

# PASSIVE INFRARED WALL SWITCH OCCUPANCY SENSOR

| WS-301

Defaults to Manual-ON operation for maximum energy savings

180° coverage, maximum of 900 ft<sup>2</sup>

Shallow (1") back housing and flying leads for easy installation

Built-in light level sensor



Optional neutral connection with break off tab to expose neutral terminals

120/277 VAC and 347 VAC models

Button provides positive tactile feedback

Color-matched lens and low profile for appealing design

## Description

The WS-301 Passive Infrared (PIR) Wall Switch Sensor turns lighting or fan loads on and off based on occupancy and ambient light level. The sensor replaces existing wall switches and fits behind a standard decorator wall plate.

## Operation

The WS-301 senses the difference between infrared energy from a human body in motion and the background space to turn on lighting automatically when occupancy is detected. After a user-specified length of time when no occupancy is detected, lighting automatically switches off. The sensor can also be used with line voltage switches for multi-level lighting.

## Features

- Complies with 2011 NEC requirements
- Zero crossing circuitry reduces stress on the relay and results in increased sensor life
- Adjustable time delay and sensitivity
- Custom two-tier Fresnel lens enhances detection at the desktop level
- Sensor coverage tested to NEMA Guide Publication WD 7-2000
- Light level sensor holds lights off when ambient lighting is above the preset level
- Patented voltage drop protection
- For safety, there is no leakage to load in the off mode and sensor is safety grounded
- LED indicates occupancy detection

## Optional Neutral Connection

The WS-301 sensor uses a patent pending Neutral Sense Technology. Any WS-301 sensor can be used for a two-wire or three wire application, either to work with existing wiring, or to meet local or national code requirements. An easy-to-break plastic tab covers neutral screw terminals. Once the sensor is connected to neutral it complies with all codes that restrict current leakage to ground.

## Applications

The WS-301 is great for retrofit projects and has the flexibility to work in a variety of applications including offices, conference rooms, break rooms and utility rooms. Energy savings for these areas can be as high as 60% since lighting will no longer remain on once the room is vacant. With a competitive price, low installation cost, and high energy savings, paybacks are usually well under two years.

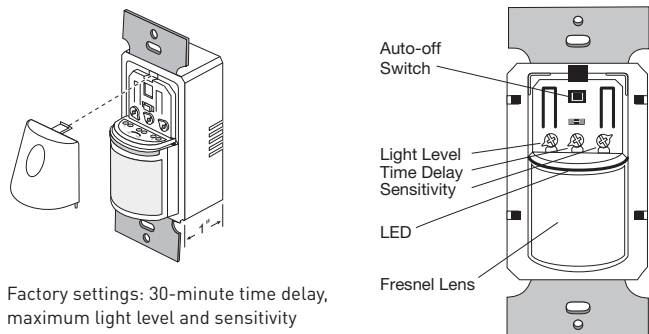
PROJECT		LOCATION/ TYPE	
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## Specifications

- WS-301: 120/277VAC; 50/60Hz, 1/6 hp  
@ 120VAC, 0-1000W ballast, LED, and tungsten  
@ 277VAC, 0-1200W ballast and LED
- WS-301-347: 347VAC; 50/60Hz, 1/6 hp; 0-1500W ballast and LED
- Time delay adjustable from 30 seconds up to 30 minutes
- Adjustable sensitivity from 20% to 100%
- Adjustable light level setting of 10 to 200 footcandles (107.6 to 2,153 lux)
- Coverage: Major motion 35' x 30'  
Minor motion 20' x 15'
- Dimensions (L x W x D): 2.68" x 1.75" x 1.04"  
(68mm x 44mm x 27mm)
- UL and cUL listed
- Five year warranty

## Controls & Installation

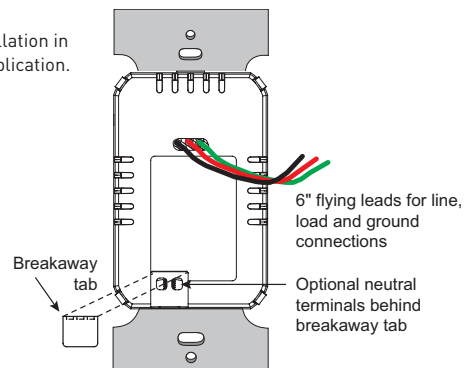
### Product Controls



Factory settings: 30-minute time delay, maximum light level and sensitivity

### Neutral Option

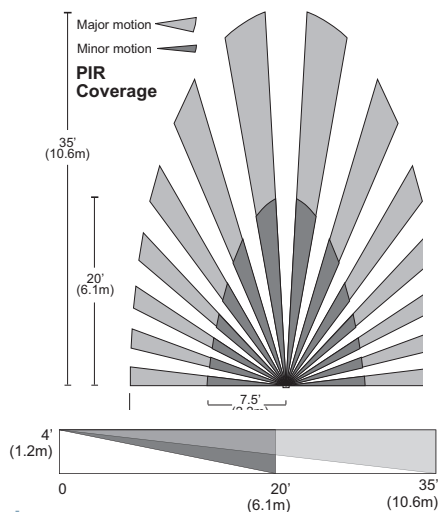
Simple optional neutral connection allows installation in any 2-wire or 3-wire application.



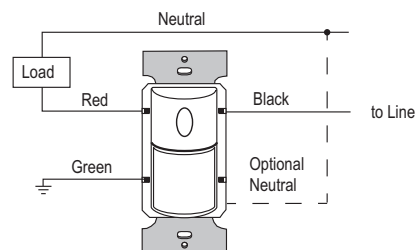
## Coverage & Wiring

### Coverage Pattern

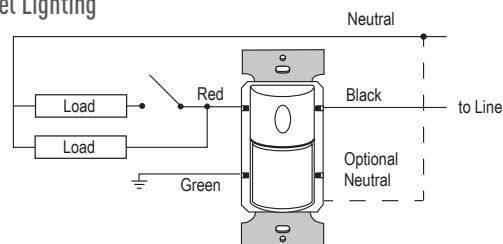
For best performance, Wattstopper recommends using this sensor in spaces no larger than 15' x 12'.



### Single Level Lighting



### Manual Bi-level Lighting



## Ordering Information

Catalog #	Color	Voltage	Load Rating
<input type="checkbox"/> WS-301-W	White	120VAC; 50/60Hz or 277VAC; 50/60Hz	@ 120VAC, 0-1000W ballast, LED, tungsten, 1/6 hp or @ 277VAC 0-1200W ballast, LED, 1/6 hp
<input type="checkbox"/> WS-301-LA	Lt. Almond		
<input type="checkbox"/> WS-301-I	Ivory		
<input type="checkbox"/> WS-301-G	Grey		
<input type="checkbox"/> WS-301-B	Black		
<input type="checkbox"/> WS-301-R	Red		
<input type="checkbox"/> WS-301-347-W	White	347VAC; 50/60H	0-1500W ballast & LED, 1/6 hp
<input type="checkbox"/> WS-301-347-I	Ivory		
<input type="checkbox"/> WS-301-347-G	Grey		
<input type="checkbox"/> WS-301-347-B	Black		
<input type="checkbox"/> WS-301-347-R	Red		

Order wall plate separately.