

LOW VOLTAGE PASSIVE INFRARED FIXTURE INTEGRATED MOTION SENSORS

FS-305 SERIES



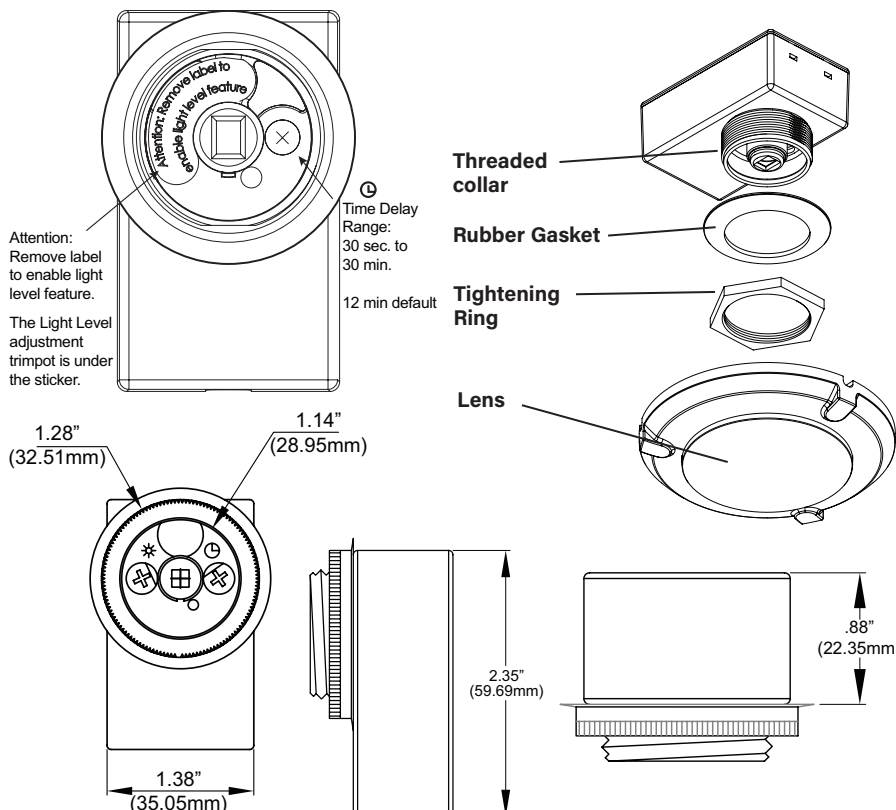
PRODUCT OVERVIEW

The FS-305 is a motion sensor that turns lighting on and off based on motion. It is a slim, low-profile device designed for installation inside the bottom of a light fixture body.

The FS-305 consists of two parts, a sensor module and a lens module. Four lens choices provide flexibility for varying mounting heights. The lenses

mount onto the sensor body from the exterior of the fixture, threading onto the FS-305 threaded collar.

The device controls lighting loads in response to motion and light level detected in its field of view. The light level feature holds lights off, if the daylight level is sufficient.



MODELS

FS-305
FS-305RC with RJ45 connector
12-30VDC
Use with FS-PPv2 power pack

SPECIFICATIONS & FEATURES

Compact design ideal for use in parking garage and parking lot luminaires

Low voltage

Power consumption: 6.5mA @ 24VDC

IP65, UL 244A and UL 508 rated (when fully assembled, installed and FS-LxW lens is used) for use in wet location environments (indoor and outdoor)

Four interchangeable lenses (FS-L2W, FS-L3W, FS-L6, FS-L7W) for mounting between 8' and 40'

Fixed sensitivity optimized for FS-LxW lens coverages

Adjustable time delay (30 seconds to 30 minutes)

Light level daylighting feature (10 fc to 120 fc)

Use copper conductors only

Operating temperature: -40°F to +131°F (-40°C to 55°C)

Storage temperature: -40°F to +176°F (-40°C to +80°C)

Operating Humidity: 5% to 95% RH, non-condensing

Weight: 1.5 oz (42.52 grams)

UL and cUL listed

Five year warranty

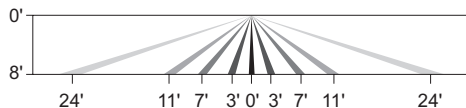
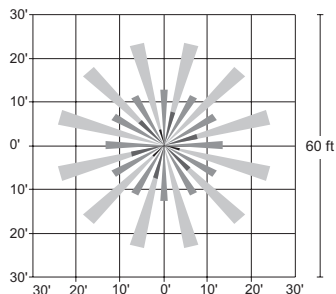
MATERIALS

