

Overview

The PIR Wall Switch Sensor is a wall mount passive infrared (PIR) occupancy sensor with integrated wall switch that communicates wirelessly to Echoflex controllers. The OWS-IR-UW-120/277 is a no-neutral conductor powered device connecting to line voltage and earth ground. The OWS-IR-UW-BTY is powered by a long shelf life battery.

The OWS-IR sensor is designed to simplify the control needs for small office spaces, boardrooms or other small enclosed spaces which require a wall switch and occupancy sensor. The integral dimming switch provides occupants with the necessary manual control of their lights.

The OWS fits well in applications where energy codes require the lights to be manually turned ON and automatically OFF with vacancy. When used with Echoflex Solution's dimming lighting controllers, the switch also provides manual dimming control of the lights. Echoflex controlled receptacles can be automated with the OWS so plug loads operate ON and OFF with the current occupancy state.

The OWS-IR provides 180 lateral degrees of coverage ideal for installation in small offices and boardrooms. Both models are installed in new or existing electrical wall boxes. The OWS-IR-UW-120/277 is connected to 120V or 277V line voltage and earth ground, and does not rely on the neutral conductor being present.

The OWS-IR is CEC Title 24 compliant and a key component in Echoflex's energy saving solutions.



Cover plate not included

Features

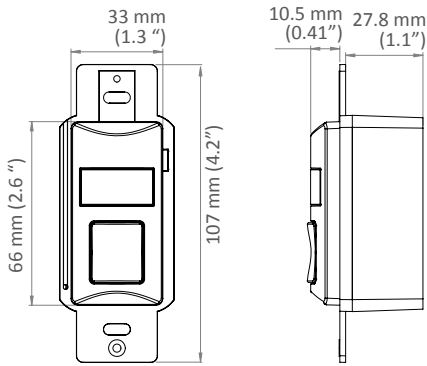
- PIR motion occupancy/vacancy sensor
- Wall mount with 180° angle of detection
- Integrated rocker switch with ON, OFF and dimming capability
- Provides immediate response to motion even in a dark room
- Sensitivity adjustment (high, medium or low) to avoid nuisance triggering
- Sends occupied and vacancy (PIR ON /OFF) telegrams
- Walk-Test feature allows installers to test operation and installation location
- Reliable radio reception range of 24 m (80 ft) - commercial office spaces (typical), up to 100m (330 ft) line of sight
- Vandal resistant lens
- 120/277V model is a no-neutral device connecting to line voltage present within the wall electrical box and earth ground
- Battery powered model design life target of at least 12 years of typical office use at 25°C.

Ordering Information

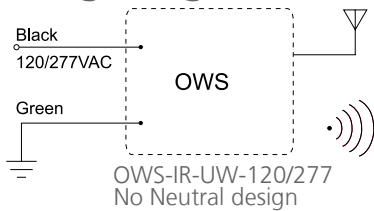
| Description | 902 MHz Model | 902 MHz PN |
|--|-------------------|---------------|
| PIR Wall Switch Sensor, 120/277VAC, No Neutral, White, 902 MHz | OWS-IR-UW-120/277 | 8188A1184-X-1 |
| PIR Wall Switch Sensor, Battery Powered, White, 902 MHz | OWS-IR-UW-BTY | 8188A1189-X-1 |
| Switch Cover Plate, single gang - white | SP-01-W | HW8563 |

OWS-IR

Dimensioned Diagram

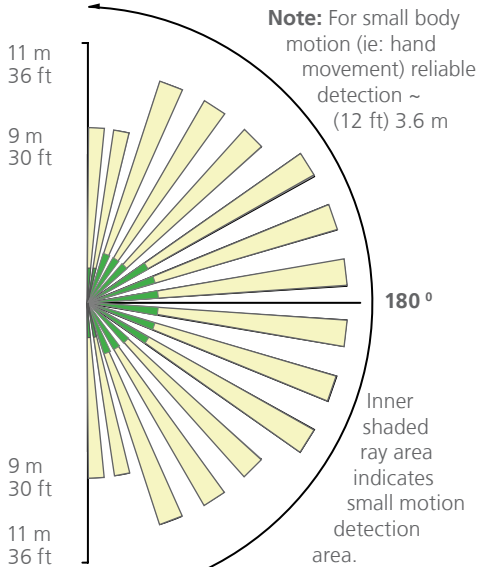


Wiring Diagram

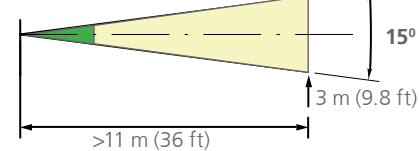


Lens Ray Diagram

Top View



Side View



Equipment Profile

| | |
|---------------|----------------------------------|
| EEP A5-07-01: | Occupancy Sensor |
| EEP F6-02-02 | Light Control - ON, OFF, dimming |

Hardware Specifications

| | OWS-IR-UW-120/277 | OWS-IR-UW-BTY |
|--|-------------------|--|
| Power Supply | 120/277VAC 60Hz | 2 x AA Energizer Lithium |
| Power Consumption / Battery life expectancy | 450 µA max | At least 12 years of typical office use at 25°C (not user serviceable) |
| Indoor Use Only | Dry location | |

Communications

| | |
|----------------------------------|--|
| Radio Frequency | 902 MHz(U) |
| Antenna | Integrated whip |
| Transmission Range | 24 m (80 ft) - commercial office spaces (typical), up to 100m (330 ft) line of sight |
| Telegram Transmission | On motion or on heartbeat period |
| Telegram Heartbeat Period | Minimum 100 seconds |

User Controls

| | |
|----------------------|--|
| Rocker Switch | ON, OFF and Dimming Control |
| Teach Button | For occupancy sensor and switch assignment to receiver and test mode selection |
| Output | 3 LEDs (behind PIR lens) - indicating PIR activity |

Mechanical Specifications

| | |
|------------------------------|---|
| Operating Temperature | -10°C to 45°C (14°F to 113°F) |
| Storage Temperature | -25°C to 65°C (-13°F to 149°F) |
| Relative Humidity | 5% to 95% RH (non-condensing) |
| Weight | 60 g (2.12 oz) |
| Dimensions | 41.5 x 107 x 42.5 mm (1.6 x 4.2 x 1.7") Wires exit from the rear of the OWS-IR-UW-120/277. Allow for additional space when selecting an electrical box |
| Mounting | Minimum electrical box size = 12.5 in ³ Cover plate not included |

Compliance and Listings

| | |
|------------------------|------------------|
| CEC Title 24 Compliant | ASHRAE 90.1-2019 |
| IECC 2018 | RoHS |

Safety

ETL Recognized Component
Conforms to UL 773A
Certified to CAN/CSA Std. C22.2 No.284-16

Radio Frequency 902 MHz

FCC Part 15.231 - Remote Control Transmitter
IC RSS-210



Specifications are subject to change without notification.