Technical Data

Fixture Mount PIR High Bay/Low Bay Dimming Occupancy Sensor

With Integrated Photocell and Two Interchangeable Lenses

Catalog#	Prepared by
Project	Date
Comments	Type

Basic Operation

The OEF-P PIR Fixture Mount High Bay/Low Bay Dimming Occupancy Sensor with Integrated Photocell and Two Interchangeable Lenses provides 1-10V control. The OEF-P is easy to program and set for desired 1-100% continuous dimming levels during daylighting. It is also engineered to meet and exceed all standards requirements of ASHRAE Standard 90.1 2010.

Whether factory or field installed, new installation or retrofit, Leviton fixture mounted sensors provide fast, easy installation and immediate energy savings by automatically activating lighting only during periods of occupancy. The innovative, integrated design includes a built-in photocell for simplified installation and convenient automatic daylighting. Reliable passive infrared (PIR) technology detects occupancy, and the variable time delay (up to 30 minutes) is user accessible without power, tools or disassembly, and allows the ideal setting based on application needs.

Included with the sensor are lenses for high-bay and low-bay applications, allowing one unit to cover a variety of high ceiling applications. The innovative Autocal™ feature performs an automatic daylight level calibration. Once calibrated, the sensor requires no further adjustment and immediately enters daylight harvesting mode, actively dimming the connected fixture load in response to occupancy and available natural light, maximizing energy savings through efficient daylighting.

Features

- 1-100% continuous dimming control
- Specifically designed for LED fixture control
- Suitable for use in standard and cold storage applications
- Visual RGB LED indicators for device states and easy troubleshooting
- Alternating relay software for increased lamp life
- Interchangeable 360° high bay and low bay lenses included
- Adjustable time delay (no power required)
- Pre-stripped color-coded wire leads
- Quicksnap feature for easy installation
  - Zero crossing circuitry
  - Robust mechanical latching relay
- Relay always returns to close after power loss event
- UL listed for electronic ballast loads 120/277V

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Product Data (Features Cont.)

- Auto Calibration: Set to auto-calibration, photocell measures lowest light level of facility with all lights ON for 24 hours to determine the Daylighting Set Point
- Performance Daylighting: Enhanced design algorithms to assure lights will not cycle during cloud cover, or varying light levels
- Fast and Simple Setting: Does not require power to set the time delay saving valuable time during installation (Load = 30s-30m)
  - Fast and Simple Testing: The sensor will "instant on" within 5 seconds. Upon initial power, relay is closed enabling labor savings testing in seconds
- Fast, Simple Installation: Easily installs on individual fixtures using standard 1/2" knockouts and the quicksnap feature which eliminates the time to tighten the lock-nut. The 21" wire leads reduce time and materials for connecting the ballast. Simply make the electrical connections inside the ballast compartment, install the appropriate adjustable lens assembly included, and the sensor is ready. Masking is provided for fine tuning the coverage pattern to specific needs. Ideal for use in food processing, warehouses, manufacturing, cold storage and other high ceilings
- 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 1.5:1 spacing to mounting height coverage for 21-40 ft mounting. The 360° low-bay lens provides 2:1 spacing to mounting height coverage for 13-20 ft mountin
- LED Indicator: Multi-color LED indicates occupancy detection and product function
- False Detection Protection: Energy saving technology is designed into the OEF-P to ensure your lights are on only when needed

Installation

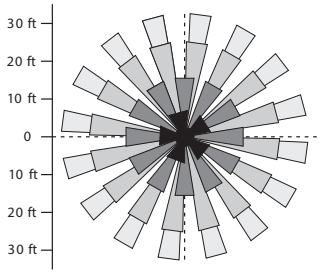
The OEF-P installs directly to an industrial fluorescent fixture or an electrical junction box through a standard 1/2" knockout using the provided lock-nut. Wiring is connected inside the fixture body. The sensor is installed in one of three 1/2" punch-outs, positioning the OEF-P at the correct field-of-view position flush or below the fixture reflector assembly.

Applications

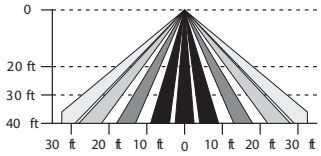
- Warehouses
- Manufacturing
- Indoor parking garages

