PSC-ID-x-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
- Color: white

Suitable for Indoor Use Only

E350121

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

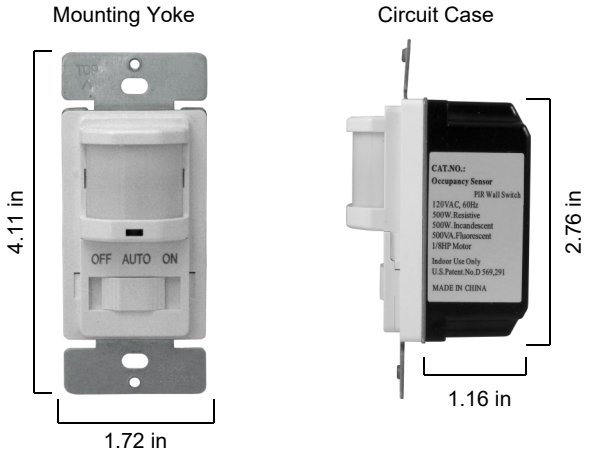
Model No.	Description	Min Load	Max Load †		Input Voltage
PSC-ID-I-WS-100*	Wall switch PIR occupancy sensor	25W	500VA	1/8 Hp motor	120VAC, 60Hz
PSC-ID-I-WS-101* **	Wall switch PIR occupancy sensor (no neutral)	25W	500VA	1/8 Hp motor	120VAC, 60Hz
PSC-ID-I-WS-110	Wall switch PIR occupancy/vacancy sensor	None	800VA @ 120VAC 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

PSC-ID-I-WS-100

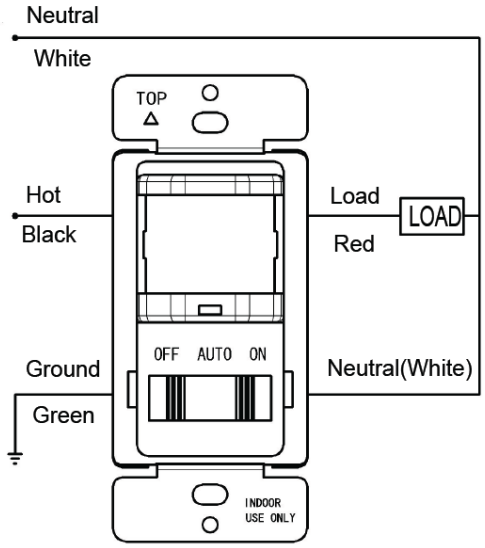
Summary	
Sensor Type	PIR occupancy sensor
Input Voltage	120VAC, 60Hz
Max Load	500W (resistive) / 500VA (fluorescent)
Min Load	none
Max Load (Motor)	1/8Hp motor
Max Sensor Range	30 ft / 980 ft²
Best Performance	15 ft / 260 ft²
Time Delay	15 sec to 30 min
Photocell Sensitivity	30 Lux to daylight
Operating Temperature	0° to 55°C
Storage Temperature	-10° to 60°C
Relative Humidity	95% non-condensing
Mounting	Standard wall box
Color	White
Warranty	3 years
Certifications	UL/cUL listed E350121

