LEVITON

OSFHU Passive Infrared Fixture Mount High-Bay Occupancy Sensor

OSFHU

OSFHU

BASIC OPERATION

The OSFHU Passive Infrared (PIR) Fixture Mount High-Bay Occupancy Sensor is specifically designed for high mounted areas such as warehouses, manufacturing and other high ceiling applications. The OSFHU installs directly to an industrial fluorescent luminaire or an electrical junction box. It is a self-contained sensor and relay that turns individual light fixtures ON or OFF based on occupancy in the detection zone. It comes with two interchangeable lenses for use in either a 360° high-bay or 360° low-bay general area or a mask for aisle way. The OSFHU provides reliable coverage up to 40 ft. mounting heights. The OSFHU is also available in a model for cold storage applications with temperatures as low as -40° F.

To improve the field-of-view for deep body fixtures, a separate offset adapter accessory (OSFLO or OSFOA) can be used to position the sensor below the fixture body. The adapter simply snaps into a 1/2" knockout on the end of the industrial fixture to attach the sensor. The OSFHU and OSFLO/OSFOA provides the most labor savings available with quick snap, 21" wire leads, and no power required to configure.

Passive Infrared Technology is used to sense occupancy by comparing the infrared energy from an object in motion and the background space. PIR sensors minimize false ON from background environmental conditions such as air movement to provide reliable detection of line-of-sight motion.
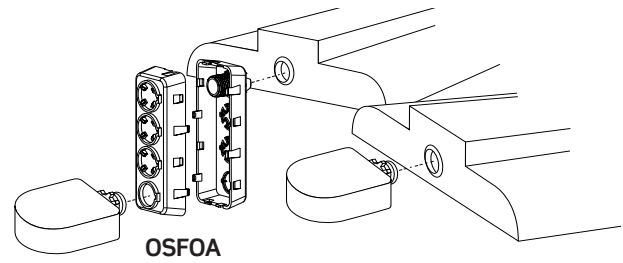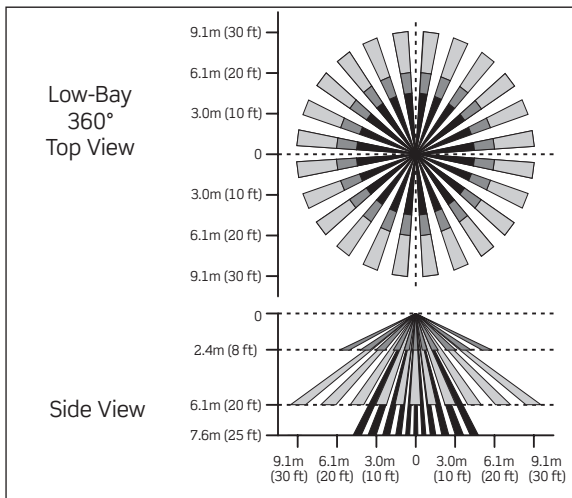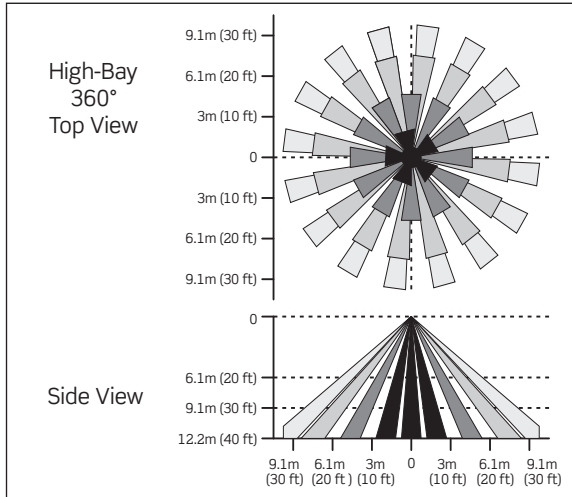
INSTALLATION

