

OVERVIEW

SensorSwitch offers a broad array of BAA low voltage ceiling mount sensors that will meet your application needs. These high-quality US produced devices include several technology features pertaining to occupancy detection, daylight harvesting, and automatic dimming control. CM BAA family of sensors utilize 100% digital Passive Infrared (PIR) detection and are available with several lens options, providing flexibility for multiple mounting height and coverage pattern requirements. Dual technology (PDT) occupancy detection can also be added as an option for applications where occupants are stationary for long periods of time.

The sensors are powered with 12 to 24 VAC/VDC and typically operate with a PP-20 enabling complete 20 Amp circuits to be controlled.

FEATURES

- 100 hr lamp burn-in timer
- No field calibration or sensitivity adjustments required
- Convenient test mode
- Green LED indicator
- The CM ADC offers continuous dimming control via daylighting. 0-10V Dimming sinks up to 20 mA
- The CM PC offers On/Off lighting control with daylighting.
- Digital Photo-Cell Set-Point control capable of finding optimum set-point
- Tested to NEMA WD 7 2011

Buy American (BAA)

This product is assembled in the USA and meets The Buy America(n) government procurement Requirements under FAR, DFARS and DOT. Please refer to www.acuitybrands.com/buy-american for additional information.

Warranty

Five-year limited warranty. Complete warranty terms located at:

www.acuitybrands.com/support/warranty/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application. Specifications subject to change without notice.

sensorswitch®

*CM BAA
Buy American
Ceiling Mount
Occupancy Sensor*



ORDERING INFORMATION

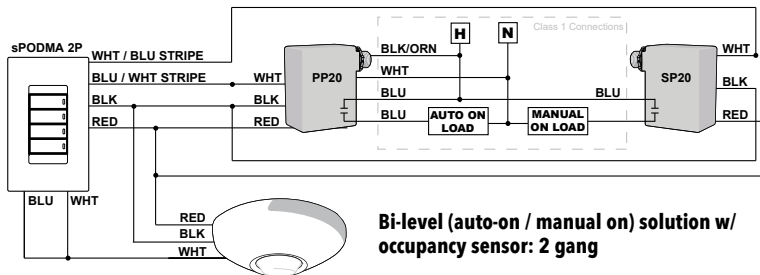
CM Family					Example: CM PDT 9 R BAA
CM					
Series	Detection Technology	Coverage Type	Relay	Dimming	Buy American Act
CM Ceiling Mount Sensor	[blank] PIR PDT ¹ Dual Technology (PIR/Microphonics)	[Blank] ³ None 6 ¹ High Bay 360° 9 Small Motion 360° 10 Large Motion 360° 11 ² Hallway	[blank] None R ² Low Voltage Relay	[blank] None P ⁴ Photocell ADC ² Photocell w/ Dimming DZ ⁵ Photocell ONLY	BAA

Notes

1. PDT, P, ADC option not available on CM 6 models.
2. R, P, ADC, option not available on CM 11 models.
3. Only available in P or ADC.
4. P offered in PDT 9 models Only.
5. DZ Only available in CM ADC.

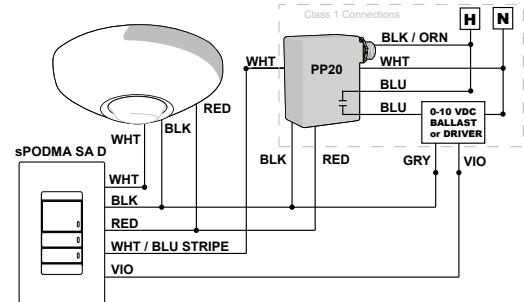
WIRING (DO NOT WIRE HOT)