Polycarbonate, flame retardant
UV resistant
Impact resistant
Recyclable

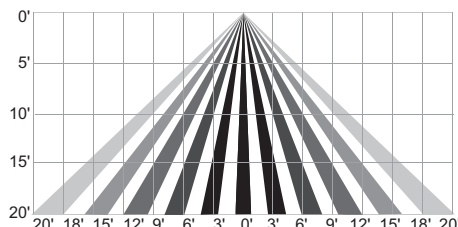
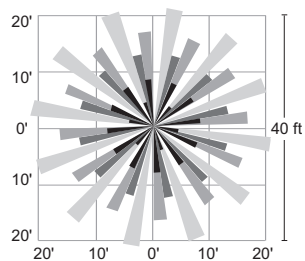
FACTORY DEFAULTS

Time delay: 12 minutes
Light level: 120 fc

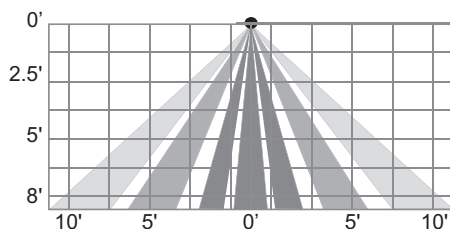
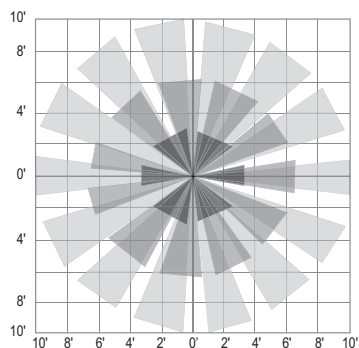
COVERAGE



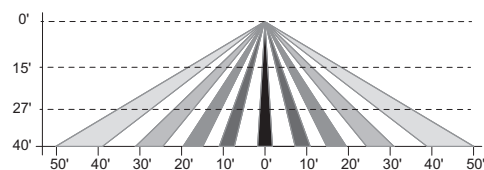
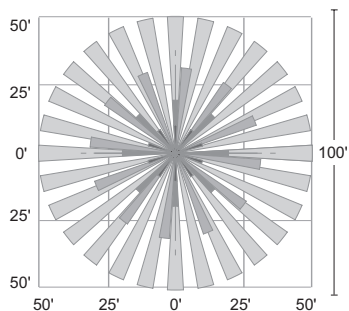
FS-L2W top and side coverage patterns



FS-L3W top and side coverage patterns

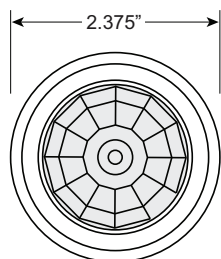


FS-L6 top and side coverage patterns
(indoor, non-wet location use only)

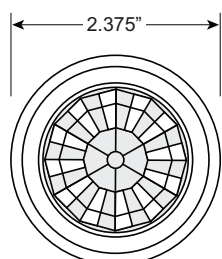


FS-L7W top and side coverage patterns

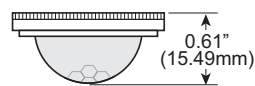
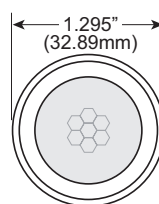
DIMENSIONS OF LENS OPTIONS



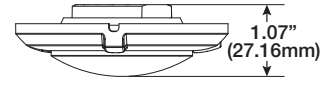
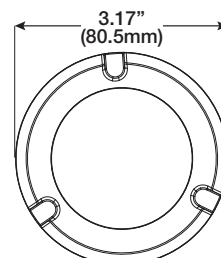
FS-L2W dimensions



