

# PSC-ID-D-WS Series | Wall Switch Vacancy / Occupancy Sensor

## Basic Features

Features common across all models:

- PIR sensor with Fresnel lens
- Manual on/off controls
- LED status indicator light
- Photocell for ambient light detection
- Sensor adjustment panel conveniently located behind manual on/off controls
- Mounts in any standard wall box
- Compatible with magnetic and electronic ballasts, CFL, LED, Tungsten
- Color: white



*Suitable for indoor use only*



## Applications

PSC-ID-x-WS-xxxx sensors provide automatic lighting control for a variety of indoor applications. They can replace any standard single-pole wall switch.

PIR detection is best suited for areas with (1) clear line of sight, and (2) good air circulation. Typical applications include classrooms, copy rooms, offices, conference rooms, and private restrooms.

Ultrasonic detection supplements PIR sensors in areas with (1) low air flow, (2) partitions and dividers or other irregular geometry, and (3) high levels of minor activity. Typical applications include public restrooms, private offices, classrooms, conference rooms, storage spaces, and break rooms.

## Sensor Operation

**OCC:** occupancy sensing mode. Sensor will turn lights on automatically when motion is detected and turn lights off automatically after the area is vacated.

**VAC:** vacancy sensing mode. Sensor will automatically turn lights off after the area is vacated, but requires the user to manually turn lights on.

**OFF:** manual off. Load will stay off until manually switched on.

**ON:** manual on. Load will stay on until manually switched off.

**AUTO:** auto set occupancy sensing mode. Same as OCC except the sensor automatically adjusts the time delay based on occupancy patterns.\*

**OCCS:** occupancy single relay. Primary load is in OCC mode. Secondary load is in VAC mode.

**OCCD:** occupancy dual relay. Both loads are in OCC mode.

**VACD:** vacancy dual relay. Both loads are in VAC mode.

**Manual on/off:** End users can override any of the sensor modes at any time by operating the manual on/off controls.

**Walk-through Mode:** This feature is available only when the sensor is set to AUTO\*. After motion is initially detected, the sensor will turn lights on. If no motion is detected beyond 30 seconds (such as when a person walks through an area) it will turn lights off automatically after another 2.5 minutes (3 minutes total) have elapsed. If motion is detected for longer than 3 minutes then AUTO mode will apply.

## How to Order

| Model No.           | Description                                                      | Min Load | Max Load †                        |                       | Input Voltage       |
|---------------------|------------------------------------------------------------------|----------|-----------------------------------|-----------------------|---------------------|
| PSC-ID-I-WS-100*    | Wall switch PIR occupancy sensor                                 | 25W      | 500VA                             | 1/8 Hp motor          | 120VAC, 60Hz        |
| PSC-ID-I-WS-101* ** | Wall switch PIR occupancy sensor (no neutral)                    | 25W      | 500VA                             | 1/8 Hp motor          | 120VAC, 60Hz        |
| PSC-ID-I-WS-110     | Wall switch PIR occupancy/vacancy sensor                         | None     | 800VA @ 120VAC<br>1600VA @ 277VAC | 1/4 Hp motor @ 120VAC | 120VAC, 60Hz        |
| PSC-ID-I-WS-120     | Wall switch dual voltage input PIR occupancy/vacancy sensor      | None     |                                   |                       | 120/277VAC, 60Hz    |
| PSC-ID-I-WS-130     | Wall switch PIR occupancy/vacancy sensor (no neutral)            | None     |                                   |                       | 120/277VAC, 60Hz    |
| PSC-ID-I-WS-130D    | Wall switch dual relay PIR occupancy/vacancy sensor (no neutral) | None     |                                   |                       | 120/277VAC, 60Hz    |
| PSC-ID-D-WS-120     | Wall switch dual technology occupancy/vacancy sensor             | None     |                                   |                       | 120/277VAC, 50/60Hz |

\* Auto set occupancy mode is not available on PSC-ID-I-WS-100 and PSC-ID-I-WS-101. The 'AUTO' setting for these models is actually the equivalent of 'OCC' sensing mode.

\*\* SCR contained, not suitable for use with electronic ballasts.

† Watts for resistive loads, VA for fluorescent

Information contained herein is subject to change without notice.

Values are nominal. All values conform to DLC tolerances.

Revised 02/2024

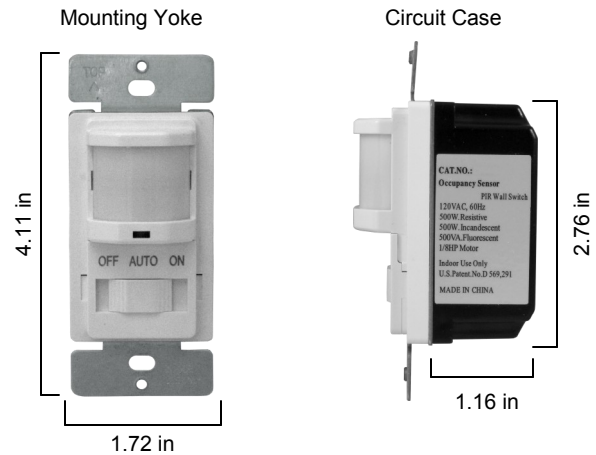
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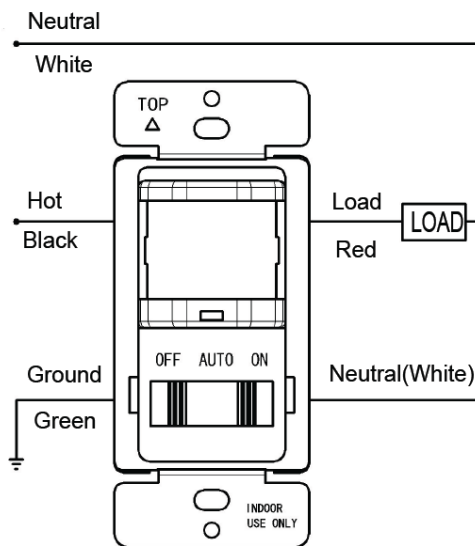
### Summary

