

## Overview

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

The OWS-DT 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. The combination of PIR sensor and audio sensing ensures positive occupant detection. Passive microphone technology provides full coverage of audible human activity across the entire PIR detection range. Innovative noise filtering is used to prevent false triggers that keep lights on in empty rooms. 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-DT 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-DT-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-DT is CEC Title 24 compliant and a key component in Echoflex's energy saving solutions.



Cover plate not included

## Features

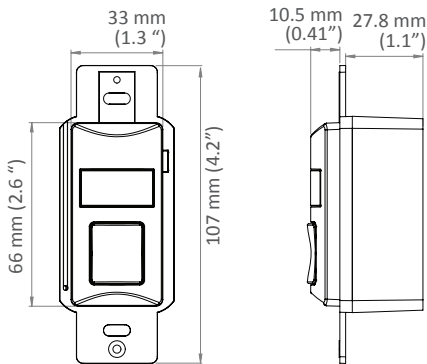
- Dual Tech motion occupancy/vacancy sensor
- A microphone is used to detect human activity even around corners, ensuring lights stay on
- Wall mount with 180° angle of detection
- Integrated rocker switch with ON, OFF and dimming capability
- Provides immediate response to motion even in a dark room
- Sensitivity adjustment (high, medium or low) to avoid nuisance triggering
- Sends occupied and vacancy 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
- 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

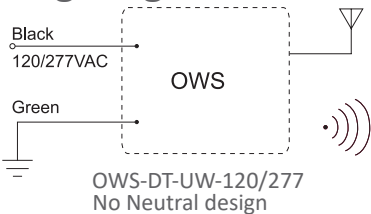
Description	902 MHz Model	902 MHz PN
Dual Tech Wall Switch Sensor, 120-277VAC, White - 902 MHz	OWS-DT-UW-120/277	8188A1700-X-1
Dual Tech Wall Switch Sensor, Battery Powered, 902 MHz	OWS-DT-UW-BTY	8188A1190-X-1
Switch Cover Plate, single gang - white	SP-01-W	HW8563

# OWS-DT

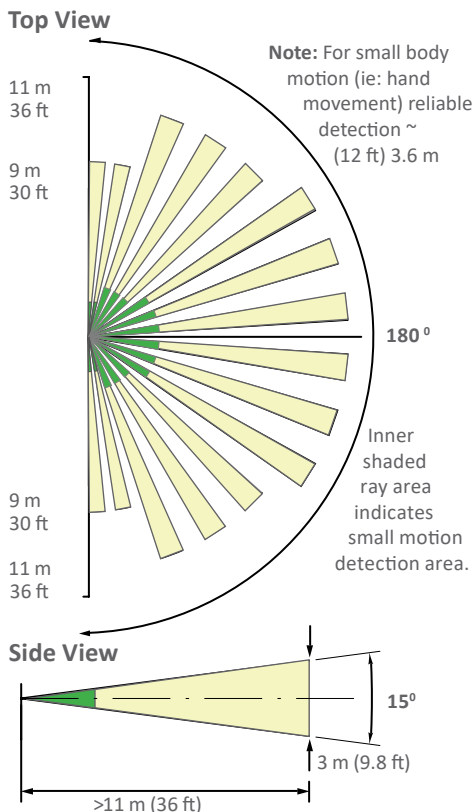
## Dimensioned Diagram



## Wiring Diagram



## Lens Ray Diagram



Reliable audio detection > 24 ft provides overlapping coverage of monitored spaces

## Equipment Profile

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

## Hardware Specifications

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

## Communications

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

## User Controls

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

## Mechanical Specifications

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

## Listings

CEC Title 24 Compliant

### 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.  
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