

Decora® Wall Switch Multi-Technology Vacancy Sensor



OSSMT-TM/GT

BASIC OPERATION

Vacancy sensors have two tasks: keeping the lights ON while the space is occupied and turning the lights OFF when unoccupied.

The Ultrasonic (U/S) sensors provide maximum sensitivity and range in difficult spaces with irregular shaped rooms and partitions that can block the PIR field-of-view. A pair of U/S sensors will detect Doppler shifts caused by motion in a space preventing false OFF. These sensors are more sensitive to small movements since they do not rely on zones.

APPLICATIONS

The Leviton Decora Multi-Technology Wall Switch Vacancy Sensor (OSSMT) is used to provide automatic lighting control for energy savings and convenience in a variety of commercial applications:

- Retrofit
- Private and executive offices
- Conference rooms
- Storage areas
- Restrooms
- Classrooms
- Lounges
- Training areas
- Multi-location switching (similar to 3-way)

SELF-ADAPTIVE TECHNOLOGY

Designed for “install and forget” use, the OSSMT automatically analyzes room conditions and adapts to errors or changing environment.

OPTIMAL LED DESIGN

Exclusive LED High Inrush Stability (H.I.S.) circuitry designed to handle the high inrush electronic ballast loads of today’s LED lighting and offer unmatched durability and service. Our true Zero-Cross Relay switches are at the zero crossing point of the AC power curve, ensuring maximum contactor life and compatibility with LED ballasts. Leviton Occupancy and Vacancy Sensors are the premiere choice for LED compatibility.

Leviton Manufacturing Co., Inc. Global Headquarters

201 North Service Road, Melville, NY 11747-3138 **tech line** 800-824-3005 **fax** 800-832-9538

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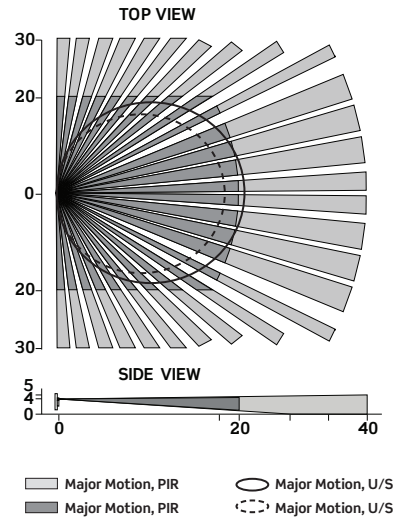
PRODUCT DATA

FEATURES

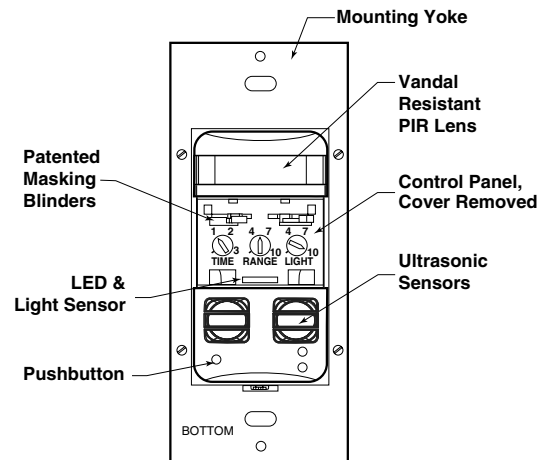
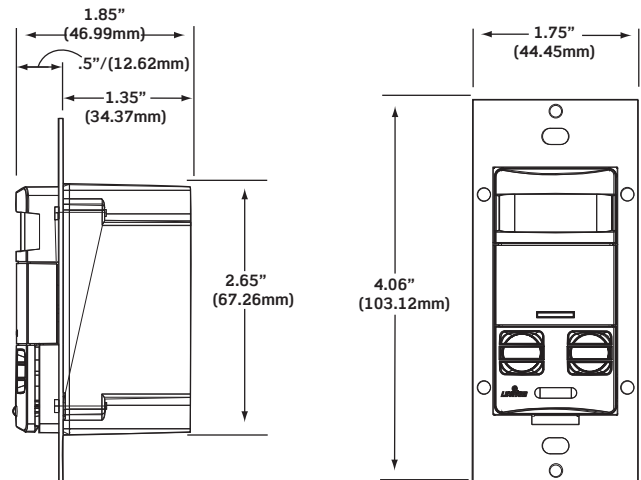
- Fast, simple installation: fits in a standard wall box and replaces a single-pole wall-switch; neutral and no neutral options available. Sensor can be ganged together with other units in a multiple-switch wall plate
- Low-profile design eliminates obtrusive “scanning-device” look. Elegant Decora wallplates complement any interior for sleek aesthetics; uses Decora wallplates and coordinates with Leviton’s popular line of Decora wiring devices.
- Convenient push button provides manual-ON/OFF light switching at any time
- Segmented Fresnel lens provides optimum sensitivity and performance. Designed with an extensive “minor motion” area where even slight body movements will be detected.
- Vandal-resistant PIR lens
- Blinders: adjustable horizontal field-of-view (PIR may be adjusted between 180° and 60° of arc by using integral blinders located on either side of the lens). No masking required.
- Manual-ON/auto-OFF vacancy sensor for installations where manual-ON switching is required but auto-OFF switching is still desired
- LED indicator light flashes when sensor detects motion to verify detection is active. Green flashes for ultrasonic, red flashes for PIR.
- Time: the delayed OFF time is preset at 30 minutes in the auto adapting mode. A choice of four delayed-OFF time settings are available: 30-seconds (for walking test purposes only), 10, 20 and 30 minutes for fixed time and auto adapting .
- Self-adaptive technology: callbacks for adjustment are eliminated. Time delay and sensitivity settings are continually adjusted to occupant patterns of use in auto adapt mode.
- Vacancy confirmation: when the time out expires and the relays turn OFF, a 30 second vacancy confirmation exists to turn the relays back on
- False detection circuitry
- Small motion sensitivity (U/S): ultrasonic technology provides excellent minor motion sensitivity
- Ability to disable U/S (OSSMT-TM). For added flexibility, OSSMT-GT has the ability to disable PIR or U/S
- Exclusive Leviton circuitry. Specifically designed to handle today’s high inrush electronic ballast loads and offer unmatched durability and service
- True zero-cross relay switches at the zero crossing point of the AC power curve to ensure maximum contactor life and compatibility with electronic ballasts
- Non-volatile memory: after power loss, product returns to last state

