



Non-Sheathed wire



Sheathed wire



DIP Switch



RC-100
(OPTIONAL)



High Bay /LowBay Microwave Sensor

SHARKWARD BRI819 series of microwave occupancy sensors are designed for use in commercial and industrial installations (indoor rated versions are available).

Typical applications may include shopping mall, warehouses, distribution centers, parking garages, and assembly areas and so on.

This product series operates using 120-277VAC mains voltage. No additional power pack is required.

The sensor emits microwaves at 5.8Ghz frequency and uses the Doppler Effect to detect motion. It has design features that enable it to detect direct and tangential motion, but it is best at detecting direct motion (coming towards or away from the sensor).

For best performance the sensor should be installed at 13ft height for low bay mounts and 40ft for high bay mounts. Sensing pattern will vary based on the particular mounting method used.

This product series can "see" through many types of low density materials such as glass, wood, or plastic. Sensor range (unobstructed) is up to 40ft for ceiling mount. However, range is adversely affected by the type and density of the material used in the fixture lens or cover. Some materials will completely block the sensor (e.g., metals) and some materials will significantly reduce the range.

Optional Accessories:



EM1(Outdoor use)



EM1-2(Indoor use)



Stainless steel extension nut

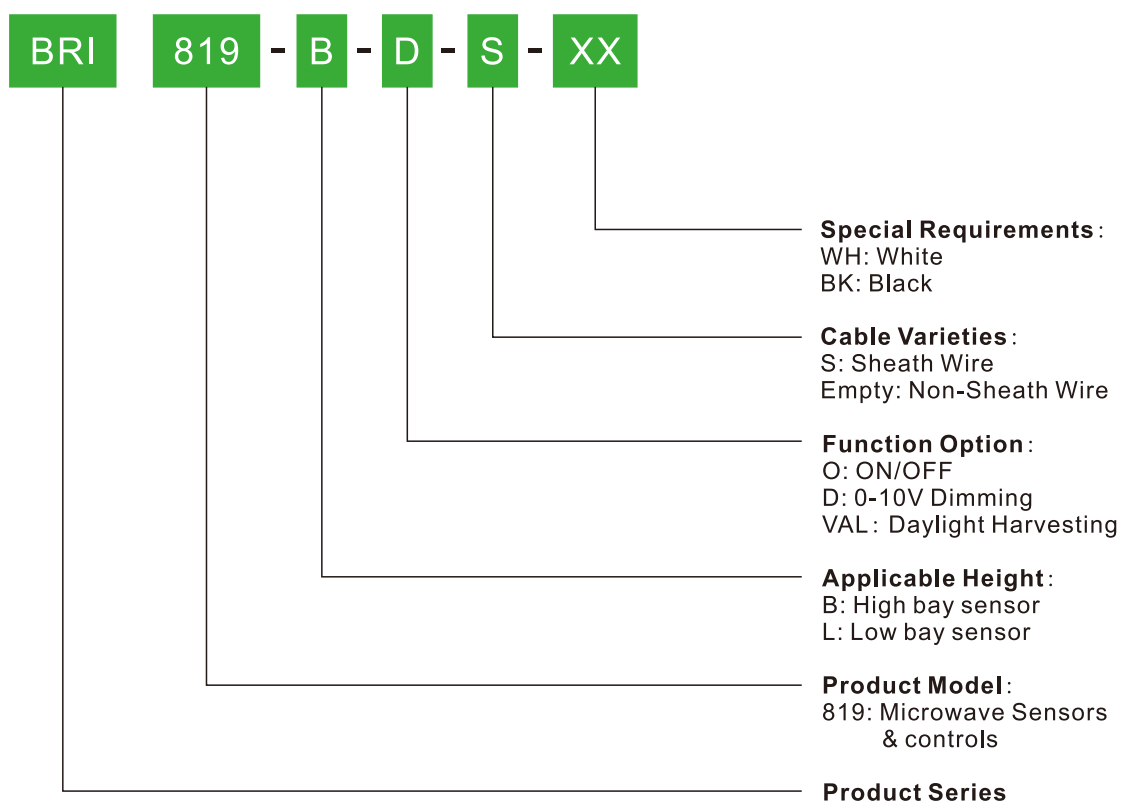


EM1B(Outdoor use)



EM1B-2(Indoor use)