BI-LEVEL (MANUAL ON / AUTO ON) SOLUTION w/ OCCUPANCY SENSOR: 1 GANG

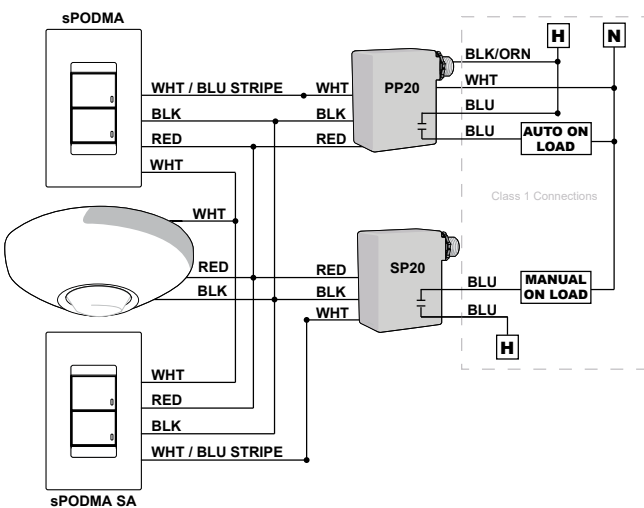


Bi-level (auto-on / manual on) solution w/ occupancy sensor: 2 gang

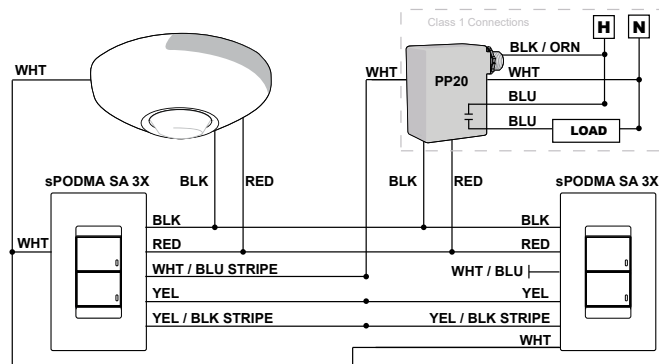
MANUAL ON w/ DIMMING & OCCUPANCY SENSOR



Note: If sensor also has dimming output (e.g., CM 9 ADC), connect sensor VIO wire to SPODMA and ballast/driver VIO wire. Lowest output level always takes precedence. If no sensor is used, connect the SPODMA white wire to the red wires.



3-WAY MANUAL ON SOLUTION w/ OCCUPANCY SENSOR

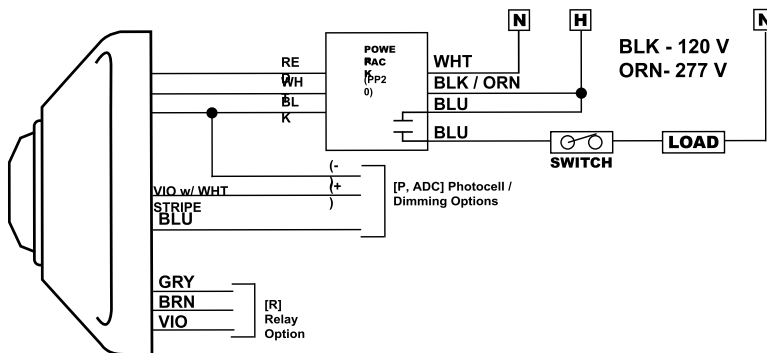


Note 1: SPODMA (SA) 3X D units should only be used in multi-way applications with SPODMA (SA) 3X units (non-dimming) as dimming levels are not communicated between devices.

Note 2: For multi-way configurations greater than two units, connect additional unit(s) in same manner as bottom right SPODMA SA 3X unit in diagram above.

Note 3: If no sensor is used, connect the SPODMA white wire to the red wires.

OCCUPANCY SENSOR AUTO ON/OFF



WIRING LEGEND

RED - Power Input (12-24 VAC/VDC)

BLACK - Common

WHITE - Occupancy State (high VDC for occupied)

BLUE - Photocell Control

VIOLET/WHITE - Automatic Dimming Control

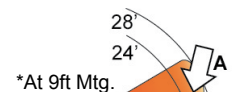
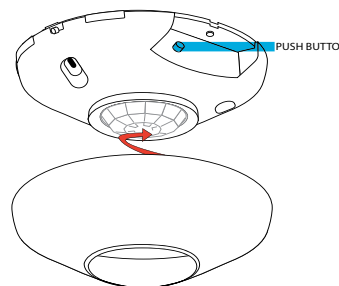
GREY - Normally Closed (Occupied)

BROWN - Common

VIOLET - Normally Open (Unoccupied)

INSTALLATION

- Mount sensor directly to a ceiling tile or a metallic grid (two self-tapping screws provided).
- Sensor's mounting holes also align with 3.5" octagon or single gang handy box (screws not provided).
- Sensor will detect motions crossing segments more effectively than motions parallel to beams.
- For optimal detection, position sensor such that segments are crossed upon entrance and unable to view outside the space.
- PDT models: For maximum Microphonics sensitivity avoid locating sensor near HVAC air diffusers



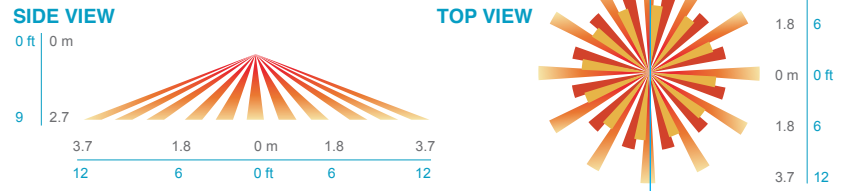
A: When walking across beam, detection will occur at approximately 28 feet (8.53 m)

