

SELECTABLE MODE HIGH/LOW/OFF PIR FIXTURE INTEGRATED INDOOR/OUTDOOR MOTION/ PHOTO SENSOR

FSP-2X2

Designed for LED fixtures and
rated for extreme temperatures

Dusk to dawn daylighting
control options for convenience
and added energy savings

Fully adjustable dimmed trim
level and time delay



FSP-202

FSP-212

Choice of four preconfigured control
modes plus test and service modes

IP66 rated when combined with FSP-Lx
lens (ordered separately) and mounted in
outdoor rated fixture

Lenses available for mounting heights
from 8' to 40'



DESCRIPTION

FSP-2x2 sensors provide multi-level control based on motion and/or daylight contribution. They control 0-10VDC LED drivers or dimming ballasts, as well as non-dimming ballasts and, with an FSP-Lx Lens, are rated for wet and cold locations. Line and low voltage models are available, and choice of control modes simplifies sensor configuration.

OPERATION

The FSP-202 operates on 12-32VDC supplied by a power pack or driver; the FSP-212 operates on 120/277VAC or 230-240VAC Single Phase. The sensors use either PIR motion detection or photocell detection of the ambient light level to turn lighting on to either a high or low level based on the selected control mode. When a daylight control option is used for dusk to dawn operation, the photocell triggers lighting on when the ambient light level is 5 footcandles or less; the off level is set at 10 footcandles with a 3 second time delay

CONTROL MODE OPTIONS

Three rotary trimpots are available on the sensor to facilitate setup and adjustment. The Mode trimpot has five settings corresponding to: (A) On at dusk to low trim, motion triggers high (10V), time delay triggers low, off at dawn; (B) Motion after dusk triggers high (10V), time delays trigger low trim, then off, off at dawn; (C) Motion anytime triggers high (10V), time delays trigger low trim, then off; (D) Motion after dusk triggers selected lighting level (high trim), time delay triggers off, off at dawn; (E) Service mode. One trim level for the selected control mode is set using an intensity level pot, adjustable from 1 to 10V. The time delay is selectable from 30 seconds to 30 minutes using a third trimpot; the cutoff delay for Mode B is 1/2 the value of the time delay.

APPLICATIONS

The economical, wet location-rated FSP-2x2 is designed for installation inside the bottom of a light fixture body. The control modes are ideal for outdoor parking lots and pathways as well as indoor parking structures or high bay applications. A choice of three lenses ensures complete coverage for mounting heights up to 40'

FEATURES

- Provides line voltage On/Off switching and 0-10VDC dimming control (FSP-212)
- Works with ballasts or LED drivers
- High or low trim fully adjustable from 1 to 10V
- Time delay from 30 seconds to 30 minutes
- Optional cut off delay
- Ramp up and fade down times (2 seconds; 10 seconds)
- Optional daylighting control
- Optional shroud with integrated lens to block high-angle light
- Polycarbonate construction; flame retardant, UV resistant, impact resistant, recyclable
- UL244A and UL508; IP66 rated (when fully assembled and installed) for use in wet locations
- This product meets the materials restrictions of RoHS
- CE compliant

