

LOW VOLTAGE DALI OUTDOOR PHOTO/MOTION PIR SENSOR

| FDP-301SR


Product Overview

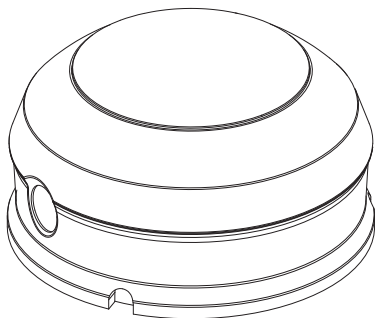
The FDP-301SR sensor works with intelligent drivers utilizing the DALI 2 protocol. This sensor family features bi-directional communication between sensor and control device, enabling connected systems for smarter, more energy efficient and data-driven applications. The FDP sensor series is compatible with various intelligent drivers such as SR compatible drivers. By connecting to an intelligent driver, the FDP sensor series does not need its own power supply which will save the OEM cost and space inside the fixture.

Configuration is possible through the Sensor Configuration App for iOS® or Android® (Search for Wattstopper Sensor Configuration App) or through compatible DALI devices and outdoor lighting controllers conforming to Zhaga or DiiA standards (103 and 303*) remotely.

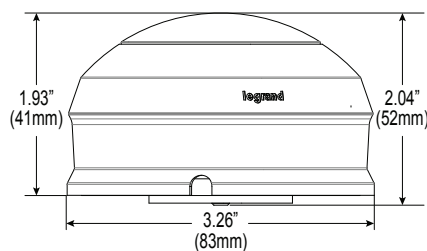


Suitable Applications: Parking Lots, Plazas, Pedestrian Street Lighting, Public Parks.
Not suitable for Roadway Detection

FDP-301SR sensor

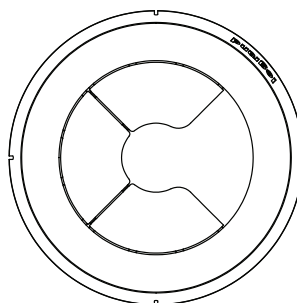


FDP-301SR dimensions



FDP-M1 sensor mask

The optional FDP-M mask provides the ability to limit coverage areas for example, in hallways or multi-use environments. The mask has three 90° sections. One or two of the sections can be removed, to provide different coverage patterns. Snap the mask onto the lens and rotate to the desired position.



Models

FDP-301SR, 12-20 VDC (Input Voltage)
Use with Philips™ SR Drivers

Specifications and Features

Quick connect design with 4-pin connector (use with high bays, parking lots and street lighting)

DALI Bus Current Consumption:
16 mA max.

2 Len Configurations
L1: 40ft (12m)
L2: 8–15ft (3m)

Remote setup and adjustment with the Wattstopper Sensor Configuration App

Adjustable high and low modes (high: 0 to 100%, low: off, 0 to 100%)

Hold time (1 second, 0 seconds to 42 minutes)

Adjustable cut off delay (none, 1 to 60 minutes, 1 to 5 hours)

Adjustable sensitivity/service mode (low, med, max; on-fix, off-fix)

Photocell: (Enable/Disable, 1 to 250 fc)

Adjustable ramp and fade times (1 to 60 seconds)

Operating temperature: -40°F to +167°F (-40°C to +75°C)

Storage temperature: -40°F to +167°F (-40°C to +75°C)

Operating Humidity: 5% to 95% non-condensing

Weight: 2.12 oz (60 grams)

UL and cUL listed, CE

IP66 rated

Five year warranty

Materials

Polycarbonate, flame retardant
UV resistant

Impact resistant (IK09 rated)

Recyclable

Meets materials restrictions of RoHS

Factory Defaults

High mode: 100%

Low mode: 40%

Time delay: 5 minutes

Cut off: Disabled

Setpoint: Disabled

Sensitivity: Max

Ramp up time: Disabled

Fade down time: Disabled

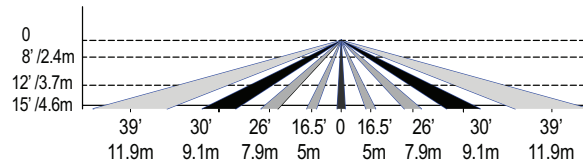
Photocell On/Off: Disabled

**DALI 303 features are continually released. Please consult Wattstopper for a list of current features.*

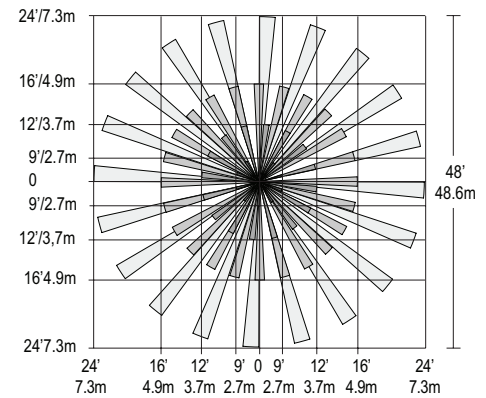
Coverage

FDP-301SR-L2

The FDP-L2 is designed for mounting at heights between 8' to 15'. It provides a 48' diameter coverage area when mounted at a height of 8', or a 78' diameter coverage area at 15'.

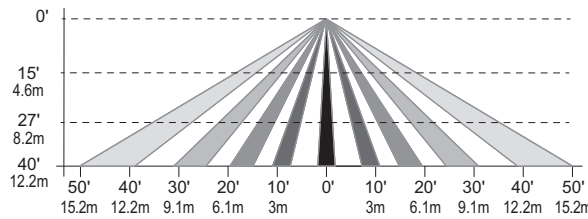


Top coverage pattern @8ft.

