

# Occupancy & Vacancy Sensors

Rely on Intermatic for added convenience, security and long-term energy savings.



# Savings in motion.

Save on energy costs with Intermatic's affordable selection of reliable, high-quality Occupancy & Vacancy Sensors.



In-Wall and Ceiling Mount Sensors in both PIR (infrared) and Dual (PIR/Ultrasonic) Technologies can monitor virtually any area within a building, making Intermatic your best source when integrating lighting strategies in any retrofit or new construction project. Intermatic sensors are Title 20 compliant and can be used to achieve LEED certification.

#### **Engineered and tested for long-lasting performance.**

Our occupancy sensors have been designed and strenuously tested to ensure their dependability and compatibility with

any lighting type including LED. In fact, they have achieved some of the highest ratings in the industry, including a 5 A Electronic Ballast Rating and meeting the NEMA 410 Standard.

They utilize zero-crossing technology to suppress inrush current impact. This provides reliable ON/OFF sensing no matter the lighting technology, whether older magnetic models or new electronic drivers and ballasts.

## The right technology for the space.

Any object or person naturally emits radiation in the infrared range, known as the ordinary heat radiated by each element. Our range of sensors detects the presence and movement of people in a room, space, or immediate vicinity. Smart technology discerns even fine motor movements, so lights stay on when needed and turn off when vacated to conserve energy.

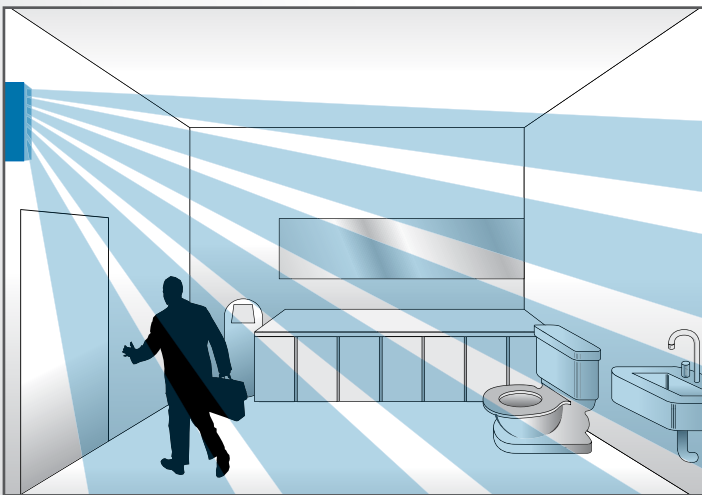


**Ceiling Mount Sensors**

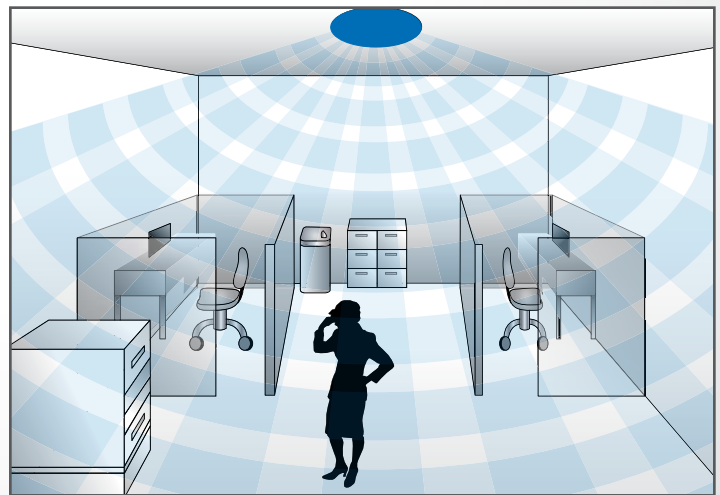


**In-Wall Sensors**

## The differences between Passive Infrared (PIR) and Dual (PIR/Ultrasonic) technology.



**Passive infrared (PIR) technology** detects the difference in heat energy a person in motion generates in contrast to the elements surrounding them in a confined space. To detect presence PIR needs line of sight to a person.