PROJECT

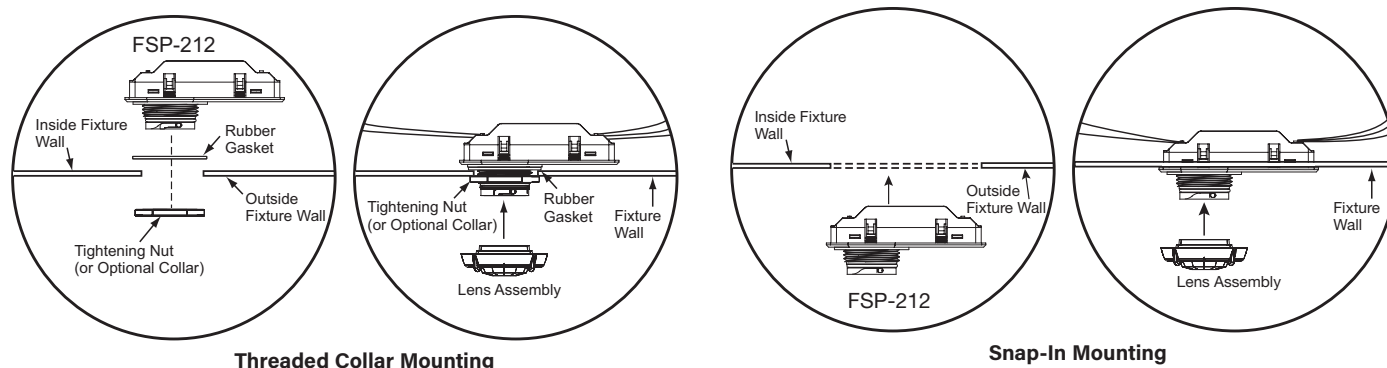
LOCATION/
TYPE

SPECIFICATIONS

- Input voltage:
 - FSP-202, 12-32VDC
 - FSP-212D: 120/277VAC, 50/60Hz; 230-240V, 50/60Hz, Single Phase
- Load ratings (FSP-212):
 - @120 VAC 0-800W tungsten, ballast, LED driver*; 1/6hp motor
 - @277 VAC 0-1200W ballast, LED driver*; 1/6hp motor
 - @230/240V 0-500W ballast, LED driver*
 - Do not use FSP-212 with non-isolated LED drivers
- Relay life rating (FSP-212): 200,000 cycles (120/277VAC); 50,000 cycles (230VAC)
- Trim level: 1-10V; default 1V
- Time delay: 30 sec.-30 min.; default 15 minutes
- Cut off delay: 1/2 of time delay
- Ramp up time: 2 seconds
- Fade down time: none, 10 seconds
- Operating conditions: -40 to 158°F (-40 to 70°C); 5-95% RH
- Weight: FSP-202, 1.31 oz (37 grams); FSP-212, 2.43 oz (69 grams)
- IP66 (when mounted inside a fixture)
- CE compliant
- UL and cUL listed (E101196)
- Five year warranty

INSTALLATION AND WIRING

Sensor Mounting



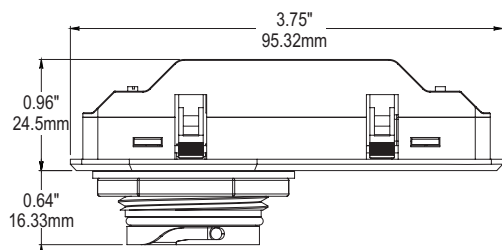
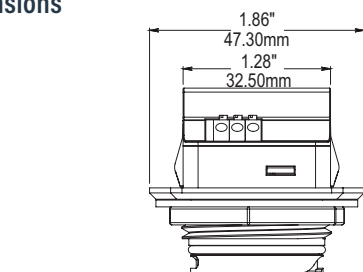
Threaded Collar Mounting

Snap-In Mounting

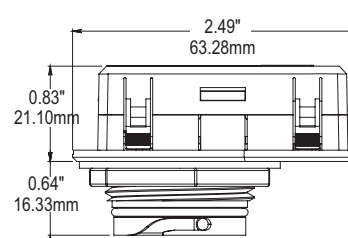
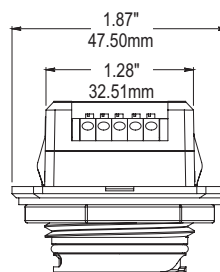
An optional collar can be installed in place of the tightening nut.

An optional shroud with integrated lens can be installed instead of the collar and a regular lens. The shroud blocks high-angle light coming from the fixture, to improve photocell performance.

