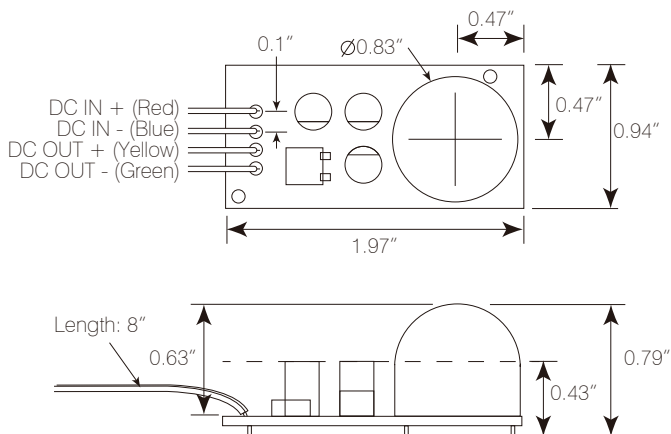


# POM-946 series

## PWM Control Occupancy Sensor Module



### DIMENSIONS



### OVERVIEW

The POM-946 series is an Occupancy Sensor Module designed to regulate the DC power supply from driver for the LED lighting. This cost effective sensor module can be easily integrated in T8 LED tube or other LED light fixture for energy efficient occupancy sensing based LED control.

The sensor module employs a cutting edge pyroelectric infrared sensor and a compact dome lens to provide excellent occupancy sensing capability. Various control modes can be ordered with specific model to further enhance the energy efficiency of LED lighting to its maximum level.

### FEATURES

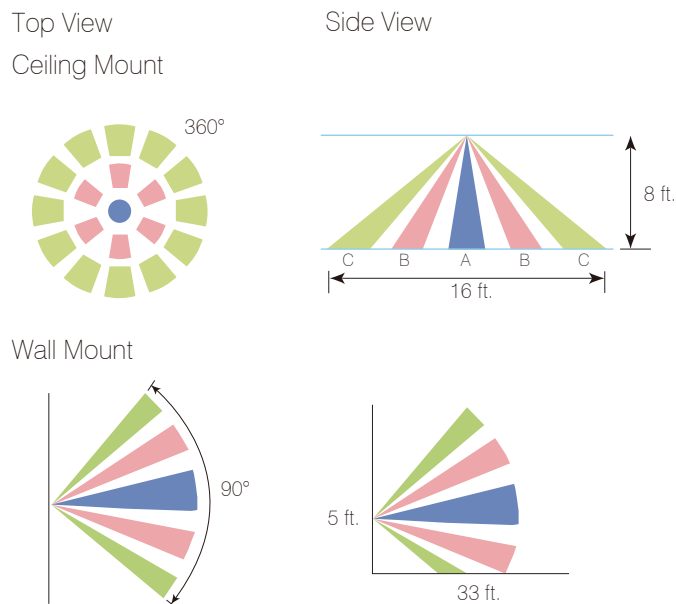
- Excellent occupancy sensing capability
- 2X height coverage for ceiling mount
- Control maximum up to 3A (144W@48V)
- Pulse Width Modulation output control
- 30% preset low dim for bi-level control\*
- Photocell sensor built-in (946MBW/MCW)
- Smart day & night ambient light sensing\*\*
- Sudden strong light inhibit processing

\* POM-946MEW not applicable  
 \*\* POM-946MBW/MCW only

### APPLICATION NOTES

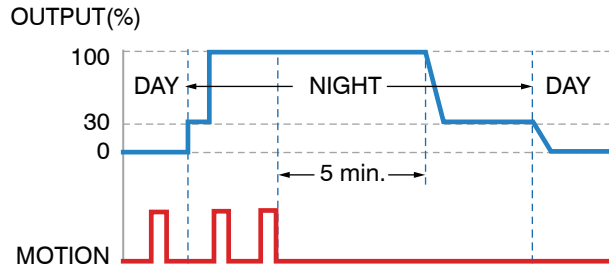
1. Please do not block any segment of dome lens if maximum coverage is desired.
2. Masking specific segments of the lens can partially block the detection coverage pattern.
3. The sensor is most sensitive to crossing zone movements rather than movements directly towards the sensor.

