# LOW AND LINE VOLTAGE PASSIVE INFRARED FIXTURE INTEGRATED MOTION SENSORS

FS-3X5 SERIES

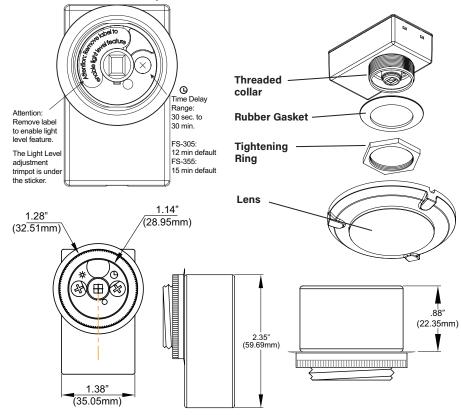


# **PRODUCT OVERVIEW**

The FS-3x5 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-3x5 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-3x5 threaded collar.

The device controls lighting loads in response to motion and light level detected in its field of view. The light level feature in the FS-355 can be used to turn lights off, and in the FS-305 to hold lights off, if the daylight level is sufficient.



#### MODELS

FS-355 120/277 VAC; 60Hz Load @ 120 VAC 0-800W ballast or incandescent Load @ 277 VAC 0-1200W ballast

FS-305 12–30VDC Use with FS-PPv2 power pack

FS-305RC with RJ45 connector 12–30VDC Use with FS-PPv2 or BZ-50RC power pack

#### **SPECIFICATIONS & FEATURES**

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

Line or low voltage

Power consumption for line voltage models: FS-355: 0.28W

Power consumption for low voltage model: FS-305, FS-305RC: 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

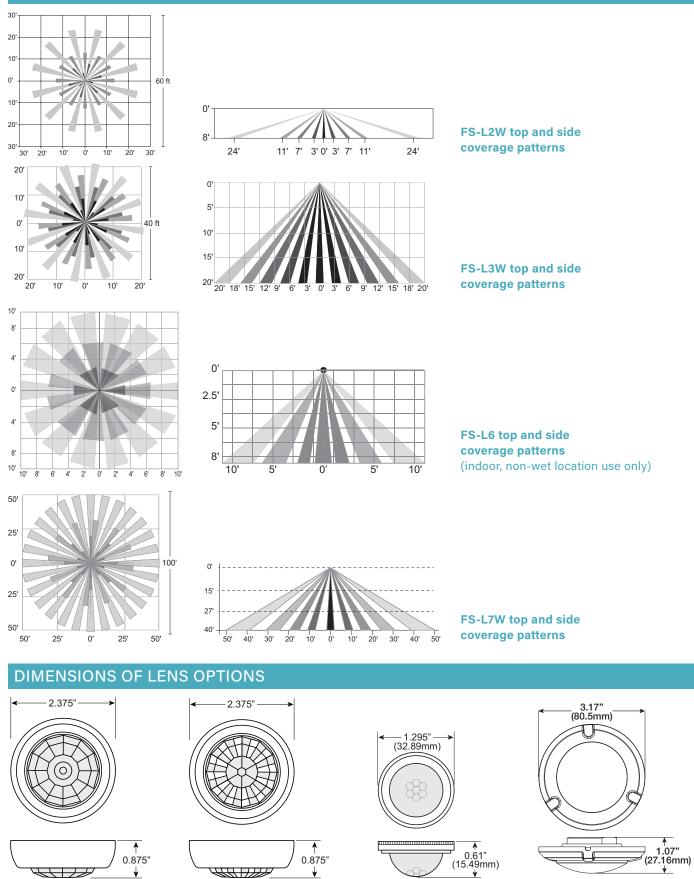
Polycarbonate, flame retardant UV resistant Impact resistant Recyclable

### FACTORY DEFAULTS

Time delay: 15 minutes (FS-355) 12 minutes (FS-305) Light level: 120 fc

### **FIXTURE SENSORS & CONTROLS**

# COV<u>ERAGE</u>



**FS-L3W dimensions** 

**FS-L6 dimensions** 

**FS-L2W dimensions** 

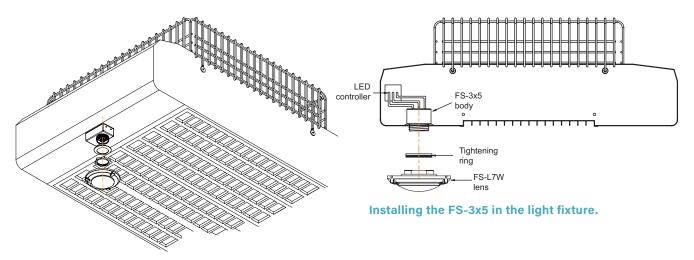
**FS-L7W dimensions** 

# **INSTALLING THE FS-3X5 SENSOR IN LIGHT FIXTURE**

Choose a level surface for mounting the FS-3x5.

Punch or drill a 1 1/8" hole in the luminaire housing. From the inside of the fixture, insert the FS-3x5 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.

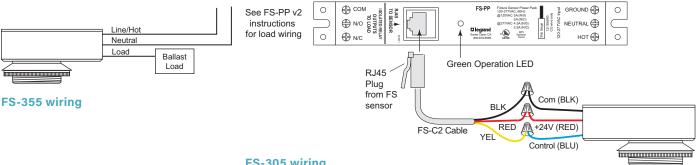


## **INSTALLING THE POWER PACK**

- 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 on the FS-305-D flying leads as described in the wiring section.

### WIRING

The FS-355 is supplied with terminal inputs, while the FS-305 is supplied with flying leads or with an RJ45 connector. This facilitates wiring at the factory, and enables manufacturers to use one-piece leads, minimizing splicing in the luminaire housing. Only copper conductors should be used for wiring connections. The FS-3x5 will accept conductor sizes between 14 and 18 AWG. 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-305 wiring

For the FS-305RC, plug the RJ-45 cable directly from the Sensor to the FS-PP or BZ-50RC

## **SEQUENCE OF OPERATION**

The FS-355 is a 120/277 VAC motion sensor, while 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 sensor 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 FS-355 sensor's time delay setting is factory preset at 15 minutes, while the FS-305 sensor's time delay is 12 minutes.

In the FS-355, the light level feature turns lights off if the load is already turned on and there is adequate daylight, while in the FS-305 the feature holds lights off. 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**

	Master Pack Details						Inner Pack Details					
	Master Pack Quantity	Case dimensions (inches)			14/-:			Case dimensions (inches)			14/-1-1-1	
Catalog #		Length	Width	Height	Weight (pounds)		Pack Quantity	Length	Width	Height	Weight (pounds)	
FS-355	200	21.1	19.7	20.4	29.7		50	20.7	9.45	9.8	6.5	
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-C2	700	18.5	13.4	14	16.8		20	13.8	9	.01	.48	

Cat	alog #	Color	Description	Voltage
	FS-355	White	Fixture mount, line voltage, passive infrared motion sensor	120/277VAC; 60Hz
	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-C2		Connector cable, 6" cable with 3 flying leads at one end and a shielded RJ45 male connector on other end	

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

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