# TRANS PIR Occupancy Sensor LENS DATASHEET

## OVERVIEW







All TRANS PIR based Occupancy Sensors feature with interchangeable lens options. Each lens provides different sensing coverage which varies with the actual mounting height.

The specified detection coverage and mounting height of each lens are based on the test result of human motion walking across the detection zones. The actual coverage may be reduced if the motion is moving toward or away the sensor. High ambient temperature (above 82°F/28°C) could reduce the coverage of PIR sensor. If ambient temperature at the covered area are expected to be high sometimes, consider adding more sensors or reduce the mounting height, if possible.

The followings are all available lens options and their respective detection patterns at printing time. For details of latest lens options available, please visit www.irtec.com.

## LENS OPTIONS

| Lens | | | Shape | Recommended 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 flat | 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 |

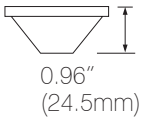
**NOTE:**

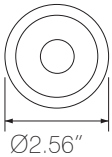
- Lens G can be rotated to change the direction of coverage. Its 3X height coverage refers only to the total length, the width of coverage will vary with the mounting height (see table of Lens G section). This lens is not IP-66 rated.
- Lens C/G may be mounted up to 40/50 ft. (12/15m) or higher at the area, providing with large moving object such as forklift trucks. Before installing all sensors, please ensure that the sensor can have optimal detection at desired height.

# LENS DATASHEET

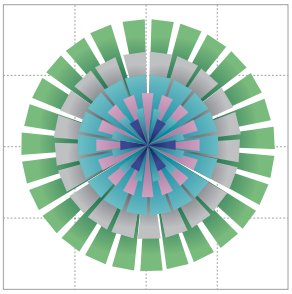
TRANS

## LENS A — 2X Standard



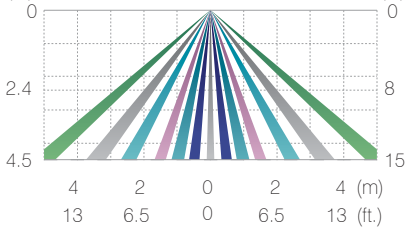




Top View

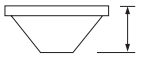


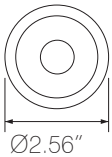
| Mounting Height | ft. (m) | 8 (2.4) | 10 (3.0) | 12 (3.6) | 15 (4.5) |
|---|---|---|---|---|---|
| Max. Coverage Diameter | ft. (m) | 16 (4.8) | 20 (6.0) | 24 (7.2) | 30 (9.0 ) |

Side View

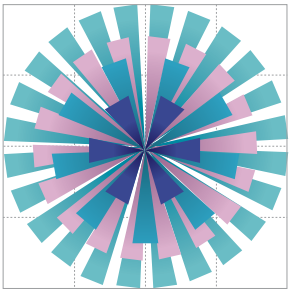



## LENS B — 6X Extra wide



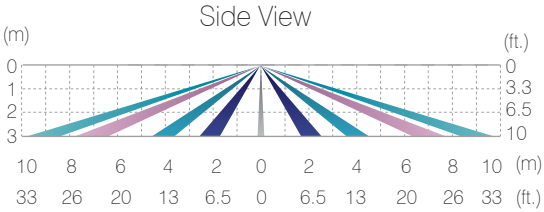




Top View



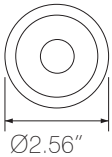
| Mounting Height | ft. (m) | 8 (2.4) | 8.5 (2.6) | 9 (2.8) | 10 (3.0) |
|---|---|---|---|---|---|
| Max. Coverage Diameter | m (ft.) | 48 (14.4) | 51 (15.6) | 54 (16.8) | 60 (18.0) |

Side View

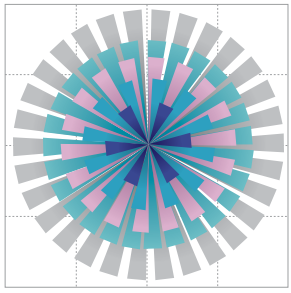



## LENS C — 3X High bay



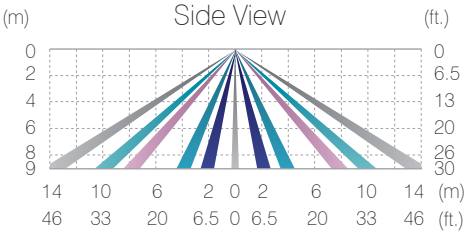




Top View

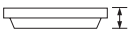


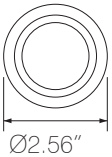
| Mounting Height | ft. (m) | 15 (4.5) | 20 (6.0) | 26 (8.0) | 30 (9.0) |
|---|---|---|---|---|---|
| Max. Coverage Diameter | ft. (m) | 45 (13.5) | 60 (18.0) | 78 (24.0) | 90 (27.0) |