### DETECTION PATTERN



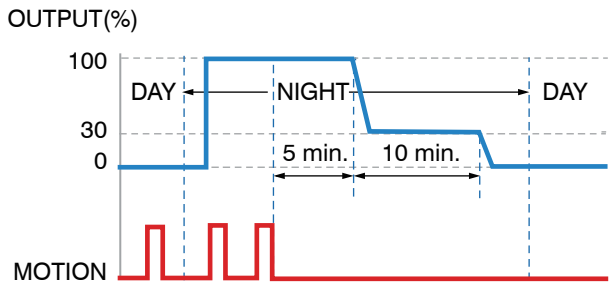
**FUNCTION DESCRIPTIONS**

**POM-946MBW (OSLA)**



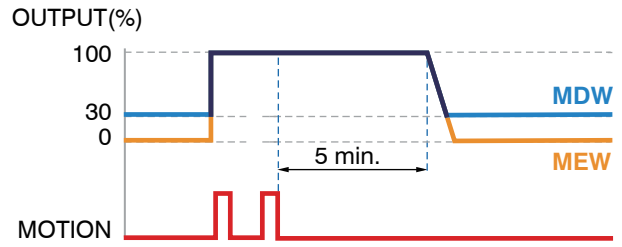
The POM-946MBW will inhibit the associated LED when ambient light level is higher than 50 lux. If ambient light level is lower than 20 lux, the sensor will automatically dim the LED with 30% power to provide safety light level. The sensor will power the LED to 100% when it detects occupancy. The sensor will dim the LED back to 30% if no movement is detected within 5 minutes.

**POM-946MCW (OSLATO)**



The POM-946MCW will inhibit the associated LED if the ambient light level is higher than 50 lux. If ambient light level goes lower than 20 lux, the sensor will switch on the LED with 100% power when it detects occupancy. If no movement is detected within 5 minutes, the sensor will dim the LED with 30% power for 10 minutes while the Time Off delay counts down. The sensor will switch back to 100% if it detects movement during Time Off delay. The LED will be switched off if no further movement is detected during Time Off delay.

**POM-946MDW/POM-946MEW (OSO)**



The POM-946MDW will switch on the LED with 100% power whenever it detects occupancy and dim the LED with 30% power if no further movement is detected within 5 minutes.

The POM-946MEW will switch on the LED with 100% power whenever it detects occupancy and switch off the LED if it detects no further movement within 5 minutes.

**SPECIFICATIONS**

Power supply	12~48VDC from LED driver
Current drain	<2.5mA @ 48V, load OFF
Control load	Max. 3A @ 12~48VDC
Infrared sensor	Dual element pyroelectric
Control output	1KHz Pulse Width Modulation
Detection coverage	Ceiling: 16 ft. @ 8 ft. high (5m @ 2.4m high)
	Wall: 33 ft., 90° wide (10m)
Detectable speed	0.5~10 ft./sec. (0.15~3m/sec.)
Detection zones	38 zones
Optical lens	Ø0.8" (21mm) dome Fresnel lens
Mounting height	Ceiling: 8~10 ft. (2.4~3.0m)
	Wall: 4~6 ft. (1.2~1.8m)
Day-Night threshold	Yes, excl. POM-946MDW/MEW
	Day: >50 lux, night: <20 lux
Warm up time	Approx. 60 sec.
Op. temperature	-40°F~122°F (-40°C~50°C)
Dimensions	0.94"x 1.97" x 0.79" (24 x 50 x 20mm)

**ORDERING INFORMATION**

Model No.	ALS	Vac. DIM	Delay	Time Off	Driver
POM-946MBW	Yes	30%	5 min.	No	CV
POM-946MCW	Yes	30%	5 min.	10 min.	CV
POM-946MDW	No	30%	5 min.	No	CV
POM-946MEW	No	No	5 min.	No	CV/CC