The OSFHU mounts directly to an industrial fluorescent fixture or an electrical junction box through a standard 1/2" knockout using the two provided lock-nuts. Wiring is connected inside the fixture body. For deep body fixtures, the OSFLO or OSFOA accessory installs into the fixture 1/2" knockout using the provided lock-nut. The OSFHU sensor is installed in one of three, 1/2" punch-outs positioning the OSFHU at the correct field-of-view position flush or below the fixture reflector assembly. When applicable, wiring is routed through the OSFLO or OSFOA to the fixture body for wiring.
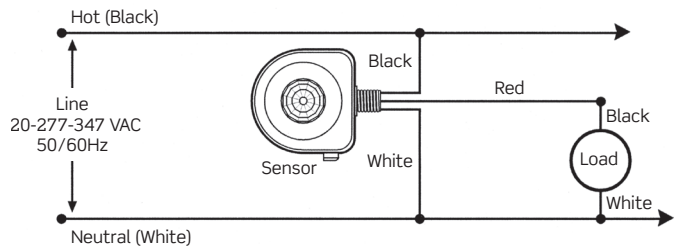
PRODUCT DATA

FEATURES

- **Quicksnap:** built into the 1/2" nipple, this locking mechanism allows for the fastest and easiest mounting not requiring a threaded lock-nut

- **Reduce time and materials:** easily reach the ballast at either end of the fixture without requiring more wire or connectors with the included 21" wire leads

- **Fast, easy time delay setting:** can be set at any time without requiring power to the sensor; time delay is variable from 30s-20m

- **Instantly verify fixture operation and wiring connections:** "instant ON" closing relay fires lamps in under 5 seconds

- **High Inrush Stability (H.I.S. Technology):**
  - Zero crossing circuitry optimizes relay operation for reliable, long-life operation
  - Robust mechanical latching relay is durable for all load types

- **Auto temperature calibration:** automatically adjusts the PIR sensitivity as ambient temperature rises to increase detection of heat movement through the field-of-view

- **Return to last state:** for safety and energy savings, the OSFHU contains a latching relay so that in the event power is lost to the device, the device will return to the last known state of the relay

- **False detection intelligence:** for increased energy savings and to mitigate nuisance tripping, the super bright LED indicates advanced detection has been activated and the lights will only turn ON when true occupancy has been determined
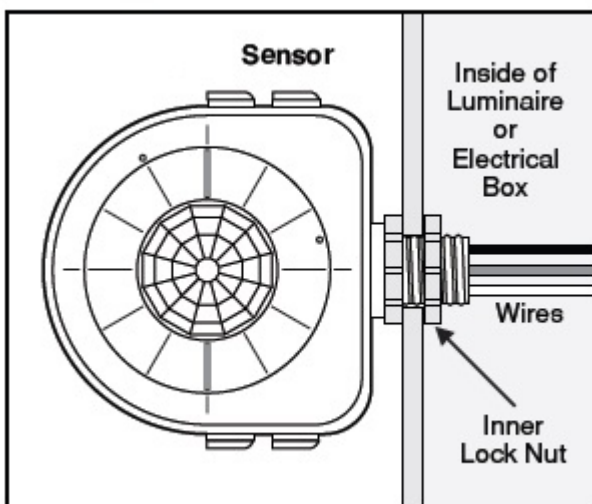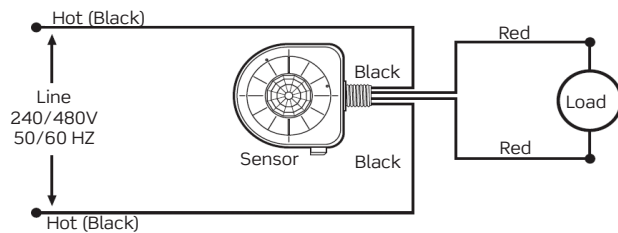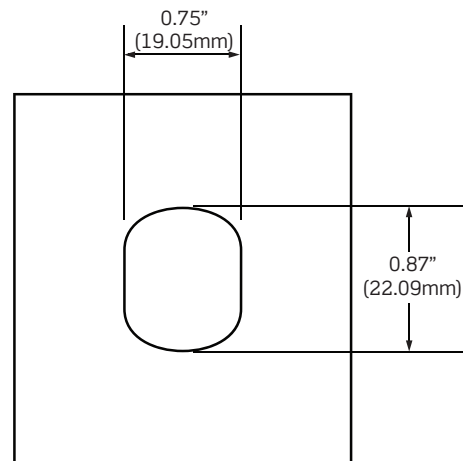
FIELD-OF-VIEW

