Catalog Number: | Date: | Project:

OVERVIEW

The CM family of ceiling mount occupancy sensors provide a range sensor solutions for applications with finished ceilings (e.g. ceiling tiles, sheetrock, plaster). CM family 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. With optional flash programming via the Sensor Switch Mobile App, the user can easily change time delay, on mode and photocontrol settings.

FEATURES

- Configurable using the Sensor Switch Mobile App
- 360° coverage pattern
- Push- button programmable, adjustable time delays, and multiple operating modes
- 100 hr lamp burn-in timer
- No field calibration or sensitivity adjustments required
- Convenient test mode
- Green LED indicator

Warranty

Five-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. 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

design select

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*See ordering tree for details

sensorswitch®

CM
CM PDT
Ceiling Mount Occupancy Sensor



Available on the App Store | ANDROID APP ON Google play | VLP | RoHS COMPLIANT | c UL US LISTED

Design Select options indicated by this color background.

ORDERING INFORMATION

CM Family — **Example: CM PDT 11 R LT**

CM

Series	Detection Technology	Coverage Type	Relay	Dimming	Visible Light Programming	Temp/Humidity
CM Ceiling Mount Sensor	[blank] PIR PDT[1] Dual Technology (PIR/Microphonics)	6 High Bay 360° 9 Small Motion 360° 10 Large Motion 360° 11 Hallway	[blank] None R Low Voltage Relay	[blank] None D Occupancy Controlled Dimming P Photocell ADC[2] Photocell w/ Dimming	[blank] None VLP[3] 6-8' Range Flash Programming via the Sensor Switch Mobile App	[blank] Standard LT Low Temp/ High humidity

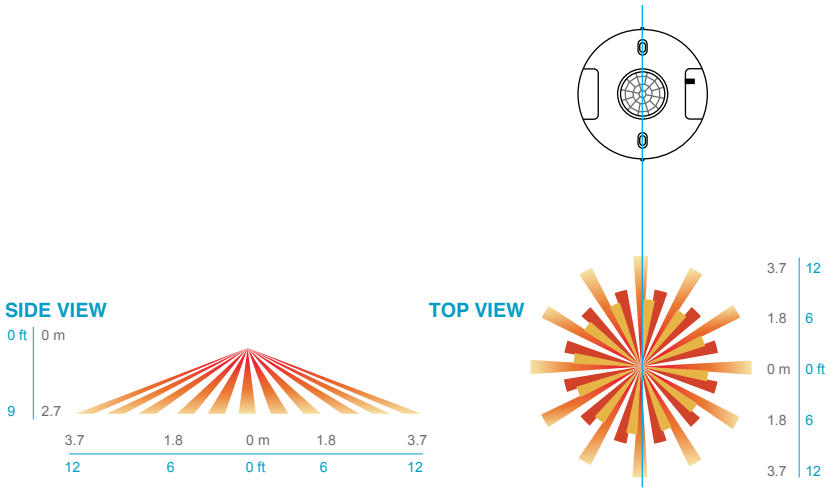
Notes
1. PDT option not available on CM 6 models
2. ADC option not available on CM 6 models
3. Must specify P or ADC if VLP is ordered and must be within 5ft of sensor to program

