sensor**switch** 

Selecting the **Right Sensor** 



With one of the industry's most extensive indoor and outdoor product portfolios, SensorSwitch $^{\text{m}}$  is your expert source for lighting controls technology, service and support.

#### SELECTING THE RIGHT SENSOR FOR YOUR APPLICATION

Sensors come in many forms with many different features. This book is designed to guide you to the right sensor for your job.

#### STEP 1: DETERMINE THE ROOM LAYOUT

The layout of the room is very important in selecting the right sensor. Large rooms require multiple sensors while small rooms may need only one sensor.

Several key pieces of information must be known about the room in order to determine the correct sensor:

- What are the dimensions of the room?
- Are there obstructions in the room?
- How high are the lights mounted?

Once this information is known, the proper sensors can be selected.

#### STEP 2: SELECT THE DETECTION TECHNOLOGY

Passive Infrared Detection (PIR) is standard on all SensorSwitch sensors. PIR detects changes in the infrared energy (heat) given off by occupants as they move within the sensor's field of view.

Passive Dual Technology (PDT) is the combination of PIR and Microphonics." Sensors with PDT can both see and hear the occupant in the room, making it ideal for rooms with obstructions. Microphonics technology, invented by SensorSwitch, allows the sensor to "hear" the occupant in the room by using a microphone inside the sensor. The sensor listens for sounds indicating occupancy while eliminating typical building noises.

#### STEP 3: SELECT THE LENS TYPE

It is important to select a lens type with a PIR coverage pattern designed for the room size and application. The applications in this guide provide coverage patterns for each sensor group.

#### **STEP 4**: DETERMINE THE POWER TYPE

Sensors must receive power in order to operate. There are two ways to receive power: through a power pack (low voltage) or by direct connection to the electrical wires (line voltage).

#### **STEP 5**: DETERMINE OPTIONS

Sensor Switch offers additional options for many applications, such as dimming and photocontrol. For all available options, please visit www.acuitybrands.com/sensorswitch.

# START HERE



#### SMALL ROOMS

Small rooms are typically less than 150 sq. ft. Common applications include private offices, storage closets and small restrooms. Programming with the VLP mobile app is optional on these small room controls.

APPLICATION	MODEL #
Private Office or Restroom	WSXA, CMR 9
Restroom with Stalls	WSXA PDT, CMR PDT 9
Private Office with Bi-Level	WSXA 2P, CMR 9 2P
Restroom with Light & Fan	WSXA PDT 2P FAN, CMR PDT 9 2P
Private Office with Dimming	SPODMRA D, WSXA PDT D











SPODMRA D WSXA

WSXA D

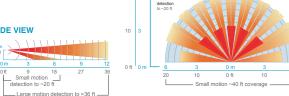
CMR PDT 9



#### WSXA D, WSXA WALL SWITCH SENSORS

#### Coverage Patterns

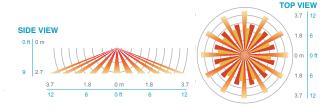
# SIDE VIEW



## CMR PDT 9, CM PDT 9 SMALL MOTION / STANDARD RANGE 360° SENSORS

#### Coverage Patterns

**TOP VIEW** 



#### **OPEN SPACES**

Larger rooms with wide open spaces have unique challenges. A larger room requires sensors with wider coverage patterns, and large rooms may have obstacles, such as cubicles or filing cabinets, that can block the sensor's view. The best controls for these rooms are sensors with PDT (PIR and Microphonics); the sensor will be able to see room occupants as well as hear them if they are blocked by an obstruction. Programming with the VLP mobile app is optional on these larger room controls.

APPLICATION	MODEL #
Open Office (on 30' centers)	CM PDT 9*, LSXR 9, CMRB 9
Storage Area with Shelving	CM PDT 10*, LSXR 10, CMRB 10

\*Power pack required





CM PDT 9



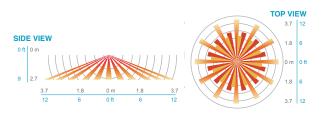


**CMRB** 

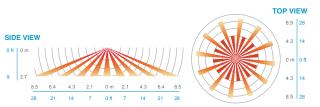


#### CM PDT 9, LSXR 9, CMRB 9 SMALL MOTION / STANDARD RANGE 360° SENSORS

#### Coverage Patterns



## CM PDT 10, LSXR 10, CMRB 10 LARGE MOTION / EXTENDED RANGE 360° SENSORS



#### CLASSROOMS

Classrooms, either in a school or corporate facility, are an ideal place for occupancy sensors. The sensor should be placed either in the corner of the room using a wide view sensor (WV) or in the center of the room using a ceiling mount sensor (CM). Classrooms are also a great application for sensors with PDT (PIR and Microphonics) technology.

APPLICATION	MODEL #*
Large Open Area (Cafeteria)	WV 16, CM 10
Classroom	WV PDT 16, CM PDT 10
Hallway	HW13, CM 11
	*Power pack required on all models

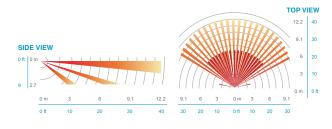


WV PDT 16

CM PDT 10

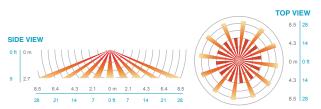
#### WV PDT 16 WIDE VIEW 120° SENSOR

#### Coverage Patterns



# CM PDT 10

LARGE MOTION / EXTENDED RANGE 360° SENSOR



#### WAREHOUSES

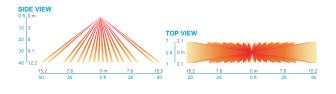
A warehouse is a high bay application and generally has ceiling heights of 30 to 45 feet. Fixture-mount sensors (mount directly to each fixture) control each fixture independently. Interchangeable lenses enable the ability to adapt to various warehouse applications.

APPLICATION	MODEL #	
High Bay	LSXR 6	
Bi-Directional Aisleway	LSXR 50, CMRB 6 and 50	

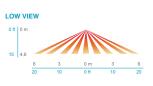


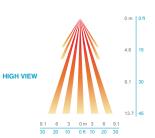
LSXR 50 HIGH BAY BI-DIRECTIONAL AISLEWAY SENSORS

## Coverage Patterns



# LSXR 6 HIGH BAY 360° SENSORS





#### **CORRIDORS**

Corridors are often overlooked applications that offer a great opportunity to conserve energy. In these areas, you need a sensor that can see down the hallway for walking motion. This can be accomplished by mounting ceiling mount sensors or hallway sensors at opposite ends of the corridor.

7' to 15' Mounting height CM 11	
Hallway (apply in pairs) HW13	

\*Power pack required for all models



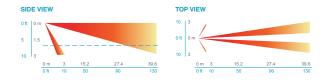
CM 11 HW13

CM 11 BI-DIRECTIONAL HALLWAY SENSOR

## Coverage Patterns



HW13 END-OF-AISLE SENSOR





# IT'S NOT JUST SMARTER. IT'S EASIER.

A leader in lighting control innovation, the SensorSwitch $^{\mathsf{m}}$  team is continuously developing technologies that enhance the performance of our occupancy sensors and photocells to provide trusted quality and reliability. We offer a broad selection of stand-alone controls to meet every application need.

www.acuitybrands.com/sensorswitch

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