

BOM-514, BOM-515 series

Low Voltage Occupancy Sensor



OVERVIEW

The BOM-514/515 series member of the TRANS family is a low voltage passive infrared occupancy sensor with dual outputs for versatile applications of occupancy sensing controls and/or building management systems.

This PIR occupancy sensor employs a cutting edge quad element pyroelectric infrared sensor to provide omni-directional sensing capability of occupant's presence and motions. An advanced digital ambient light sensor is integrated to provide smart ambient light level sensing for bi-level or daylight harvesting control. The first digital output will be active when ambient light level is lower than the threshold level. The second digital output will be active when the sensor detects occupancy and the ambient light level is lower than the threshold level.

Like all sensors in the TRANS family, the BOM-514/515 series is available with various mounting options and interchangeable lenses. This feature provides a second-to-none design and installation flexibility. The sensor is designed to operate in the coldest of environments, down to -40°C/°F.

FEATURES

- Omni-directional quad element infrared sensor
- 5-12/12-24VDC low voltage power operation
- Dual digital outputs for versatile applications
- Accu-Set potentiometer adjustable settings
- Motion sensing LED indicator for walk test
- Push-in locking terminals for easy connection
- Available with variety of mounting options
- Available with interchangeable lens options

APPLICATION

- Light Control
- Building Management

The BOM-514/515 series of occupancy sensor can be used to provide energy efficient bi-level or daylight harvesting light control by sensing the presence or movements of an occupant and ambient light levels. Basic wiring diagrams are included for reference. Consult with an IR-TEC team member if a more complex wiring diagram is required.

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SENSOR OPTIONS

Model No.	Power Input	Output A	Output B
BOM-514Sxx	5~12VDC	Day: Open	Night & Occ: Low
BOM-515Sxx	12~24VDC	Night: Low	Others: Open

MOUNTING OPTIONS

The BOM-514/515Sxx series can be mounted into the ceiling, attached to a fixture or mounted into a junction box. The mounting options are available by combining a specific mounting bracket (if applicable) from the chart below. The bracket will be shipped with the sensor when ordered with the respective code. Mounting option code F and W allow the BOM-514/515Sxx to be directly integrated with OEM control devices in any environment.

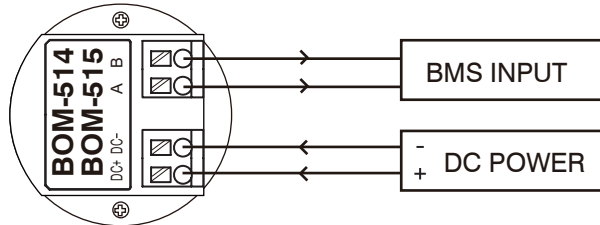
Code	Mounting Option	Mounting Bracket
F	Fixture Integrated	---
W	IP-66 Fixture Integrated	---
E	Fixture External	EMB-500
P	IP-66 Fixture External	PMB-500
S	Ceiling Surface	SMB-500
C	Junction Box	CMB-500
R	Ceiling Recess	RMB-500

LENS OPTIONS

The BOM-514/515Sxx series is available with following lens options which provide different coverage at different mounting height (H). When adding the lens code the lens is then automatically shipped with the sensor.

Lens	Shape	Mounting Height		Coverage
A	Standard	Cone	8~15 ft. 2.4~4.5m	2X height
B	Extra wide	Cone	8~10 ft. 2.4~3.0m	6X height
C	High bay	Cone	15~30 ft. 4.5~9.0m	3X 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
G	Aisle way	Arch	8~40 ft. 2.4~12.0m	3X height
H	High bay	Dome	30~50 ft. 9.0~15.0m	1X height
L	Long aisle	Arch	8~10 ft. 2.4~3.0 m	6X height

WIRING DIAGRAM



Example: BOM-514SWC

This sensor would come with an ambient light sensor, and lens with high bay detection for wet location. Specific mounting bracket or lens may be order separately if needed. For help selecting sensors with proper mounting and lens options, please visit www.irtec.com, send your inquiry to sales@irtec.com or contact an IR-TEC team member directly.

SPECIFICATIONS

Power supply	BOM-514: 5~12VDC, BOM-515: 12~24VDC
Current drain	5mA @12VDC, idle
Sensor output	Open collector, active low
Infrared sensor	Omni-directional quad element pyroelectric
Detectable speed	0.3~3m/sec (1~10 ft./sec.)
Mounting height	Subject to the lens type applied
Detection range	Subject to the lens applied and height
ALS sensor	Digital, color temperature compensation
Delay time	T/1/3/5/10/20/30', T=0 sec. for testing
Ambient level	24Hr/5/10/30/50/100/200 Lux.
Op. humidity	Max. 95% RH
Op. temperature	-40°C~55°C (-40°F~131°F)
Dimensions	Ø60 x H37mm (Ø2.36"x H1.45")