOAD B
RED
RED LEADS ARE NON-POLARITY SENSITIVE.

Coverage

OAC-P-1500-MV/DMV
1,500 sq. ft.

OAC-P-0500-MV/DMV
500 sq. ft.

Maximum coverage area may vary somewhat according to room shape and the presence of obstacles.

Recommended Mounting Height: 8 to 12 feet
**Controls**

**DIP Switch Legend**

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<thead>
<tr>
<th>DIP Switch</th>
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*Auto adjusts to 10 min. user mode

Default = ▲

![Daylight Sensor Adjustment](image-url)

**Ordering**

<table>
<thead>
<tr>
<th>Catalog #</th>
<th>Maximum Room Size</th>
<th>Field of View</th>
<th>Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>OAC-P-0500-MV</td>
<td>500 sq. ft.</td>
<td>360°</td>
<td>w/ Daylight Sensor</td>
</tr>
<tr>
<td>OAC-P-1500-MV</td>
<td>1,500 sq. ft.</td>
<td>360°</td>
<td>w/ Daylight Sensor</td>
</tr>
<tr>
<td>OAC-P-1500-DMV</td>
<td>1,500 sq. ft.</td>
<td>360°</td>
<td>Dual Relay w/ Daylight Sensor</td>
</tr>
</tbody>
</table>