CONTINUOUS 0–10V DIMMING OUTDOOR PHOTO/ MOTION SENSOR IN IP66 ENCLOSURE WITH BLUETOOTH® TECHNOLOGY

FSP-3X1B SERIES

Designed for LED fixtures and rated for extreme temperatures; options for box or pole mounting

Fully adjustable high and low dimmed light levels

Hold off setpoint with automatic calibration option for convenience and added energy savings

FSP-3x1B

w/ Straight Nipple

w/ Drop Nipple

Continuous dimming & daylight harvesting for energy efficiency and energy code compliance

Adjustable via the iOS® or Android® Sensor Configuration App

IP66 rated with choice of lenses for wet and outdoor locations, and mounting heights from 8′ to 40′

Adjustable time delay and cutoff delay

DESCRIPTION

The FSP-3x1B sensors provide continuous dimming light level control based on motion and/or daylight contribution. They control 0-10 VDC LED drivers or dimming ballasts, as well as non-dimming ballasts and, with an FSP-Lx Lens, are rated for wet and cold locations. All control parameters are adjustable via the iOS or Android Sensor Configuration App capable of storing and transmitting sensor profiles. The FSP-3x1B family is available in three configurations for mounting inside a fixture, to the outside of a fixture via a 1/2" knockout, or to a pole.

OPERATION

Typically, the sensor ramps lighting On to the selected High mode level when motion is detected and the ambient light level is below the hold off setpoint. After the sensor stops detecting movement and the time delay elapses, lights fade to the lower light level. If there is no motion during the subsequent cut off time delay, the lights will turn Off. For dusk to dawn control, the integral photocell can switch the lights On/Off and dim based on the ambient light level, so that lighting remains on overnight even without motion detection.

APPLICATIONS

The versatile, wet location-rated FSP-3x1B is designed for installation inside the bottom of a light fixture body, to the outside of a fixture via a 1/2" knockout or to a pole. The sensor is ideal for areas such as parking facilities, gas stations, pedestrian pathways and warehouses. A choice of three lenses ensures complete coverage for mounting heights up to 40′.

OPERATION

Initial setup and subsequent sensor adjustments are made using the iOS or Android Sensor Configuration App. This app enables adjustment of parameters including high and low modes, sensitivity, time delay, cut off and more. The smartphone app is also used to initiate automatic calibration of the FSP-3x1B ambient light level setpoint. The setpoint is used to hold the controlled lighting off or at low level when there is sufficient daylight. The wireless tool stores an unlimited number of sensor parameter profiles to speed configuration of multiple sensors.

FEATURES

- Provides line voltage On/Off switching and 0-10VDC continuous dimming control (FSP-311B and FSP-321B)
- Works with ballasts or LED drivers
- High and low modes fully adjustable from 0 to 10V
- Continuous dimming provides appropriate light levels based on ambient light conditions
- Time delay from 5 to 30 minutes
- Optional daylighting setpoints feature automatic calibration, or permit manual adjustment
- Optional shroud with integrated lens to block high-angle light
- Polycarbonate construction; flame retardant, UV resistant, impact resistant, recyclable
- Adjustable ramp up and fade down times
- Smartphone application stores an unlimited number of sensor profiles for quick setup and adjustment of multiple sensors (download Sensor Configuration App)
- UL244A and UL508; IP66 rated (when fully assembled and installed) for use in wet locations

PROJECT		LOCATION/ TYPE	

SPECIFICATIONS

- Input voltage:
  - FSP-301B, 12–32VDC
  - FSP-311B, 120–277VAC (single phase); 50/60Hz
  - FSP-321B, 100–347VAC (single phase) or 208/230/480VAC (phase-to-phase); 50/60Hz
- Load ratings (FSP-311B, FSP-321B):
  @120VAC 0–800W tungsten, ballast, LED driver; 1/6hp motor
  @230-240V 0–300W ballast, LED driver
  @277VAC 0–1200W ballast, LED driver; 1/6hp motor
  @347V 0–1200W ballast, LED driver; (FSP-321B only)
  @480V 0–1200W ballast; (FSP-321B only)
- Relay life rating (FSP-311B & FSP-321B): 200,000 cycles (120/277VAC); 50,000 cycles (230VAC)
- High mode: 0–10V; default 10V
- Low mode: Off, 0–9.8V; default 1V
- Time delay: 30 sec., 1–30 min.; default 5 min.
- Cut off delay: none, 1–60 min. 1–5 hrs.; default 1 hr.
- Sensitivity: none, low, med, max; default max
- Setpoint: none, 1–250 fc, auto; default disabled
- Photocell On/Off: 1–250 fc; default disabled
- Ramp up time: none, 1–60 sec.; default none
- Fade down time: none, 1–60 sec.; default none
- Lead length: 12" (30.5cm), 10" (25.4cm) for FSP-3x1B-D models
- Operating temperature: FSP-301B: -40 to 167°F (-40 to 75°C) FSP-311B and FSP-321B: -40 to 140°F (-40 to 60°C)
- Dimensions: Body, no nipple, 4.13"L x 2.32"W x 1.29"H (105mm x 58.8mm x 32.8mm); -S body 5.5"L x 2.32"W x 1.36"H (139.7mm x 58.8mm x 34.4mm); -D body 5.71"L x 2.32"W x 2.79"H (145mm x 58.8mm x 70.74mm); Collar (all models), 1.3"dia. x 0.64"H (33mm x 16.3mm)
- Weight: FSP-301B, 4.8 oz (136 grams); FSP-311B & FSP-321B, 6.7oz (190 grams)
- IP66
- UL and cUL listed (E101196)
- Five year warranty

