

Project	
Notes	
Type	Date
Cat. No.	

**SPIR-OSDL/BT-PPx-DC-30y**      **AleoBlue, Wireless Bluetooth PIR High Bay Occ Sensor w/ Daylight Harvesting**

**DESCRIPTION**

The SPIR-OSDL/BT-PP1-DC-300 combines occupancy sensing, daylight harvesting, 0-10V dimming and Bluetooth® mesh into a convenient, plug and play, field installable sensor. This advanced sensor brings greater controllability, energy savings, and intelligence to high bay lighting. Utilizing a 3.5mm audio jack, the sensor can be easily installed in the field and is compatible with many Aleo high bay luminaires, reducing lead times and labor cost.



**APPLICATIONS**

High bay applications: warehouse, distribution centers, storage, manufacturing, shops, retail.  
 Exterior applications: area/site lighting, wall packs



**Fixture Mount**  
PIR Occ Sensor with Daylight Harvesting

**Specification Features**

**Overview**

- Bluetooth® Mesh SIG
- PIR sensing with daylight harvesting
- Built-in 25mA 0-10V sinking current output
- On-board antenna
- LED indicator for motion

**Benefits**

- Cost-effective solution for energy savings
- Energy code compliance
- Robust mesh network
- Decentralized control (no single point of failure)
- Gateway-less configuration & operations

**Warranty**

5-year Limited Warranty. See warranty documentation for more information.

**Overview**

- Bluetooth® Mesh SIG
- PIR sensing with daylight harvesting
- Built-in 25mA 0-10V sinking current output
- On-board antenna
- LED indicator for motion

**Benefits**

- Cost-effective solution for energy savings
- Energy code compliance
- Robust mesh network
- Decentralized control (no single point of failure)
- Gateway-less configuration & operations

**IP Rating**

5-year Limited Warranty. See warranty documentation for more information.

**Ordering Information**

Example: SPIR-OSDL/BT-PP1-DC-300

SPIR	OSDL/BT	PP1	DC	300
<b>Series</b>	<b>Controls</b>	<b>Mounting</b>	<b>Input Power</b>	<b>300</b>
<b>SPIR</b>	<b>OSDL/BT</b>	<b>PP1</b>	<b>DC</b>	<b>Designator</b>
PIR Sensor	Wireless Bluetooth Occupancy Sensor with Daylight Harvesting	Plug and Play w/ 3.5mm Audio Jack Receptacle	12-24VDC Input	300 301
		<b>PP2</b>		
		Plug and Play w/ spring-loaded 3-pin		

Specifications and Dimensions subject to change without notice.

**Performance Summary**

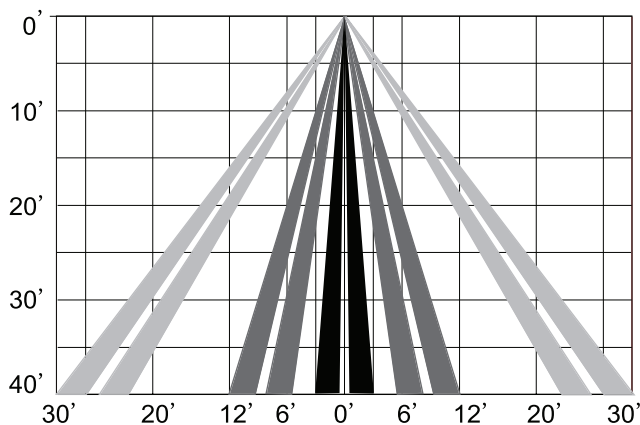
Input Voltage	12-24VDC
Sinking Current	25mA (max.)
Factory Reset	Magnet Reset
Status Indicators	Red (network status), Green (occupancy detection)
Wireless Protocol	Bluetooth® Mesh SIG
Wireless Range	200 feet* for indoor environ.
Occupancy Sensing Type	Passive infrared (PIR)
Sensing Information	Can be shared within Bluetooth® mesh network

Operating Temperature Range	-20°C to 60°C
IP Rating	IP65
Detection Angle	360°
Mounting Height (Max.)	40-feet
Bluetooth Range (Max.)	200-feet
Color	White
Warranty	5 Years Limited

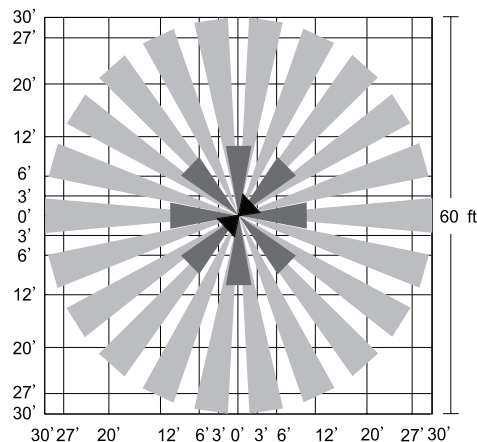
\*Bluetooth Range is highly dependent on the integration of fixtures, surrounding environment and conditions. It is recommended to conduct testing for range accuracy.