**Dual (PIR/Ultrasonic) technology** combines PIR with Ultrasonic technology. Ultrasonic utilizes wave analysis and Doppler sound waves to detect differences in energy from different phenomenon. The combination of the two technologies enhances responsiveness for maximum system reliability.

# Commercial-Grade Sensors

## Ceiling Mount and In-Wall Switch Sensors

Intermatic's line-up of ceiling mount sensors and in-wall switches are simple to install, so they can get to work quickly, helping to save energy, enhance security, and add convenience in all types of facilities: offices, industrial/warehouses, schools, hospitals, nursing homes, and rehabilitation centers.

## Features:

- Variety of coverage options to best meet the environment
- Zero-crossing technology for long life and performance
- Adjustable ambient light sensor override
- "No neutral wire required" models for retrofit applications
- User-selectable Vacancy or Occupancy switch mode available on IOS-DSR/DOV/DDR models
- High-Bay Fixture Mount Sensor detects from 15 to 50 ft.
- In-Wall Switches come with standard decorator wall plate
- Incandescent/Fluorescent/CFL/LED compatible

## Commercial-Grade, In-Wall Sensor Applications

In-Wall Mount		Ceiling Mount			
IOS-DOV-DT	IOS-DOV / IOS-DSR / IOS-DDR	IOS-CMP-DT-U	IOS-CMP-DT-LV	IOS-CMP-U / IOS-CMP-LV	IOS-HB-U
Dual (PIR/Ultrasonic)	PIR	Dual (PIR/Ultrasonic)		PIR	
<ul style="list-style-type: none"> <li>• Partitioned Restroom</li> <li>• Office Space w/Cubicles</li> <li>• Storage Rooms</li> <li>• Libraries</li> <li>• Waiting Rooms</li> </ul>	<ul style="list-style-type: none"> <li>• Laundry Room</li> <li>• Private Office</li> <li>• Copy Room</li> </ul>	<ul style="list-style-type: none"> <li>• Partitioned Restroom</li> <li>• Office Space w/Cubicles</li> <li>• Storage Rooms</li> <li>• Libraries</li> <li>• Waiting Rooms</li> </ul>	<ul style="list-style-type: none"> <li>• Partitioned Restroom</li> <li>• Storage Rooms</li> <li>• Waiting Rooms</li> </ul>	<ul style="list-style-type: none"> <li>• Conference Room</li> <li>• Classroom</li> <li>• Large Open Areas</li> <li>• Breakroom</li> </ul>	<ul style="list-style-type: none"> <li>• Warehouse</li> <li>• Manufacturing</li> </ul>



## Commercial-Grade, In-Wall Switches Comparison Guide




Model #	IOS-DOV-DT	IOS-DOV-NL	IOS-DOV	IOS-DSR	IOS-DDR
Switch Type	Occupancy or Vacancy	User-selectable Vacancy or Occupancy with Nightlight, 1-Circuit	User-selectable Vacancy or Occupancy, 1-Circuit		User-selectable Vacancy or Occupancy, 2-Circuit
Technology	Dual (PIR/Ultrasonic)	PIR			
Color	White	White or Ivory			
Requires Neutral Connection	Yes			No	
Mounting Height	4 to 5'				
Operating Voltage	120/277, 50/60 Hz	120 VAC, 60 Hz		120/277 VAC, 60 Hz	
Resistive	—	800 W, 120 VAC, 60 Hz			
Inductive Ballast	—	800 VA, 120 VAC, 60 Hz		800 VA, 120 VAC; 1600 VA, 277 VAC, 60 Hz	
Electronic Ballast	5 A, 120/277 VAC, 50/60 Hz	—	—	—	—
Tungsten/Incandescent	800 W, 120 VAC, 50/60 Hz	800 W, 120 VAC, 60 Hz			
Motor	1/4 HP, 120 VAC @ 50/60 Hz	1/4 HP, 120 VAC @ 60 Hz			
Coverage Pattern	180° 1200 ft² PIR 400 ft² Ultrasonic	180° 1200 ft² PIR			
Adjustable Light Level	10 fc to Daylight	30 lux to Daylight			
Adjustable Time Delay	15 sec to 30 min				
Operating Temp	32° F to 122° F (0° C to 50° C)	32° F to 131° F (0° C to 55° C)			