High-Bay 360° Top View

Side View

Low-Bay 360° Top View

Side View

OSFOA

OSFHU Wiring Diagram

Hot (Black)

Line 20-277-347 VAC 50/60Hz

Black

Red

Black

Load

White

Sensor

White

Neutral (White)

OSFHU (480V) Wiring Diagram

Hot (Black)

Line 240/480V 50/60 HZ

Black

Red

Load

Sensor

Black

Red

Hot (Black)

Sensor

Inside of Luminaire or Electrical Box

Wires

Inner Lock Nut

Sheet Metal* Punch Dimensions for Optional Snap-In Installation

0.75" (19.05mm)

0.87" (22.09mm)

*18-22 Gauge Steel

Leviton Mfg. Co., Inc. Lighting & Energy Solutions

OSFHU

SPECIFICATIONS

ELECTRICAL	
Input Voltage	120-230-277-347VAC; 240/480VAC (-I4W models)
Torque	**TIGHTEN** to 4 ft-lbs of torque **NEVER USE MORE THAN** 5 ft-lbs of torque
Operational Frequencies	50/60 Hz
Load Rating	800VA @ 120VAC Ballast 1200VA @ 277VAC Ballast 1500VA @ 347VAC Ballast 2000VA @ 480VAC Ballast Motor: 1/4 HP Load @ 120V
Standby Power Consumption	120V – 130mW – .13W 277V – 450mW – .45W 347V – 460mW – .46W
Time Delay	30 seconds-20 minutes (factory set to 30 sec – no power required to set)
Wire Designation	-ITW/-CTW models: Line-Black, Load-Red, Neutral-White -I4W/-C4W models: Line-Black, Load-Red, Load-Red
ENVIRONMENTAL	
Operating Temperature Range	14-160° F (-10-71° C)
Cold Storage Operating Temperature Range	-40-160° F (-40-71° C)
Storage Temperature Range	-14-160° F (-25-71° C)
Relative Humidity	20% to 90% non-condensing
PHYSICAL	
Dimensions	OSFHU: 3.50" H x 3.50" W x 1.25" D OSFOA: 5.50" H x 2.00" W x 2.00" D OSFLO: 4.325" H x 2.00" W x 2.00" D
Construction	High-impact, injection molded plastic housing
Color	White
OTHER	
Agency Listings	UL and CUL Listed (OSFHU models), Title 20/24 Compliant
Warranty	Limited 5-Year

ORDERING INFORMATION

CAT. NO.	DESCRIPTION
OSFHU-ITW	PIR Fixture Mount High Bay Sensor with 2 Interchangeable Lenses and Aisle Mask, White
OSFHU-CTW	PIR Fixture Mount High Bay Sensor with 2 Interchangeable Lenses and Aisle Mask for Cold Storage, White
OSFHU-I4W	PIR Fixture Mount High Bay Sensor with 2 Interchangeable Lenses and Aisle Mask, 480V, No Neutral, White
OSFHU-C4W	PIR Fixture Mount High Bay Sensor with 2 Interchangeable Lenses and Aisle Mask for Cold Storage, 480V, No Neutral, White
OSFOA-00W	Offset Adapter Accessory for OSFHU, 3 Position, White
OSFLO -00W	Offset Adapter Accessory for OSFHU, 1 Position, White
OSFCG -00W	Protective Cage for Fixture Mounted Sensors

NAFTA models available.

Leviton Manufacturing Co., Inc. Lighting & Energy Solutions
201 N. Service Rd. Melville, NY 11747-3138 Tech Line: 1-800-824-3005 Fax: 1-800-832-9538 www.leviton.com/les

Leviton Manufacturing of Canada, Ltd.
165 Hymus Boulevard, Pointe Claire, Quebec H9R 1E9 • Telephone: 1-800-469-7890 • FAX: 1-800-563-1853

Leviton S. de R.L. de C.V.
Lago Tana 43, Mexico DF, Mexico CP 11290 • Tel. (+52) 55-5082-1040 • FAX: (+52) 5386-1797 • www.leviton.com.mx

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