

# WIRELESS LUMINAIRE-LEVEL CONTROLLER WITH 0-10V DIMMING, MOTION SENSOR, AND PHOTOCELL

## FSP-600 SERIES

Includes both occupancy and daylight sensing

Provides robust wireless network functionality and group-based operation

Mounted either internally or externally via knock out

Supports a wide range of input voltages: 120V, 230V, 240V, 277V, 347V, and 480V



Multiple lens options for mounting from 8ft to 40ft

Compatible with Wattstopper's floor plan-based Polaris dashboard software

Fully configurable 0-10V or ON/OFF control



### DESCRIPTION

The FSP-600 "Fixture Sensor Photocell" devices provide a wirelessly networked fixture-level sensing and control solution for a range of indoor and outdoor applications. They control 0-10V and non-dimming LED drivers or ballasts and, with an FSP-Lx Lens, are rated for wet and cold locations. As components of the Wattstopper PLUS control system, device parameters and operations are fully configurable, and devices are easily integrated into a full-site dashboard within Polaris software.

### OPERATION AND CONFIGURATION

With occupancy detection, daylight sensing, and networking available, devices can be easily programmed for a wide array of sequence of operations. Prior to programming, devices operate as on-only to facilitate construction. Once installed, the devices are commissioned into a Wattstopper PLUS control system and

configured for the site-specific sequence of operation using Polaris. After being configured, devices are then available for interaction by facility managers or other designated operators in the floor-plan based Polaris user interface. Polaris enables full configuration of occupancy and daylight parameters, as well as advanced functions like time or astronomical-based control schedules, demand responsive control, and more.

### APPLICATIONS

The FSP-6x1 is available in internal and external mount options. Internal mount options offer a slim, low-profile design targeted for installation inside the bottom of a light fixture body through a 1.31" (33.3mm) drilled hole. External mount options are installed via a 1/2" knockout to either the fixture, pole, or similar electrical enclosure and are offered in both straight and drop-mount configurations. Both internal and external mount options provide an IP66-rated solution when installed with FSP-Lx lenses.

### FEATURES

- Provides line voltage On/Off switching
- Works with 0-10V dimming ballasts or LED drivers
- Continuous dimming provides appropriate light levels based on ambient light conditions
- Fully configurable parameter list including time delays, ramp and fade times, daylight setpoints, and more.
- Time and astronomical based schedules
- Demand response / load shed compatibility
- Polycarbonate construction; flame retardant, UV resistant, impact resistant, recyclable
- Optional shroud with integrated lens to block high-angle light
- Networked solution allows full integration into a Wattstopper PLUS control system for configuration via Polaris software
- UL916
- Device acts as a repeater when in range of 3 or more repeater devices, expanding wireless system communication range.
- FSP-611 and FSP-621 IP66 rated (when fully assembled and installed with FSP-Lx lens into an IP66 or greater rated enclosure)
- This product meets the materials restrictions of RoHS

PROJECT		LOCATION/ TYPE	
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## SPECIFICATIONS

- Input voltage:
  - FSP-611, 120/277VAC, 230-240VAC; 50/60Hz
  - FSP-621, 100-347VAC (single phase) or 208/230/480VAC (phase-to-phase); 50/60Hz
- Load ratings:
  - @120VAC 0-800W tungsten, ballast, LED driver; 1/6hp motor
  - @230-240V 0-300W ballast, LED driver
  - @277V 0-1200W ballast, LED driver; 1/6hp motor
  - @347V 0-1200W ballast, LED driver
  - @480V 0-1200W ballast
- Wiring Terminals (FSP-611 only)
  - Line Voltage: 16-18AWG
  - Low Voltage (for 0-10V Dimming): 18-20AWG
- Wireless (2.4Ghz) Range: 500ft (150m) line-of-sight to other repeater devices, 100ft (30m) in parking garage applications.
- Weight: FSP-611, 2.8 oz (80 g); FSP-621, 5.5 oz (155 g); FSP-6x1-S, 7.4 oz (210 g); FSP-6x1-D, 8.1 oz (230 g)
- Operating temperature: -40 to 140°F (-40 to 60°C)
- Operating Humidity: 20-90%
- Dimensions:
  - FSP-611: 3.7"L x 1.6"W x 1.1"D (w/o lens nipple) / 1.7" (with lens nipple) (94.5mm x 44.5mm x 26mm / 42.5mm)
  - FSP-621: 3.9"L x 1.7"W x 1.1"D (w/o lens nipple) / 1.7" (with lens nipple) (100mm x 44mm x 28mm / 44mm)
  - FSP-6x1-D, FSP-6x1-S: -S body 5.5"L x 2.32"W x 2"H (139.7mm x 58.8mm x 51mm); -D body 5.71"L x 2.32"W x 3.4"H (145mm x 58.8mm x 87mm) Length dimensions include 1.37" (35mm) for wiring nipple. Height dimensions include .64" (16.3mm for lens nipple)
- UL/cUL listed under UL916 (E207852); Complementary Listed to Emergency Lighting Equipment (UL924); CE; FCC part 15 Class A; RoHS
- FSP-6x1-S and FSP-6x1-D IP66 rated (when fully assembled and installed) for use in wet location;
- FSP-611 and FSP-621 IP66 rated (when fully assembled and installed with FSP-Lx lens into an IP66 or greater rated enclosure
- Five year warranty

