

OVERVIEW

CMR is a family of line voltage occupancy sensors for applications with finished ceilings (e.g. ceiling tiles, sheet-rock, or plaster) for residential, commercial and High Bay Industrial applications. With a variety of lens options, CMR sensors utilize 100% passive Infrared detection and is powered directly from line voltage without the need of a power pack. For added occupancy detection capabilities, dual technology (PDT) can be added as an option for applications where occupants are stationary for a long periods of time. Programming CMR sensor setting can easily be achieved via push button or optional flash programming via the SensorSwitch VLP Mobile App. With either programming method, the user can change time delay.

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



Items marked by a shaded background qualify for the Design Select program and ship in 15 days or less. To learn more about Design Select, visit www.acuitybrands.com/designselect.

*See ordering tree for details

sensorswitch

CMR

Line Voltage Ceiling Mount Occupancy Sensor



Design Select options indicated by this color background.

ORDERING INFORMATION

CMR Family								Example: CMR PDT 9 LT	
CMR									
Series	Detection Technology	Coverage Type	Relay	Dimming	Voltage	Visible Light Programming	Temp/Humidity		
CMR Ceiling Mount Sensor	[blank] PIR	6 High Bay 360°	[blank] None 2P ⁴ Dual Relay	[blank] None	[blank] 120/230/277 VAC	[blank] None VLP ^{3,5,7} 6-8' Range Flash Programming via the Sensor Switch Mobile App	[blank] Standard LT Low Temp/ High humidity		
	PDT ^{1,4} Dual Technology (PIR/Microphonics)	9 Small Motion 360°		D ^{4,5} Occupancy Controlled Dimming					
		10 Large Motion 360°		P Photocell					
				ADC ^{2,4,5} Photocell w/ Dimming					
				DZ ^{4,6} Dual Zone Photocell					

Accessory Cover			
CMR			
Series	Color Finish	Packaging	
CM COVER Ceiling Mount Sensor Cover	RD Red	M5 Master pack of five	
	BK Black		
	WH White		

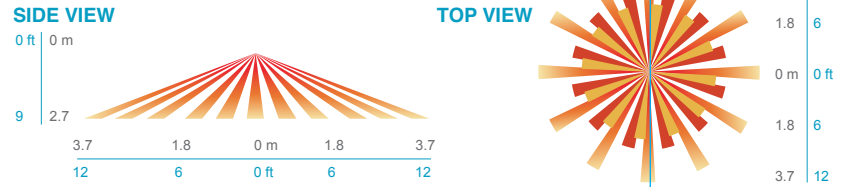
Notes

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.
4. Not available with 208, 480 option.
5. Not available with 2P option.
6. Not available with single relay option.
7. Requires PDT.

COVERAGE PATTERNS

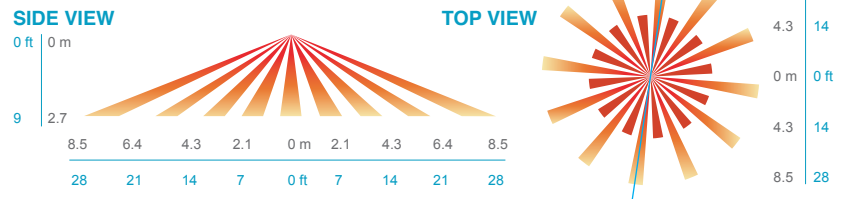
Small Motion 360° (Model # CM 9/ CM PDT 9')

- 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



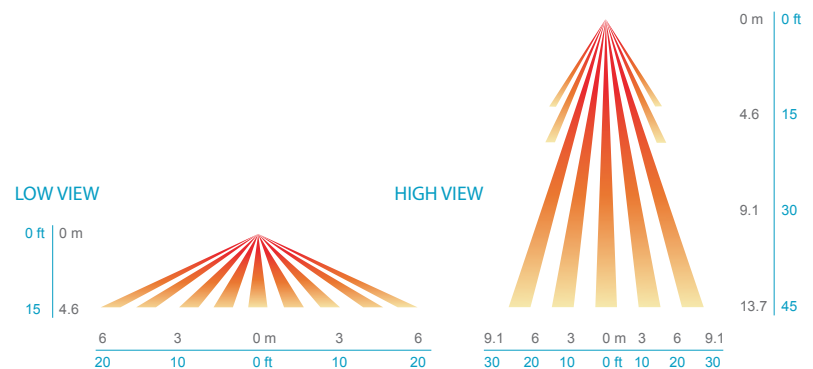
Large Motion 360° (Model # CM 10/ CM PDT 10')

- 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



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.

