AcuityControls.

Sensor Switch™

CMB 50
High Bay Aisleway Sensor

OVERVIEW

The CMB 50 Series High Bay Aisleway occupancy sensor provides bi-directional detection extending 70-110 ft (21.34-33.53 m) when mounted at heights of 30-45 ft (9.14- 13.72 m). The CMB 50 installs to a junction box or fixture with a 1/2 inch knockout and has a detection pattern that covers the area lit by three typically spaced high bay fixtures. Therefore, when mounted at a fixture, the coverage area extends out to the area that is lighted by each of the neighboring fixtures. This effect is useful with some ballasts that have a delay such that when traveling in a fork-lift truck, lighting needs to be initiated on ahead of the truck.

Multiple fixture control is best handled by using multiple low voltage sensors together as needed. For example to achieve total aisleway sensing, use a HMB 10 Series sensor at each end and CMB 50(s) in the center section, all wired to one power pack. When used with standard power packs, these sensors are ideal for on/off control of T5/T8 fluorescent lighting. However, HID bi-level fixtures can also be controlled when the CMB 50 is partnered with a PP20 SH power pack with the start-to-high feature.

FEATURES

- 100% Digital PIR Detection, Excellent RF Immunity
- Up to 45 ft Mounting
- Push-Button Programmable
- User Adjustable Time Delays
- Non-Volatile Settings Memory
- No Field Calibration or Sensitivity
- Adjustments Required
- Convenient Test Mode
- Adjustable Time Delay
- 100 Hr Lamp Burn-in Timer
- Convenient Test Mode
- 100 Hr Lamp Burn-in Timer

SPECIFICATIONS

Sensor dimensions:	3.63" H x 3.63" W x 1.50" D (9.22 cm x 9.22 cm x 3.81 cm)
Weight:	6 oz
Mounting:	1/2" knockout
Color:	White
Operating Voltage:	12-24 VAC/VDC
Current Draw:	Standard, 4 mA w/ R option, 16 mA
Dimming Load:	Sinks <20 mA; ~40 Ballasts @ .5 mA each
Rcmd Power Pack:	PP20 or PP20 SH

ROHS compliant

Warranty

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

CMB 50					Example: CMB 50 R D LT
CMB 50					
Series	**Relay**	**Dimming**	**Photocell**	**Visible Light Programming**	**Temp / Humidity**
CMB 50 High Bay Aisleway Sensor	[blank] None R Low Voltage Relay	[blank] None D Occupancy Controlled Dimming	[blank] None P Photocell	[blank] None VLP Visible Light Programming[1, 2]	[blank] Standard LT Low Temp/ High humidity

Notes
1. Must specify P if VLP is ordered
2. Must be within 5ft of sensor to program

COVERAGE PATTERN
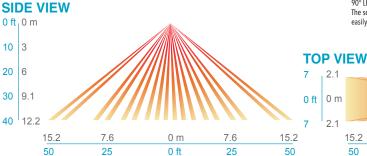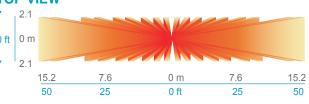
50 High Bay Aisleway Lens

- Provides 50º bi-directional and 10º wide coverage pattern
- 1.2x mounting height equals approximate detection range in either direction
- Typical 40 ft (12.19 m) mounting detects 50 ft (15.24 m) in either direction

90º LENS ROTATION
The sensors lens turret rotates 90º in order to easily adjust the direction of the view pattern

SIDE VIEW

0 ft	0 m
10	3
20	6
30	9.1
40	12.2

15.2	7.6	0 m	7.6	15.2
50	25	0 ft	25	50

TOP VIEW

7	2.1
0 ft	0 m
7	2.1

15.2	7.6	0 m	7.6	15.2
50	25	0 ft	25	50

WIRING (DO NOT WIRE HOT)

STANDARD WIRING

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

BLACK - Common

WHITE - Output (high VDC for occupancy)

PHOTOCELL / DIMMING OPTIONS (D, P)

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 Violet control wire 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

Wiring diagram: BRO, RED, BLK, WHT connect to PP20. BLU CAP OFF. PP20 outputs WHT to N, BLK/ORN to H (BLK - 120 V, ORN - 277 V), BLU, BLU to LOAD and N.