

## OVERVIEW

The **CMR(B) PC** Series of On/Off Photocell sensors provide the industry's most intelligent control of lighting for daylight harvesting applications. Ideal for public spaces with windows like vestibules, corridors, or bathrooms; the sensors work by monitoring daylight conditions in a room, then controlling the lighting so as to insure that adequate lighting levels are maintained. The **CMR(B) PC** has on/off lighting control; turning off the lights when sufficient daylight is present and turning them on when additional lighting is necessary. The **CMR(B) PC** Series sensors are line powered and can switch loads directly without the need for a power pack. The **CMR** version sensors are ceiling mounted, while the **CMRB** versions are specifically designed to mount on the end of a linear fluorescent fixture. To add dimming control to the on/off control provided by the **CMR(B) PC**, see the data sheet on the **CMR(B) PC ADC** sensor.

## FEATURES

- Self-contained Relay, no Power Pack needed
- Capable of finding optimum set-point
- Digitally Programmable via simple push button commands
- No Minimum Load Requirements
- 100 Hour Lamp Burn-in Timer Mode

## SPECIFICATIONS

Size:	<b>CMRB:</b> 3 5/8" x 3 5/8" x 1 1/4" (9.2 cm x 9.2 cm x 3.175 cm) <b>CMR:</b> 4.55" Dia., 1.55" Deep (11.56 cm Dia., 3.94 cm Deep)
Weight:	5 oz
CMRB Mounting:	1/2" knockout
CMR Mounting:	Round Fixture Box or Single Gang Handy Box
Color:	White
Maximum Load(per pole):	800W @ 120 VAC, 1200W @ 277 VAC, 1500W @ 347 VAC, 5 Amps @ 208/240 VAC, 5 Amps @ 480 VAC
Motor Load:	1/4 HP
Frequency:	50/60Hz

**AcuityControls**

Sensor Switch™

**CMR PC**  
**CMRB PC**  
On/Off Photocell Sensor



## Warranty

Five-year limited warranty. Complete warranty terms located at:  
[www.acuitybrands.com/CustomerResources/Terms\\_and\\_conditions.aspx](http://www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx)

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



## ORDERING INFORMATION

CMR PC/ CMRB PC		Example: CMRB PC DZ LT	
Series	Dual Zone	Voltage	Temp/Humidity
CMR PC On/Off Photocell Sensor Ceiling Mount, Line Voltage	[blank] Single Zone DZ* Dual Zone	[blank] 120/277 VAC 208 208/240 VAC	[blank] 14° to 160°F LT -40° to 160°F
CMRB PC On/Off Photocell Sensor Fixture Mount, Line Voltage		347 347 VAC 480 480 VAC	

