

# **High Frequency Microwave Occupancy Sensor**





#### **Description**

The Leviton High Frequency Microwave Occupancy Sensor (OSM3D) is an innovative sensor that detects motion through low density materials using high frequency electromagnetic waves. The OSM3D offers superior detection and can be installed behind fixture lenses, inside a lighting fixture or behind objects made of plastic or glass. The high frequency waves offer less interference and false tripping than traditional sensing technology for reliable occupancy applications. The integrated daylighting sensor detects natural light and turns lights ON or keeps lights OFF in response to available natural light or the daylight set point when motion is detected.

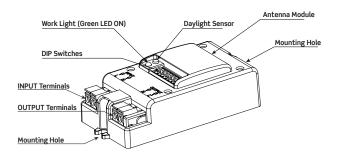
## **Applications**

The OSM3D offers superior detection and is designed for installation in a variety of settings:

- Garages
- Warehouses
- Metal walls or fixtures including wall sconces and wall packs
- Can be installed inside of an IP65/IP66 enclosure or fixture for washdown applications\*

\*When mounted inside of an enclosure, sensing range will be reduced; cannot be mounted inside metal enclosure.

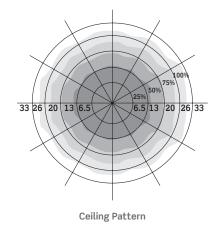
#### **Sensor Features**

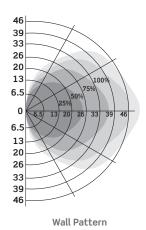


#### **Features**

- Designed to detect movement behind low-density fixture materials or behind objects made of plastic or glass
- Automatic switching based on motion and ambient light level
- Zero crossing detection circuitry—protects the sensor against inrush current when switching
- LED lighting compatible
- Detection area, time delay and daylight threshold can be set via sensor DIP switch
- Hold times range from 10 seconds to 30 minutes
- UL/cUL listed
- 150° wall detection, 360° ceiling detection
- 5.8 GHz high frequency microwave
- 4-pole press-in terminal for easy wiring
- Surface or base mounting—can be hidden from view
- Can be used to comply with IECC, ASHRAE 90.1, and 2019 Title 24, Part 6 occupancy sensing requirements

## Field-of-View



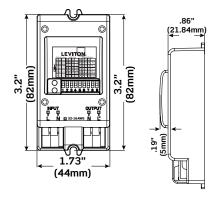


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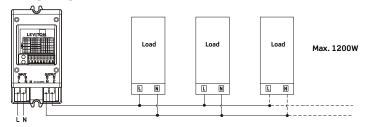
## Product Data OSM3D-V1W



#### **Dimensions**



## **Wiring Diagram**



## **Specifications**

| Specifications           |  |
|--------------------------|--|
| Electrical               |  |
| Voltage                  | 120-277V 50/60 Hz  |
| Load Rating              | Tungsten: 800 W @ 120VAC, Electronic Driver/Ballast: 1000VA @ 120VAC, Driver: 1200VA @ 277VAC          |
| Frequency                | 50/60 Hz   |
| Microwave High Frequency | 5.8 GHz  |
| Transmitting Power       | <0.5mW   |
| Power Consumption        | ≤0.5W (standby), <1W (operation)   |
| Detection Zone           | 52'(16m)D x 32'(10m)H Max  |
| Detection Sensitivity    | 25% / 50% / 75% / 100%   |
| Daylight Sensor          | 0.46FC (5lux)/1.39FC (15lux)/2.78FC (30lux)/4.64FC(50lux)/disable                                      |
| Mounting Height          | Up to 32ft (10m)   |
| Detection Angle          | 150° (wall), 360° (ceiling)  |
| Environment              |  |
| Operating Temperature    | -13°-140°F (-25-60°C)  |
| Humidity                 | 20-90% non-condensing  |
| Other                    |  |
| Energy Codes             | Can be used to comply with IECC, ASHRAE 90.1, and 2019 Title 24, Part 6 occupancy sensing requirements |
| Listing                  | UL/cUL   |
| Rating                   | IP20   |
| Warranty                 | 5-Year   |

# **Ordering Information**

| High Frequency Microwave Sensor |  |
|---------------------------------|--|
| Cat. No.                        | Description                                      |
| OSM3D-V1W                       | High Frequency Microwave Sensor, 120-277V, White |

#### Leviton Manufacturing Co., Inc. Lighting & Controls

20497 SW Teton Avenue, Tualatin, OR 97062 **tel** 800-736-6682 **tech line** (6:00AM-4:00PM PT Mon-Fri) 800-959-6004

#### Leviton Manufacturing Co., Inc. Global Headquarters

201 North Service Road, Melville, NY 11747-3138 tel 800-323-8920 tech line (8:30AM-7:00PM ET Mon-Fri) 800-824-3005