

# OSFHS Passive Infrared Surface Mount High-Bay Occupancy Sensor



## Basic Operation

The OSFHS Passive Infrared (PIR) Surface Mount High-Bay [Occupancy Sensor](#) is specifically designed and assembled to reduce the amount of labor required during the fixture assembly process and at time of installation. The OSFHS is used in spaces where ceiling heights can vary from 8 to 40 feet, such as warehouses, manufacturing facilities, production, industrial area and all other high ceiling applications. It comes with two interchangeable lenses for use in either a 360° high-bay or 360° low-bay general area.

The OSFHS is designed simply to automatically turn lights ON or OFF and utilizes PIR technology combined with Fresnel lenses to determine when an area is occupied by detecting a heat source moving from one facet in the lens to another. The sensor recognizes this as a motion and provides power to the light fixture. Simultaneously, a timer is started and restarts with each motion, once expired, the lights will turn OFF.

The OSFHS maximizes energy savings incorporating false detection algorithms to eliminate false ONs by nuisance tripping or background environmental conditions.

The OSFHS also optimizes energy savings and safety concerns during power loss scenarios by assuming a return to last known state of operation.

## Installation

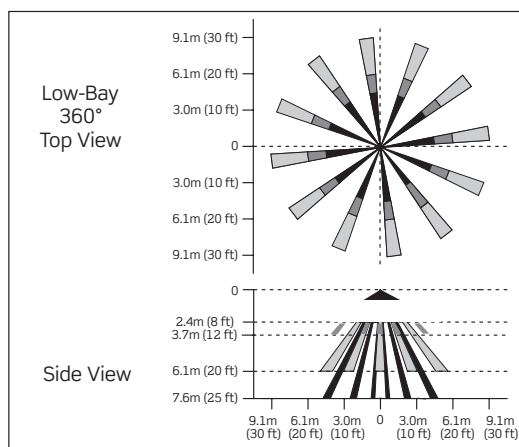
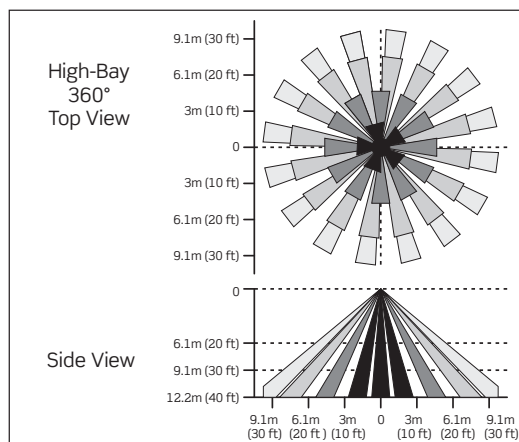
The OSFHS sensors can be mounted to a fixture in a variety of ways making it the most versatile high-bay sensor in the market. These options have all been designed to provide the quickest and easiest installation possible:

- 1/2" Knockout: the OSFHS mounting nipple can be snapped into a standard 1/2" knockout. If additional security is desired, the provided lock-nut may also be used.
- Keyholes slots: by first removing the snap out mounting nipple, the OSFHS may be surface mounted using the integral keyhole slots and standard #8-32 pan head screws
- In fixture: the OSFHS may be snapped into a fixture which has the proper opening to accept the sensor. The illustration on page 3 shows the proper dimensions. The snap feature will accommodate sheet metal from 18-22 gauge.