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COVERAGE PATTERNS

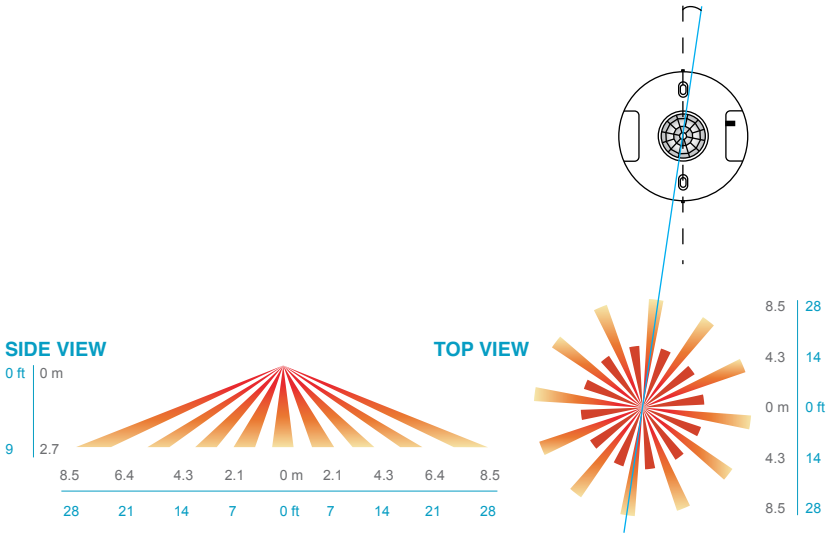
Small Motion 360° (Model # CM 9/ CM PDT 9[1])

- 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



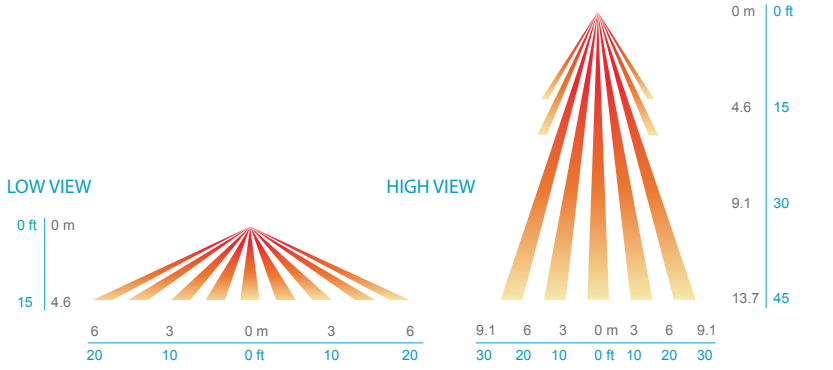
Large Motion 360° (Model # CM 10/ CM PDT 10[1])

- 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



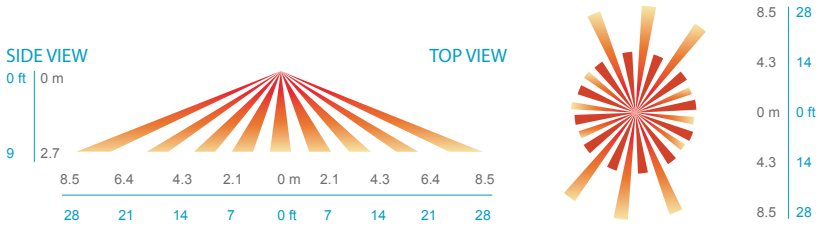
High Mount 360° (Model # CM 6)

- 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[1])

- 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 4.57m) mounting heights provide 16 to 36 ft (4.88 to 10.97m) 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.

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WIRING (DO NOT WIRE HOT)

STANDARD WIRING

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

BLACK - Common

WHITE - Occupancy State (high VDC for occupied)

PHOTOCELL / DIMMING OPTIONS (D, P, ADC)

BLUE - Direct output to power pack for providing photocell control and/or secondary dim time out. Output is high VDC with occupancy & low light. Output also held high during secondary dim time out. For multi-level control, use two power packs and connect White wire to primary load and Blue to daylight load.

VIOLET w/ WHITE STRIPE - Connect to 0-10 VDC control wire (typically Violet) from 0-10 VDC dimmable ballast

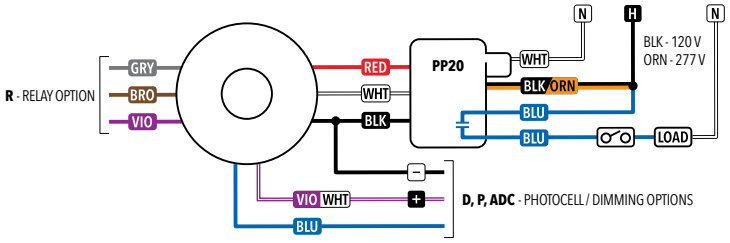
GRAY from Ballast - Connect to sensor Black wire

