

# LOW VOLTAGE CONTINUOUS DIMMING DALI OUTDOOR PHOTO/MOTION PIR SENSOR

FDP-301/FDP-301SR

Two lens configurations for mounting heights from 8' to 40'

Continuous dimming provides energy code compliance

Manual reset button for security recovery



Stream-lined design for seamless fixture integration

IP65 rated housing

Bluetooth Sensor Configuration App allows easy commissioning from ground level



## DESCRIPTION

The FDP sensor series allows your lighting fixtures to participate in the internet-of-things (IoT) revolution. This sensor family features bi-directional communication between sensor and driver, enabling connected systems for smarter, more energy efficient and data-driven applications. The FDP sensor series is compatible with various intelligent drivers including Signify SR or many other connected drivers. By connecting to an intelligent driver, the FDP sensor series does not need its own power supply which will save cost and space inside the luminaire.

## CONFIGURATION

Initial setup and subsequent sensor adjustments are made using the iOS or Android Sensor Configuration App (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. 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 FDP-3x1 ambient light level setpoint. The setpoint is used to hold the controlled lighting off or at a low level when there is sufficient daylight. The wireless tool stores an unlimited number of sensor parameter profiles to speed configuration of multiple sensors.

Bluetooth communication ranges can vary depending on the

device, as well as mobile carrier. Wattstopper recommends devices with Bluetooth 5.0. Iphone 8 and Samsung Galaxy S8 and later devices are recommended for optimal performance.

## 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 an acceptable light level for the space. 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 and Off based on the ambient light level so that lighting remains on overnight even without motion detection.

## APPLICATIONS

The FDP sensors series attaches to a luminaire in two different methods allowing more design freedom for our lighting OEM customers. The FDP series is available with a traditional threaded nipple that attaches utilizing a 1" knock-out. The FDP series is also available with a Zhaga Book 18 compliant push-and-twist lock interface.

The sensor is ideal for areas such as parking facilities, gas stations, pedestrian pathways street lighting, and warehouses.

Not suitable for Roadway Detection

## FEATURES

- SR-certified by Philips (FDP-301SR only)\*
- 4 pin connector (for Zhaga book 18 socket installation)
- DALI 103 and 303\* compatible (FDP-301 only)
- Continuous dimming provides appropriate light levels based on ambient light conditions
- Bluetooth low energy technology commissioning utilizing the Wattstopper Configuration App (Available on Google Play or Apple App Store)
- 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)
- 2 lens configurations for 8-15 ft or up to 40 ft
- Polycarbonate construction; flame retardant, UV resistant, impact resistant, recyclable
- UL244A and UL508; IP65 rated (when fully assembled and installed) for use in wet locations
- This product meets the materials restrictions of RoHS

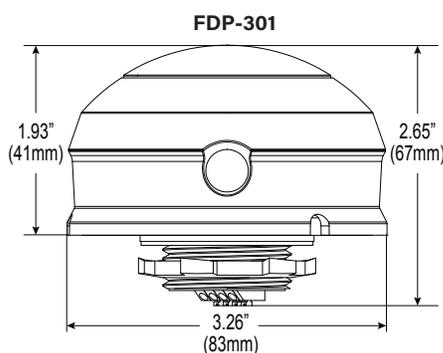
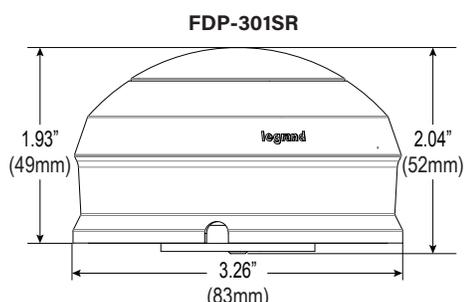
\*DALI 303 features are continually released. Please consult Wattstopper for a list of current features.

PROJECT	LOCATION/ TYPE

## SPECIFICATIONS

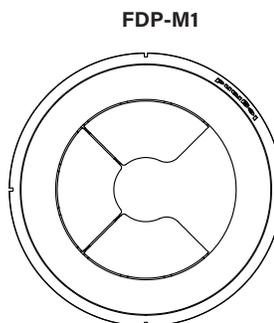
- Input voltage: FDP-301SR -12-20 VDC
- Current Consumption: 16mA from DALI bus
- Trim level: 1-10V; default 1V
- Time delay: 30 sec.-30 min.; default 15 minutes
- Cut off delay: 1/2 of time delay
- Ramp up time: 2 seconds
- Fade down time: none, 10 seconds
- Operating conditions: -40 to 167°F (-40 to 75°C); 5-95% RH
- Dimensions: FDP-301SR 2.04" x 3.26" (52mm x 83mm)  
FDP-301 2.65" x 3.26" (67mm x 83mm)
- Weight: FDP-301SR - 4 oz, FDP-301 - 4.4 oz
- IP65
- UKCA and CE certified
- UL and cUL listed (E101196)
- IK09 Impact Rating Pending
- Five year warranty