FIELD-OF-VIEW

The OSSMT provides a 180° field-of-view with a maximum coverage area of approximately 2,400 square feet. The maximum sensing distance in front of the sensor is 40 feet, and side to side is 30 feet. The “minor motion” zone detects relatively small body movements and allows the lights to stay ON even though a person may not be moving or walking around the room. The remainder of the field-of-view, the “major motion” zone, exhibits a lesser degree of sensitivity and requires larger movements.



DIMENSIONAL DIAGRAMS



INSTALLATION

The OSSMT is preset to deliver optimum performance in a wide variety of applications without requiring any adjustments during installation. Exclusive self-adjusting operating features will automatically compensate for real-time vacancy patterns to provide maximum convenience and energy savings. The unit may replace a single-pole wall switch mounted in a standard wall box. The OSSMT-TM must have a neutral and be properly grounded in order to operate. The OSSMT-GT does not require a neutral for installation. The unit's integral blinders may be used to restrict the field of view to prevent unwanted detection of traffic. It should be positioned at least 6 feet away from HVAC registers. Note that whenever the unit is powered up, it will take approximately 1 minute to begin normal operation.

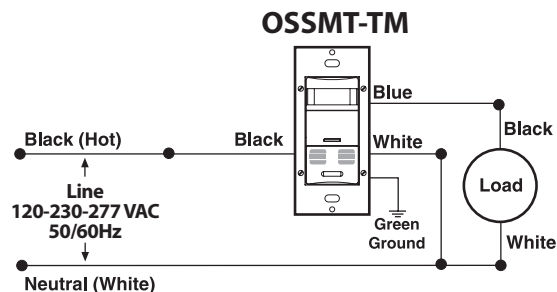
ELECTRICAL			
Line Voltage	120-230-277 VAC		
Power Consumption		U/S & PIR	PIR only
OSSMT-TM	120V 277V	480mW	190mW 270mW
OSSMT-GT	120V 277V	110mW 340mW	70mW 310mW
Operational Frequency	350/60Hz		
Ultrasonic Operating Frequency	40kHz		
Wire Designation	Line-Black Neutral-White Load-Blue Ground-Green		
Load Rating	Incandescent/Tungsten: 800W @ 120V Fluorescent: 1200VA @ 120V 2700VA @ 277V, Motor: 1/4 HP @ 120V		
ENVIRONMENTAL			
Operating Temperature Range	32-104°F (0-40°C)		
Storage Temperature Range	14-185°F (-10-185°C)		
Relative Humidity	20-90% non-condensing		
OTHER			
Listings	OSSMT-TM = UL/cUL listed OSSMT-GT=ETL/cETL listed, NYCL48, FCC compliant		
Energy Codes	Can be used to comply with IECC, ASHRAE 90.1 and 2019 Title 24, Part 6 vacancy sensing requirements.		
Warranty	Limited Five-Year Warranty		

ORDERING INFORMATION

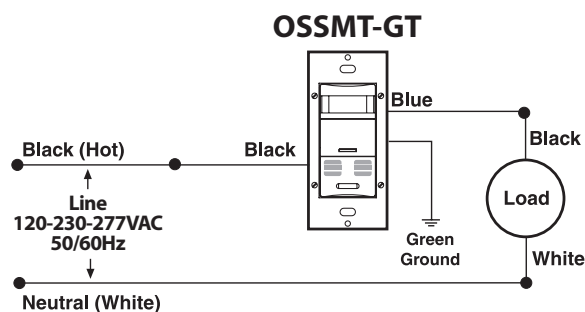
CAT. NO. *	DESCRIPTION
OSSMT-TMW	Multi-Technology Wall Switch Vacancy Sensor, White
OSSMT-GTW	Multi-Technology Wall Switch Vacancy Sensor, No Neutral, White

* Made in USA with globally sourced components and NAFTA compliant models available.

WIRING DIAGRAM

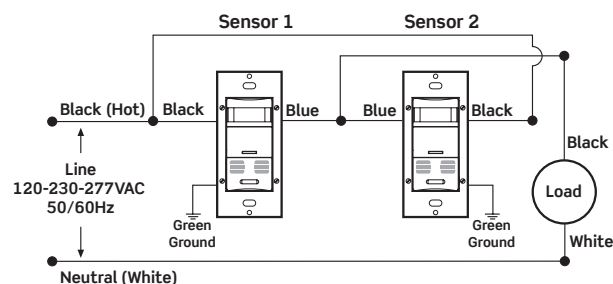


OSSMT-TM Wall Switch Vacancy Sensor Wiring Diagram, Single Location Control



Note: Ground wire must be connected.

OSSMT-GT Wall Switch Vacancy Sensor Wiring Diagram, Single Location Control



Note: Ground wire must be connected.

OSSMT-GT Wall Switch Vacancy Sensor Wiring Diagram, Two Location Control

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

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