|                       |                                        |
|-----------------------|----------------------------------------|
| Sensor Type           | PIR occupancy sensor                   |
| Input Voltage         | 120VAC, 60Hz                           |
| Max Load              | 500W (resistive) / 500VA (fluorescent) |
| Min Load              | none                                   |
| Max Load (Motor)      | 1/8Hp motor                            |
| Max Sensor Range      | 30 ft / 980 ft <sup>2</sup>            |
| Best Performance      | 15 ft / 260 ft <sup>2</sup>            |
| Time Delay            | 15 sec to 30 min                       |
| Photocell Sensitivity | 30 Lux to daylight                     |
| Operating Temperature | 0° to 55°C                             |
| Storage Temperature   | -10° to 60°C                           |
| Relative Humidity     | 95% non-condensing                     |
| Mounting              | Standard wall box                      |
| Color                 | White                                  |
| Warranty              | 3 years                                |
| Certifications        | UL/cUL listed E350121                  |

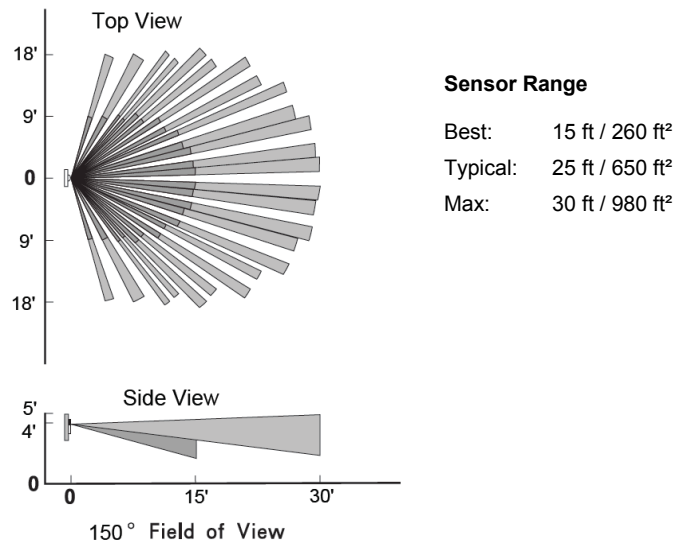
### Physical Dimensions



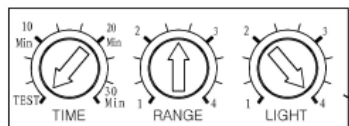
### Wiring Diagram



### Detection Area



### Settings Adjustment



#### Time Delay Trimpot

Default position: 15 sec (Test mode)  
Adjustable: 15 sec to 30 min

#### Sensor Sensitivity Range Trimpot

Default position: center at 65%  
Adjustable: 30% (position 1) to 100% (position 4)

#### Ambient Light Level Trimpot

Default position: 100% (position 4), Daylight  
Adjustable: daylight to 30 Lux (counter clockwise)

### Sensor Operation

| Mode | Position | Description                                                                            |
|------|----------|----------------------------------------------------------------------------------------|
| OFF  | Left     | Manual off: Load will stay off until manually switched to ON or AUTO.                  |
| AUTO | Center   | OCC Mode: Automatic on when occupancy is detected. Automatic off after set time delay. |
| ON   | Right    | Manual on: Load will stay on until manually switched to OFF or AUTO.                   |

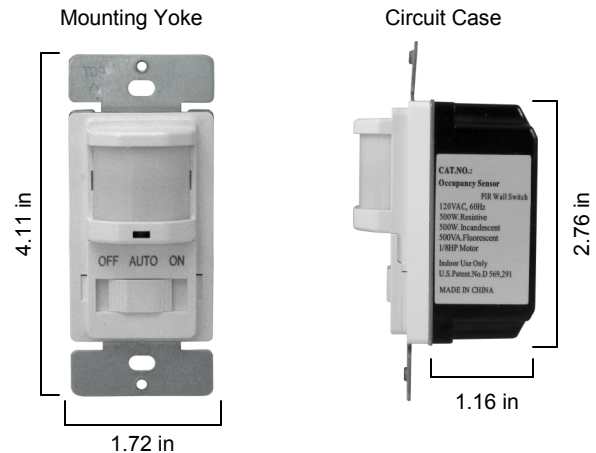


### Summary

|                       |                                         |
|-----------------------|-----------------------------------------|
| Sensor Type           | PIR occupancy sensor                    |
| Input Voltage         | 120VAC, 60Hz                            |
| Max Load              | 500W (resistive) / 500VA (fluorescent)* |
| Min Load              | 25W* (Resistive)                        |
| Max Load (Motor)      | 1/8Hp motor                             |
| Max Sensor Range      | 30 ft / 980 ft <sup>2</sup>             |
| Best Performance      | 15 ft / 260 ft <sup>2</sup>             |
| Time Delay            | 15 sec to 30 min                        |
| Photocell Sensitivity | 30 Lux to daylight                      |
| Operating Temperature | 0° to 55°C                              |
| Storage Temperature   | -10° to 60°C                            |
| Relative Humidity     | 95% non-condensing                      |
| Mounting              | Standard wall box                       |
| Color                 | White                                   |
| Warranty              | 3 years                                 |
| Certifications        | UL/cUL listed E350121                   |