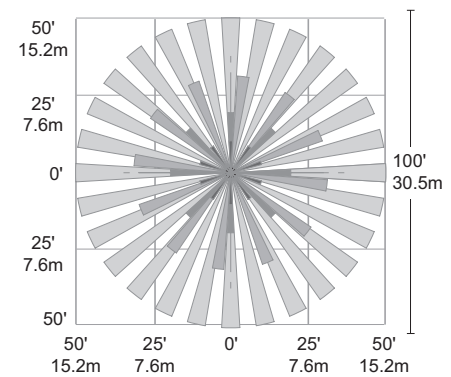


FDP-301SR-L7

The FDP-L7 has a lens that covers a 100' diameter area at a height of 40'.

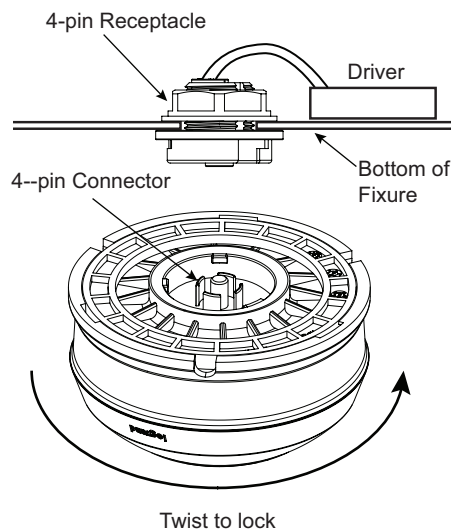


Top coverage pattern @40ft.



Installing the FDP-301SR Sensor in a Light Fixture

1. For OEMs: Determine an appropriate mounting location inside the light fixture. Allow a minimum distance of 0.2" (5.1mm) from the end of the sensor to the wall of the fixture.
2. Drill a 0.79" (20mm) diameter hole through the sheet metal in the bottom of the fixture.
3. Install a socket (call your local account manager for details) that utilizes a 4 pin connection.
4. Mounting the sensor is then simple—insert the pins on the connector into the receptacle, and rotate clockwise to lock. the connector only fits onto the receptacle one way, so the pins always line up correctly
5. Connect load, supply and control wires.
6. Restore power from the circuit breaker.
7. Commission the sensor settings using the Wattstopper Sensor Configuration App (including setting a recommended password).



Pin	Function
1	not used
2	DALI (or DALI-based protocol) - / common ground
3	DALI (or DALI-based protocol) +
4	not used

Sequence of Operation

- Dimming:** When motion is detected within the sensor's coverage area, the sensor sends a signal to ramp the load up to the selectable High Mode level unless the ambient light level is higher than the selected setpoint. When no motion is detected for the duration of the time delay setting (factory preset at 5 minutes), the lights will go to the selectable Low Mode level based on the signal from the sensor. If desired, a cut off time delay (factory preset at 1 hour) will trigger to eventually turn the lights OFF.
- Non dimming:** When motion is detected within the sensor's coverage area, the sensor sends a signal to turn the load ON unless the ambient light level is higher than the selected setpoint. When no motion is detected for the duration of the time delay setting (factory preset at 5 minutes), the lights will go OFF based on the signal from the sensor.
- Dusk to dawn control:** When photocell on/off is enabled, and the ambient light falls below the photocell setpoint, the sensor ramps the load up to the selectable High Mode level. If no motion is detected for the duration of the time delay setting (factory preset at 5 minutes), the lights will go to the selectable Low Mode level. If the cut off time delay is disabled, the load will remain on, at High or Low level, based on motion detection, until the ambient light increases above the photocell setpoint.

Ordering Information

Catalog #	Master Pack Details				
	Master Pack Quantity	Case dimensions (in. /mm)			Weight (lbs. /kg)
		Length	Width	Height	
FDP-301SR-L2	40	17.4/443	19.5/494	10.3/261	19.6/8.9
FDP-301SR-L7	40	17.4/443	19.5/494	10.3/261	19.6/8.9
FDP-M					

Inner Pack Quantity	Inner Pack Details				
	Case dimensions (in. /mm)	Length	Width	Height	Weight (lbs. /kg)
10	8.4/212	19/482	4.8/121	4.4/2	
10	8.4/212	19/482	4.8/121	4.4/2	

Catalog #	Unit Pack Details				
	Unit Pack Quantity	Case dimensions (in. /mm)			Weight (lbs. /kg)
		Length	Width	Height	
FDP-301SR-L2	1	3.7/94	4.5/113	4/102	0.4/0.2
FDP-301SR-L7	1	3.7/94	4.5/113	4/102	0.4/0.2
FDP-M					

Catalog #	Color	Description	Input Voltage	Power Consumption from DALI Bus
<input type="checkbox"/> FDP-301SR-L2-W	White	Fixture mount, passive infrared motion sensor, low voltage 360° lens, maximum coverage 48' diameter from 8-15' height	12-20 VDC	16 mA
<input type="checkbox"/> FDP-301SR-L2-TG	Traffic Gray			
<input type="checkbox"/> FDP-301SR-L7-W	White	Fixture mount, passive infrared motion sensor, low voltage 360° lens, maximum coverage 100' diameter from 40' height	12-20 VDC	16 mA
<input type="checkbox"/> FDP-301SR-L7-TG	Traffic Gray			
<input type="checkbox"/> FDP-M1-W	White			
<input type="checkbox"/> FDP-M1-TG	Traffic Gray			

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