Catalog Number: | Date: | Project:

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

sensorswitch®

SBGR 6 ODP
SBGR 10 ODP

Outdoor Embedded Motion Sensor

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.

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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

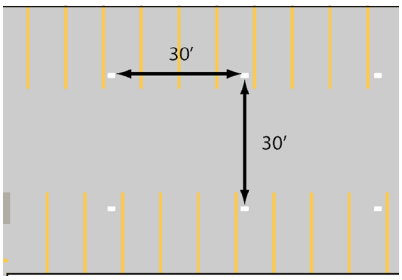
SPECIFICATIONS

Electrical	**Input Ratings**	120-277V, 80 mA, 50/60Hz 347V, 50 mA, 50/60Hz 480V, 60 mA, 50/60Hz
	Output Ratings	120V, 800W/6.67A - Tungsten, Standard Ballast, Electronic Ballast 277V, 1385W/5A - Tungsten 277V, 1200VA/4.3A - Standard Ballast, Electronic Ballast 347V, 1500VA/4.3A - Standard Ballast 480V, 2400VA/5A - Standard Ballast 120V, 1/2HP - Motor
	Relay Type	Latching
	Low Voltage Output Ratings	0-10VDC, Sinks <20mA (With Dimming Options; D/ADC/ODP)
	Class Rating	0-10V Dimming can be wired Class 1 or 2
	Standards/ Ratings	Energy Management Equipment, UL916 (E167435)
Mechanical	**Dimensions**	3.40"H x 3.40"W x 1.40"D (86mm x 86mm x 36mm)
	Mounting	Recessed
	Connection Type	Line-Voltage Leads
Environmental	**Warrantied Operating Temperature**	14°F to 140°F (-10°C to 60°C)
	Relative Humidity	Up to 90%, Non-Condensing
	Environment	Indoor/Outdoor
	Standards/ Ratings	IP66 (IEC60529) when mounted in an IP66 enclosure, RoHS

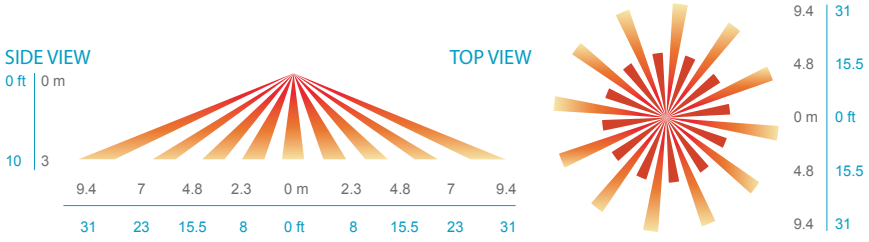
COVERAGE PATTERN

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).



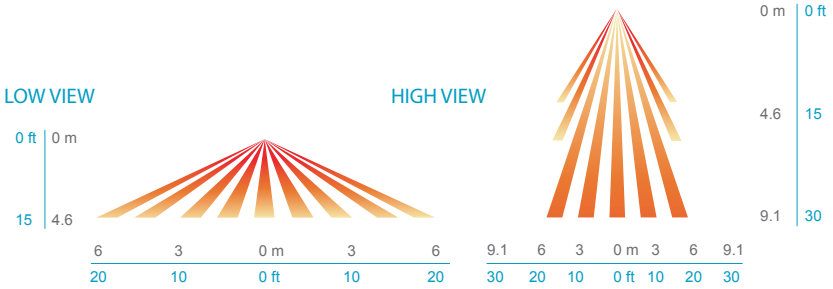
Typical 30′x30′ spacing of parking garage luminaires



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).

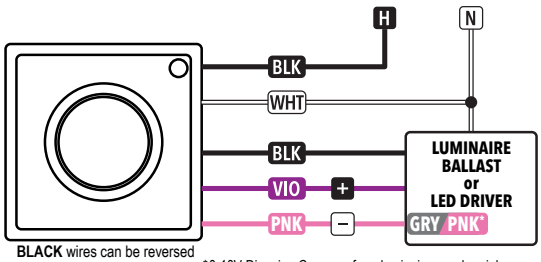


Coverage Pattern of High Mount Lens Option (SBGR 6 ODP)

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)
PINK** - Low Voltage Common

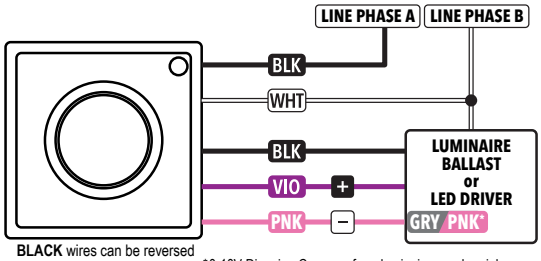


*0-10V Dimming Common from luminaire may be pink or as otherwise indicated per section 410.69 of the 2020 NEC

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)
PINK** - Low Voltage Common

*Safety Note: only one line phase is being switched
**0-10V Dimming Common from luminaire may be pink or as otherwise indicated per section 410.69 of the 2020 NEC



*0-10V Dimming Common from luminaire may be pink or as otherwise indicated per section 410.69 of the 2020 NEC

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.