Physical Dimensions

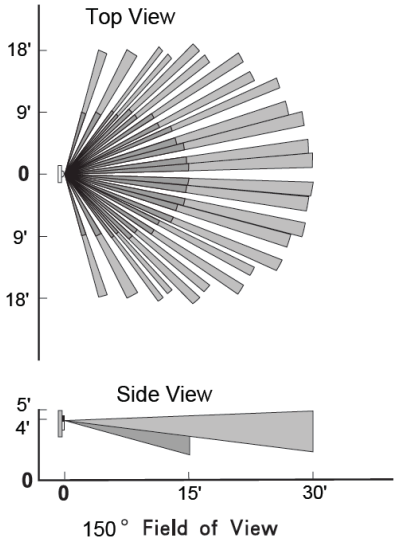


Weight: 3.9 oz

Wiring Diagram



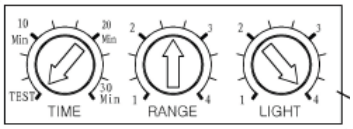
Detection Area



Sensor Range

Best:	15 ft / 260 ft²
Typical:	25 ft / 650 ft²
Max:	30 ft / 980 ft²

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

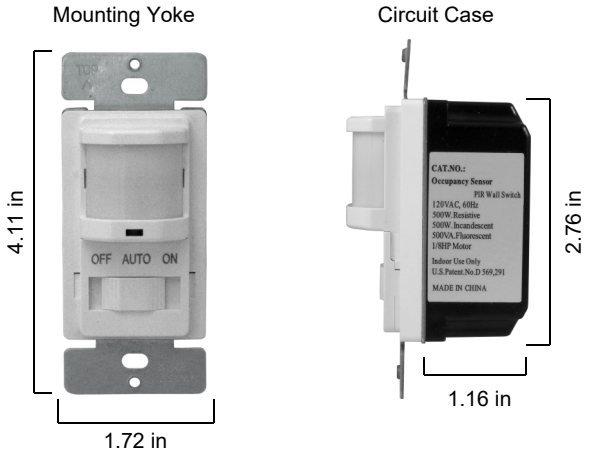
Mode	Position	Description
OFF	Left	Manual off: Load will stay off until manually switched to ON or AUTO.
AUTO	Center	OCC Mode: Automatic on when occupancy is detected. Automatic off after set time delay.
ON	Right	Manual on: Load will stay on until manually switched to OFF or AUTO.

PSC-ID-I-WS-101

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 ft²
Best Performance	15 ft / 260 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	3 years
Certifications	UL/cUL listed E350121

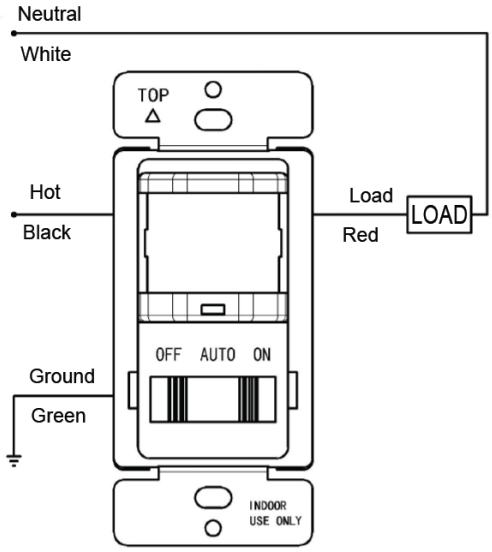
*SCR contained, not suitable for use with electronic ballasts.

Physical Dimensions

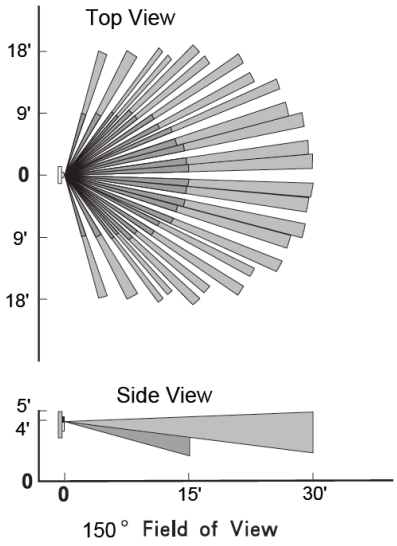


Weight: 3.1 oz

Wiring Diagram



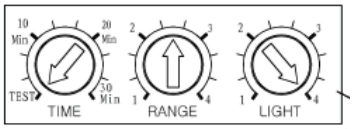
Detection Area



Sensor Range

Best:	15 ft / 260 ft²
Typical:	25 ft / 650 ft²
Max:	30 ft / 980 ft²

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)

