

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°F/°C.

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.

BOM-514, BOM-515 series

Low Voltage Occupancy Sensor

TRANS

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.

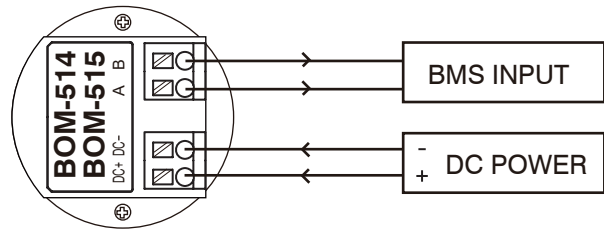
| Code | Mounting Option | Mounting Bracket |
|------|--------------------------|------------------|
| F | Fixture Integrated | --- |
| W | IP-66 Fixture Integrated | --- |
| E | Fixture External | EMB-500 |
| P | IP-66 Fixture External | PMB-500 |
| S | Ceiling Surface | SMB-500 |
| C | Junction Box | 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 info@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 | 1~10 ft./sec. (0.3~3m/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°F~131°F (-40°C~55°C) |
| Dimensions | Ø2.36"x H1.45" (Ø60 x H37mm) |