\*Not avail. with 208 or 480 option

## OVERVIEW

### LIGHT LEVEL SET-POINT

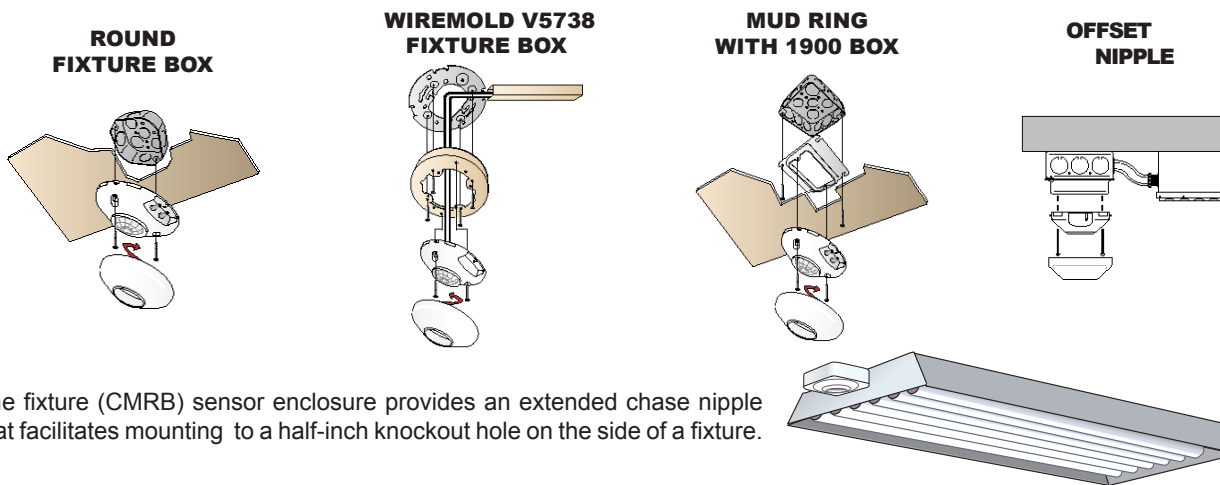
The sensor functions by comparing the amount of daylight available with a defined acceptable lighting level. This threshold, called the set-point, is utilized in all daylight harvesting lighting control decisions. The sensor can find its optimum set-point via the **Automatic Set-Point Programming** mode. In this mode, the sensor sets the minimum light level to be the amount contributed by the artificial lights being controlled. It is assumed that the space is properly lit by design, however, if this is not the case the set-point may be easily adjusted to the occupant's preferences. All modes and settings are entered digitally via a push button sequence. Once programmed, the exact value of the set-point (in foot candles) can be read out from the sensor via a series of LED flashes.

### DIGITAL SET-POINT CONTROL

Each sensor contains a microcontroller that enables the user to engage the Automatic Set-Point Programming mode or to manually set / adjust the set-point. The manual process involves calculating and inputting the exact foot-candle value of the desired set-point into the sensor. It is important to note that the set-point is the light level required at the face of the sensor and that this value will be much different than the level required at a work surface. Typically, light levels at the ceiling are 3 to 5 times less than the work surface. For example, if 50 fc is desired at the work surface, the sensor should be set at 10 fc. For best results, measure the levels at both locations using a foot-candle meter before programming the set-point.

## INSTALLATION

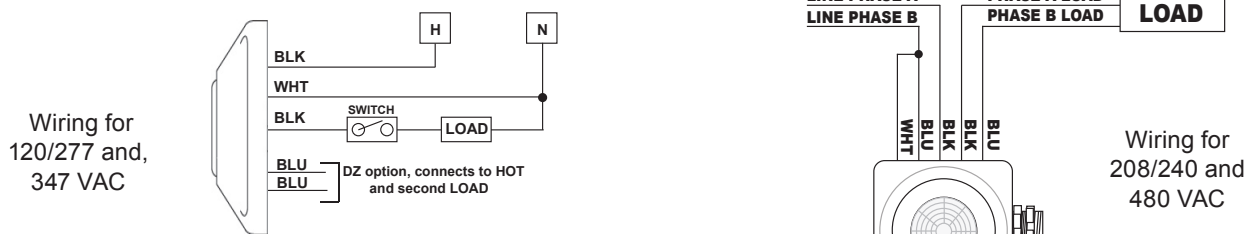
The ceiling (CMR) sensor enclosure accommodates mounting to a variety of junction boxes ranging in size from a single gang mud ring at a 3.28" spacing, up to a round fixture box spacing of 3.5".



The fixture (CMRB) sensor enclosure provides an extended chase nipple that facilitates mounting to a half-inch knockout hole on the side of a fixture.

## WIRING (DO NOT WIRE HOT)

The sensor uses Sensor Switch's patented reversible wiring; black to hot and black to load (DZ, 208, and 480 option adds a pair of blue wires for the second zone or phase). For 120, 277, and 347 VAC the white wire connects to neutral. For 208 and 480 VAC version the white wire connects to either the phase 1 or phase 2 line input. Black wires are replaced with red wires for 347 VAC.



**Note:** Once installed, the sensor may take a few minutes to become active. Additionally, there is a 45 second delay before switching from off to on (this delay is 55 seconds when connected to 50 Hz).