

LENS DATASHEET

OVERVIEW

All PIR based ILL-400 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 28°C/82°F) 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.

LENS OPTIONS

Lens		Shape	Recommended Mounting Height		Coverage
A	Standard	Cone	2.4~4.5 m	8~15 ft.	2X height
B	Extra wide	Cone	2.4~3.0 m	8~10 ft.	6X height
C	High bay	Cone	4.5~9.0 m	15~30 ft.	3X height
D	Standard	Round flat	2.4~6.0 m	8~20 ft.	2X height
F	Extra wide	Dome	2.4~6.0 m	8~20 ft.	4X height
G	Aisle way	Arch	2.4~12.0 m	8~40 ft.	3X height
H	High bay	Dome	9.0~15.0 m	30~50 ft.	1X height
L	Long aisle	Arch	2.4~3.0 m	8~10 ft.	6X height

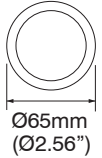
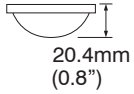
NOTE:

- Lens G/L can be rotated to change its direction of coverage. Its 3X/6X height coverage refers only to the total length, the width of coverage will vary with the mounting height (see table of Lens G/L section). This lens is not IP-66 rated.
- Lens C/G may be mounted up to 12/15 m (40/50 ft.) 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.
- All dimensions are for reference only.

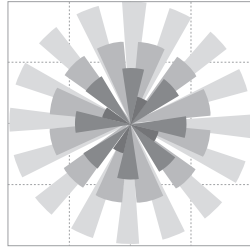
LENS A		2X Standard		Mounting Height	m (ft.)	2.4 (8)	3.0 (10)	3.6 (12)	4.5 (15)
				Max. Coverage Ø	m (ft.)	4.8 (16)	6.0 (20)	7.2 (24)	9.0 (30)
				Minor Motion Ø	m (ft.)	3.0 (10)	1.8 (6)	1.8 (6)	--
LENS B		6X Extra wide		Mounting Height	m (ft.)	2.4 (8)	2.6 (8.5)	2.8 (9)	3.0 (10)
				Max. Coverage Ø	m (ft.)	14.4 (48)	15.6 (51)	16.8 (54)	18.0 (60)
LENS C		3X High bay		Mounting Height	m (ft.)	4.5 (15)	6.0 (20)	8.0 (26)	9.0 (30)
				Max. Coverage Ø	m (ft.)	13.5 (45)	18.0 (60)	24.0 (78)	27.0 (90)
LENS D		2X Standard		Mounting Height	m (ft.)	2.4 (8)	3.0 (10)	4.5 (15)	6.0 (20)
				Max. Coverage Ø	m (ft.)	4.8 (16)	6.0 (20)	9.0 (30)	12.0 (40)
				Minor Motion Ø	m (ft.)	1.8 (6)	3.0 (10)	--	--

LENS F 4X Extra wide

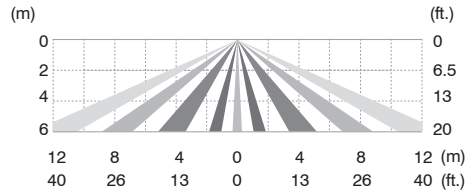
Mounting Height	m (ft.)	2.4 (8)	3.0 (10)	4.5 (15)	6.0 (20)
Max. Coverage Ø	m (ft.)	9.6 (32)	12.0 (40)	18.0 (60)	24.0 (80)
Minor Motion Ø	m (ft.)	1.8 (6)	4.0 (13)	--	--



Top View

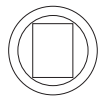
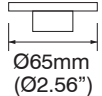
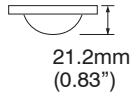