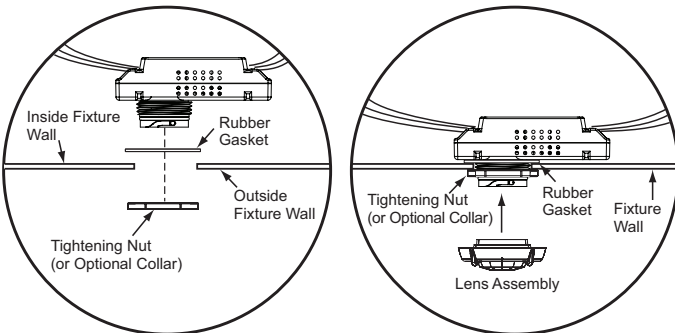
## MOUNTING

### Internal Mounting (FSP-611, FSP-621)

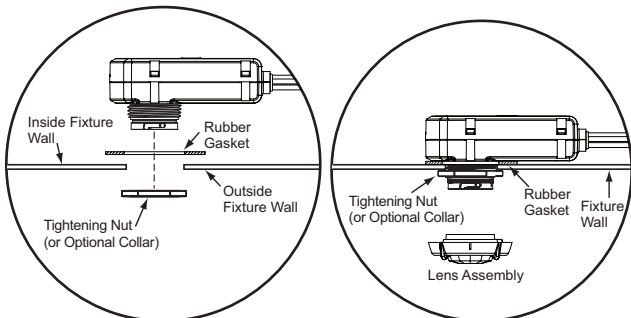
An optional collar can be installed in place of the tightening nut on the FSP-6x1.

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.

#### FSP-611

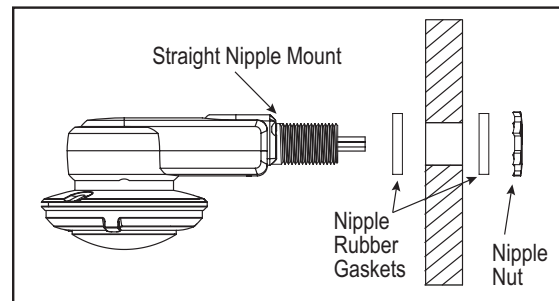


#### FSP-621

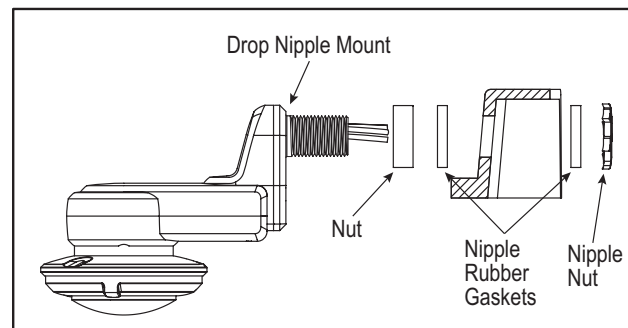


The FSP-6x1 accommodates fixture wall thickness up to 0.125" (3.18mm).