WIRING (DO NOT WIRE HOT)

TYPICAL WIRING SINGLE RELAY

STANDARD WIRING

- BLACK*** - Line Input
 - BLACK*** - Load Output
 - WHITE** - Neutral
- *BLACK wires can be reversed

DIMMING OPTIONS (D, ADC)

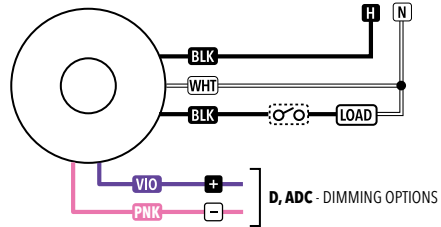
VIOLET - Connect to Violet control wire from 0-10 VDC dimmable ballast

PINK - Connect to Pink common wire from ballast

INITIAL POWER UP

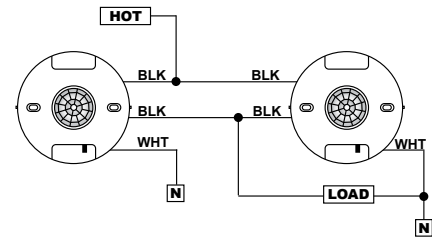
The sensor's relay is shipped in a latched closed position so the lights will come on upon initial power-up. If the lights do not immediately turn on (initial installation only) the latching relay opened during shipment and will close within 30 secs.

Note: If the sensor loses power, the internal relay will latch to on.



SENSORS IN PARALLEL

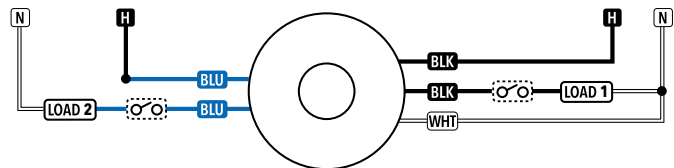
Sensors may be wired in parallel; however, the maximum load ratings stay the same. Do not wire sensors with P or ADC option in parallel.



TYPICAL WIRING DUAL RELAY

STANDARD WIRING

- BLACK*** - Line Input 1
 - BLACK*** - Load Output 1
 - BLUE**** - Line Input 2
 - BLUE**** - Load Output 2
 - WHITE** - Neutral
- *BLACK wires can be reversed
- **BLUE wires can be reversed



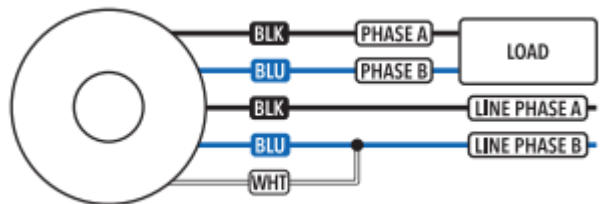
347 VAC OPTION (347)

Black wires are replaced w/ Red wires

208, 480 VAC WIRING

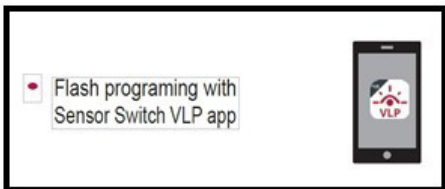
For 480 VAC version the white wire connects to either the phase 1 or phase 2 line input.

- BLACK** Line Phase A
- BLACK** Phase A Load
- BLUE** Line Phase B
- BLUE** Phase B Load
- WHITE** Connect to either Line Phase



*Black wires can be reversed

**Blue wires can be reversed



SPECIFICATIONS

Electrical

Input Ratings 120/220/230/277, 80 mA, 50/60 Hz
347V, 80 mA, 50/60 Hz
480V, 80 mA, 50/60Hz

Output Ratings 120V, 800W/6.67A - Tungsten, Ballast
120/220/230/277V, 4.3A, 1200W, Ballast.
120V, 5A, General Purpose
220/230/277V, 4.3A, General Purpose.

Relay Type Latching

Low Voltage Output Ratings 0-10VDC, Sinks <20mA

Class Rating 0-10V Dimming can be wired Class 1 or 2; Do not include if only Class 1

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 Line Voltage Leads

Environmental

Warrantied Operating Temperature Standard: 14°F to 185°F (-10°C to 85°C)
PDT option: 14°F to 140°F (-10°C to 60°C)
LT option: -4°F to 185°F (-20°C to 85°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