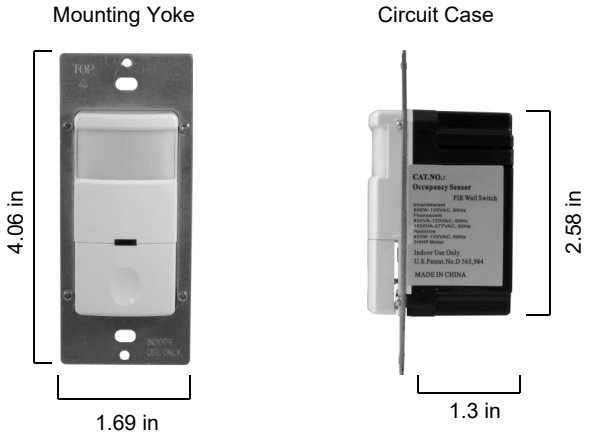
Sensor Operation

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.

PSC-ID-I-WS-110

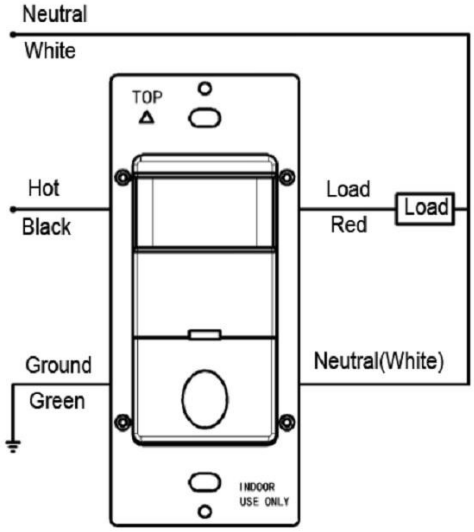
Summary	
Sensor Type	PIR occupancy / vacancy sensor
Input Voltage	120 VAC, 60Hz
Max Load (Resistive)	800W @ 120VAC
Max Load (Fluorescent)	800VA @ 120VAC
Min Load	None
Max Load (Motor)	1/4 Hp motor
Max Sensor Range	40 ft / 1200 ft²
Best Performance	20 ft / 320 ft²
Time Delay	15 sec to 30 min
Photocell 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

