

# WS-250 Passive Infrared Wall Switch Occupancy Sensor

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

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

Built-in light level sensor



Button provides positive  
tactile feedback

Dual voltage model,  
120/277 VAC

Compatible with all  
electronic ballasts

PROJECT

LOCATION/TYPE

## Product Overview

### Description

The WS-250 Passive Infrared (PIR) Wall Switch Sensor turns lighting on and off based on occupancy and ambient light level. It replaces existing wall switches and fits behind a standard decorator wall plate.

### Operation

The WS-250 utilizes advanced PIR technology to detect occupancy. Detection occurs when the WS-250 senses the difference between infrared energy from a human body in motion and the background space. Lighting automatically turns on 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.

### Light Level Sensor

The WS-250 features a built-in light level sensor. This feature holds lighting systems off when natural light levels are above the preset level. Once lights are switched on, the sensor will not switch them off even if daylight levels increase. Using the light level feature is optional and the setting is adjustable by the user.

### Applications

The WS-250 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.

## Features

- Pulse Count Processing eliminates false offs without reducing sensitivity
- Detection Signature Processing eliminates false triggers; provides immunity to RFI and EMI
- Zero crossing circuitry reduces stress on the relay and results in increased sensor life
- Time delay adjustment from 30 seconds up to 30 minutes
- Adjustable unit sensitivity from 20% to 100%
- Light level sensor holds lights off when ambient lighting is above the preset level
- Custom two-tier Fresnel lens enhances detection at the desktop level
- Sensor coverage tested to NEMA Guide Publication WD 7-2000
- 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
- Compatible with decorator wall plates
- Qualifies for ARRA-funded public works projects

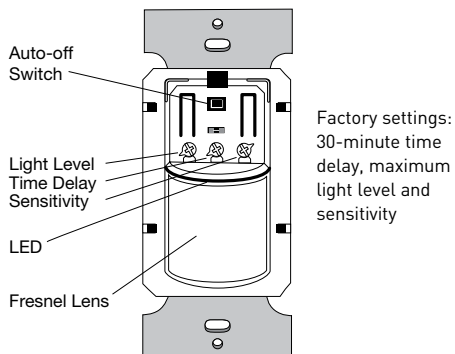


# Specifications

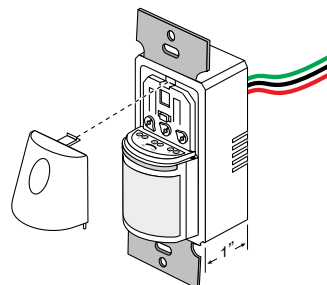
- 120/277VAC, 60Hz, or 347VAC, 60Hz
- Time delay adjustable from 30 seconds up to 30 minutes
- Adjustable unit sensitivity from 20% to 100%
- Adjustable light level setting of 2 to 200 foot-candles (21.5 to 2,153 lux)
- Compatible with all electronic ballasts and PL lamp ballasts
- Coverage: Major motion 35' x 30'  
Minor motion 20' x 15'
- Dimensions: 2.6" x 1.7" x 1.55" (66.0mm x 43.1mm x 39.4mm) L x W x D
- UL and cUL listed
- Five year warranty

# Controls & Installation

## Product Controls



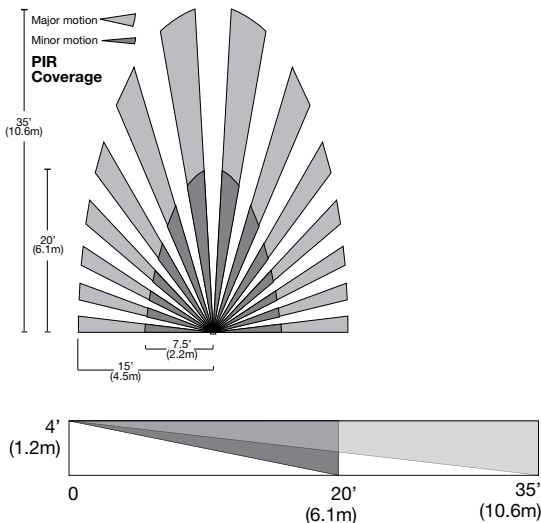
## Installation



Extremely shallow (1") back housing and 6" flying leads facilitate quick installation in standard wall box

