

OVERVIEW

The **SBO xx OEX** Series outdoor rated sensor incorporates Passive Infrared (PIR) technology into a low voltage sensor. Designed to mount directly through a 1/2" knockout (7/8" hole) in a light fixture or pole, the **SBO xx OEX** utilizes 100% Digital Passive Infrared (PIR) technology that is tuned for walking size motion while preventing false tripping from the environment. The unit's optional integrated photocell enables additional energy savings during daytime periods when there is sufficient daylight.

The **SBO xx OEX P** also is ideal for interfacing to other control devices within a luminaire such as the **ROAM®** dimming control module (**DCM**) or a twist-lock photocell. For integrated dimming control without the **ROAM®** system use the **SBOR xx ODP** Series sensor.

FEATURES

- 100% Digital PIR Detection, Excellent RF Immunity
- Push-Button Programmable
- Non-Volatile Settings Memory
- Adjustable Time Delays
- Convenient Test Mode
- Optional 0-10 VDC Dimming Output
- 100 hr Lamp Burn-in Timer
- Green LED Indicator

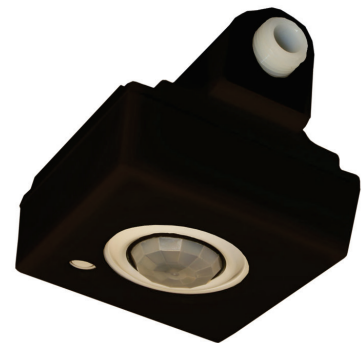
SPECIFICATIONS

Size:	3.35" H x 4.40" W x 4.00" D (8.51 cm x 11.18 cm x 10.16 cm)
Weight:	9 oz
Mounting:	1/2" knockout (7/8" hole)
Mounting Height:	SBO 10: 8-15 ft (2.44-4.57 m) SBO 6: 15-30 ft (4.57-9.14 m)
Operating Voltage:	12-24 VAC/VDC
Current Draw:	4 mA
Rcmd. Power Pack	PP20 or MP20
Dimming Load:	Sinks <20 mA; ~40 Ballasts @ .5 mA each
IP66 Rated, ROHS compliant	

AcuityControls™

Sensor Switch™

SBO xx OEX Family
Outdoor Pole/ Fixture Mount
Motion Sensor



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

SBO xx OEX					Example: SBO 6 OEX P WH			
SBO		OEX						
Series	Mounting Height	PIR Detection Type	Dimming / Photocell (choose one) *	Color	Min Dim Level **			
SBO Outdoor Pole/ Fixture Mount Sensor; Low Voltage	6 High Mount (15-30 ft)	OEX Outdoor PIR	[blank] None	WH White	0V	0 VDC		
	10 Low Mount (8-15 ft)		D Occupancy Controlled	BK Black	1V	1 VDC		
			High/Low Dimming		2V	2 VDC		
			P Photocell		3V	3 VDC		
					4V	4 VDC		
					5V	5 VDC		

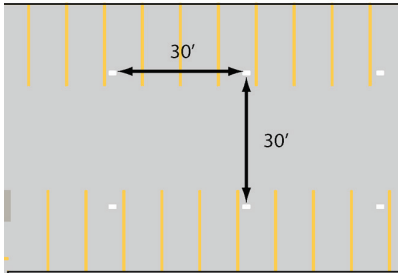
* Dimming & Photocell not available together in this model family, see **SBO xx ODP** data sheet for alternate solution

Required for **D option

COVERAGE PATTERN

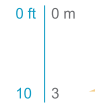
PARKING GARAGE / LOW MOUNT APPLICATIONS

In general, the **SBO 10 OEX** is recommended for 8-15 ft mounting and provides a coverage area radius for walking motion of greater than 2x the mounting height. The **SBO 10 OEX** is ideal for on/off control in parking garage and low pole mount applications. When mounted 10 ft high, for example, on a luminaire in a parking garage, the sensor's coverage for walking motion extends out 30 ft in a 360° pattern. This closely matches the lighting distribution of a typical parking garage luminaire. When mounted to a light pole, for example, in a parking lot or along a path, the sensor provides 270° of coverage (90° is blocked by the pole).

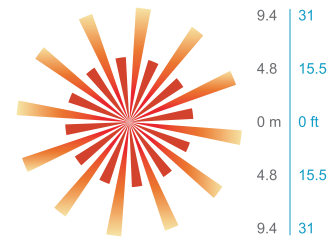


Typical 30'x30' spacing of parking garage luminaires

SIDE VIEW



TOP VIEW



Coverage Pattern of Low Mount Lens Option (SBO 10 OEX) at 10' Mounting

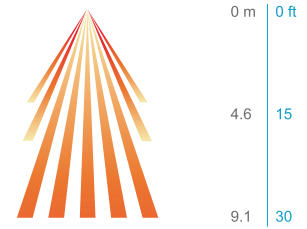
SITE & AREA LIGHTING / HIGH MOUNT APPLICATIONS

The **SBO 6 OEX** is intended for higher pole mount applications, between 15-30 ft, and provides a coverage area radius for walking motion of 15-20 ft. When mounted to a pole the sensor provides 270° of coverage (90° is blocked by the pole).

LOW VIEW



HIGH VIEW



Coverage Pattern of High Mount Lens Option (SBO 6 OEX)

WIRING (DO NOT WIRE HOT)

STANDARD WIRING

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

BLACK - Low Voltage Common

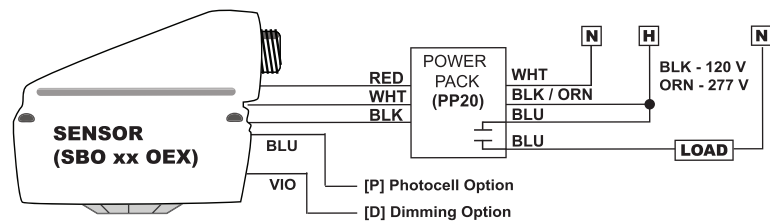
WHITE - Motion State (high VDC when motion is detected)

DIMMING OPTION (D)

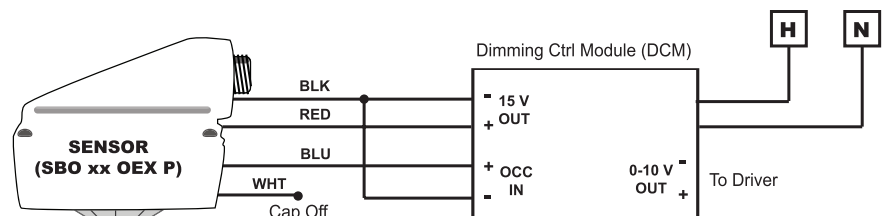
VIOLET - Low Voltage Dimming Output (0-10 VDC)

PHOTOCELL OPTION (P)

BLUE - Direct output to power pack for providing photocell control. Output is high VDC with motion & low light. For multi-level control, use two power packs and connect White wire to primary load and Blue to daylight load.



Typical Wiring Diagram using Power Pack



Wiring Connections to Dimming Control Module (DCM)

INSTALLATION

- Sensor has a 1/2" chase nipple that enables mounting through a knockout/hole in a junction box, fixture, or pole
- When mounting to a pole, a 7/8" unthreaded hole should be located 12" below luminaire and should be accessible via an adjacent or opposite side hand hole
- Sensor will detect motions crossing segments more effectively than motions parallel to beams



SBO XX OEX FAMILY (TS-SBR-015C)