

## OVERVIEW

The SBGR xx ODP Series sensors provide both Motion and Daylight based control of a 0-10 VDC dimmable outdoor or wet location luminaire. The SBGR xx ODP can both switch and dim its connected lighting. For motion detection, the sensor utilizes 100% Digital Passive Infrared (PIR) technology that is tuned for walking size motion while preventing false tripping from the environment. The unit's integrated photocell enables additional energy savings during daytime periods when there is sufficient daylight.

## FEATURES

- 100% Digital PIR Detection, Excellent RF Immunity
- Integrated Photocell
- IP65 Rated for Outdoor Applications
- Self-Contained Relay for Switching
- 0-10 VDC Dimming Output
- Compatible w/ 0-10 VDC Dimmable Ballasts and LED Drivers
- Interchangeable Hot & Load Wires, Impossible to Wire in Reverse
- Adjustable Time Delays, Max/Min Dim Levels, and Ramp Rates
- Programming Button Accessible w/o Opening Sensor or Removing Gaskets
- No Field Calibration or Sensitivity Adjustments Required
- Non-Volatile Settings Memory
- Convenient Test Mode
- Green LED Indicator

## SPECIFICATIONS

Size: 3.40"H x 3.40"W x 1.40"D (8.64 cm x 8.64 cm x 3.56 cm)

Weight: 6 oz

Mounting: 2.65" (6.7 cm) square opening in fixture  
(minimum depth 1.50" (3.8 cm))

Maximum Load: 800 W @ 120 VAC, 1000 W @ 208 VAC, 1200 W @ 240 VAC, 1200 W @ 277 VAC, 1500 W @ 347 VAC, 2160 W @ 480 VAC

Motor Load: 1/4 HP

Frequency: 50/60Hz

Dimming Load: Sinks <20 mA (0-10 VDC LED Drivers / Ballasts)

IP65 Rated, ROHS Compliant, and Title 24 Component

## 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.

**AcuityControls**<sup>™</sup>

*Sensor Switch*<sup>™</sup>

**SBGR 6 ODP**  
**SBGR 10 ODP**

*Outdoor Embedded Motion  
Sensor*



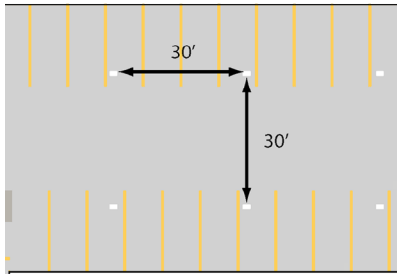
## ORDERING INFORMATION

SBGR 10		Example: SBGR 10 ODP WH 3V		
Mounting Height	Photocell	Voltage	Color	Min Dim Setting
SBGR 10 (8-15 ft) SBGR 6 (15-30 ft)	ODP On/ Off/ Dim	[blank] 120-277VAC (MVOLT) HVOLT 347-480VAC	WH White	0V Off 3V 3 VDC 1V 1 VDC 4V 4 VDC 2V 2 VDC 5V 5 VDC

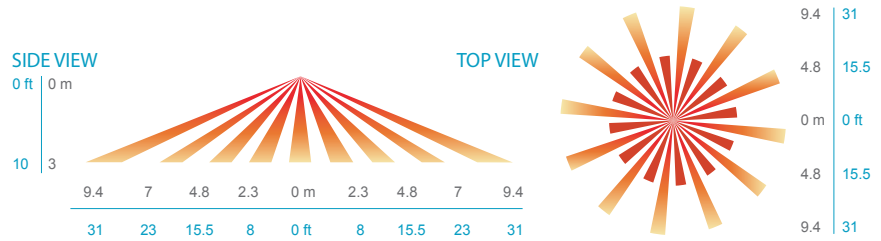
## COVERAGE PATTERN

### PARKING GARAGE / LOW MOUNT APPLICATIONS

In general, the **SBGR 10 ODP** is recommended for 8-15 ft mounting and provides a coverage area radius for walking motion of greater than 2x the mounting height. The **SBGR 10 ODP** is ideal for parking garage and other low mount applications. When mounted 10 ft high, for example embedded in 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 embedded in a pole mounted fixture, for example, in a parking lot or along a path, the sensor provides 270° of coverage (90° is blocked by the pole).



