POA-900 series

Under Cabinet Occupancy Sensor

iR-TEC
Specializing in Building Sensors

OVERVIEW

The POA-900 series is a low voltage occupancy sensor with 0-10V output designed for LED lighting control. The sensor employs a cutting edge pyroelectric infrared sensor and a compact dome lens to provide excellent occupancy sensing capability. Four different control modes and light-off delays are available for selection via DIP switch setting. Low dim level can be easily adjusted to a desired level.

Thanks to its low profile design, the POA-900 sensor can be easily mounted under a cabinet or shelf to provide energy efficient, occupancy sensing based, on/off switching or bi-level dimming LED lighting control.

APPLICATIONS

- ☑ Under-cabinet lighting
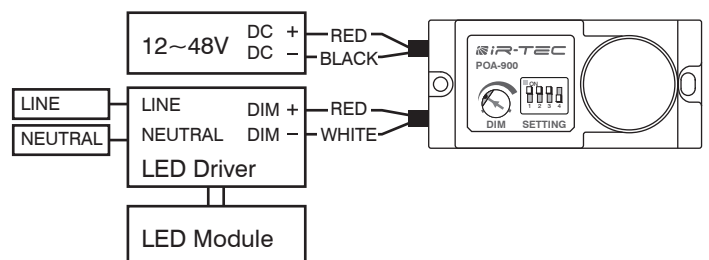- ☑ Under-shelf lighting (cubicle)
- ☑ Refrigerator cabinet

FEATURES

- Excellent occupancy sensing capability
- 2X height with 360° look down coverage
- Smart day & night ambient light sensing
- 4 control modes available for selection
- Different light-off delay times selectable
- Low-dim level during vacancy adjustable
- Easy to mount under a cabinet or shelf
- Lens cap supplied for range reduction

APPLICATION NOTES

- Suitable for the LED lighting powered by 0-10V driver
- Place the sensor above the area with the most motion
- Do not mount the sensor right above or nearby a heat source
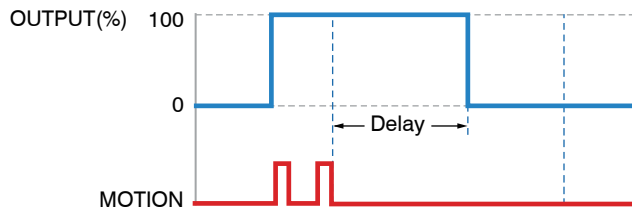- Easy screw down mounting for universal location
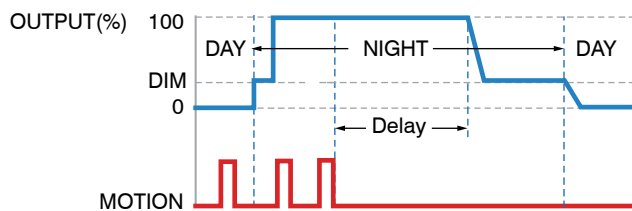
WIRING

CONTROL DESCRIPTIONS

Four different control modes can be selected via DIP switch setting to provide different lighting control. Low-dim level can be easily adjusted and displayed by rotating the potentiometer.
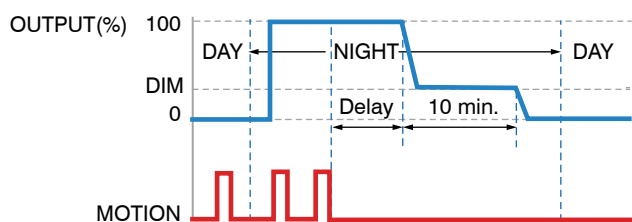
OOS

The sensor will turn on the light with 100% power whenever it detects occupancy, and turn off the light if no movement is detected within the delay time set.
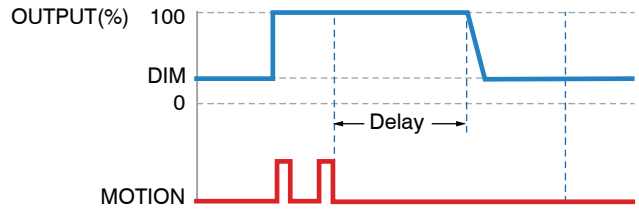
OSLA

The sensor will inhibit the light during daytime (ambient light > 50 lux), and automatically turn on the light as the dim level set during nighttime (ambient light <20 lux) to provide safety light. The sensor will power the light to 100% when it detects occupancy, and dim to the low level after the delay time elapses. Safety night light will be automatically switched off if ambient light level is higher than 50 lux.

OSLATO

The sensor will inhibit the light during daytime (ambient light > 50 lux), and turn the light to 100% when it detects occupancy during nighttime (ambient light < 20 lux). If no movement is detected within delay time, the sensor will dim the light to low level for 10 minutes as Time-Off delay. The sensor will switch the light back to 100% if it detects movement during Time Off delay, or the light will be switched off if no further movement is detected.
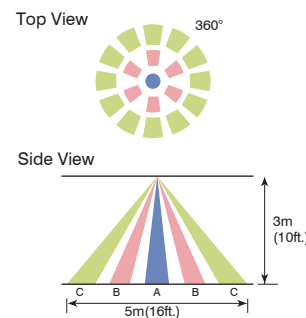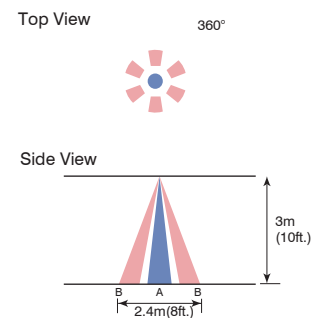
OSO

The sensor will turn on the light with 100% power whenever it detects occupancy and dim to the low level set if no further movement is detected within delay time.

DETECTION PATTERN

Standard

Top View 360°

Side View
3m (10ft.)
C B A B C
5m (16ft.)

Range with mask cap on

Top View 360°

Side View
3m (10ft.)
B A B
2.4m(8ft.)

SPECIFICATIONS

Power supply	12-48 VDC
Current drain	<2.5 mA @48V, load OFF
Control output	0-10V
Sensing technology	Passive Infrared (PIR)
Day/Night threshold	Day: >50 lux, night: <20 lux
Low dim level	10-60%
Warm-up time	Approx. 90 sec.
Detection coverage	2X of mounting height
Mounting height	0.6~3 m (2~10 ft)
Detection zones	38 zones
Cable length	Approx. 4"(10 cm)
Detectable speed	0.15~3 m/sec (0.5~10 ft/sec)
Op. temperature	-10°C~55°C (14°F~131°F)
Dimensions	66 x 30 x 24 mm (2.6"x 1.2"x 0.95")