RELAY OPTION (R)

GRAY / BROWN - Connected during occupied state

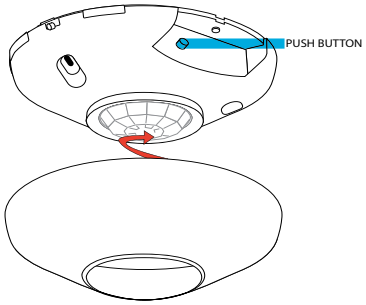
VIOLET / BROWN - Connected during unoccupied state

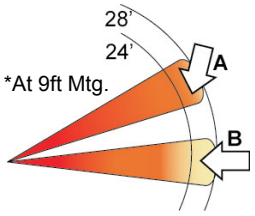
Note: Relay is energized during unoccupied state



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)

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SPECIFICATIONS

Electrical	**Input Ratings**	Class 2 Input 24V max, 4mA Class 2 Input 24V max, 16mA (-R Option)
	Relay Type	Electrically held
	Low Voltage Output Ratings	0-10VDC, Sinks <20mA
	Standards/ Ratings	Energy Management Equipment, UL916 (E167435)
Mechanical	**Dimensions**	4.55"W x 1.55"D (116mm x 40mm)
	Mounting	Single-Gang or Octagonal Box, Surface Mount
	Color	White
	Finish	Matte
	Connection Type	Low Voltage Leads
Environmental	**Warrantied Operating Temperature**	Standard: 14°F to 176°F (-10°C to 80°C) PDT option: 14°F to 140°F (-10°C to 60°C) LT option: -4°F to 176°F (-20°C to 80°C) PDT LT options: -4°F to 140°F (-20°C to 60°C)
	Relative Humidity	Up to 90%, Non-Condensing
	Environment	Indoor
	Standards/ Ratings	RoHS