B: When walking into beam, detection will occur at approximately 24 feet (7.32 m)

COVERAGE PATTERNS

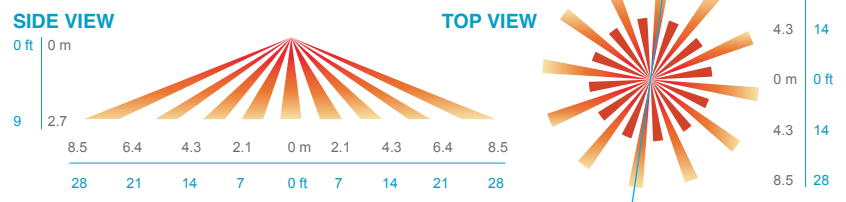
Small Motion 360° (Model # CM 9/ CM PDT 9')

- Best choice for small motion (e.g. hand movements) detection
- 360° conical shaped pattern
- Provides 12 ft (3.66 m) radial coverage (~500 ft²) when mounted to standard 9 ft (2.74 m) ceiling
- 8 to 15 ft (2.44 to 4.57 m) mounting heights provide 10 to 20 ft (3.05 to 6.10 m) radial coverage
- Lens assembly is marked with a gray ring around lens to differentiate versus the #10 lens
- Tested to NEMA WD 7-2011



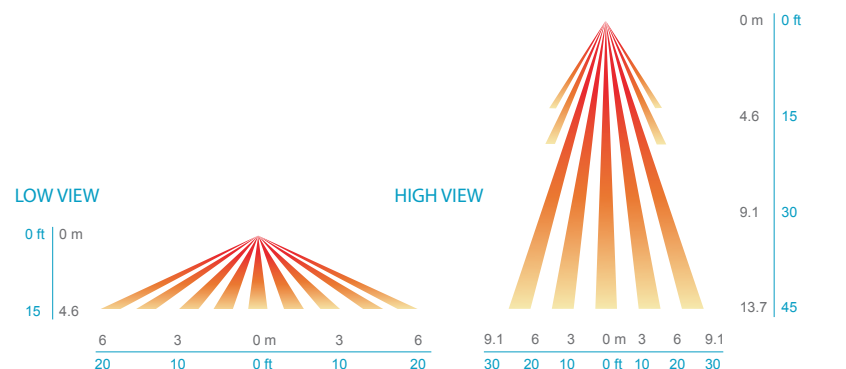
Large Motion 360° (Model # CM 10/ CM PDT 10')

- Best choice for large motion detection (e.g. walking)
- 360° conical shaped pattern
- Provides ~24 ft (7.32 m) radial coverage (~2000 ft²) when mounted at 9 ft (2.74 m)
- 7 to 15 ft (2.13 to 4.57 m) mounting heights provide 16 to 36 ft (4.88 to 10.97 m) radial coverage
- Detection range improves when walking across beams compared to into beams
- Tested to NEMA WD 7-2011



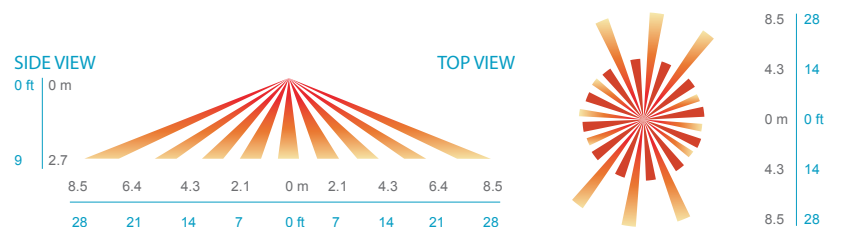
High Mount 360° (Model # CM 6)

- Best choice for 15 to 45 ft (4.57 to 13.72 m) mounting heights
- 15 to 20 ft (4.57 to 6.10 m) radial coverage overlaps area lit by a typical high bay fixture
- Excellent detection of large motion (e.g. walking) up to 35 ft (10.76 m)
- Excellent detection of extra large motion (e.g. forklifts) up to a 45 ft (13.72 m)
- Tested to NEMA WD 7-2011



High Mount Hallway (Model # CM 11/ CM PDT 11')

- Best choice for large motion detection
- Provides 28 ft (8.53 m) of coverage when mounted to standard 9 ft (2.74 m) ceiling
- 7 to 15 ft (2.13 to 4.57 m) mounting heights provide 16 to 36 ft (4.88 to 10.97 m) hallway coverage
- Tested to NEMA WD 7-2011



1. Sensors with Microphonics™ provides overlapping detection of human activity over the complete PIR coverage area. Advanced filtering is also utilized to prevent non-occupant noises from keeping the lights on.