How to choose



ON/OFF Function

Model No.	Description	Input Voltage (VAC)	Output / Max Load	Sheath Wire	UL
BRI819-B-O	ON/OFF High Bay sensor Mounting height: Max 40ft Detection radius: Max.detection radius 30ft	120-277	Resistive/Tungsten - 600W@120V Electronic Ballast - 800W@120V/ 1200W@277V	x	✓
BRI819-B-O-S	Operating temperature: -40°F ~ 158°F (-40°C ~ 70°C)			✓	
BRI819-L-O	ON/OFF Low Bay sensor Mounting height: Max 20ft Detection radius: Max.detection radius 26ft			x	
BRI819-L-O-S	Operating temperature: -40°F ~ 158°F (-40°C ~ 70°C)			✓	

0-10V Dimming Function

Model No.	Description	Input Voltage (VAC)	Output / Max Load	Sheath Wire	UL
BRI819-B-D	0-10V Dimming High Bay sensor Mounting height: Max 40ft Detection radius: Max.detection radius 30ft	120-277	Resistive/Tungsten - 600W@120V Electronic Ballast - 800W@120V/ 1200W@277V	x	✓
BRI819-B-D-S	Operating temperature: -40°F ~ 158°F (-40°C ~ 70°C)			✓	
BRI819-L-D	0-10V Dimming Low Bay sensor Mounting height: Max 20ft Detection radius: Max.detection radius 26ft			x	
BRI819-L-D-S	Operating temperature: -40°F ~ 158°F (-40°C ~ 70°C)			✓	

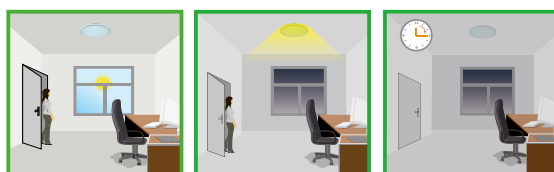


Daylight Harvesting Function

Model No.	Description	Input Voltage (VAC)	Output / Max Load	Sheath Wire	UL
BRI819-B-VAL	Daylight Harvesting High Bay sensor Mounting height: Max 40ft Detection radius: Max.detection radius 30ft	120-277	Resistive/Tungsten - 600W@120V Electronic Ballast - 800W@120V/ 1200W@277V	x	√
BRI819-B-VAL-S	Operating temperature: -40°F ~ 158°F (-40°C ~ 70°C)			√	
BRI819-L-VAL	Daylight Harvesting Low Bay sensor Mounting height: Max 20ft Detection radius: Max.detection radius 26ft			x	
BRI819-L-VAL-S	Operating temperature: -40°F ~ 158°F (-40°C ~ 70°C)			√	

ON/OFF Function

The sensor is a motion-sensitive switch that controls lighting. Lights go on when people are around and off when no one is around. The sensor has a built-in light sense and only works if the ambient brightness is lower than the light sense setting.



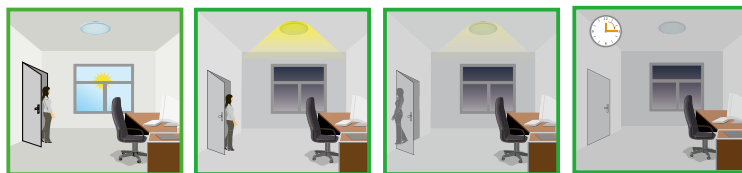
With sufficient natural light, the light does not switch on when presence is detected.

With insufficient natural light, the sensor switches on the light automatically when presence is detected.

Light switches off automatically after the hold-time elapses.

Dimming Function

This function inside the motion sensor to achieve tri-level control, for some areas which require a light change notice before switch-off. The sensor offers 3 levels of light: 100%-->dimmed light (natural light is insufficient) -->off; and 2 periods of selectable waiting time: motion hold-time and stand-by period; Selectable daylight threshold and freedom of detection area.



With sufficient natural light, the light does not switch on when presence is detected.

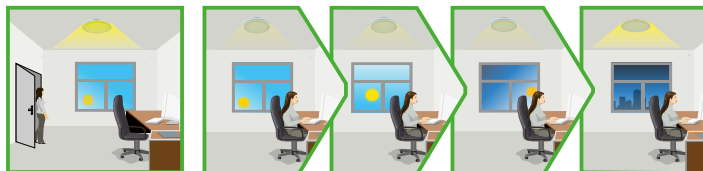
With insufficient natural light, the sensor switches on the light automatically when presence is detected.