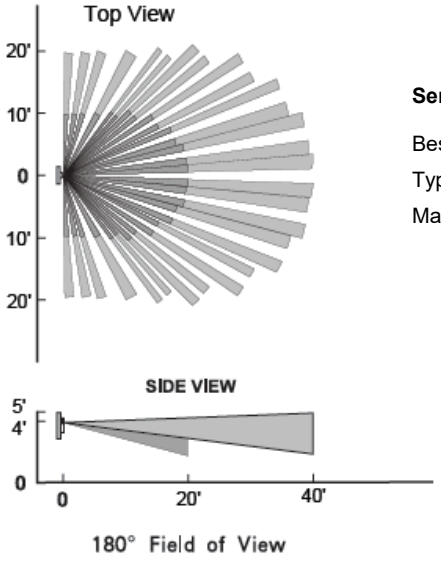


Weight: 3.6 oz

Wiring Diagram



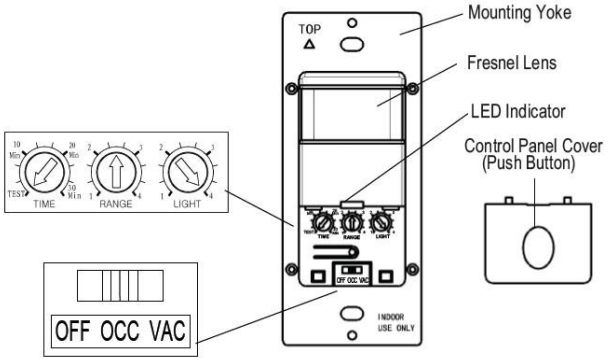
Detection Area



Sensor Range

Best:	20 ft / 320 ft²
Typical:	28 ft / 800 ft²
Max:	40 ft / 1200 ft²

Settings Adjustment



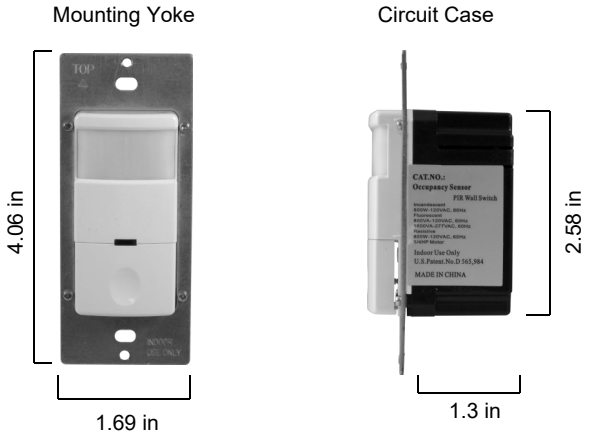
Sensor Operation

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

PSC-ID-I-WS-120

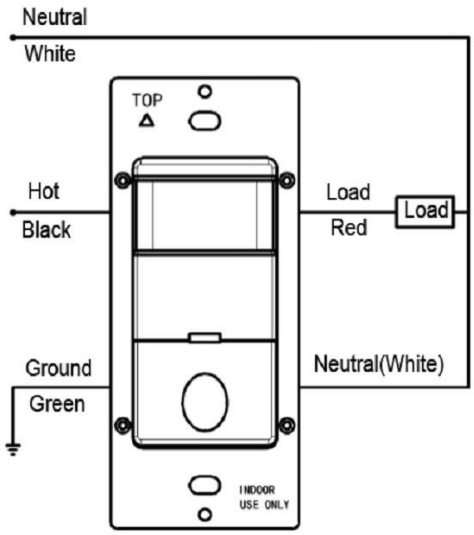
Summary	
Sensor Type	PIR dual voltage input
Input Voltage	120/277VAC, 60Hz
Max Load (Resistive)	800W
Max Load (Fluorescent)	800VA @ 120VAC / 1600VA @ 277VAC
Min Load	None
Max Load (Motor)	1/4 Hp motor
Max Sensor Range	40 ft / 1200 ft²
Best Performance	20 ft / 320 ft²
Time Delay	15 sec to 30 min
Photocell 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

