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

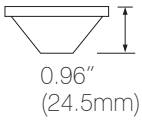
NOTE:

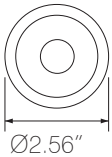
- Lens G can be rotated to change the direction of coverage. Its 3X height coverage refers only to the total length, the width of coverage will vary with the mounting height (see table of Lens G section). This lens is not IP-66 rated.
- Lens C/G may be mounted up to 40/50 ft. (12/15m) or higher at the 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

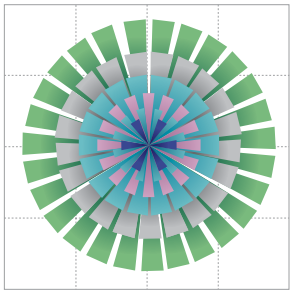
TRANS

LENS A — 2X Standard



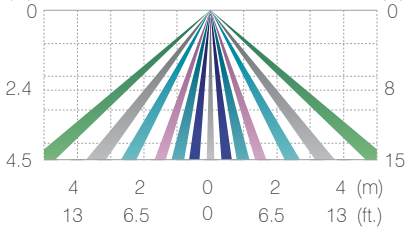


Top View

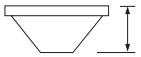


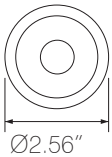
Mounting Height	ft. (m)	8 (2.4)	10 (3.0)	12 (3.6)	15 (4.5)
Max. Coverage Diameter	ft. (m)	16 (4.8)	20 (6.0)	24 (7.2)	30 (9.0)

Side View

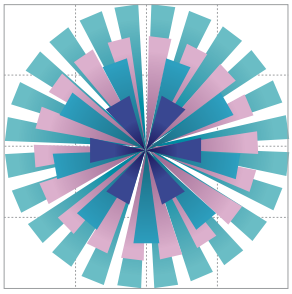


LENS B — 6X Extra wide



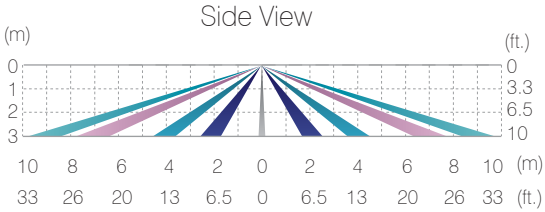


Top View

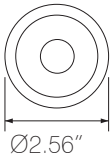


Mounting Height	ft. (m)	8 (2.4)	8.5 (2.6)	9 (2.8)	10 (3.0)
Max. Coverage Diameter	m (ft.)	48 (14.4)	51 (15.6)	54 (16.8)	60 (18.0)

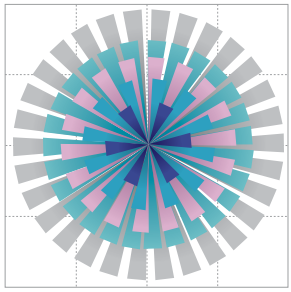
Side View



LENS C — 3X High bay

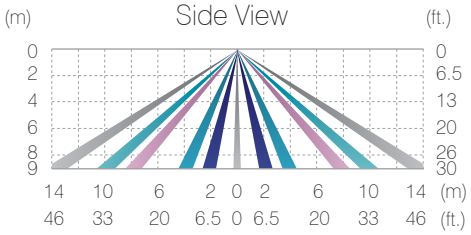


Top View

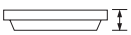


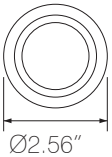
Mounting Height	ft. (m)	15 (4.5)	20 (6.0)	26 (8.0)	30 (9.0)
Max. Coverage Diameter	ft. (m)	45 (13.5)	60 (18.0)	78 (24.0)	90 (27.0)

Side View

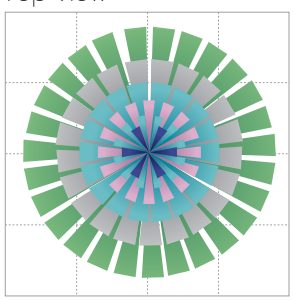


LENS D — 2X Standard



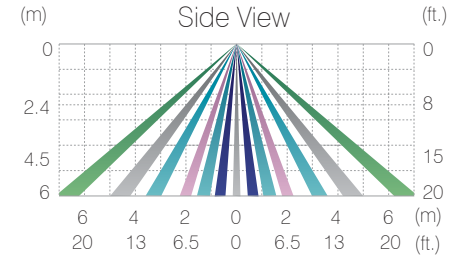


Top View



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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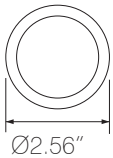
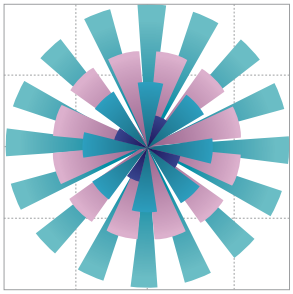
LENS F — 4X Extra wide

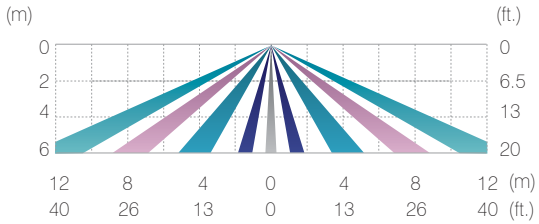
Mounting Height	ft. (m)	8 (2.4)	10 (3.0)	15 (4.5)	20 (6.0)
Max. Coverage Diameter	ft. (m)	32 (9.6)	40 (12.0)	60 (18.0)	80 (24.0)