After hold-time, the light dims to stand-by level if the surrounding natural light is below the daylight threshold.

Light switches off automatically after the stand-by period elapses.

Daylight Harvesting Function

Open the daylight harvesting function only by choosing “” button when remote control is in setting condition. Memory and maintain current ambient brightness.



When the natural light is sufficient or dark, movement is detected and the light will turn on 100% brightness.

The light turns on at full or dims to maintain the lux level. The light output regulates according to the level of natural light available.

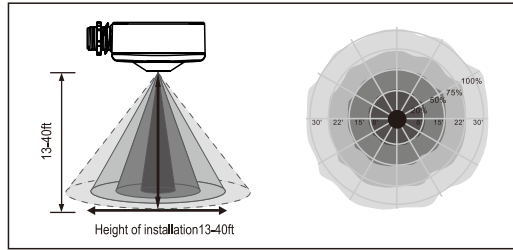


The light dims to stand-by period after hold-time and stays on selected minimum dimming level.

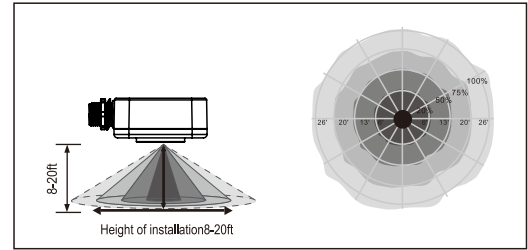
The light switches off completely after the stand-by period.

Coverage

BRI819-B High bay

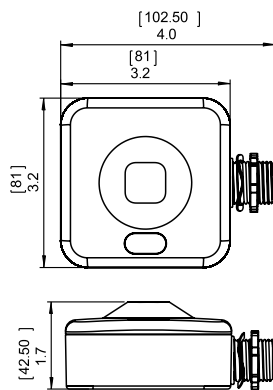


BRI819-L Low bay

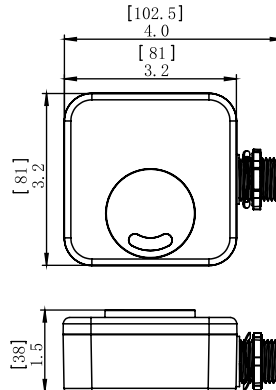


Dimensions & Mounting

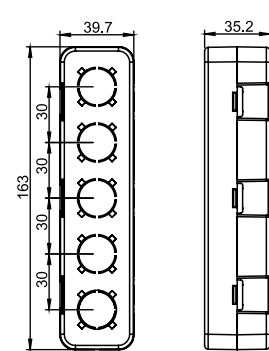
BRI819-B Sensor Enclosure



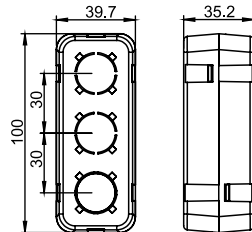
BRI819-L Sensor Enclosure



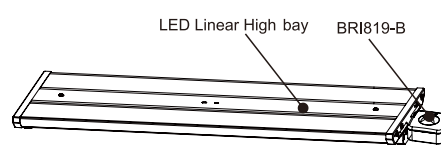
EM1 Enclosure



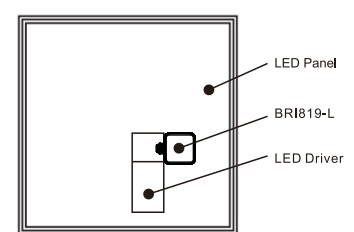
EM1B Enclosure



BRI819-B Mounted To LED Linear High Bay



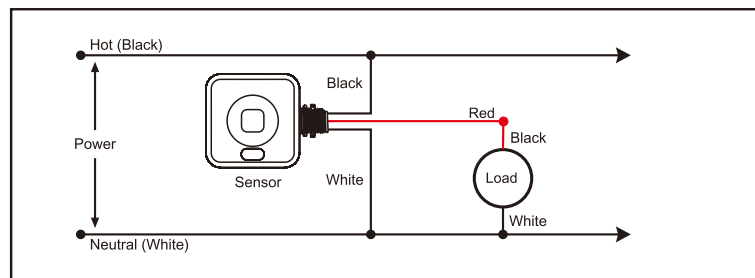
BRI819-L Mounted To LED Panel



Wiring

Wiring with non-dimming ballast or LED driver.

ON/OFF Sensor



Wiring with dimming ballast or LED driver.

Dimming Sensor