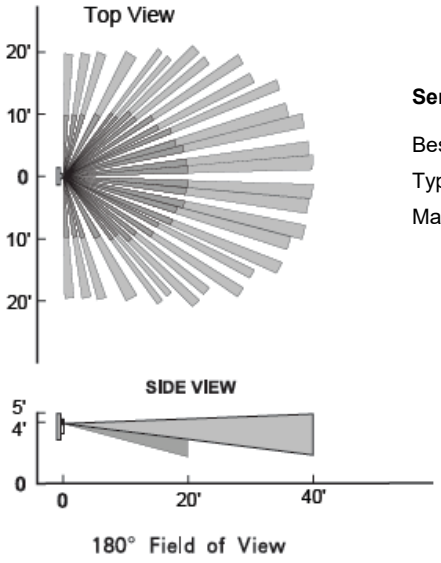


Weight: 3.6 oz

Wiring Diagram



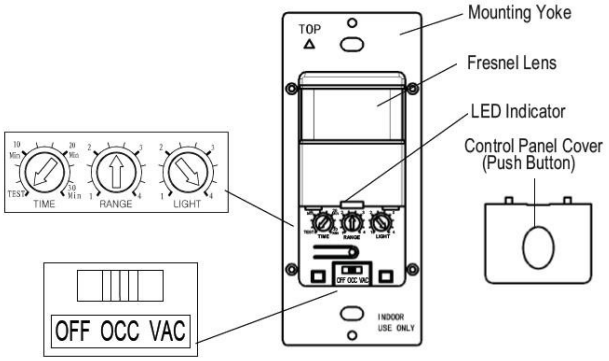
Detection Area



Sensor Range

Best:	20 ft / 320 ft²
Typical:	28 ft / 800 ft²
Max:	40 ft / 1200 ft²

Settings Adjustment



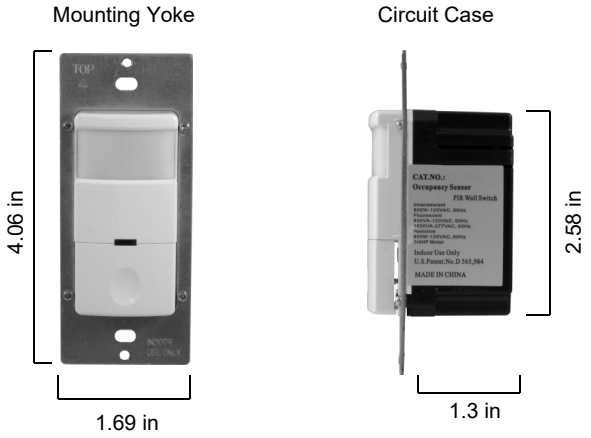
Sensor Operation

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

PSC-ID-I-WS-130

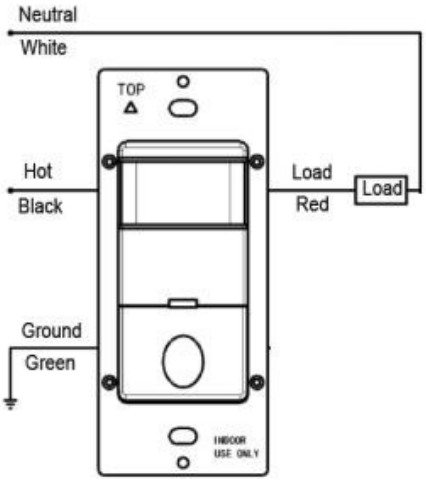
Summary	
Sensor Type	PIR occupancy / vacancy
Input Voltage	120/277VAC, 60Hz
Max Load (Resistive)	800W
Max Load (Fluorescent)	800VA @ 120VAC / 1600VA @ 277VAC
Min Load	None
Max Load (Motor)	1/4 Hp motor
Max Sensor Range	40 ft / 1200 ft²
Best Performance	20 ft / 320 ft²
Time Delay	15 sec to 30 min
Photocell 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

