TRANS

LOS-502Sxx-UV

Line Voltage UV Control Sensor



OVERVIEW

The LOS-502Sxx-UV is a line voltage occupancy sensor specially designed with reverse logic for UV lighting control. This sensor employs a cutting edge quad element pyroelectric infrared sensor with easy twist-lock lens to provide omni-directional sensing capability of occupant's presence and movements. The sensor will shut off the human hazardous UV-C lighting when it detects the presence of an occupant.

The LOS-502Sxx-UV has an ambient light sensor (ALS) built-in to inhibit germicidal lighting during daytime. A specialized timer allows the sensor to be used in rooms with no daylight present. The combination of these intelligent schemes enables the sensor to turn on the UV light once every 24 hours to prevent un unnecessary lighting cycle. Two Accu-Set digital potentiometers allow you to set the ON-delay and RUN time with ease and accuracy. ON-delay is the delay time that sensor will turn on the UV lighting after the area is vacated. RUN time is the operation cycle time of UV light. The sensor can be easily integrated with OEM lighting fixture or ceiling mounted with a specific mounting bracket. Multiple lens options are available to provide different detection coverage for different mounting heights.

This unique occupancy sensor can be used to inhibit the undesired operation of the UV light that may be harmful or dangerous to the occupant. Typical applications include UV based germicidal lighting, automatic chemical sterilization, and dangerous machine operation.

FEATURES

- Omni-directional quad element infrared sensor
- 120/277V universal line voltage operation
- Accu-Set ON-delay and RUN time settings VR
- Smart scheme for rooms with or without windows
- Nighttime activation and once every 24 hours
- Walk test and sensor operation LED indicator
- Direct lead wires for easy wiring connection
- OEM fixture integrated or attached mounting
- Recess, surface, or J-box mounting available
- Multiple changeable lens options for selection

APPLICATION UV-C Germicidal Lighting Control

The LOS-502Sxx-UV sensor can be used to control human hazardous UV-C lighting by sensing the presence and movements of the occupant in combination with the ALS and intelligent control scheme. The sensor will allow the UV-C light to turn on for the preset RUN time at a point during the night and the space is free of occupant. Basic wiring diagrams are included. Consult with an IR-TEC team member for the availability of complex control.







MOUNTING OPTIONS

The first "x" of LOS-502Sxx-UV represents the mounting option of sensor to be shipped. Following options are available for ordering. The bracket will be shipped with the sensor when ordered with the respective code. Codes F and W allow the LOS-502Sx-UV to be directly integrated with OEM light fixtures for indoor and wet location respectively.

Code	Mounting Option	Mounting Bracket	
F	Fixture Integrated		
W	IP-66 Fixture Integrated		
Е	Fixture External	EMB-500	
Р	IP-66 Fixture External	PMB-500	
S	Ceiling Surface	SMB-500	
С	Junction Box	CMB-500	

More technical details of mounting options are available at <u>www.irtec.com</u>

LENS OPTIONS

The second " \mathbf{x} " of LOS-502Sx**x**-UV represents the lens to be equipped with the sensor. Different lenses can be applied to provide different coverage for different mounting heights (H). When order with the lens code x, the respective lens will be shipped with the sensor.

Lens		Shape	Mounting Height		Coverage
А	Standard	Cone	8~15 ft.	2.4~4.5m	2X height
В	Extra wide	Cone	8~10 ft.	2.4~3.0m	6X height
D	Standard	Round	8~20 ft.	2.4~6.0m	2X height
F	Extra wide	Dome	8~20 ft.	2.4~6.0m	4X height
L	Long aisle	Arch	8~10 ft.	2.4~3.0 m	6X height

More technical details of lens options are available at www.irtec.com

Ex. LOS-502SEB-UV

The sensor will be supplied with an EMB-500 for fixture-end mount and B lens for extra wide detection. Other mounting brackets or lenses can be ordered separately if needed. If you require assistance for selecting proper mounting and lens options, please visit <u>www.irtec.com</u>, send your inquiry to <u>info@irtec.com</u>, or contact an IR-TEC team member directly.

WIRING DIAGRAM

A. Single sensor control





SPECIFICATIONS

Power supply	120/277VAC, 50/60Hz		
Infrared sensor	Omni-directional quad element pyroelectric		
Maximum load	Ballast Electronic (LED) – 540/1200VA@120/277V		
Power consumption	<0.5W @277VAC		
Detectable speed	1~10 ft./sec. (0.3~3 m/sec)		
Mounting height	Subject to the lens type applied		
Detection range	Subject to the lens applied and height		
ON delay	10'/30'/1/2/3/4/6H		
Run time	T/1/2/3/4/5/6H, T=10 sec. for testing		
Humidity	Max. 95% RH		
Op. temperature	-40°F~131°F (-40°C~55°C)		
Dimensions	Ø2.36"x H1.45"(Ø60 x H37mm)		



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