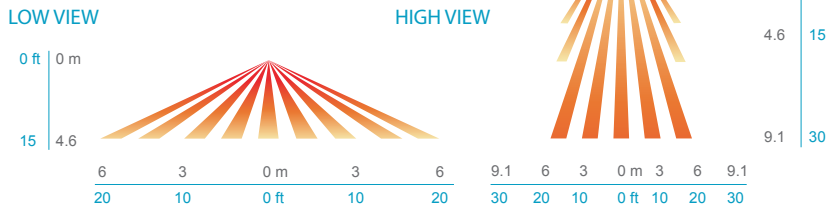
Typical 30'x30' spacing of parking garage luminaires



Coverage Pattern of Low Mount Lens Option (SBGR 10 ODP)

### SITE & AREA LIGHTING / HIGH MOUNT APPLICATIONS

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

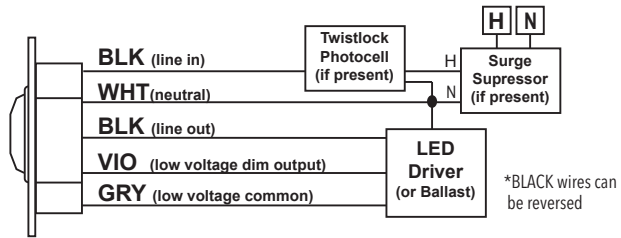


Coverage Pattern of High Mount Lens Option (SBGR 6 ODP)

## WIRING (DO NOT WIRE HOT)

### WIRING TO SINGLE PHASE POWER (120/277/347 VAC)

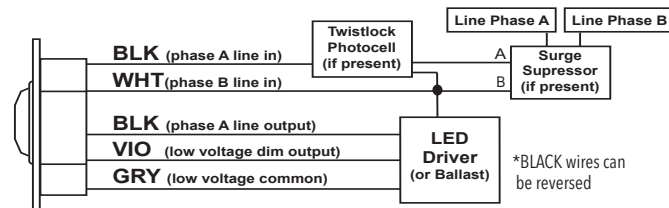
- BLACK\*** - 120/277 VAC Input  
(RED wire for 347 VAC - requires HVOLT option)
- BLACK\*** - Switched Line Voltage Output to Luminaire  
(RED wire for 347 VAC - requires HVOLT option)
- WHITE** - Neutral
- VIOLET** - Low Voltage Dimming Output (0-10 VDC)
- GRAY** - Low Voltage Common



\*BLACK wires can be reversed

### WIRING TO 2-PHASE POWER (208/240/480 VAC)\*

- BLACK\*** - 208/240 VAC Phase A Input  
(RED wire for 480 VAC - requires HVOLT option)
- BLACK\*** - Switched Line Voltage Output to Luminaire  
(RED wire for 480 VAC - requires HVOLT option)
- WHITE** - Phase B of 208/240/480 VAC Input
- VIOLET** - Low Voltage Dimming Output (0-10 VDC)
- GRAY** - Low Voltage Common



\*BLACK wires can be reversed

\*Safety Note: only one line phase is being switched

## INSTALLATION

- The SBGR Series offers a custom look for recess mounting in lighting fixtures. It mounts inside a 2.65" square opening in a fixture (minimum depth 1.50"). A #6 screw with a max head height of .130 inches is recommended.
- Sensor will detect motions crossing segments more effectively than motions parallel to beams
- If the sensor loses power, the internal relay will latch closed and the dimming output will allow lights to return to full bright.