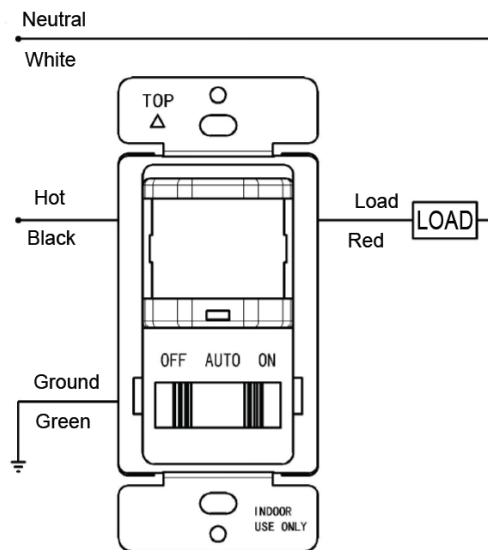
\*SCR contained, not suitable for use with electronic ballasts.

### Physical Dimensions

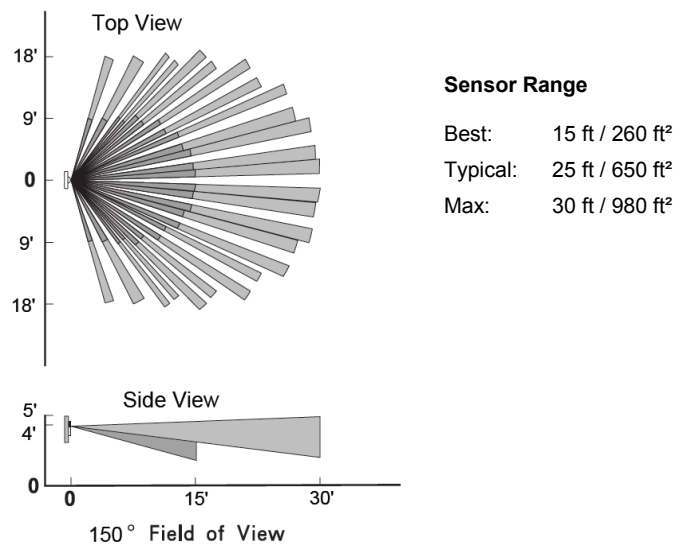


Weight: 3.1 oz

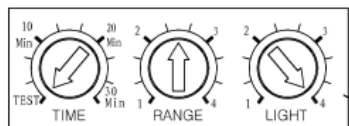
### Wiring Diagram



### Detection Area



### Settings Adjustment



#### Time Delay Trimpot

Default position: 15 sec (Test mode)  
Adjustable: 15 sec to 30 min

#### Sensor Sensitivity Range Trimpot

Default position: center at 65%  
Adjustable: 30% (position 1) to 100% (position 4)

#### Ambient Light Level Trimpot

Default position: 100% (position 4), Daylight  
Adjustable: daylight to 30 Lux (counter clockwise)

### Sensor Operation

| Mode | Position | Description                                                                            |
|------|----------|----------------------------------------------------------------------------------------|
| OFF  | Left     | Manual off: Load will stay off until manually switched to ON or AUTO.                  |
| AUTO | Center   | OCC Mode: Automatic on when occupancy is detected. Automatic off after set time delay. |
| ON   | Right    | Manual on: Load will stay on until manually switched to OFF or AUTO.                   |

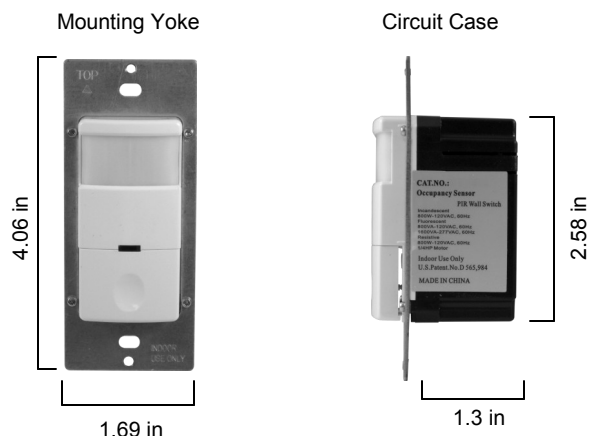
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Revised 02/2024