Top View

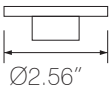


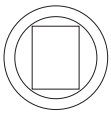
Side View



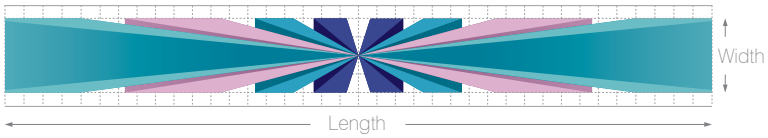
LENS G — 3X Aisle way

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)

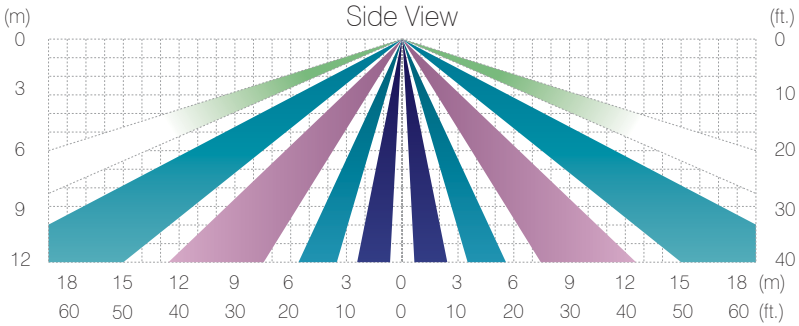




Top View

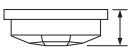


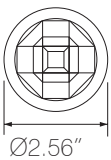
Side View



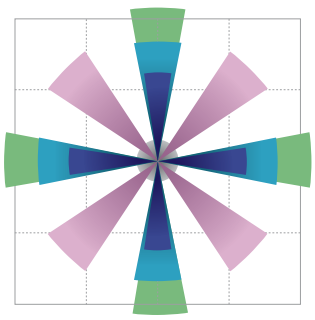
LENS H — 1X High bay

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)

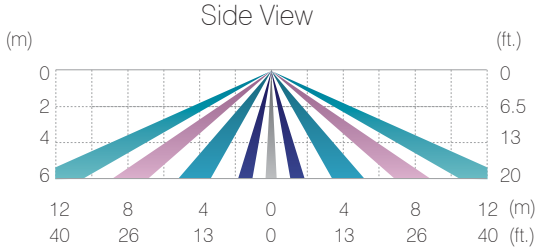




Top View



Side View



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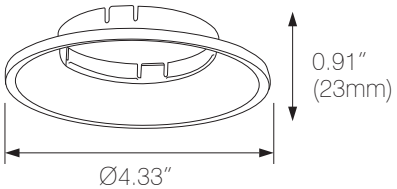
ACCESSORIES

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.



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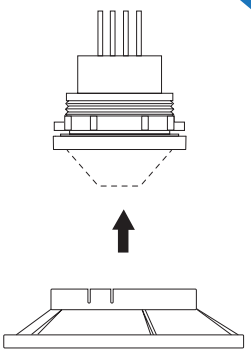

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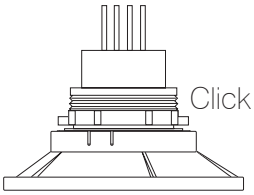
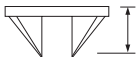
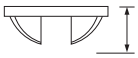
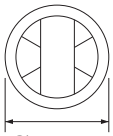
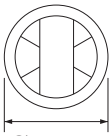


LENS MASK

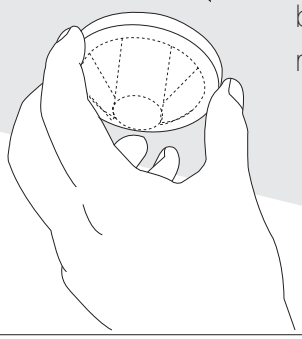
LM-12C For Lens A/B/C	LM-12D For Lens F
 1.02″ (26mm)	 0.79″ (20mm)
 Ø2.74″ (Ø69.5mm)	 Ø2.74″ (Ø69.5mm)

1

① Push the mask onto the installed lens

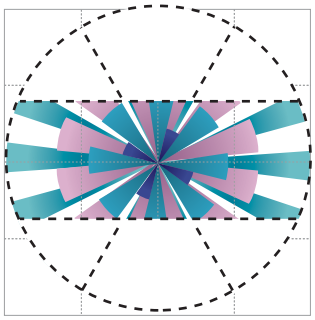
Click!

② Masked area can be changed by rotating the mask

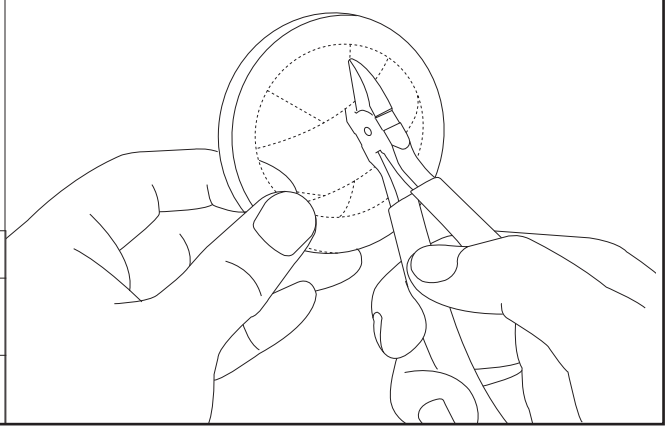


Example: Lens F with LM-12D

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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