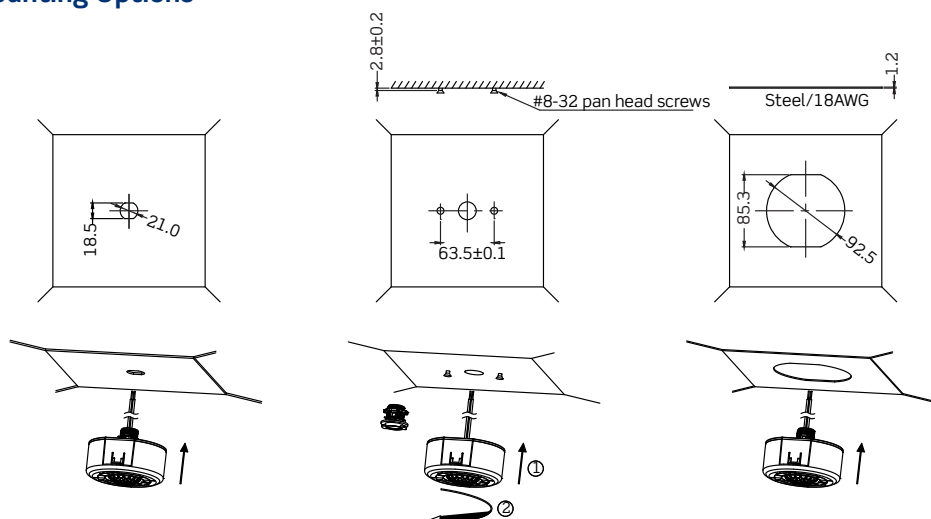
## Features

- **Multiple mounting options:**
  - Quicksnap: built into a 1/2" nipple, this locking mechanism allows for the fastest and easiest installation
  - Keyhole: added flexibility for surface mount applications
  - Recess: mounts directly into a luminaire using slotted side clip design
- **Reduce time and materials:** easily reach the ballast at either end of the fixture without requiring more wire or connectors with the included 42" 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-30m
- **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 OSFHS 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



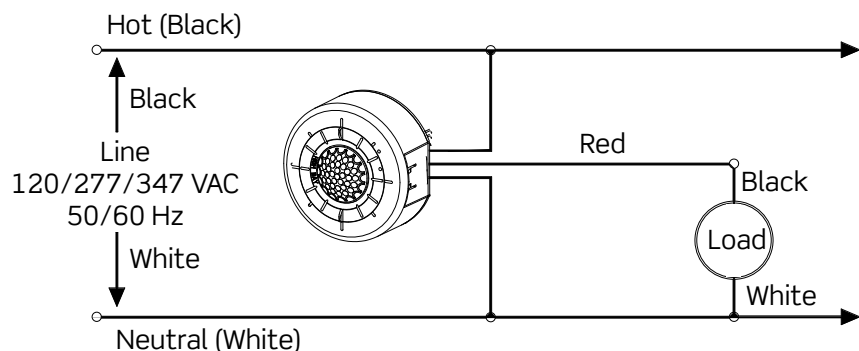
## Mounting Options



## Product Data

### OSFHS-ITW

#### Wiring Diagram



#### Specifications

##### Electrical

Input Voltage	120-230-277-347VAC
Operational Frequencies	50/60 Hz
Load Rating	800VA @ 120VAC Ballast 1200VA @ 277VAC Ballast 1500VA @ 347VAC Ballast Motor: 1/4 HP Load @ 120V
Standby Power Consumption	120V - 100mW - 0.1W 277V - 380mW - 0.38W 347V - 390mW - 0.39W
Time Delay	30 seconds-30 minutes (factory set to 30 mins - no power required to set)
Wire Designation	Line-Black, Load-Red, Neutral-White

##### Environmental

Operating Temperature Range	-40-160° F (-23-71° C)
Relative Humidity	20-90% non-condensing

##### Physical

Dimensions	3.62" (92mm) OD x 1.57" (40mm) H
Construction	High-impact, injection molded plastic housing
Color	White

##### Other

Agency Listings	cUL/US Certified, can be used to comply with ASHRAE 90.1 and 2016 Title 24, Part 6 occupancy sensing requirements
Warranty	Limited 5-Year

#### Ordering Information

##### Header

Cat. No.	Description
OSFHS-ITW	PIR Surface/Recess Mount High-Bay Occupancy Sensor

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