### Summary

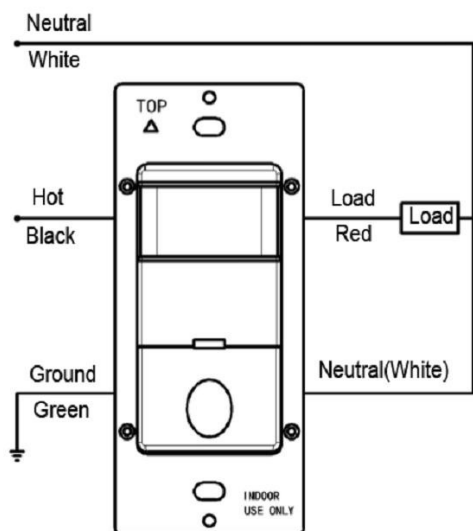
|                        |                                |
|------------------------|--------------------------------|
| Sensor Type            | PIR occupancy / vacancy sensor |
| Input Voltage          | 120 VAC, 60Hz                  |
| Max Load (Resistive)   | 800W @ 120VAC                  |
| Max Load (Fluorescent) | 800VA @ 120VAC                 |
| Min Load               | None                           |
| Max Load (Motor)       | 1/4 Hp motor                   |
| Max Sensor Range       | 40 ft / 1200 ft²               |
| Best Performance       | 20 ft / 320 ft²                |
| Time Delay             | 15 sec to 30 min               |
| Photocell Sensitivity  | 30 Lux to daylight             |
| Operating Temperature  | 0° to 55°C                     |
| Storage Temperature    | -10° to 60°C                   |
| Relative Humidity      | 95% non-condensing             |
| Mounting               | Standard wall box              |
| Color                  | White                          |
| Warranty               | 5 years                        |
| Certifications         | UL/cUL listed E350121          |

### Physical Dimensions

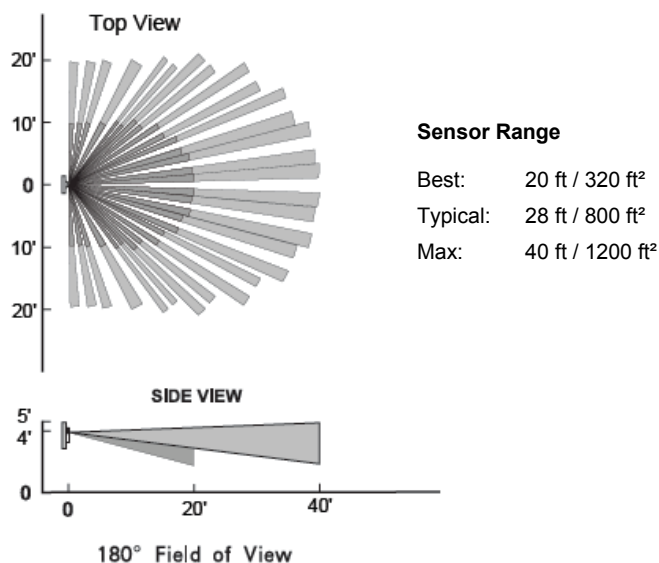


Weight: 3.6 oz

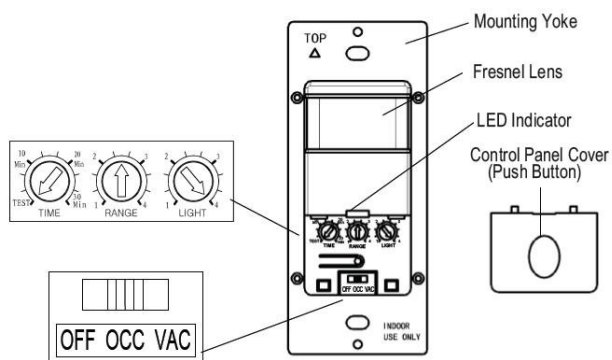
### Wiring Diagram



### Detection Area



### Settings Adjustment



### Sensor Operation

| Mode | Position | Description                                                                                  | Push-button Reaction             |
|------|----------|----------------------------------------------------------------------------------------------|----------------------------------|
| OFF  | Left     | Manual off: Load will stay off until manually switched to OCC or VAC.                        | None                             |
| OCC  | Center   | Occupancy Mode: Automatic on when occupancy is detected. Automatic off after set time delay. | Manually toggles the load on/off |
| VAC  | Right    | Vacancy Mode: manual on only, automatic off after set time delay                             | Manually toggles the load on/off |

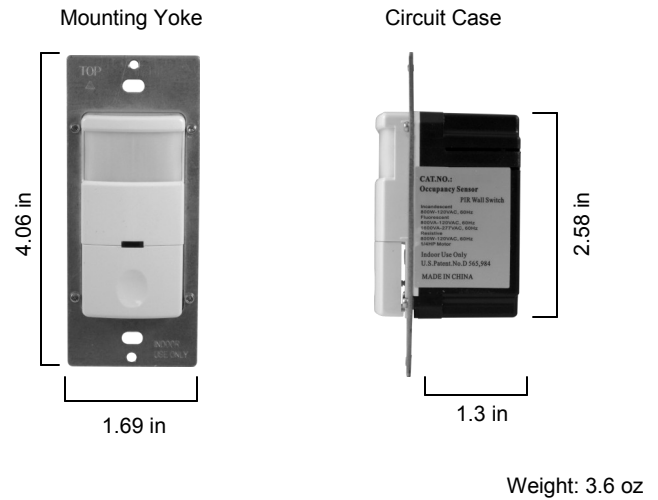
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Revised 02/2024