**Detection Area**

**Coverage Side View**



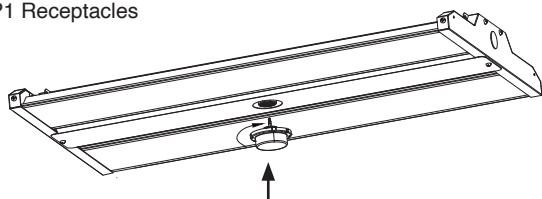
**Coverage Top View**



**Mounting Information**

**Plug and Play Sensor**

Compatible with Aleo luminaires that have PP1 Receptacles

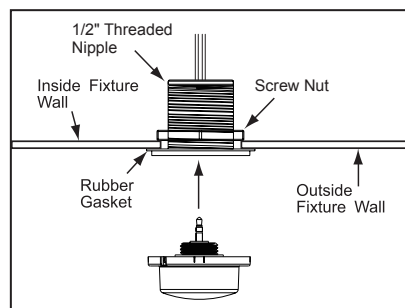


**Typical Installation:**

1. Remove sensor cover.
2. Plug sensor jack into port and rotate sensor clockwise until sensor base reaches the bottom.
3. Do not overtighten. Ensure sensor is fully and completely engaged with receptacle base.

**Fixture Mounting**

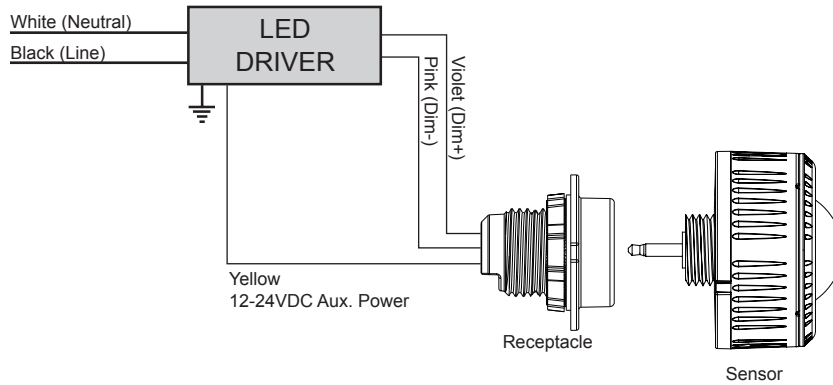
Details of sensor receptacle mounting in fixture



Specifications and Dimensions subject to change without notice.

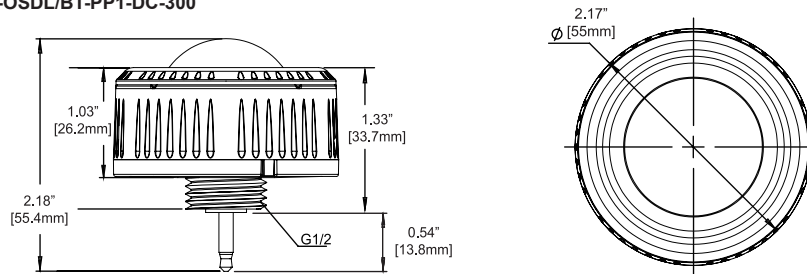
### Wiring Diagram

(NOT TO SCALE)

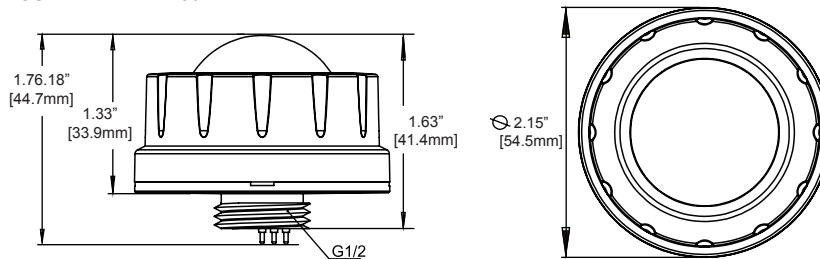


### Dimensions

MODEL NO. SPIR-OSDL/BT-PP1-DC-300



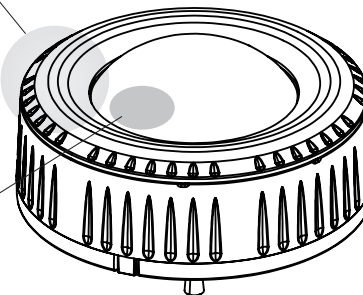
MODEL NO. SPIR-OSDL/BT-PP2-DC-301



### Additional Information

**Magnetic Reset:** Use strong magnet to touch this area for 5 seconds.

Motion Indicator: Green  
Status Indicator: Red



Specifications and Dimensions subject to change without notice.