Side View

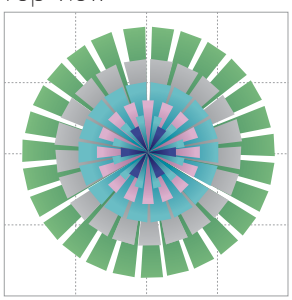



## LENS D — 2X Standard



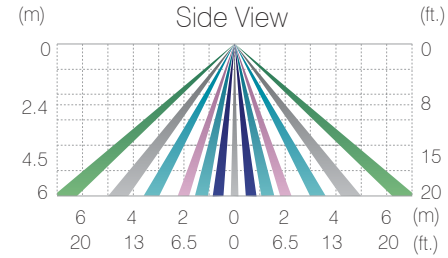




Top View



| Mounting Height | ft. (m) | 8 (2.4) | 10 (3.0) | 15 (4.5) | 20 (6.0) |
|---|---|---|---|---|---|
| Max. Coverage Diameter | ft. (m) | 16 (4.8) | 20 (6.0) | 30 (9.0) | 40 (12.0) |

Side View




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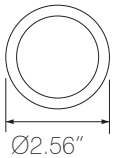
# LENS DATASHEET

TRANS

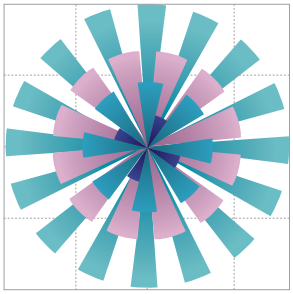
## LENS F — 4X Extra wide

| Mounting Height | ft. (m) | 8 (2.4) | 10 (3.0) | 15 (4.5) | 20 (6.0) |
|---|---|---|---|---|---|
| Max. Coverage Diameter | ft. (m) | 32 (9.6) | 40 (12.0) | 60 (18.0) | 80 (24.0) |

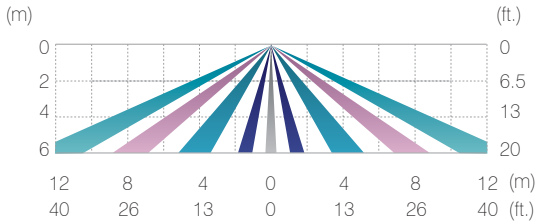



Top View



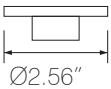
Side View

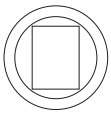



## LENS G — 3X Aisle way

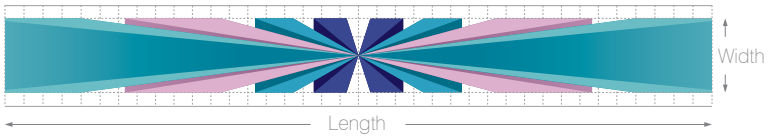
| Mounting Height | ft. (m) | 10 (3.0) | 20 (6.0) | 30 (9.0) | 40 (12.0) |
|---|---|---|---|---|---|
| Max. Coverage Length x Width | ft. (m) | 30 x 3.3 (9.0 x 1) | 60 x 6.5 (18.0 x 2) | 90 x 10 (27.0 x 3) | 120 x 13 (36.0 x 4) |



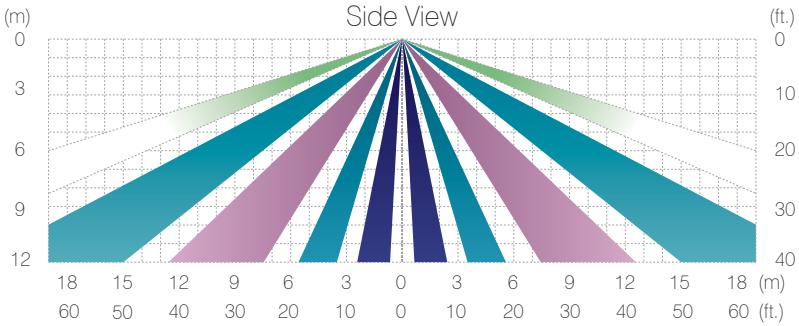



Top View

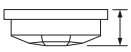


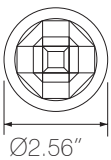

Side View



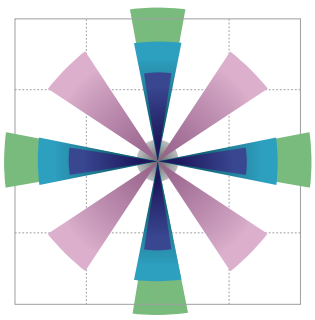

## LENS H — 1X High bay

| Mounting Height | ft. (m) | 30 (9.0) | 36 (11.0) | 43 (13.0) | 49 (15.0) |
|---|---|---|---|---|---|
| Max. Coverage Length x Width | ft. (m) | 20 (9.0) | 36 (11.0) | 43 (13.0) | 49 (15.0) |