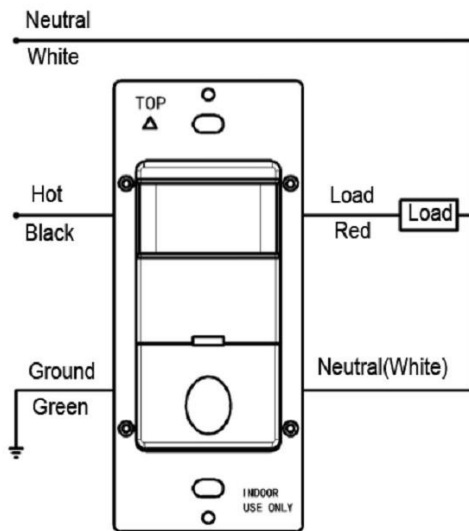
### Summary

|                        |                                  |
|------------------------|----------------------------------|
| Sensor Type            | PIR dual voltage input           |
| Input Voltage          | 120/277VAC, 60Hz                 |
| Max Load (Resistive)   | 800W                             |
| Max Load (Fluorescent) | 800VA @ 120VAC / 1600VA @ 277VAC |
| Min Load               | None                             |
| Max Load (Motor)       | 1/4 Hp motor                     |
| Max Sensor Range       | 40 ft / 1200 ft <sup>2</sup>     |
| Best Performance       | 20 ft / 320 ft <sup>2</sup>      |
| Time Delay             | 15 sec to 30 min                 |
| Photocell Sensitivity  | 30 Lux to daylight               |
| Operating Temperature  | 0° to 55°C                       |
| Storage Temperature    | -10° to 60°C                     |
| Relative Humidity      | 95% non-condensing               |
| Mounting               | Standard wall box                |
| Color                  | White                            |
| Warranty               | 5 years                          |
| Certifications         | UL/cUL listed E350121            |

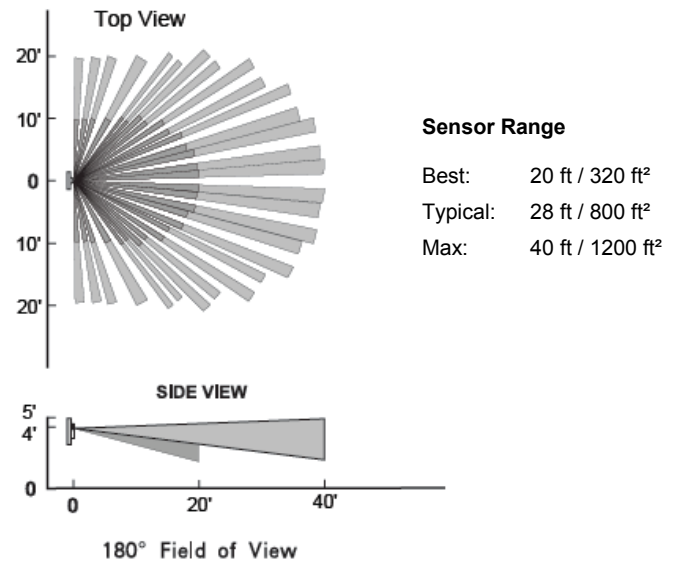
### Physical Dimensions



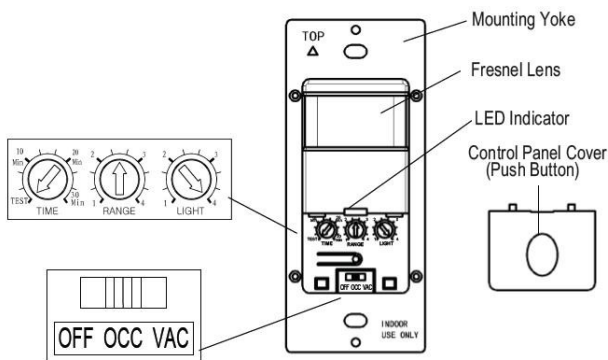
### Wiring Diagram



### Detection Area



### Settings Adjustment



### Sensor Operation

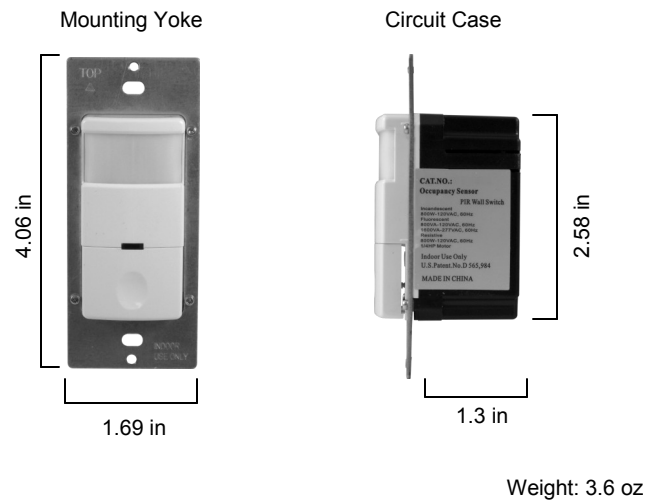
| Mode | Position | Description                                                                                  | Push-button Reaction             |
|------|----------|----------------------------------------------------------------------------------------------|----------------------------------|
| OFF  | Left     | Manual off: Load will stay off until manually switched to OCC or VAC.                        | None                             |
| OCC  | Center   | Occupancy Mode: Automatic on when occupancy is detected. Automatic off after set time delay. | Manually toggles the load on/off |
| VAC  | Right    | Vacancy Mode: manual on only, automatic off after set time delay                             | Manually toggles the load on/off |