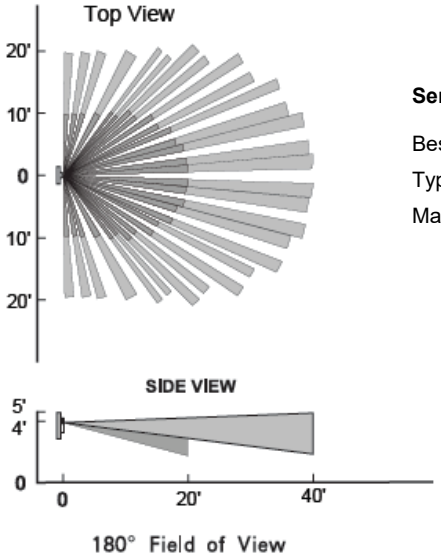


Weight: 3.6 oz

Wiring Diagram



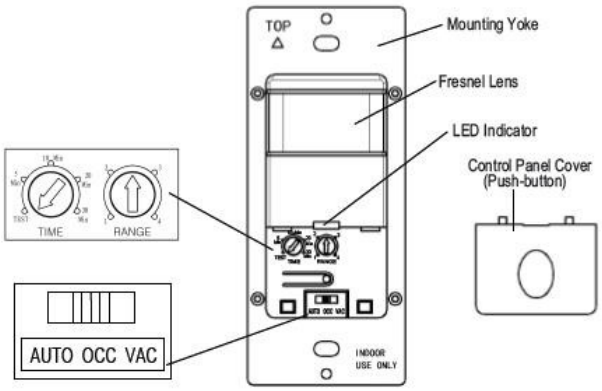
Detection Area



Sensor Range

Best:	20 ft / 320 ft²
Typical:	28 ft / 800 ft²
Max:	40 ft / 1200 ft²

Settings Adjustment



Sensor Operation

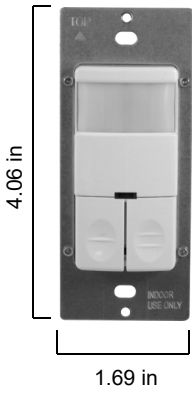
Mode	Position	Description	Push-button Reaction
AUTO	Left	Auto set occupancy mode: automatic on, automatic off after set time delay; includes walk-through mode	Manually toggles the load on/off
OCC	Center	Occupancy Mode: Automatic on, automatic off after set time delay	Manually toggles the load on/off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

PSC-ID-I-WS-130D

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 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