Field-of-View

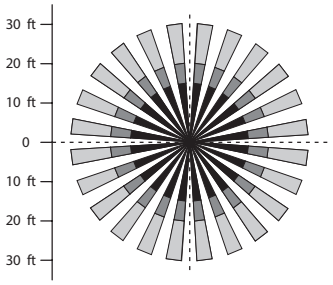
High Bay
360 °
Top View



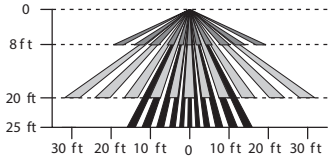
Side View



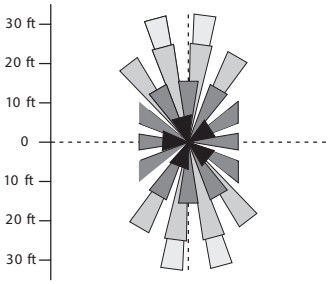
Low Bay
360 °
Top View



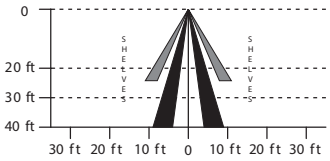
Side View



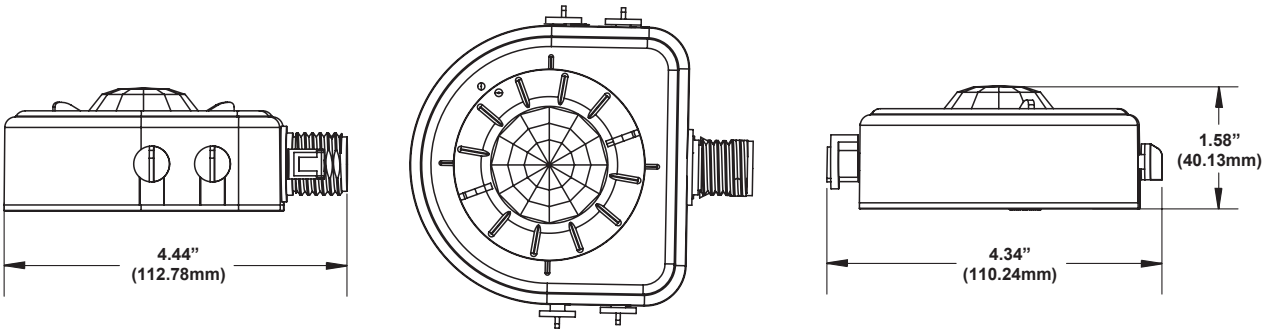
High Bay
Lens with
Aisle Mask



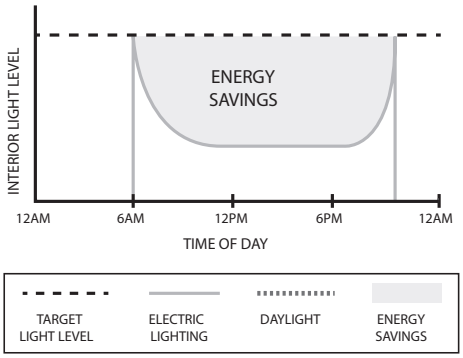
Side View



Dimensions

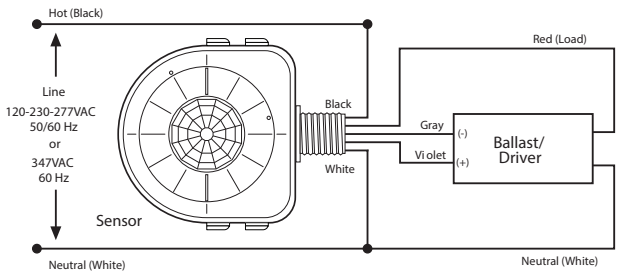


Daylighting Diagram



Wiring Diagram

120-230-277V, 347V - Wiring Diagram



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Specifications

120-230-277V and 347V Models

Electrical	
Input Voltage	120-230-277 or 347VAC
Operational Frequencies	50/60Hz
Load Rating	Fluorescent Ballasts: 800W tungsten load @120VAC 1200W tungsten load @277VAC 120V, 8A electronic ballast 277V, 5A electronic ballast 1500W @347VAC (ballast only) Dimming Loads: 1-10VDC dimmable ballasts or LED drivers only, sinks 20mA maximum (~40 LED driver/ ballasts @ 0.5 per) Minimum load: 0.5mA
Minimum Load	No requirement
Dimming Output	0.1 mA minimum to 20 mA maximum
Time Delay	30s - 30m
Wire Designation	Line-Black, Load-Red, Neutral-White

Environmental	
Operating Temperature Range	14°-122° F (-10°-50° C)
Cold Storage Temperature Range	-40°-122° F (-40°-50° C)
Relative Humidity	20% to 75% non-condensing

Other	
Agency Listings	UL 773A, CSA 22.2 No. 205 M1983, FCC Certified, ASHRAE Standard 90.1 2010 Compliant
Warranty	Limited 5-Year

Ordering Information

Cat. No.*	Description
OEF-P-010V-MV	Fixture Mount PIR High Bay/Low Bay Dimming Occupancy Sensor with 21" Leads, 120-277V
OEF-P-010V-347	Fixture Mount PIR High Bay/Low Bay Dimming Occupancy Sensor with 21" Leads, 347V

Eaton
1000 Eaton Boulevard
Cleveland, OH 44122
United States
Eaton.com

Eaton
Lighting systems
1121 Highway 74 South
Peachtree City, GA 30269
www.eaton.com/lightingsystems

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