FS-L3W dimensions



FS-L6 dimensions

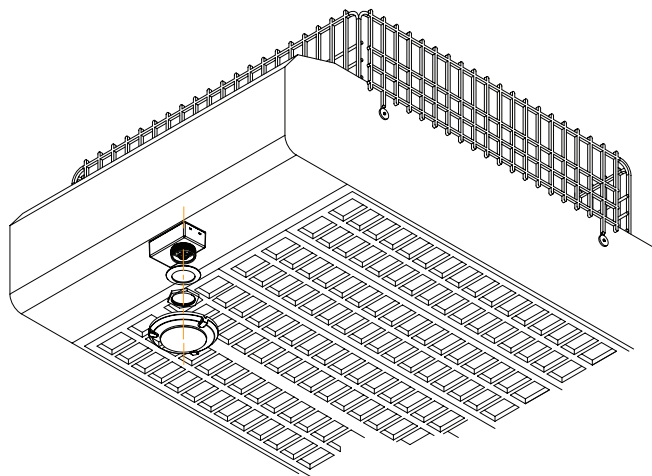


FS-L7W dimensions

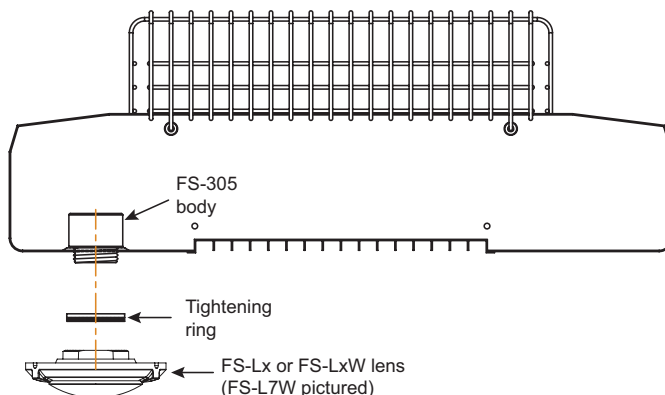
INSTALLING THE FS-305 SENSOR IN LIGHT FIXTURE

Choose a level surface for mounting the FS-305.

Punch or drill a 1 1/8" hole in the luminaire housing. From the inside of the fixture, insert the FS-305 threaded collar through the hole in the bottom of the fixture. Hand tighten the lens securely against the outside of the fixture.



If necessary, use the tightening ring as a spacer on either side of the fixture wall. For line voltage models, connect the wiring from the sensor to the ballast or LED driver. Use copper conductors only. For low voltage models, see Installing the Power Pack, below.



Installing the FS-305 in the light fixture.

INSTALLING THE POWER PACK

1. Determine an appropriate mounting location inside the fixture.
2. Use the holes or mounting slots at both ends of the power pack to secure it to the fixture.
3. Connect wires to the load and the electrical supply as described in the wiring section.

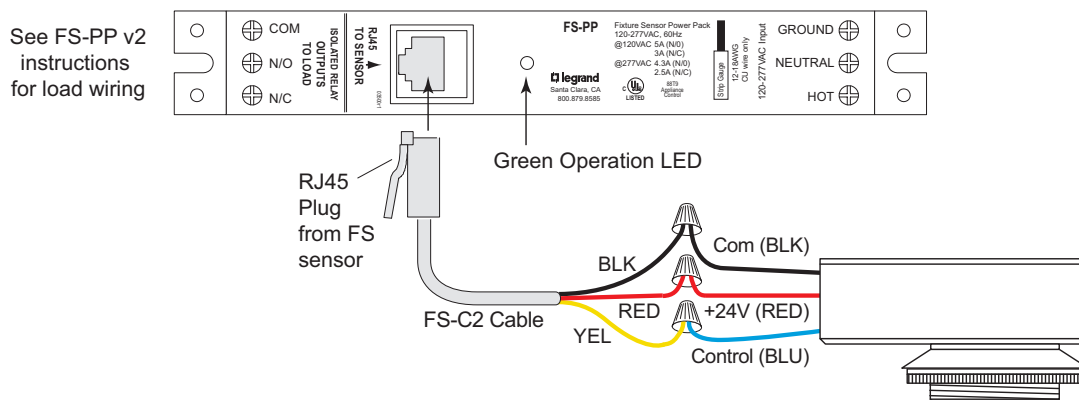
4. Connect the FS-C2 connector to the RJ45 on the power pack.
5. Connect the FS-C2 flying lead to the FS-305 flying leads as described in the wiring section.

NOTE: For the FS-305RC, use an FS-C1, FS-C1-20, or FS-C3 to connect to the RJ45 jack on the FS-305RC.