## DIMENSIONS

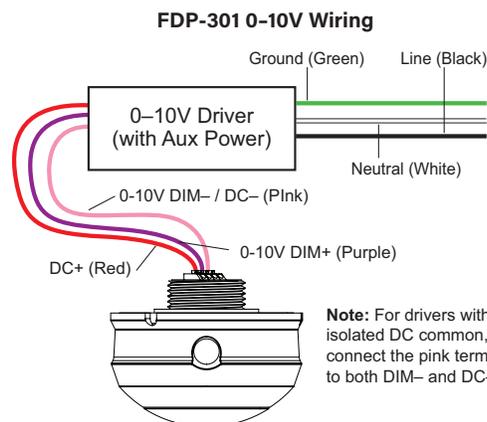
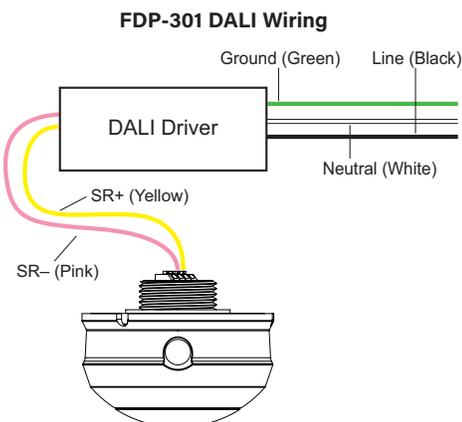
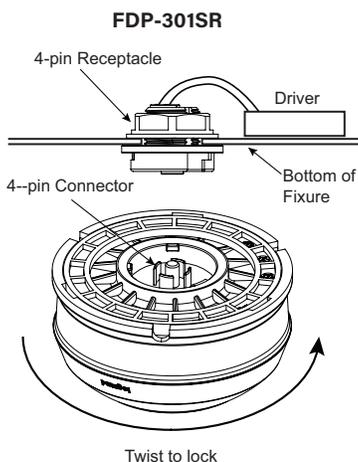


## FDP-M1 SENSOR MASK

The included FDP-M1 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.



## WIRING



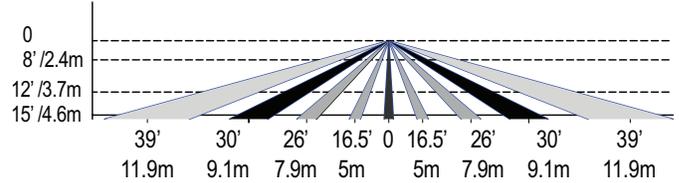
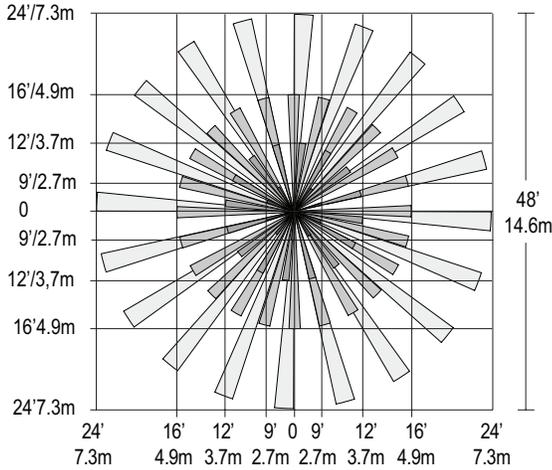
**Note:** For drivers with an isolated DC common, connect the pink terminal to both DIM- and DC-.

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

## COVERAGE

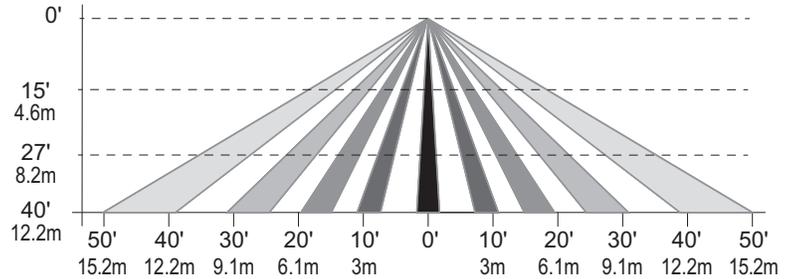
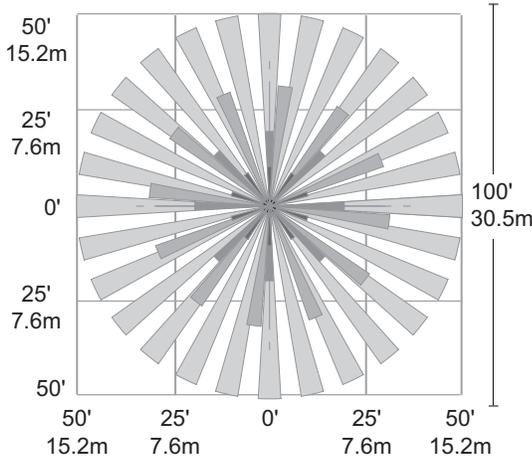
**L2 Lens** The FDP-L2 is designed for mounting at heights between 8' to 15'. It provides a 48' diameter coverage area when mounted at a height of 8', or a 78' diameter coverage area at 15'.

Top view @ 8 ft.



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

Top view @ 40 ft.



## ORDERING INFORMATION

Catalog #		Description
<input type="checkbox"/>	FDP-301SR-L7-X	PIR DALI Sensor, 40ft Mount, 4 Pin Connector
<input type="checkbox"/>	FDP-301SR-L2X	PIR DALI Sensor, 8-15ft Mount, 4 Pin Connector
<input type="checkbox"/>	FDP-301-L7-X	PIR DALI/0-10v Sensor 40ft Mount Terminal Connector
<input type="checkbox"/>	FDP-301-L72-X	PIR DALI/0-10v Sensor 8-15ft Mount Terminal Connector

X = Color (TG = Traffic Gray, W = White)

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