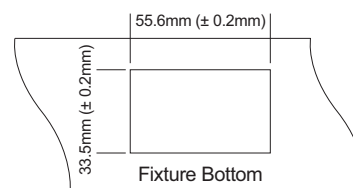
Dimensions



FSP-212 Dimensions

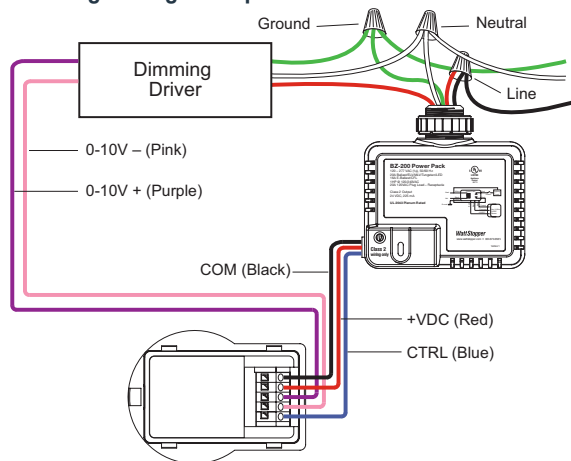


FSP-202 Dimensions

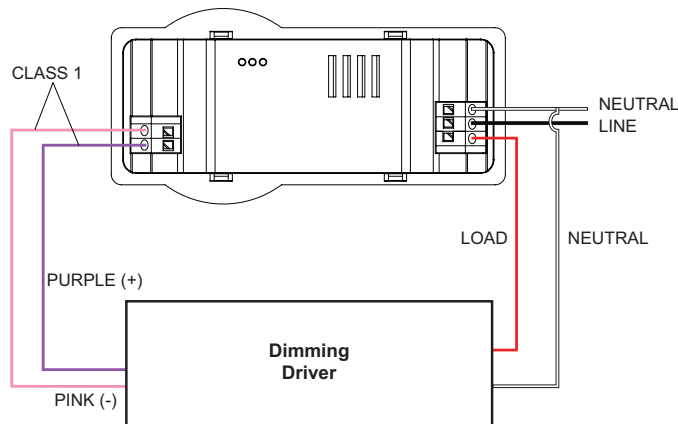


Cutout for snap-in mounting

Dimming Wiring Examples



Low voltage FSP-202 with power pack for on/off; sensor also works with ballasts or drivers with an auxiliary power output.



Line voltage FSP-212 wiring with dimming ballast or LED driver.

NOTE: Per UL, the 0-10V negative dimming wire color has been changed from gray to pink.

ORDERING INFORMATION

Catalog #		Color	Description	Voltage
	FSP-202	White	Fixture mount, passive infrared motion sensor, low voltage	12-32 VDC
	FSP-212	White	Fixture mount, passive infrared motion sensor	120-277VAC, 50/60Hz
	FSP-L2	White	360° lens, maximum coverage 48' diameter from 8' height	
	FSP-L2-B	Black		
	FSP-L2-BR	Bronze		
	FSP-L2-G	Grey		
	FSP-L2-S	White	360° lens, maximum coverage 48' diameter from 8' height, with shroud; Minimizes high-angle light contribution to photocell	
	FSP-L3	White	360° lens, maximum coverage 40' diameter from 20' height	
	FSP-L3-B	Black		
	FSP-L3-BR	Bronze		
	FSP-L3-G	Grey		
	FSP-L3-S	White	360° lens, maximum coverage 40' diameter from 20' height, with shroud; Minimizes high-angle light contribution to photocell	
	FSP-L7	White	360° lens, maximum coverage 100' diameter from 40' height	
	FSP-L7-B	Black		
	FSP-L7-BR	Bronze		
	FSP-L7-G	Grey		
	FSP-L7-S	White	360° lens, maximum coverage 100' diameter from 40' height, with shroud; Minimizes high-angle light contribution to photocell	
	FSP-C1-W	White	Small collar, for use with FSP-L2 and FSP-L3 lenses (Optional aesthetic collar to transition from fixture housing to lens) Note: Not used with lenses that include shroud	
	FSP-C1-B	Black		
	FSP-C1-BR	Bronze		
	FSP-C1-G	Gray		
	FSP-C2-W	White	Large collar, for use with FSP-L7 lens (Optional aesthetic collar to transition from fixture housing to lens) Note: Not used with lens that includes shroud	
	FSP-C2-B	Black		
	FSP-C2-BR	Bronze		
	FSP-C2-G	Gray		

Note: Unless used with a driver or ballast with a low voltage power supply, the FSP-202 requires a Wattstopper power pack (ordered separately) to operate. FSP-Lx series lens required for operation; order lens separately.