PW-301 Passive Infrared Wall Switch Occupancy Sensor

Product Overview

Description

The PW-301 passive infrared (PIR) wall switch sensor can turn lights OFF and ON based on occupancy. It is characterized by high sensitivity to small and large movements, appealing aesthetics, and a variety of features.

Operation

The PW-301 replaces existing wall switches and installs in a single gang junction box with or without either neutral wiring. Factory default operation is for Manual-ON, so that users turn lights on only when needed. It uses advanced PIR technology to detect occupancy and keep lighting ON when it is needed. Once the space is vacated and the time delay elapses, lights automatically turn OFF. DIP switch settings allow for a variety of control options such as Auto-ON operation, walk-through and test modes. Multiple sensors may be used for control of one or more loads from up to four locations.

Features

- Complies with 2011 NEC requirements
- Zero-crossing for long relay life
- Vandal resistant lens combines precise coverage with durability
- Selectable walk-through mode turns lights off three minutes after the room is initially occupied if no motion is detected after the first 30 seconds
- Test mode allows quick and easy adjustments
- Selectable audible and/or visual alerts for impending shutoff

Optional Neutral Connection

The PW-301 sensor uses a patent pending Neutral Sense Technology. Any PW-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 PW-301 sensor is great for retrofit projects and well suited for small, enclosed spaces with clear line of sight of the occupant. Common applications include small offices, small conference rooms and lunch/break rooms.

- LED indicates occupancy detection
- In automatic mode, sensor returns automatically to Auto-ON after lights are turned off manually; ideal for presentations
- Optional light level sensing with simple setup
- Service mode allows sensor to operate as a service switch in the unlikely event of a failure
- Sensor coverage tested to NEMA Guide Publication WD 7-2000
- Compatible with decorator wall plates
### Specifications

- **PW-301**: 120/277VAC; 50/60Hz, 1/6 hp  
  @ 120VAC, 0-1000W ballast, LED, and tungsten  
  @ 277VAC, 0-1200W ballast and LED  
- **PW-301-347**: 347VAC; 50/60Hz, 1/6 hp;  
  0-1500W ballast and LED  
- Time delays: 5, 10, 15, 20, 25 or 30 minutes,  
  walk-through, test-mode  
- Coverage: Major motion 35' x 30'  
  Minor motion 20' x 15'  
- Sensitivity adjustment: PIR (high/low)  
- Dimensions (L x W x D):  
  - PW-301: 4.1" x 1.58" x 1.39" (104.6mm x 40.3mm x 35.5mm)  
  - PW-301-347: 4.5" x 1.58" x 1.39" (114.36mm x 40.3mm x 35.5mm)  
- UL and cUL listed  
- Five year warranty

### Controls & Settings

#### Product Controls & Neutral Option

![Diagram of product controls and neutral option]

- **ON/OFF Button**
- **Detection LED**
- **PIR Lens**

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'.

![Coverage pattern diagram]

#### Wiring Diagrams

![Wiring diagrams]

### Ordering Information

<table>
<thead>
<tr>
<th>Catalog No.</th>
<th>Color</th>
<th>Voltage</th>
<th>Load Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>PW-301-W</td>
<td>White</td>
<td>120VAC; 50/60Hz</td>
<td>Ø 120VAC, 0-1000W ballast, LED, tungsten, 1/6 hp</td>
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<tr>
<td>PW-301-LA</td>
<td>Lt. Almond</td>
<td>or 277VAC; 50/60Hz</td>
<td>Ø 277VAC 0-1200W ballast, LED, 1/6 hp</td>
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<tr>
<td>PW-301-I</td>
<td>Ivory</td>
<td></td>
<td>0-1500W ballast &amp; LED, 1/6 hp</td>
</tr>
<tr>
<td>PW-301-G</td>
<td>Grey</td>
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</tr>
<tr>
<td>PW-301-B</td>
<td>Black</td>
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</tr>
<tr>
<td>PW-301-R</td>
<td>Red</td>
<td></td>
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<tr>
<td>PW-301-347-W</td>
<td>White</td>
<td>347VAC; 50/60Hz</td>
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Order wall plate separately.