

OSF10 Fixture Mount Integral Luminaire Occupancy Sensor

Energy savings for linear and task lighting fixtures



DEFINITION

OSF10, Integral Occupancy Sensor, is designed to be mounted directly into a luminaire. The OSF10 offers a sensor and relay in one device with an integrated ambient Hold-OFF adjustable photocell for daylighting. The wiring and housing of the sensor is installed adjacent to the ballast and hidden from view behind the reflector cover. Only the PIR detector dome lens and locking ring are visible on the exterior of the fixture.

The OSF10's self-contained occupancy sensing technology offers energy savings in linear and task lighting applications. Long 38" leads make the OSF10 easy to install. With no additional wiring needed, labor, time and material costs are reduced. Once installed, only the PIR detector and ring are visible, making it aesthetically pleasing and reducing the number of devices visible in small spaces.

OPERATION

The OSF10 utilizes passive infrared (PIR) technology with Auto-ON/Auto-OFF operation and an adjustable Time Delay to detect motion within its field of view. A small semiconductor heat detector resides behind a multi-zone optical lens, making the sensor sensitive to the heat emitted by occupants. This Fresnel lens establishes dozens of zones of detection. In order to initially trigger the sensor, the source of heat must move from one zone of detection to another. The OSF10 is most effective in sensing motion across its field-of-view.

Once the device senses motion, the sensor will automatically turn the lights ON. When motion is no longer detected, the sensor will conclude that the space is unoccupied. This will initiate the Delay Timer. If the delay timer expires and no motion is detected, the lights will turn OFF. If motion is detected, the delay timer will stop and the lights will remain ON. The integrated photocell can also be adjusted to detect the ambient light level and prevent the fixture from turning ON.

APPLICATIONS

Integral Fixture Mount Occupancy Sensor is designed specifically for pre-wiring and installing inside of luminaire fixtures.

- Small offices
- Cubicles
- Task lighting
- Cabinet lighting
- Small bathroom lighting

FEATURES AND BENEFITS

- Easy installation with longer 38" leads allows for easy connection to any ballast and eliminates the need to splice additional wiring
- Passive infrared detection technology for accurate sensing
- Integrated photocell prevents lights from turning ON when room is adequately illuminated by natural light for maximum energy savings
- True Zero-Cross relay technology provides maximum contact life and compatibility with electronic ballasts
- Adjustable Time Delay and Light Level dials located on sensor housing for easy access
- Aesthetically pleasing design
- Compact size for tight spaces
- 8' mounting heights for indoor use
- Internal fixture mount reduces number of devices on ceiling

INSTALLATION

The OSF10 is designed to mount directly into a light fixture, with only the PIR lens being visible. The wiring and housing of the sensor is installed adjacent to the ballast, hidden from view behind the reflector's cover.

FEATURES

- **Passive Infrared Technology (PIR):** The OSF10 uses Passive Infrared technology to detect motion.
- **Time Delay:** The time out occurs when motion is no longer detected by the sensor and the device counts a set amount of time before turning off the load. If the device sensor detects motion during this 'time delay' the count resets and the device initiates a new count. The Time Delay can be adjusted to 30 seconds, 10, 20, and 30 minutes respectively.
- **Ambient Light:** The light-level control is used to keep the lights off if the ambient light is sufficient. If occupancy is detected, the OSF10 checks if the current light level is below the Light Level set point. If it is, the OSF10 turns the light on. Otherwise, the lights remain off. When the lights are on, the OSF10 will not look at the ambient light level to determine

if the lights should stay on, because the ambient level will be artificially increased by the lights. The Light Level control is located on the housing of the sensor. With the Light Level set to MIN, the lights will not turn on, even with very little light in the room. With the Light Level set to MAX, the lights will turn on even if the room is extremely bright and will turn off when the Time Delay expires.

- **Zero-Crossing Circuitry:** Relay uses a zero-crossing circuitry to provide reliable, long-life operation.
- **LED:** A red LED blinks when motion is detected.
- **Fresnel Lens:** Detects small motion when mounted within 6' of occupants. When mounted at a height of 8', the coverage will be approximately 10' diameter but sensitivity may be diminished. The field-of-view below shows maximum coverage.

SPECIFICATIONS

ELECTRICAL

Input Power:	120-277VAC
Operational Frequency:	50/60Hz
Wire Designation:	Line-Black, Load-Red, Neutral-White
Load Rating:	
Fluorescent Ballasts:	800VA @ 120VAC 1200VA @ 277VAC
Incandescent:	800W @ 120V
Motor:	1/6 HP Load @ 120V
Time Delay:	30 seconds, 10, 20, and 30 minutes
Photocell Range:	10-120 foot candles

ENVIRONMENTAL

Operating Temperature Range:	0°C to 55°C
Storage Temperature Range:	-10°C to 80°C
Relative Humidity:	20% to 90% non-condensing

PHYSICAL

Size:	7.50" L x 0.90" W x 1.00" H
Color:	White
Lead Length:	38"
Listings:	UL/CUL Listed, CEC Title 24 Compliant

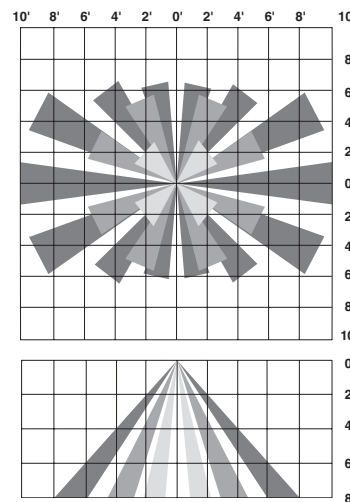
WARRANTY

- Limited 5-Year Warranty

ORDERING INFORMATION

CAT. NO.	DESCRIPTION
OSF10-l0W	Fixture Mount Integral Luminaire Occupancy Sensor, 120-277V

Field-of-View



Wiring Diagram