Side View

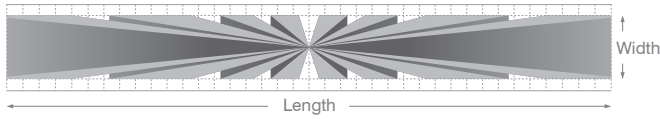


LENS G 3X Aisle way

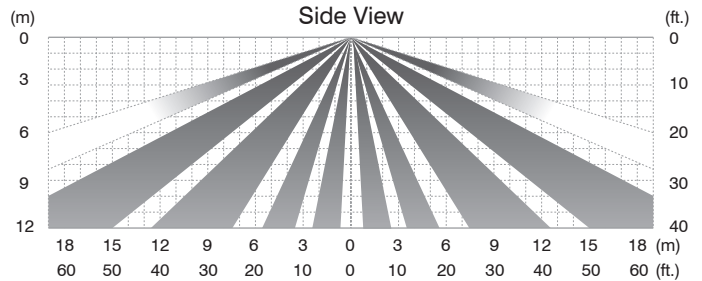
Mounting Height	m (ft.)	3.0 (10)	6.0 (20)	9.0 (30)	12.0 (40)
Max. Coverage Ø	m (ft.)	9.0 x 4 (30 x 13)	18.0 x 4 (60 x 13)	27.0 x 4 (90 x 13)	36.0 x 4 (120 x 13)



Top View

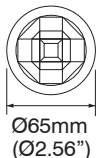
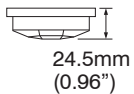


Side View

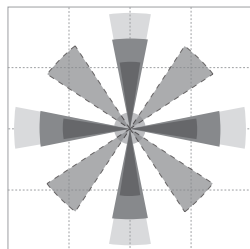


LENS H 1X High bay

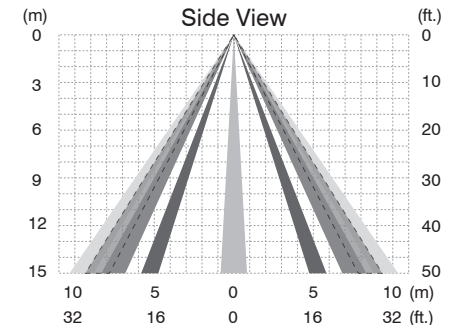
Mounting Height	m (ft.)	9.0 (30)	11.0 (36)	13.0 (43)	15.0 (49)
Max. Coverage Ø	m (ft.)	9.0 (30)	11.0 (36)	13.0 (43)	15.0 (49)



Top View

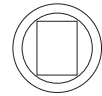
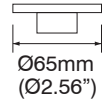
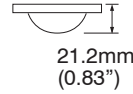


Side View

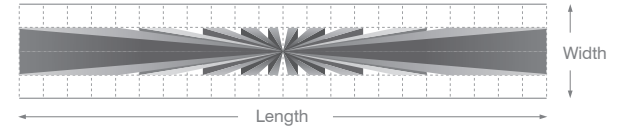


LENS L 6X Long aisle

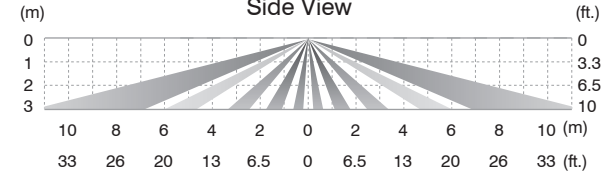
Mounting Height	m (ft.)	2.4 (8)	2.6 (8.5)	2.8 (9)	3.0 (10)
Max. Coverage Ø	m (ft.)	14.4 x 2 (48 x 6.5)	15.6 x 2 (51 x 6.5)	16.8 x 2 (54 x 6.5)	18.0 x 2 (60 x 6.5)



Top View



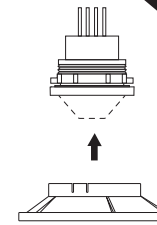
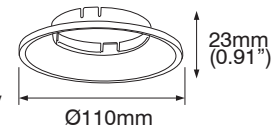
Side View



ACCESSORIES

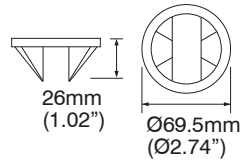
LENS HOOD LH-110

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

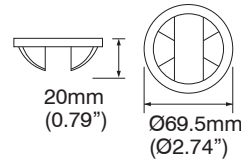


LENS MASK

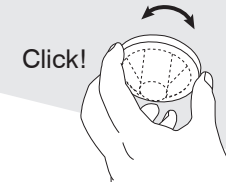
LM-12C For Lens A/B/C



LM-12D For Lens F



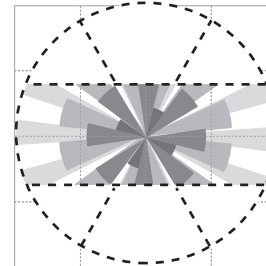
1 Push the mask onto the installed lens



2 Masked area can be changed by rotating the mask

Example: Lens F with LM-12D

Top View



Coverage Area with Lens F and Mask

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

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