INSTALLATION AND WIRING

Sensor Mounting Options

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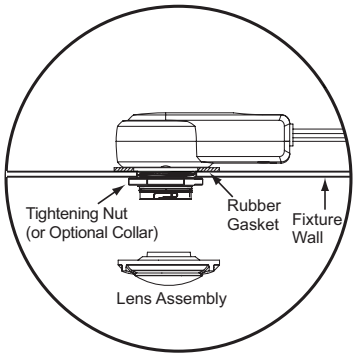
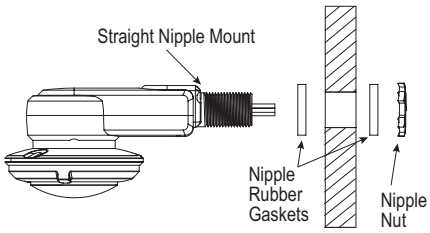
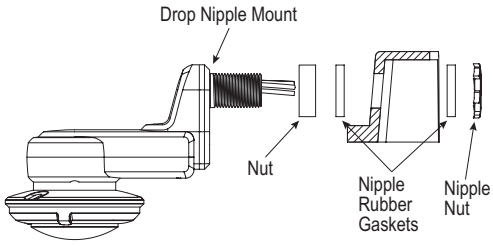


FSP-3x1B fixture mount model with no nipple or lens





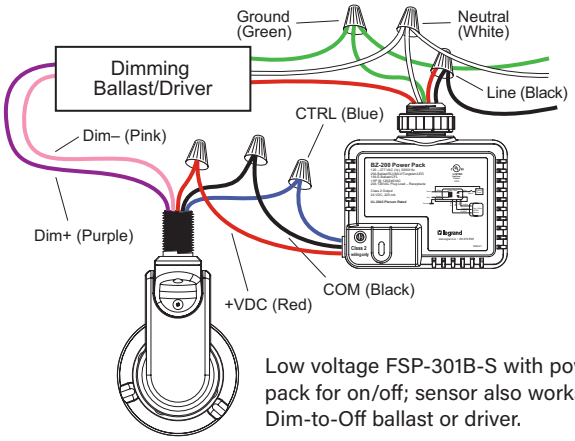
FSP-3x1B-S with lens mounted to enclosure

An optional collar can be installed in place of the tightening nut on the FSP-3x1B. This collar is included with the FSP-3x1B-S and FSP3x1B-D

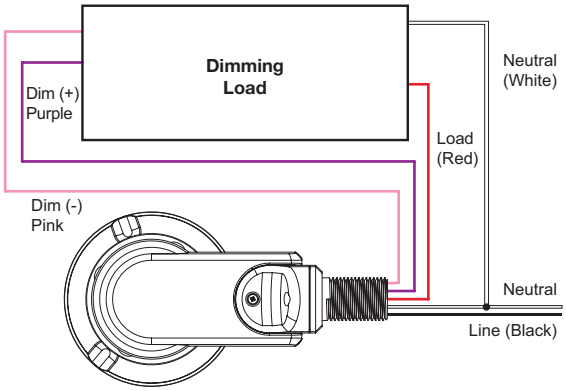
An optional shroud with integrated lens can be installed instead of the collar and a regular lens. The shroud blocks high-angle light coming from the fixture, to improve photocell performance. The shroud does not apply for FSP-3x1B-S and FSP-3x1B-D models.)

Dimming Wiring Examples

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



Low voltage FSP-301B-S with power pack for on/off; sensor also works with Dim-to-Off ballast or driver.



Line voltage FSP-3x1B-S wiring with dimming ballast or LED driver.

ORDERING INFORMATION

Catalog #		Color	Description	Voltage
☐	FSP-301B	White	Fixture Mount PIR sensor, low voltage, no nipple or lens	12-32 VDC
☐	FSP-311B	White	Fixture Mount PIR sensor, line voltage, no nipple or lens	120/277VAC, 50/60Hz or 230VAC, 50Hz
☐	FSP-321B	White	Fixture Mount PIR sensor, universal voltage, no nipple or lens	100–347VAC (single phase) or 208/230/480VAC (phase-to-phase); 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-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	

To order -S or -D model sensor, select one option from each column below and combine part numbers (as an example, FSP-301B-S-L2-W).

Pole or Box Mount Sensor Voltage	Nipple Configuration	Lens Option	Color
☐ FSP-301B, 12-32VDC sensor	☐ -S, Straight Nipple	☐ -L2, 360° lens, max coverage 48′diameter from 8′ height	☐ -W, White
☐ FSP-311B, 120/277VAC or 230VAC sensor	☐ -D, Drop Nipple	☐ -L3, 360° lens, max coverage 40′diameter from 20′ height	☐ -B, Black
☐ FSP-321B, 100-347VAC or 208/230/480VAC sensor		☐ -L7, 360° lens, max coverage 100′diameter from 40′ height	☐ -BR, Bronze ☐ -G, Gray

Note: Unless used with a driver or ballast with a low voltage power supply, the FSP-301B requires a Wattstopper power pack (ordered separately) to operate. FSP-Lx series lens required for operation; order lens separately.

Smartphone commissioning application required for configuration. Download separately.

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26564r8 Rev 03/2026