

0-10V Dimming High Frequency Occupancy Sensor



Description

The Leviton 0-10V Dimming High Frequency Occupancy Sensor (OSM3D-DDW) is an innovative device that detects motion through low density materials. The OSM3D-DDW uses a high frequency sensor to detect motion and provide automatic switching or dimming when used in combination with 0-10V LED drivers or ballasts. The built-in daylight sensor keeps lights turned off when sufficient ambient light is present. Add a Leviton 0-10V external photocell (ODCOP-D0W) to achieve full daylight harvesting and additional energy savings.

The OSM3D-DDW 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. Microwaves are extremely sensitive, omnidirectional and penetrate through most building construction material except metal which can be used to control the direction of the microwave detection.

Applications

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

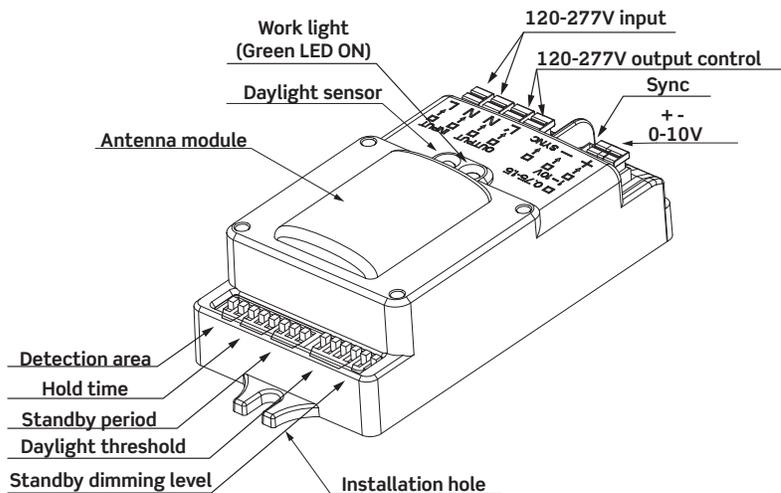
- Walls or fixtures including wall sconces and wall packs
- Cafeterias
- Open office cubicles
- Warehouses
- Conference rooms
- Any space used by a multi-tech sensor
- Can be installed inside of an IP65/IP66 enclosure or fixture for washdown applications*

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

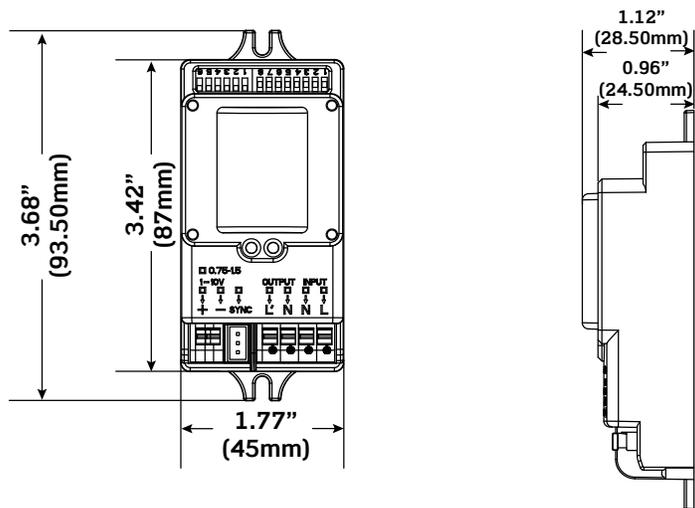
Features

- Automatic switching or dimming
- Ambient light override
- Designed to detect movement behind low density fixture materials or behind objects made of plastic or glass
- The sensor's compact size allows it to easily fit in most luminaires
- LED lighting compatible
- Detection area, time delay and daylight threshold can be set via sensor DIP switch
- Wide detection area—range up to 52 feet
- Mounting height up to 40 feet
- Hold times range from 5 seconds to infinity
- 150° wall detection, 360° ceiling detection
- 5.8 GHz high frequency microwave
- Press-in terminal for easy wiring
- Surface or base mounting—can be hidden from view
- Can be used to comply with ASHRAE 90.1, IECC and 2019 Title 24, Part 6 occupancy sensing and dimming requirements