WIRING

The FS-305 is supplied with flying leads and the FS-305RC with an RJ45 connector. This facilitates wiring at the factory, and enables manufacturers to use one-piece leads, minimizing splicing in the luminaire housing. There is an initial warm-up period, so during initial power-up, it may take up to a minute

before the lights turn on. After warm-up, the sensor will open or close the relay to correspond to the occupancy status of the room. This occurs only during first power up at the initial installation or after a lengthy power failure.



FS-305RC wiring

For the FS-305RC, plug the built-in RJ45 cable directly from the Sensor to the FS-PP or BZ-50RC

SEQUENCE OF OPERATION

The FS-305 and FS-305RC are 12-30 VDC motion sensors. Either model can be wired to control all loads in a fixture, or to provide hi/low control of LED arrays. When motion is detected within the sensor's coverage area, the relay in the power pack closes, and lighting loads are automatically turned on. When motion is no longer detected for the duration of the time delay setting, the relay opens and the lighting load is turned off, or set to low level. The sensor's time delay setting is factory preset at 12 minutes.

The light level feature holds lights off when there is adequate daylight. The light level setting is factory preset to maximum, meaning that even the brightest ambient light will not turn the lights off if the sensor detects occupancy in the controlled area. Refer to the Installation Instructions for changing factory preset values, and for important start up instructions.

ORDERING INFORMATION

Catalog #	Master Pack Details					Inner Pack Details				
	Master Pack Quantity	Case dimensions (inches)			Weight (pounds)	Inner Pack Quantity	Case dimensions (inches)			Weight (pounds)
		Length	Width	Height			Length	Width	Height	
FS-305	200	21.1	19.7	20.4	26.8	50	20.7	9.45	9.8	6
FS-305RC	200	21.1	19.7	20.4	48.4	50	20.7	9.45	9.8	11.3
FS-L2W	420	16.3	12.75	20.3	23.2	105	7.75	6	19.7	5.3
FS-L3W	420	16.3	12.75	20.3	23.2	105	7.75	6	19.7	5.3
FS-L6	400	15.75	9.8	11.8	5.56	N/A	N/A	N/A	N/A	N/A
FS-L7W	100	21.8	17.5	15.7	15.2	50	20.6	8.3	15	6.7
FS-PPv2	100	21.1	20.1	10.3	21.8	N/A	N/A	N/A	N/A	N/A
BZ-50RC	40	12.6	8.7	12.6	15	10	12.2	6.1	4	3.55
FS-C1	160	14.2	11	14.2	31.6	10 (in bag)	13.8	9	.01	1.9
FS-C1-20	120	18.5	13.4	14	44.9	5 (in bag)	13.8	9	.01	1.8
FS-C2	700	18.5	13.4	14	16.8	20 (in bag)	13.8	9	.01	.48
FS-C3	350	18.5	13.4	14	28.1	10 (in bag)	13.8	9	.01	.76

Catalog #	Color	Description	Voltage
☐ FS-305	White	Fixture mount, low voltage, passive infrared motion sensor	12-30 VDC
☐ FS-305RC	White	Fixture mount, low voltage, passive infrared motion sensor with RJ45 connector	12-30 VDC
☐ FS-L2W	White	360° lens, maximum coverage 48' diameter from 8' height	
☐ FS-L3W	White	360° lens, maximum coverage 48' diameter from 20' height	
☐ FS-L6	White	360° lens, maximum coverage 20' diameter from 8' height (indoor, non-wet location use)	
☐ FS-L7W	White	360° lens, maximum coverage 100' diameter from 40' height	
☐ FS-PPv2	White	Fixture Sensor Power Pack	120/277/347 VAC; 60 Hz
☐ BZ-50RC	White	Universal Voltage Power Pack	120/230 (1P, L-N) /277 VAC; 50/60 Hz
☐ FS-C1		10' (3.048m) cable with shielded RJ45 male connectors at each end (for connecting two sensors and two FS-PPs)	
☐ FS-C1-20		20' (3.048m) cable with shielded RJ45 male connectors at each end (for connecting two sensors and two FS-PPs)	
☐ FS-C2		Connector cable, 6" cable with 3 flying leads at one end and a shielded RJ45 male connector on other end	
☐ FS-C3		3' (0.914m) cable with shielded 90° male RJ45 on one end and shielded straight male RJ45 on the other (for connecting two sensors and two FS-PPs)	
☐ FS-C4		Shielded RJ45 splitter with female to dual female receptacles	

Information supplied above is subject to change.
Harmonization code: 8538908080. Country of origin: China.

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