## Commercial-Grade, Ceiling-Mount Sensor Comparison Guide




Model #	IOS-CMP-DT-U	IOS-CMP-U	IOS-CMP-DT-LV	IOS-CMP-LV
Switch Type	Occupancy		Occupancy, High Bay	Occupancy, Low Voltage
Technology	Dual (PIR/Ultrasonic)	PIR		Dual (PIR/Ultrasonic)
Color	White			
Requires Neutral Connection	Yes		No	No
Mounting Height	8 to 11'		15 to 50'	8 to 11'
Operating Voltage	120/277 VAC, 50/60 Hz	120-277 VAC, 60 Hz		24 VDC
Resistive	—	10 A, 120 VAC, 60 Hz		—
Inductive Ballast	—		20 A, 120/240/277 VAC*	
Electronic Ballast	5 A, 120/277 VAC, 50/60 Hz	800 VA, 120 VAC, 60 Hz; 1600 VA, 277 VAC, 60 Hz		—
Tungsten/Incandescent	800 W, 120 VAC, 50/60 Hz	800 W, 120 VAC, 60 Hz		15A, 120 VAC *
Motor	1/4 HP, 120 VAC, @ 50/60 Hz	1/4 HP, 120 VAC @ 60 Hz		1 HP, 120/240 VAC* 1 HP, 120/240 VAC*
Coverage Pattern	360° 1600 ft² PIR 1000 ft² Ultrasonic	360° 1200 ft² PIR	360° 1200 ft² Lens 1 2800 ft² Lens 2	360° 1600 ft² PIR 1000 ft² Ultrasonic 1200 ft² PIR
Adjustable Light Level	10 fc to Daylight	10 fc to 150 fc		10 fc to Daylight 10 fc to 150 fc
Adjustable Time Delay	5 sec to 30 min	15 sec to 30 min		5 sec to 30 min 15 sec to 30 min
Operating Temp	32° F to 122° F (0° C to 50° C)	32° F to 131° F (0° C to 55° C)	32° F to 122° F (0° C to 50° C)	

\* Ratings of Low Voltage Power Pack, IOS-PP24.

# Residential-Grade Sensors

## In-Wall Vacancy and Occupancy Sensor Switches






Intermatic's Occupancy Sensors are designed to save energy, add security, and compliment the aesthetics of single or multifamily homes. They are simple to install, as many do not require a neutral wire. There are models to control both electronic and magnetic ballasts and all meet California Title 20 requirements. All models incorporate passive infrared (PIR) technology to detect the heat that is naturally generated by people for ON and OFF activation.

## Features:

- Adjustable PIR sensitivity
- Adjustable time delay 15 sec to 30 min
- Adjustable ambient light sensor override
- Incandescent/ Fluorescent/CFL/LED compatible models
- "No neutral wire required" models available for retrofit
- Come with standard decorator wall plate



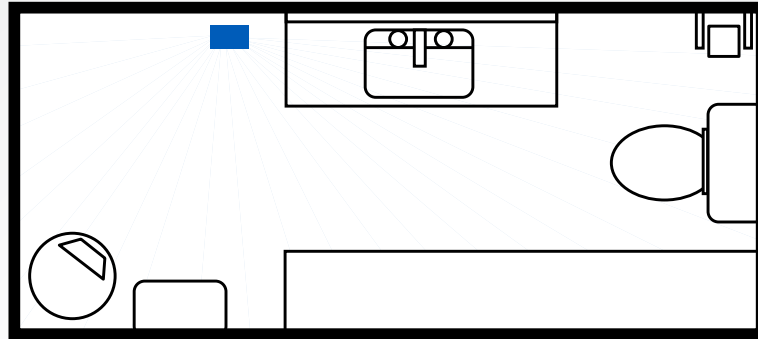
## Residential Grade In-Wall Sensor Switches Comparison Guide