### External Mounting (FSP-6x1-S, FSP-6x1-D)

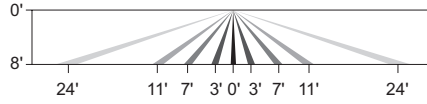
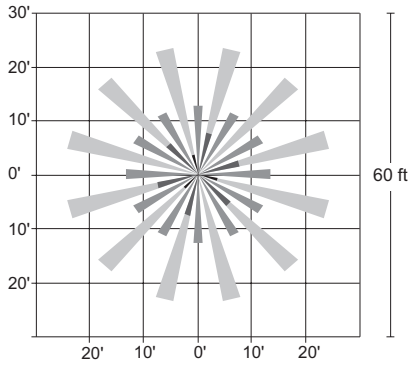


#### Installing the FSP-6x1-S to the exterior of a fixture

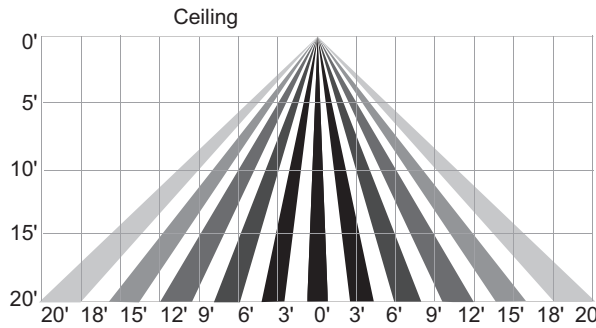
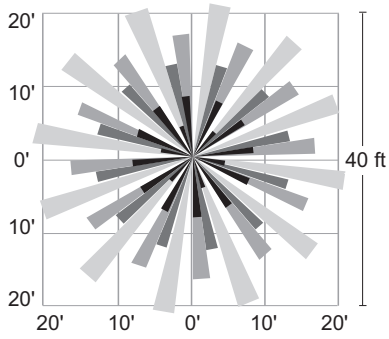


#### Installing the FSP-6x1-D to a pole using the optional nut

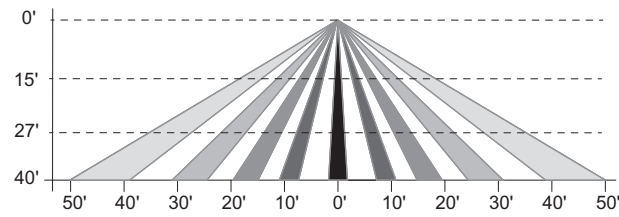
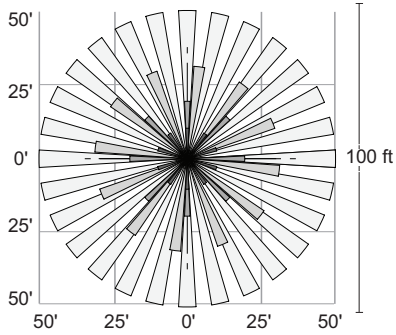
# COVERAGE



**FSP-L2 top and side coverage patterns**



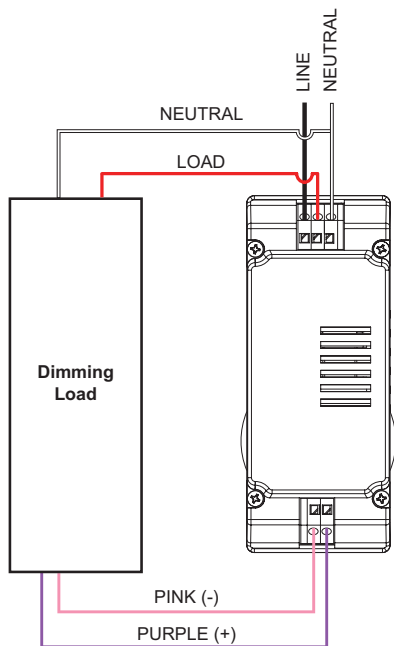
**FSP-L3 top and side coverage patterns**