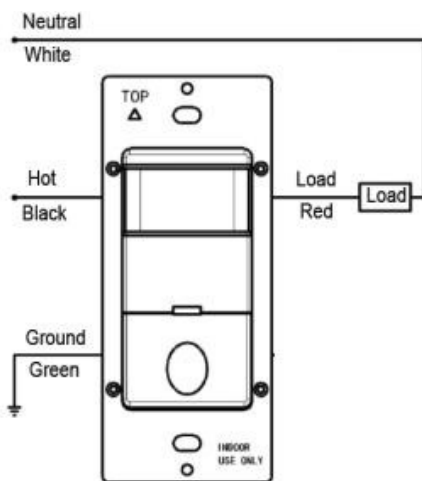
## Summary

|                        |                                  |
|------------------------|----------------------------------|
| Sensor Type            | PIR occupancy / vacancy          |
| Input Voltage          | 120/277VAC, 60Hz                 |
| Max Load (Resistive)   | 800W                             |
| Max Load (Fluorescent) | 800VA @ 120VAC / 1600VA @ 277VAC |
| Min Load               | None                             |
| Max Load (Motor)       | 1/4 Hp motor                     |
| Max Sensor Range       | 40 ft / 1200 ft²                 |
| Best Performance       | 20 ft / 320 ft²                  |
| Time Delay             | 15 sec to 30 min                 |
| Photocell Sensitivity  | 30 Lux to daylight               |
| Operating Temperature  | 0° to 55°C                       |
| Storage Temperature    | -10° to 60°C                     |
| Relative Humidity      | 95% non-condensing               |
| Mounting               | Standard wall box                |
| Color                  | White                            |
| Warranty               | 5 years                          |
| Certifications         | UL/cUL listed E350121            |

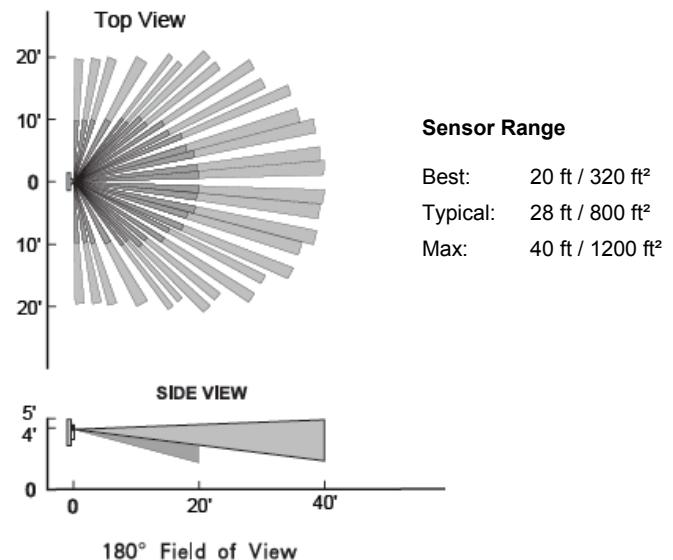
## Physical Dimensions



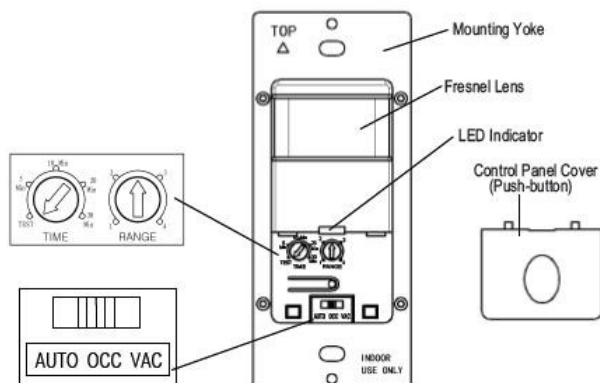
## Wiring Diagram



## Detection Area



## Settings Adjustment



## Sensor Operation

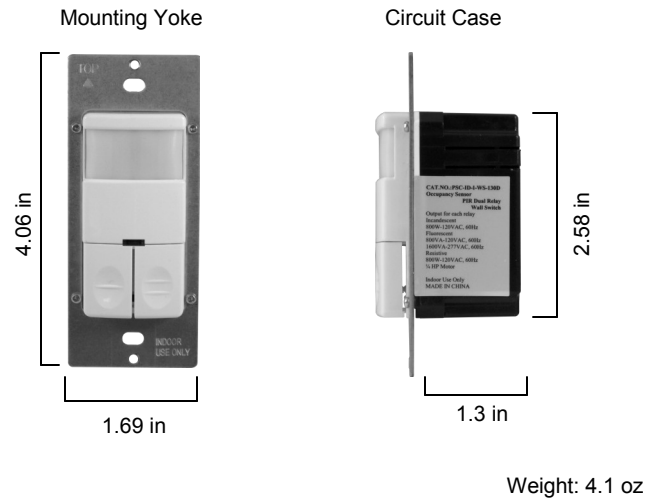
| Mode | Position | Description                                                                                           | Push-button Reaction             |
|------|----------|-------------------------------------------------------------------------------------------------------|----------------------------------|
| AUTO | Left     | Auto set occupancy mode: automatic on, automatic off after set time delay; includes walk-through mode | Manually toggles the load on/off |
| OCC  | Center   | Occupancy Mode: Automatic on, automatic off after set time delay                                      | Manually toggles the load on/off |
| VAC  | Right    | Vacancy Mode: manual on only. Automatic off after set time delay.                                     | Manually toggles the load on/off |