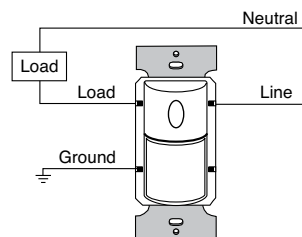
# Coverage & Wiring

## Coverage Pattern

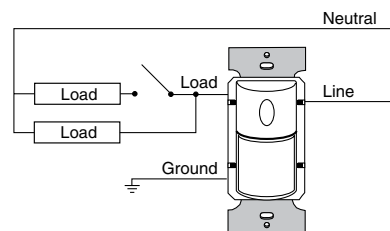


For best performance, WattStopper recommends using this sensor in spaces no larger than 15' x 12'.

## Single Level Lighting



## Manual Bi-level Lighting



# Ordering Information

Catalog No.	Color	Voltage	Load Rating
<input type="checkbox"/> WS-250-W	White	120 VAC; 60 Hz or 277 VAC; 60 Hz	@ 120 VAC, 0-800 W ballast or tungsten or 1/6 hp @ 277 VAC 0-1200 W ballast
<input type="checkbox"/> WS-250-W-U			
<input type="checkbox"/> WS-250-LA	Light Almond		
<input type="checkbox"/> WS-250-I	Ivory		
<input type="checkbox"/> WS-250-I-U			
<input type="checkbox"/> WS-250-G	Gray		
<input type="checkbox"/> WS-250-B	Black		
<input type="checkbox"/> WS-250-347-W	White	347 VAC; 60 Hz	0-1200 W ballast
<input type="checkbox"/> WS-250-347-I	Ivory		
<input type="checkbox"/> WS-250-347-G	Gray		
<input type="checkbox"/> WS-250-347-B	Black		

Order wall plate separately.  
-U = ARRA compliant. Product produced in the U.S.

# WS-250 Passive Infrared Wall Switch Occupancy Sensor

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

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

Built-in light level sensor



Button provides positive  
tactile feedback

Dual voltage model,  
120/277 VAC

Compatible with all  
electronic ballasts

PROJECT

LOCATION/TYPE

## Product Overview

### Description

The WS-250 Passive Infrared (PIR) Wall Switch Sensor turns lighting on and off based on occupancy and ambient light level. It replaces existing wall switches and fits behind a standard decorator wall plate.

### Operation

The WS-250 utilizes advanced PIR technology to detect occupancy. Detection occurs when the WS-250 senses the difference between infrared energy from a human body in motion and the background space. Lighting automatically turns on 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.

### Light Level Sensor

The WS-250 features a built-in light level sensor. This feature holds lighting systems off when natural light levels are above the preset level. Once lights are switched on, the sensor will not switch them off even if daylight levels increase. Using the light level feature is optional and the setting is adjustable by the user.

### Applications

The WS-250 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.

## Features

- Pulse Count Processing eliminates false offs without reducing sensitivity
- Detection Signature Processing eliminates false triggers; provides immunity to RFI and EMI
- Zero crossing circuitry reduces stress on the relay and results in increased sensor life
- Time delay adjustment from 30 seconds up to 30 minutes
- Adjustable unit sensitivity from 20% to 100%
- Light level sensor holds lights off when ambient lighting is above the preset level
- Custom two-tier Fresnel lens enhances detection at the desktop level
- Sensor coverage tested to NEMA Guide Publication WD 7-2000
- 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
- Compatible with decorator wall plates
- Qualifies for ARRA-funded public works projects