## AleoBlue Wireless Bluetooth Controls

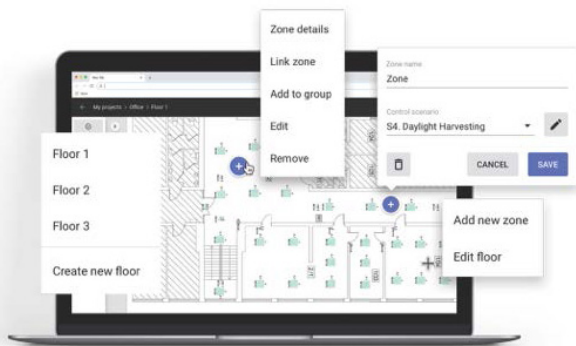


The AleoBlue is a complete solution for managing connected lighting systems using a Bluetooth Mesh lighting network. This enables seamless implementation of simple to complex lighting control scenarios without specialized training or lighting control engineering expertise.

DLC NLC Qualified.

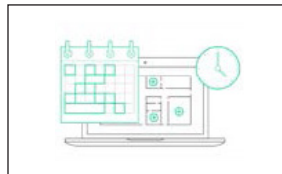
### Features and Benefits

- Lighting Zones / Grouping
- Manual control of individual lights
- On Power up Behavior
- Zone Linking
- Vacancy Sensing
- Per fixture Daylight Control
- Per zone Daylight Control

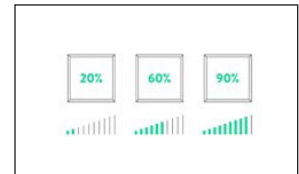


- Optimized Energy Consumption
- Less Hassle with On-Site Adjustments
- More Savings
- Increased Safety
- More Flexibility

#### Scheduling



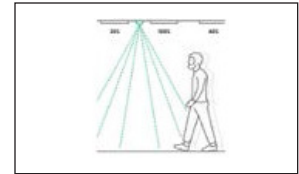
#### High and Low End Trim



#### Scenes



#### Occupancy Sensing



- Intuitive and user-friendly web and iOS apps
- No specialized training or lighting control expertise required
- Optimized for commercial spaces of any size
- No additional wiring or central control box
- Customizable lighting control parameters
- Future proof with Software Updates
- Multiple Zone Configurable
- Built-In Scenarios + Customization

### Bluetooth Mesh Technology Advantages



The fastest low-power communication



Scalability to thousands of devices



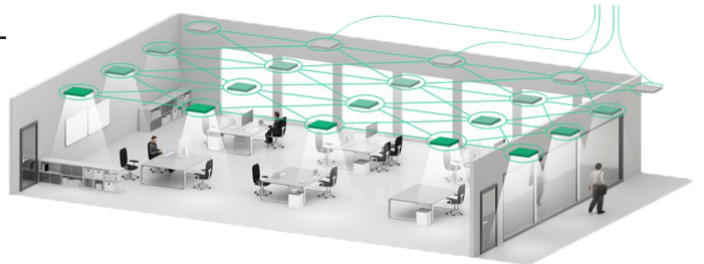
The most advanced encryption standards as well as the cutting-edge device authentication

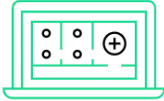


No single point of failure (no central device)



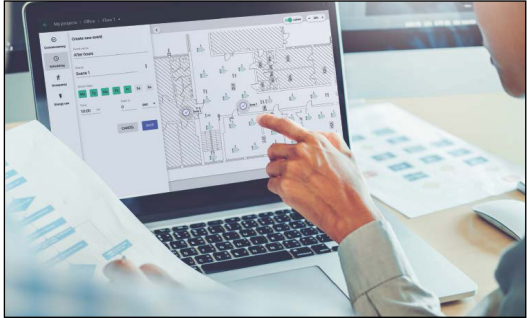
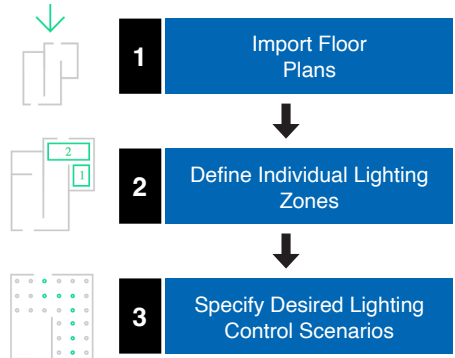
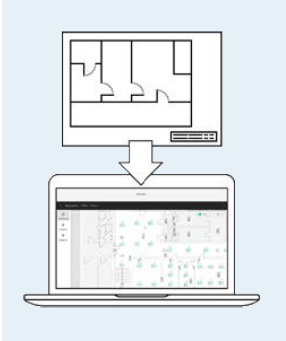
Compatibility with a widely available devices (smart phones & tablets – both with Bluetooth 4.0 and Bluetooth 5)