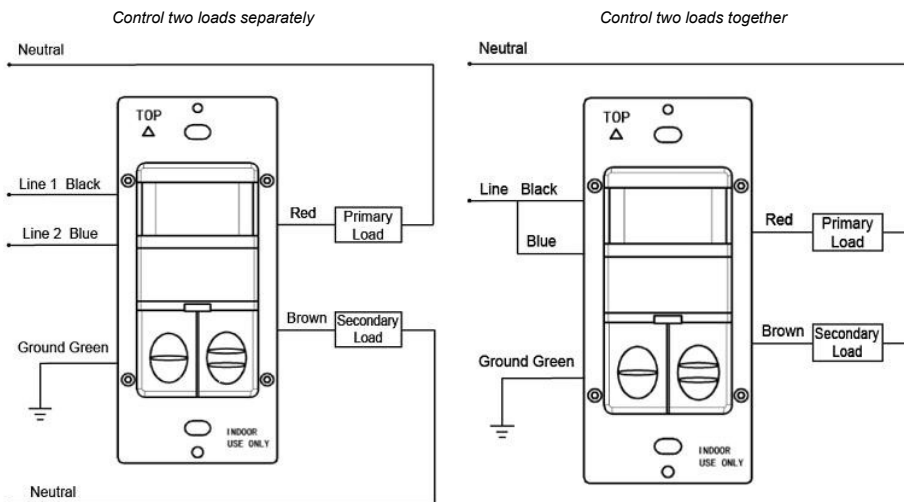
### Summary

|                        |                                    |
|------------------------|------------------------------------|
| Sensor Type            | PIR dual load, occupancy / vacancy |
| Input Voltage          | 120/277VAC, 60Hz                   |
| Max Load (Resistive)   | 800W                               |
| Max Load (Fluorescent) | 800VA @ 120VAC / 1600VA @ 277VAC   |
| Min Load               | None                               |
| Max Load (Motor)       | 1/4 Hp motor                       |
| Max Sensor Range       | 40 ft / 1200 ft <sup>2</sup>       |
| Best Performance       | 20 ft / 320 ft <sup>2</sup>        |
| Time Delay             | 15 sec to 30 min                   |
| Photocell Sensitivity  | 30 Lux to daylight                 |
| Operating Temperature  | 0° to 55°C                         |
| Storage Temperature    | -10° to 60°C                       |
| Relative Humidity      | 95% non-condensing                 |
| Mounting               | Standard wall box                  |
| Color                  | White                              |
| Warranty               | 5 years                            |
| Certifications         | UL/cUL listed E350121              |

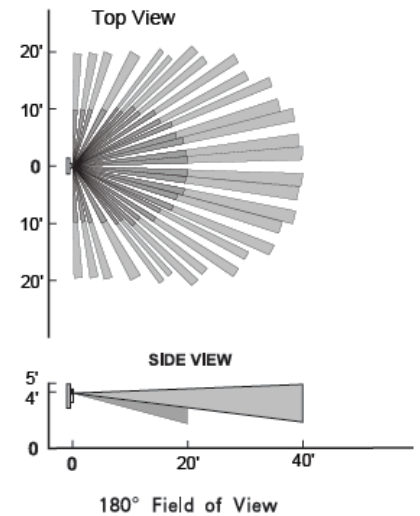
### Physical Dimensions



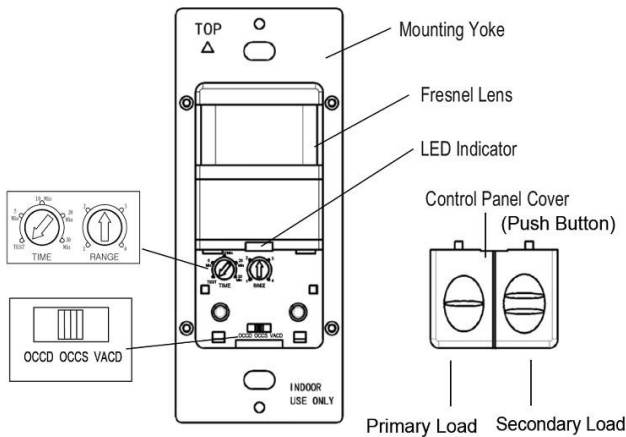
### Wiring Diagram



### Detection Area



### Settings Adjustment



### Sensor Operation

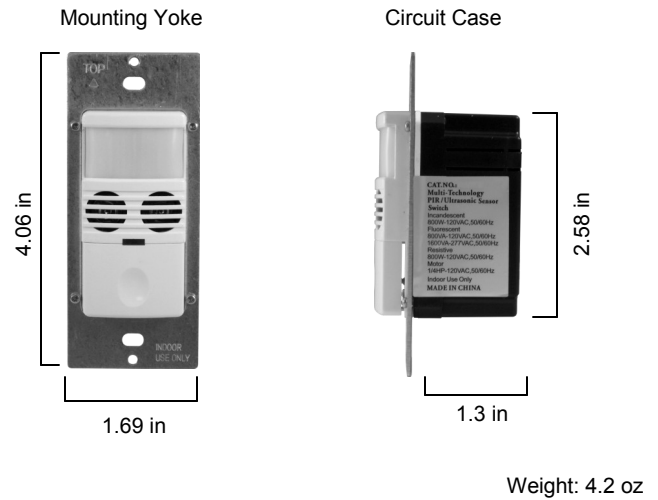
| Mode | Position | Description                                                                         | Push-button Reaction             |
|------|----------|-------------------------------------------------------------------------------------|----------------------------------|
| OCCD | Left     | Occupancy dual relay: Both loads are in OCC mode.                                   | Manually toggles the load on/off |
| OCCS | Center   | Occupancy single relay: Primary load is in OCC mode. Secondary load is in VAC mode. | Manually toggles the load on/off |
| VACD | Right    | Vacancy dual relay: Both loads are in VAC mode.                                     | Manually toggles the load on/off |



