

# OSFHU Fixture-Mounted Infrared High-Bay Occupancy Sensor

The OSFHU self-contained sensor mounts directly to a luminaire or electrical box to provide local occupancy control for either general area or aisle way pattern detection using PIR technology with a microprocessor based digital architecture that minimizes false triggering. The OSFHU provides a trouble-free “install and forget” solution for high-bay lighting control.

- Passive Infrared Technology (PIR)
- Interchangeable lenses for 360° high-bay, 360° low-bay, and aisle way patterns
- Use in warehouses, manufacturing, and other high ceilings
- Cold storage application model available
- Simple, fast installation
- Mounts directly to industrial style fluorescent luminaires
- 8 ft.-40 ft. mounting heights
- 120/277/347 VAC
- 480 VAC

## DESCRIPTION

The OSFHU 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 three interchangeable lenses for use in either a 360° high-bay or 360° low-bay general area or an 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 (OSFOA-00W) 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.

## OPERATION

Passive Infrared Technology (PIR) 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 installs directly to an industrial fluorescent fixture or an electrical junction box through a standard 1/2” knockout using provided lock-nut. Wiring is connected inside the fixture body. For deep body fixtures, the accessory OSFOA is a two piece plastic offset that installs into the fixture 1/2” knockout using the provided lock-nut. Then 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. Wiring is routed through the OSFOA to the fixture body for wiring.

## Leviton Mfg. Co., Inc. Lighting Management Systems

20497 SW Teton Avenue, Portland, OR 97062 1-800-736-6682 Tech Line: 1-800-959-6004 Fax: 503-404-5594 www.leviton.com/lms  
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OSFHU

## FEATURES

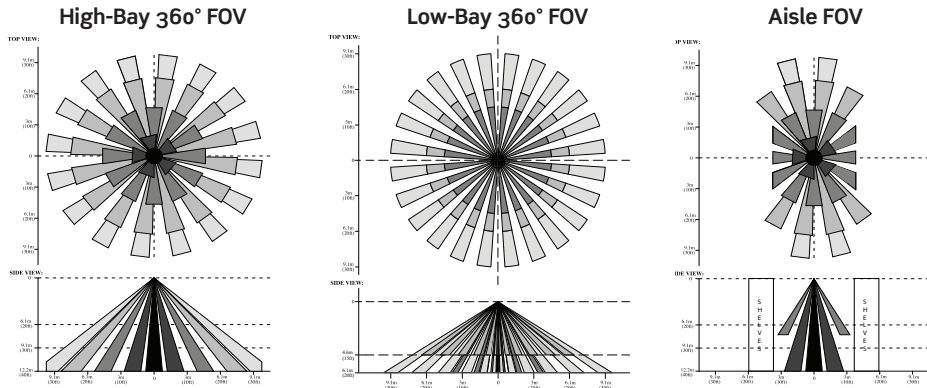
**Fast, Simple Installation:** The OSFHU sensor is a self-contained, line voltage sensor that easily installs on individual fixtures using standard 1/2” knockouts. Simply make the electrical connections inside the ballast compartment, install the appropriate, adjustable lens assembly included and the sensor is ready. For deep body fixtures, the OSFOA positions the OSFHU sensor flush or below the bottom of the reflector giving the sensor full field-of-view.

**Zero Crossing Circuitry:** Relay uses a zero crossing circuitry to provide reliable, long-life operation.

**Range and Coverage:** The 360° high-bay PIR lens provides a 2:1 spacing to mounting height coverage under 25 ft. mounting and a 1.5:1 for heights up to 40 ft. mounting. The 360° low-bay lens provides 2:1 spacing to mounting height coverage for 8 ft. to 20 ft. mounting. The aisle lens is designed to provide detection of 60 ft. long by 20 ft. wide for heights up to 40 ft. mounting.

**LED:** Green LED indicates occupancy detection.





**SPECIFICATIONS**

**Electrical**

Input Voltage: 120/277/347 VAC  
 Input Voltage: 480 VAC  
 Operational Frequencies: 50/60Hz  
 Wire Designation: Line-Black, Load-Red, Neutral-White  
 Load Rating:  
     Fluorescent Ballasts: 800VA @ 120 VAC  
                               1200VA @ 277 VAC  
                               1500VA @ 347 VAC  
                               2000VA @ 480 VAC  
     Motor: 1/4 HP Load @ 120V

**Environmental**

Operating Temperature Range:  
     OSFHU-IXW: 14°F to 160°F  
     OSFHU-CxW: -40°F to +40°F  
 Storage Temperature Range: -14°F to 160°F  
 Relative Humidity: 20% to 90% non-condensing

**Physical**

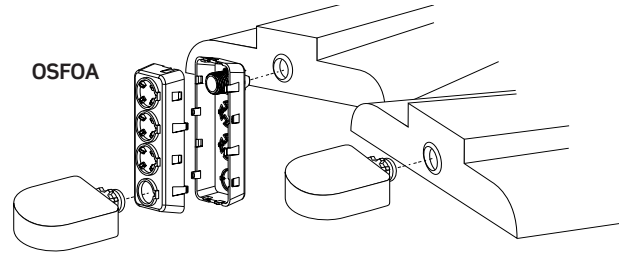
**OSFHU-IXW/OSFHU-CxW**  
 Size: 3.50" H x 3.50" W x 1.25" D  
 Color: White  
 Construction: High-impact, injection molded plastic housing.  
 Color coded wire leads are 42" long  
 Listings: UL and cUL Listed

**OSFOA-00W**

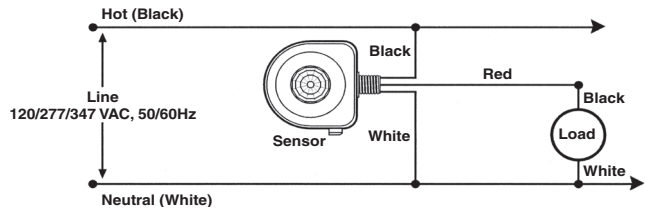
Size: 5.50" H x 2.00" W x 2.00" D  
 Color: White  
 Construction: High-impact, injection molded plastic housing.

**Warranty**

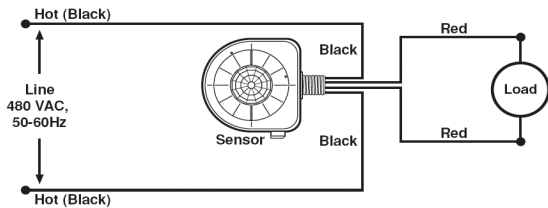
Limited 5-Year Warranty



OSFHU Wiring Diagram



OSFHU (480V) Wiring Diagram



**CONTROLS**

Timer Setting: 30 seconds-20 minutes

**ORDERING INFORMATION**

CAT. NO.	DESCRIPTION
OSFHU-ITW	Fixture-Mounted PIR High-Bay Sensor with 3 Interchangeable Lenses, White
OSFHU-CTW	Fixture-Mounted PIR High-Bay Sensor with 3 Interchangeable Lenses for Cold Storage, White
OSFHU-14W	Fixture-Mounted PIR High-Bay Sensor with 3 Interchangeable Lenses, 480V, No Neutral, White
OSFHU-C4W	Fixture-Mounted PIR High-Bay Sensor with 3 Interchangeable Lenses for Cold Storage, 480V, No Neutral, White
OSFOA-00W	Fixture-Mounted Offset Adapter Accessory for OSFHU, 3 Position, White

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