**Planning**

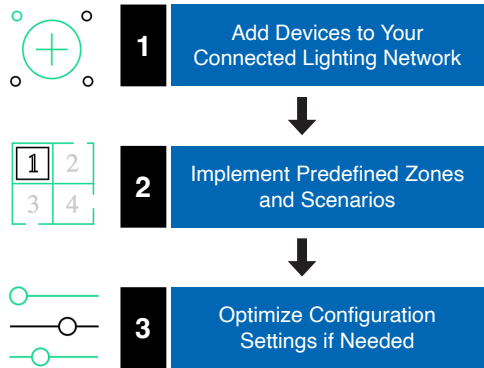
Remote preparation of a retrofit project with the use of our web app. Uploading floor plans, defining individual lighting zones and choosing lighting control scenarios.



**Implementation**

Adding lighting devices to the Bluetooth mesh network on-site with the use of an iOS app.

Customization and calibration of lighting control parameters during and after the commissioning process. Defining scenes for specific working activities.



**Provisioning / Configurations**

The Bluetooth mesh Node is in the Unprovisioned Mode until it is provisioned by a "Provisioner", which typically is a smart phone with a Bluetooth mesh compatible app.

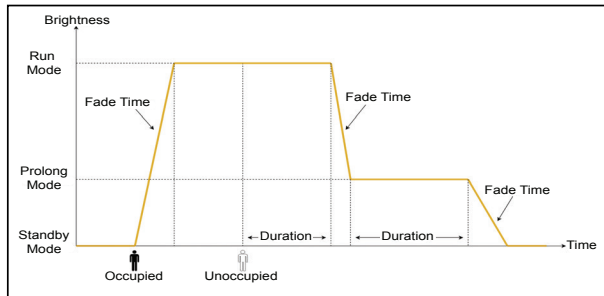
## Lighting Control Scenarios

Multiple lighting control scenarios are available once the Bluetooth mesh Node is provisioned. At each scenario, duration, fade time and target brightness can be configured at any time with the iOS app.

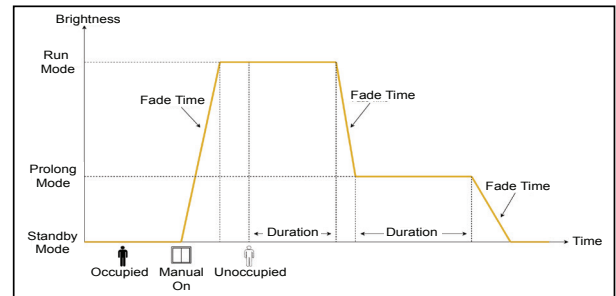


Mode / Scenario	Wireless Switch	Occupancy Sensor	Ambient Light Sensor
Unprovisioned Mode	-	-	-
Switch	On / Off / Scenes	-	-
Occupancy	On / Off / Scenes	Auto On / Off	-
Vacancy	On / Off / Scenes	Auto Off	-
Occupancy with Daylight Harvesting	On / Off / Scenes	Auto On / Off	Enabled
Vacancy with Daylight Harvesting	On / Off / Scenes	Auto Off	Enabled

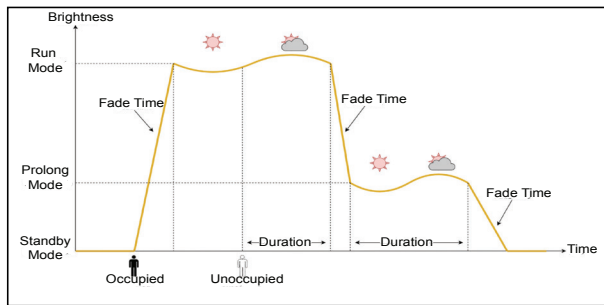
### Occupancy Scenario



### Vacancy Scenario



### Occupancy Scenario - with Daylight Harvesting



### Occupancy Scenario with Manual Override