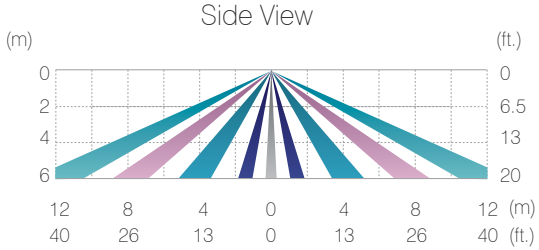



Top View



Side View




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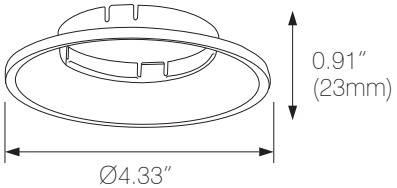
# LENS DATASHEET

TRANS

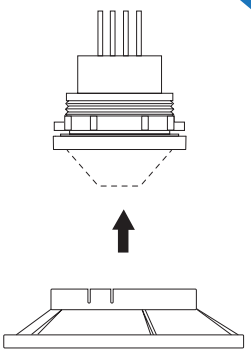
## ACCESSORIES

### LENS HOOD LH-110

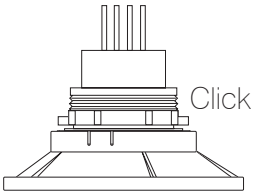
The LH-110 is designed for bi-level control sensors to prevent its ambient light sensor from being saturated by the excessive lighting nearby.



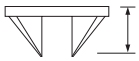
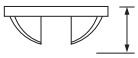
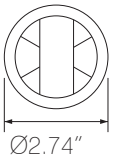

1



2




### LENS MASK

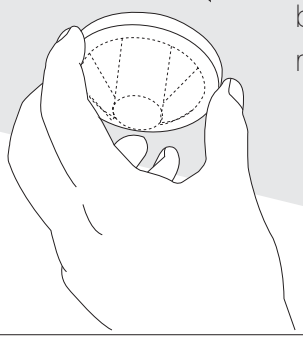
| LM-12C<br>For Lens A/B/C | LM-12D<br>For Lens F |
|---|---|
|  |  |
|  |  |

1

① Push the mask onto the installed lens

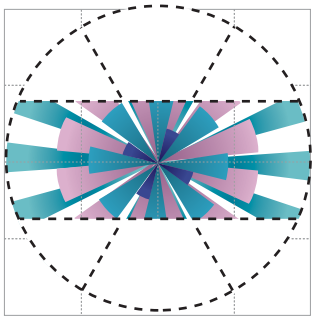
Click!

② Masked area can be changed by rotating the mask

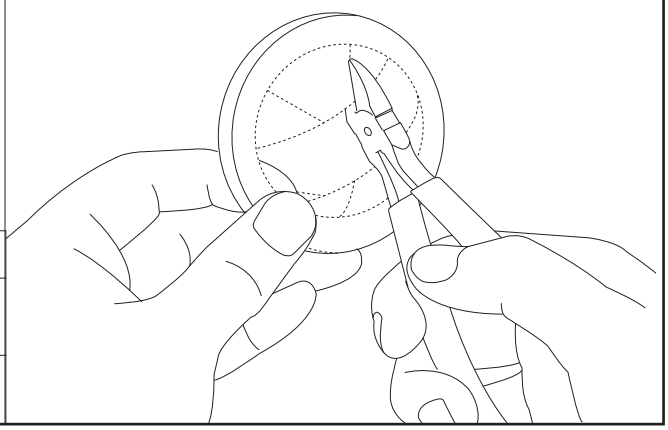


**Example: Lens F with LM-12D**

Top View



If necessary, the masked area can be altered by cutting off the respective grooved segments with a wire cutter or knife.



Coverage Area with Lens F and Mask

| Mounting Height | ft. (m) | 8 (2.4) | 10 (3.0) | 15 (4.5) | 20 (6.0) |
|---|---|---|---|---|---|
| Max. Coverage Length x Width | ft. (m) | 32 x 3.3 (9.6 x 1) | 40 x 6.5 (12.0 x 2) | 60 x 10 (18.0 x 3) | 80 x 13 (24.0 x 4) |

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