Mounting Yoke

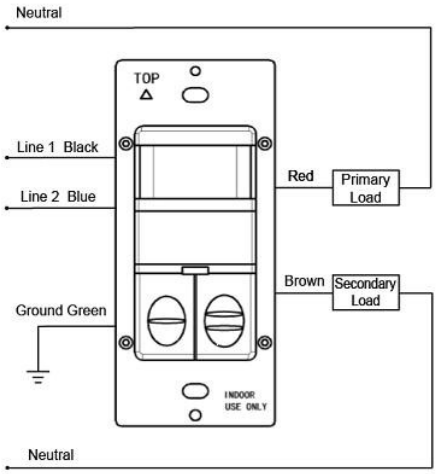


Circuit Case

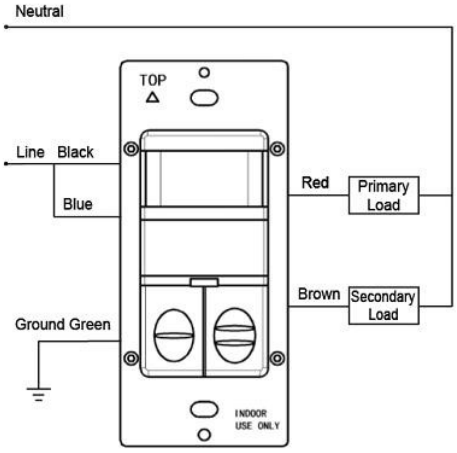
Weight: 4.1 oz

Wiring Diagram

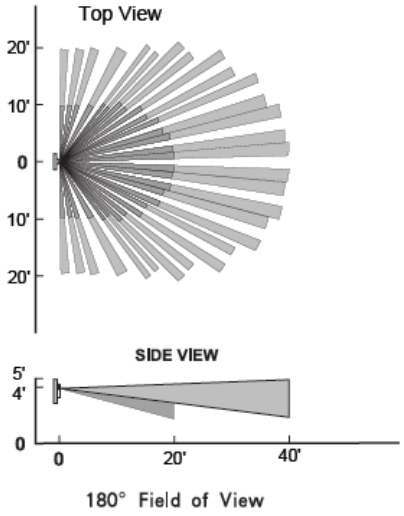
Control two loads separately



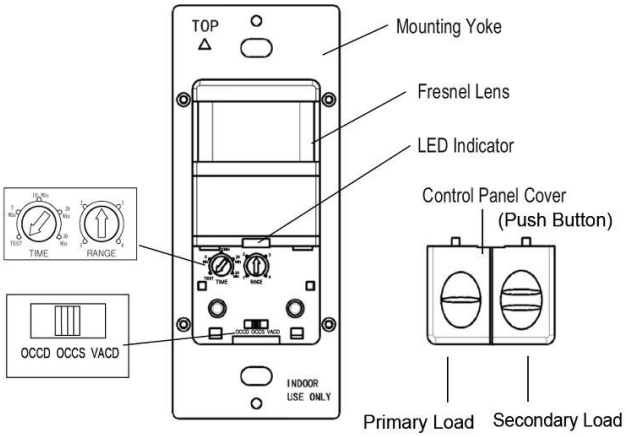
Control two loads together



Detection Area



Settings Adjustment



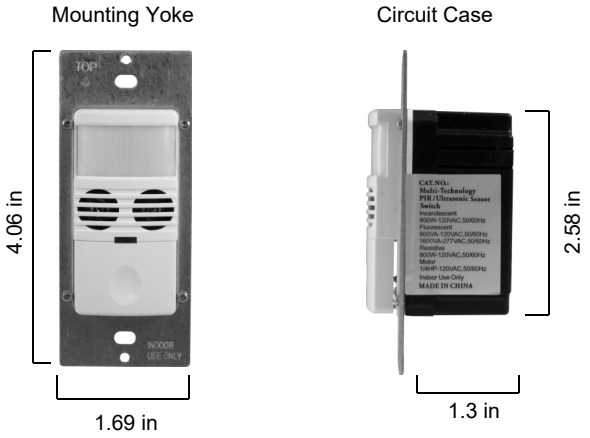
Sensor Operation

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

PSC-ID-D-WS-120

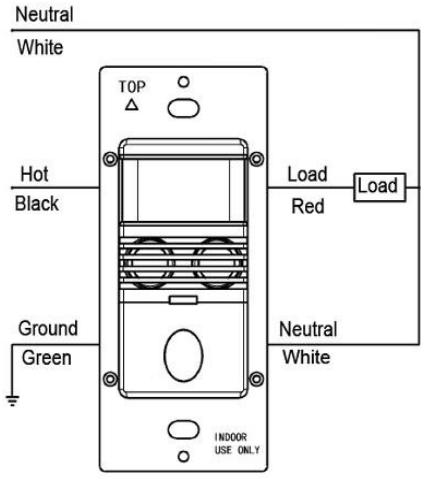
Summary	
Sensor Type	PIR / Ultrasonic, occupancy / vacancy
Input Voltage	120/277VAC, 50/60Hz
Max Load (Resistive)	800W
Max Load (Fluorescent)	800VA @ 120VAC / 1600VA @ 277VAC
Min Load	None
Max Load (Motor)	1/4 Hp motor
PIR Sensor Range	40 ft / 1200 ft²
Ultrasonic Sensor Range:	20 ft / 400 ft²
Time Delay	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

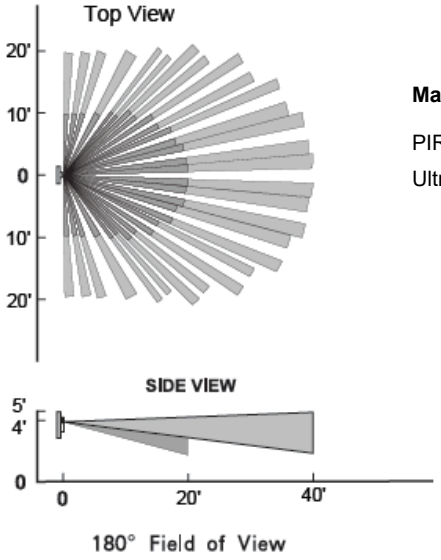


Weight: 4.2 oz

Wiring Diagram



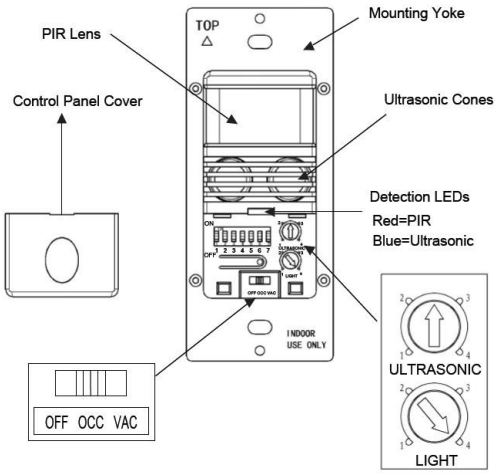
Detection Area



Max Sensor Range

PIR:	40 ft / 1200 ft²
Ultrasonic:	20 ft / 400 ft²

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