					
Model #	IOS-DSIMF	IOS-DSIF	IOS-DPBIMF	IOS-DPBIF	IOS-DPBIF2
Switch Type	Occupancy, Manual Override		Occupancy		Vacancy
Technology	PIR				
Applications	Laundry Room, Closets, Kitchen, Home Office, Bathrooms				
Color	White or Ivory				
Requires Neutral Wire	No	Yes	No	Yes	
Mounting Height	4 to 5'				
Operating Voltage	120 VAC, 60 Hz				
Resistive	500 W, 120 VAC 32° F to 122° F (0° C to 50° C) 60 Hz				
Inductive Ballast	500 VA, 120 VAC, 60 Hz				
Incandescent	500 W, 120 VAC, 60 Hz				
Motor	1/8 HP, 120 VAC				
Coverage Pattern	150°, 980 ft²				
Adjustable Light Level	30 lux to Daylight				
Adjustable Time Delay	15 sec to 30 min				
Operating Temp	32° F to 131° F (0° C to 55° C)				

# Using PIR or Dual Technology Based on Room Layout\*

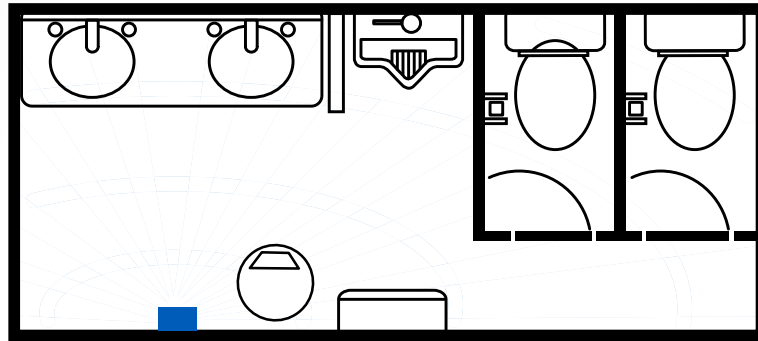
## Non-partitioned Bathroom

In-Wall Sensor with PIR Technology



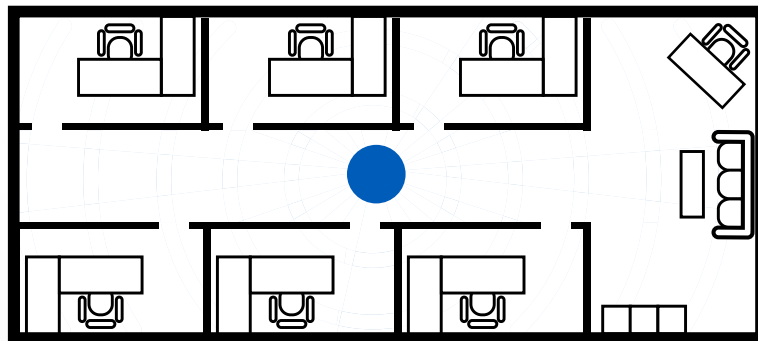
## Partitioned Bathroom

In-Wall Sensor with Dual Technology



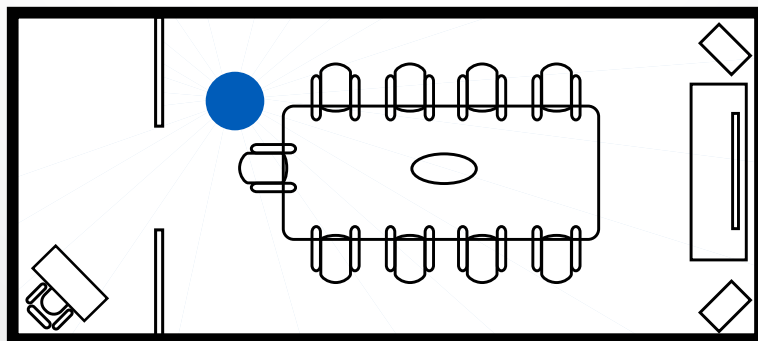
## Office Space with Cubicles

Ceiling Mount Sensor with Dual Technology



## Conference Room

Ceiling Mount Sensor with PIR Technology



### Installation Tips:

- \* Do not install near vents; refer to instruction sheets
- \* Make sure sensor is not blocked by objects or doors
- \* When installing multiple sensors, overlap walkway coverage, to avoid non-triggers