**FSP-L7 top and side coverage patterns**

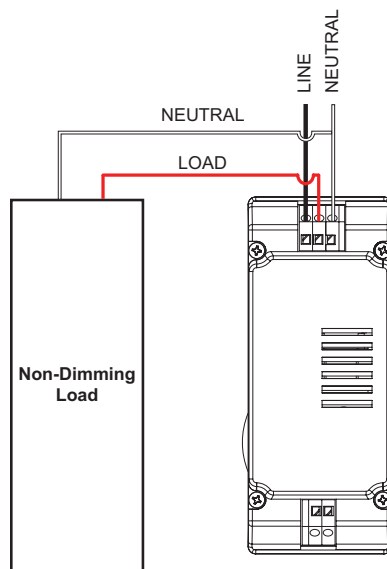
WIRING

FSP-611 Dimming

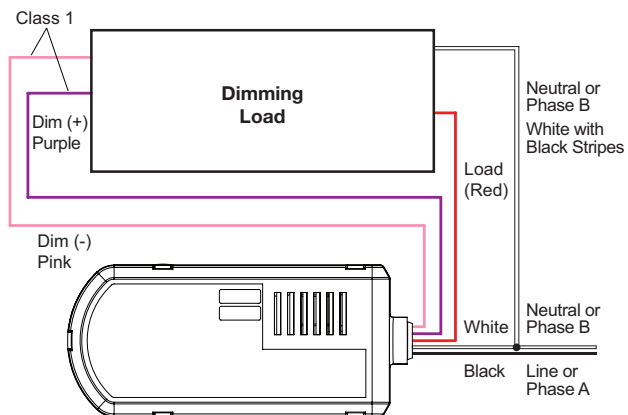


**NOTE:** Per UL, the 0-10V negative dimming wire color has been changed from gray to pink.

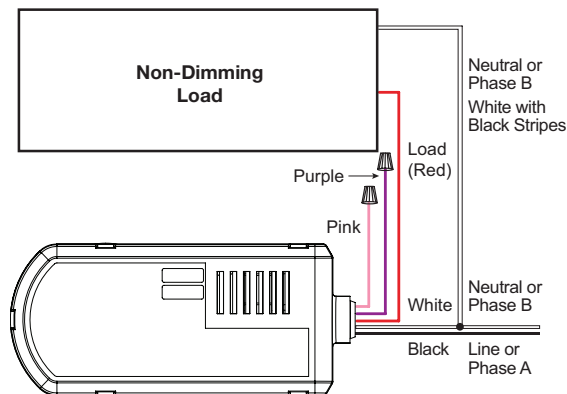
FSP-611 Non-Dimming



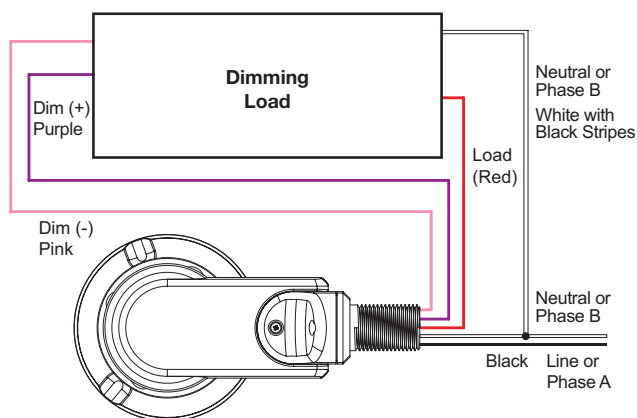
FSP-621 Dimming



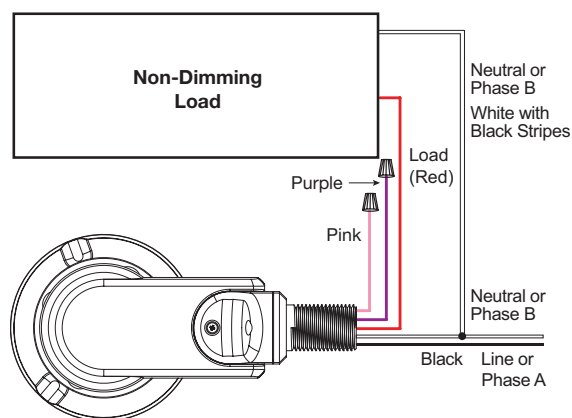
FSP-621 Non-Dimming



FSP-6x1-S/6x1-D Dimming



FSP-6x1-S/6x1-D Non-Dimming



## ORDERING INFORMATION

Catalog #	Color	Description	Mounting	Voltage
■ FSP-611	White	Wireless fixture mount PIR motion sensor, line voltage, internal mount	Internal	120/277VAC, 50/60Hz or 230VAC, 50Hz
■ FSP-611-S	White	Wireless fixture mount PIR motion sensor, line voltage, external straight mount	External, straight	
■ FSP-611-D	White	Wireless fixture mount PIR motion sensor, line voltage, external drop mount	External, drop	
■ FSP-621	White	Wireless fixture mount PIR motion sensor, universal voltage, internal mount	Internal	100-347VAC (single phase) or 208/230/480VAC (phase-to-phase); 50/60Hz
■ FSP-621-S	White	Wireless fixture mount PIR motion sensor, universal voltage, external straight mount	External, straight	
■ FSP-621-D	White	Wireless fixture mount PIR motion sensor, universal voltage, external drop mount	External, drop	

### FSP Series Lenses, Shrouds, and Collars (lens required for operation, ordered separately)

Catalog #	Color	Description
■ 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