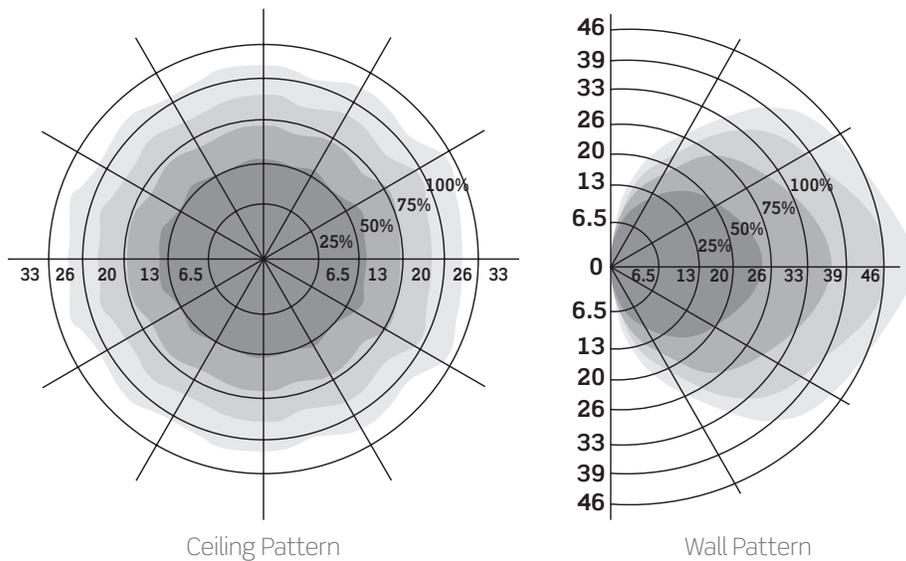
Sensor Features



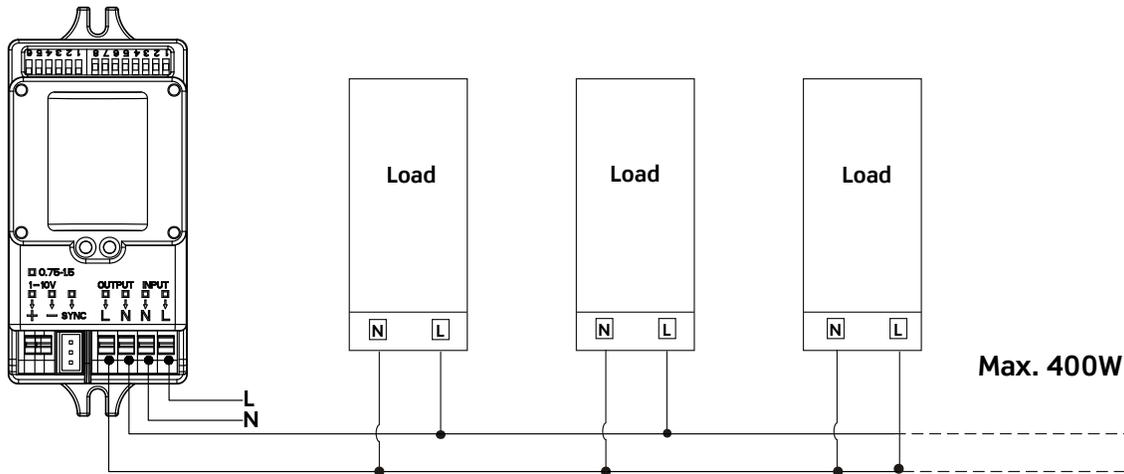
Dimensions



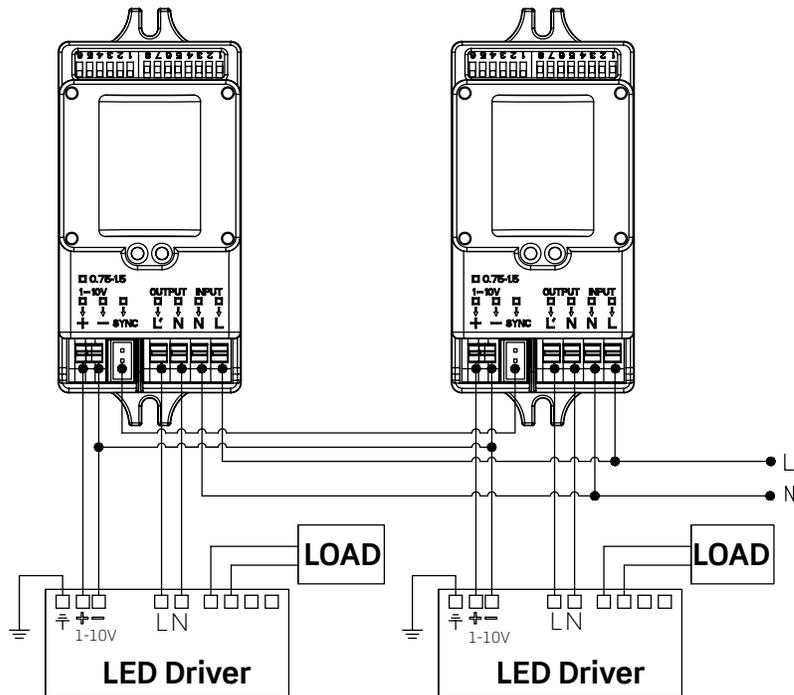
Field of View (In Feet)



Wiring Diagram - Auto-ON/OFF Wiring Diagram (Switching)



Wiring Diagram For Multiple Sensors (Dimming)



Specifications

Electrical	
Voltage	120-277V 50/60 Hz
Rated Capacitive Load	120V @ 400W; 220-240V @ 800W; 277V@ 1000W
Microwave High Frequency	5.8GHz ± 75MHz, ISM wave band
Transmitting Power	<0.5mW
Power Consumption	≤0.5W (standby), <1W (operation)
Detection Zone	52'(16m)D x 49'(15m)H Max
Detection Sensitivity	10% / 50% / 75% / 100%
Hold Time	5s / 5min / 10min / 20/min/ 30min / + ∞
Daylight Sensor	.18FC (2lux)/0.46FC (5lux)/.9250FC (10lux)/2.32FC (25lux)/4.64FC(50lux)/9.29FC (100lux)/disable
Standby Period	0s /5s / 5min / 10min / 30min / 1h / + ∞
Standby Dimming Level	10% / 20% / 30% / 50%
Mounting Height	40' (12m) Max
Motion Detection	0.5 - 3m/s
Detection Angle	150° (wall), 360° (ceiling)
Environment	
Operating Temperature	-13°F to 140°F (-25°C to 60°C)
Humidity	20-90% non-condensing
Other	
Energy Codes	Can be used to comply with ASHRAE 90.1, IECC and 2019 Title 24, Part 6 occupancy sensing and dimming requirements
Rating	IP20
Warranty	5-Year

Ordering Information

0-10V Dimming Microwave Sensor

Cat. No.	Description
OSM3D-DDW	0-10V Dimming High Frequency Sensor, 120-277 50/60Hz, 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

Visit our Website at: www.leviton.com/sensors

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