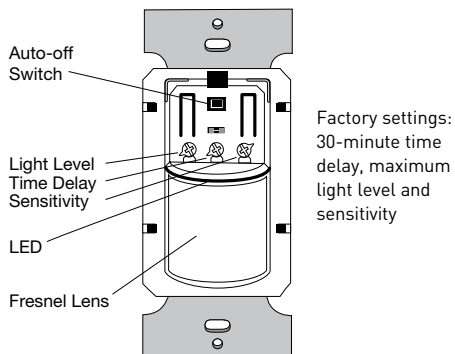


# Specifications

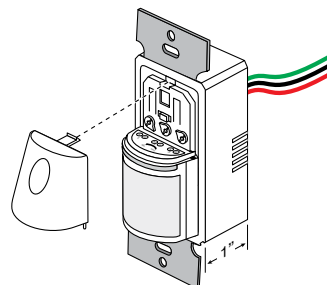
- 120/277VAC, 60Hz, or 347VAC, 60Hz
- Time delay adjustable from 30 seconds up to 30 minutes
- Adjustable unit sensitivity from 20% to 100%
- Adjustable light level setting of 2 to 200 foot-candles (21.5 to 2,153 lux)
- Compatible with all electronic ballasts and PL lamp ballasts
- Coverage: Major motion 35' x 30'  
Minor motion 20' x 15'
- Dimensions: 2.6" x 1.7" x 1.55" (66.0mm x 43.1mm x 39.4mm) L x W x D
- UL and cUL listed
- Five year warranty

# Controls & Installation

## Product Controls



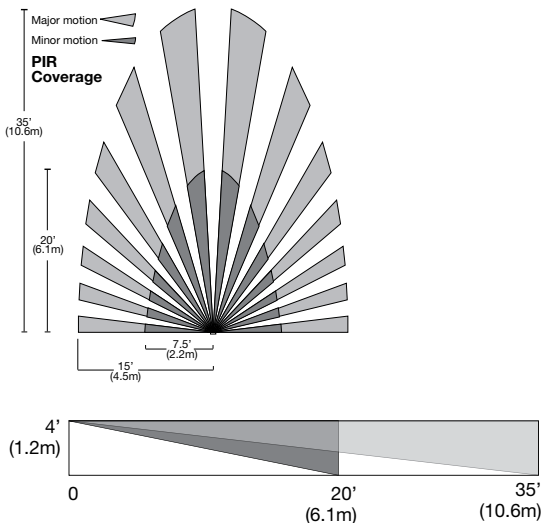
## Installation



Extremely shallow (1") back housing and 6" flying leads facilitate quick installation in standard wall box

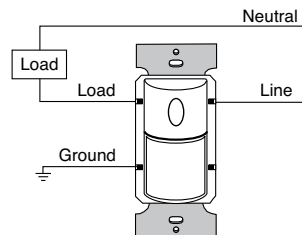
# Coverage & Wiring

## Coverage Pattern

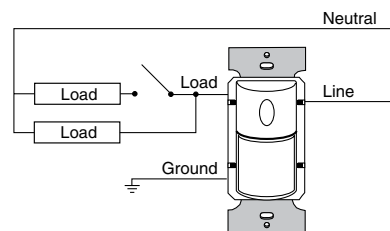


For best performance, WattStopper recommends using this sensor in spaces no larger than 15' x 12'.

## Single Level Lighting



## Manual Bi-level Lighting



# Ordering Information

Catalog No.	Color	Voltage	Load Rating
<input type="checkbox"/> WS-250-W	White	120 VAC; 60 Hz or 277 VAC; 60 Hz	@ 120 VAC, 0-800 W ballast or tungsten or 1/6 hp @ 277 VAC 0-1200 W ballast
<input type="checkbox"/> WS-250-W-U	White		
<input type="checkbox"/> WS-250-LA	Light Almond		
<input type="checkbox"/> WS-250-I	Ivory		
<input type="checkbox"/> WS-250-I-U	Ivory		
<input type="checkbox"/> WS-250-G	Gray		
<input type="checkbox"/> WS-250-B	Black	347 VAC; 60 Hz	0-1200 W ballast
<input type="checkbox"/> WS-250-347-W	White		
<input type="checkbox"/> WS-250-347-I	Ivory		
<input type="checkbox"/> WS-250-347-G	Gray		
<input type="checkbox"/> WS-250-347-B	Black		

Order wall plate separately.  
-U = ARRA compliant. Product produced in the U.S.