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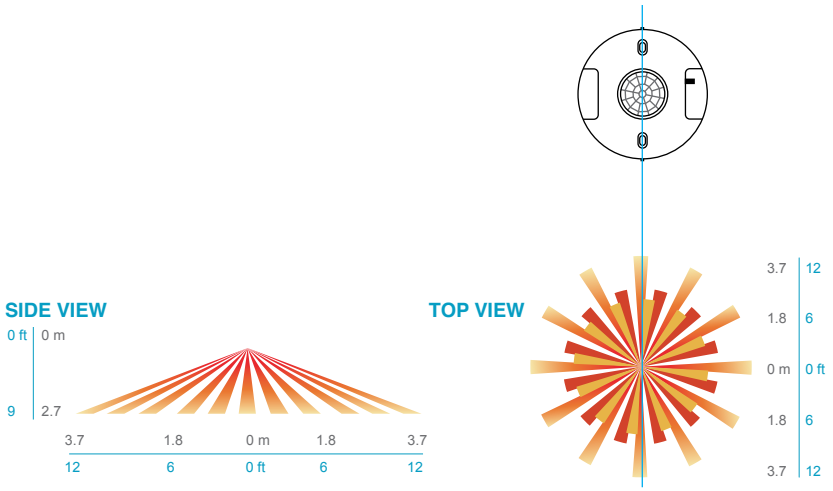
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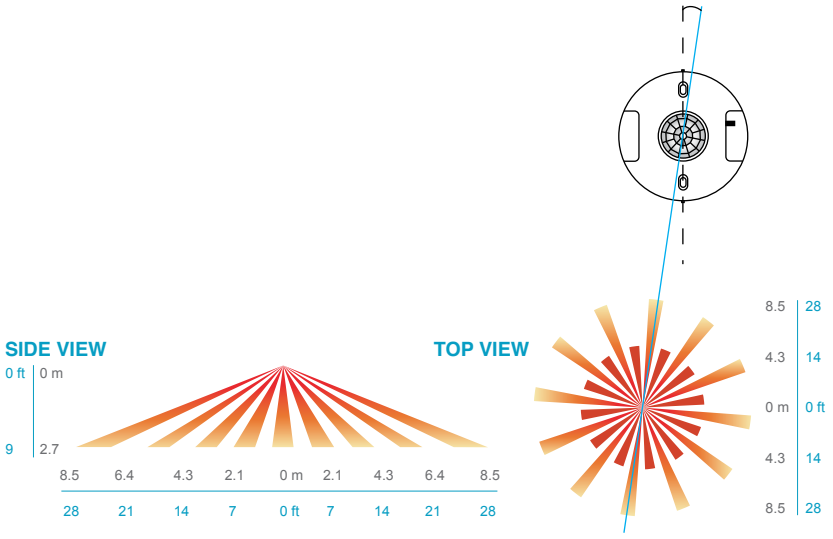
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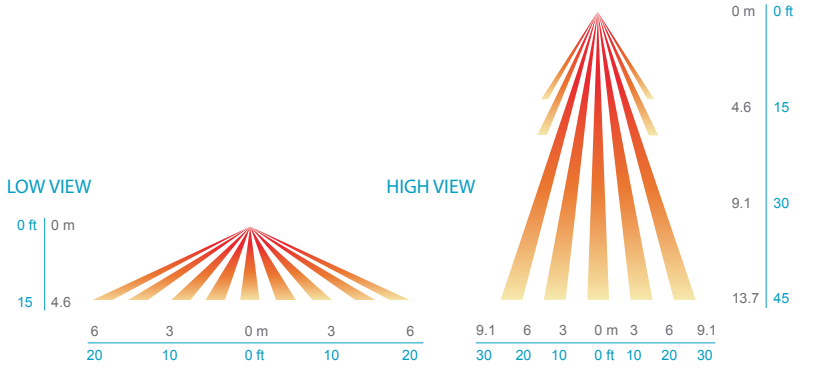
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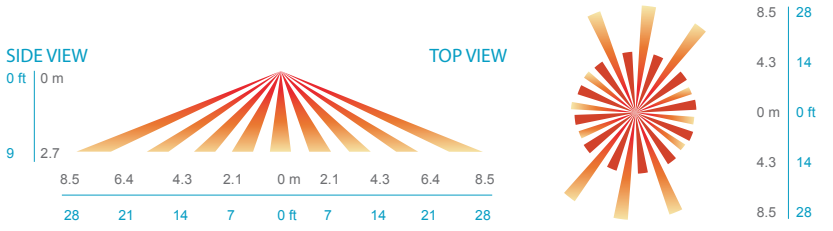
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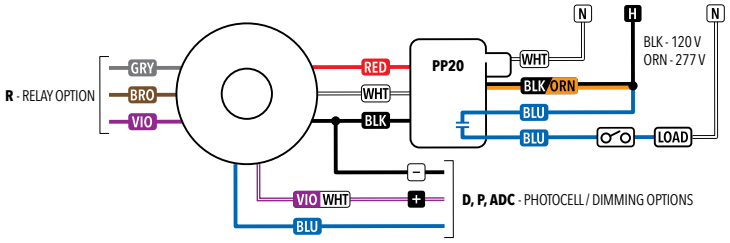
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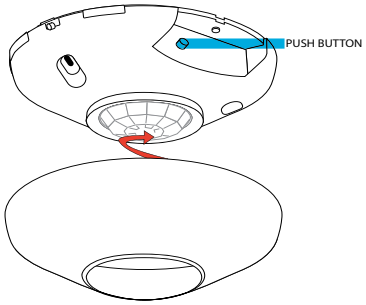
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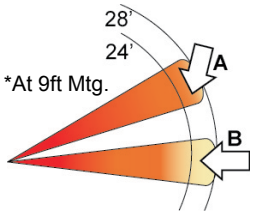
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