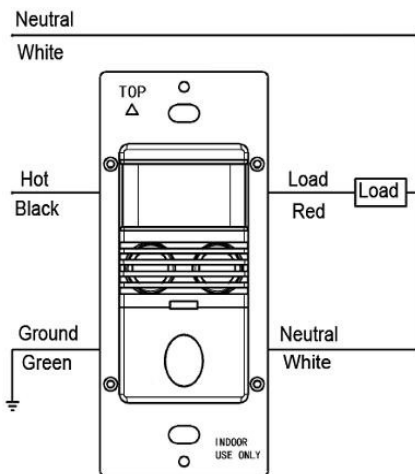
### Summary

|                          |                                       |
|--------------------------|---------------------------------------|
| Sensor Type              | PIR / Ultrasonic, occupancy / vacancy |
| Input Voltage            | 120/277VAC, 50/60Hz                   |
| Max Load (Resistive)     | 800W                                  |
| Max Load (Fluorescent)   | 800VA @ 120VAC / 1600VA @ 277VAC      |
| Min Load                 | None                                  |
| Max Load (Motor)         | 1/4 Hp motor                          |
| PIR Sensor Range         | 40 ft / 1200 ft²                      |
| Ultrasonic Sensor Range: | 20 ft / 400 ft²                       |
| Time Delay               | 15 sec to 30 min                      |
| Photocell Sensitivity    | 30 Lux to daylight                    |
| Operating Temperature    | 0° to 55°C                            |
| Storage Temperature      | -10° to 60°C                          |
| Relative Humidity        | 95% non-condensing                    |
| Mounting                 | Standard wall box                     |
| Color                    | White                                 |
| Warranty                 | 5 years                               |
| Certifications           | UL/cUL listed E350121                 |

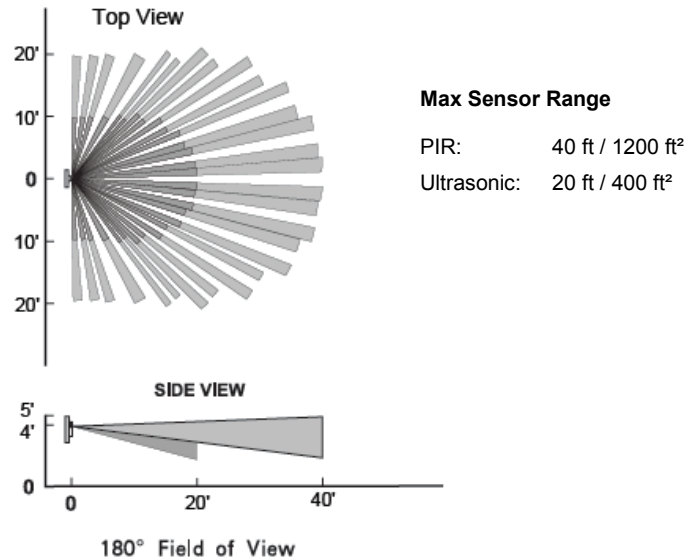
### Physical Dimensions



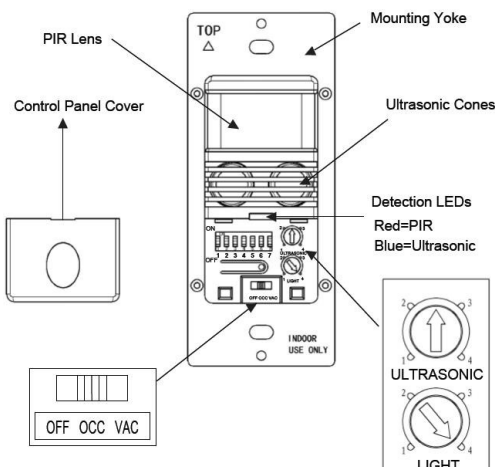
### Wiring Diagram



### Detection Area



### Settings Adjustment



### Sensor Operation

| Trigger Mode | Initial Trigger | Maintain Load Output | Re-trigger | 2 | 3 |
|--------------|-----------------|----------------------|------------|---|---|
| Option 1     | Both            | Either               | Either     | ↓ | ↓ |
| Option 2     | PIR             | PIR                  | PIR        | ↓ | ↑ |
| Option 3     | US              | US                   | US         | ↑ | ↓ |
| Option 4     | Both            | Both                 | Both       | ↑ | ↑ |

| PIR Sensitivity | 1 |
|-----------------|---|
| 50%             | ↓ |
| 100%            | ↑ |
| Walk Through    | 7 |
| Disabled        | ↓ |
| Enabled         | ↑ |

| Time Delay  | 4 | 5 | 6 |
|-------------|---|---|---|
| 15 Sec/Test | ↓ | ↓ | ↓ |
| 1 Minute    | ↓ | ↓ | ↓ |
| 5 Minutes   | ↓ | ↓ | ↓ |
| 10 Minutes  | ↓ | ↓ | ↓ |
| 15 Minutes  | ↓ | ↓ | ↓ |
| 20 Minutes  | ↓ | ↓ | ↓ |
| 25 Minutes  | ↓ | ↓ | ↓ |
| 30 Minutes  | ↓ | ↓ | ↓ |

↓=OFF ↑=ON ◀=Factory Setting

