

Project	
Notes	
Type	Date
Cat. No.	

SPIR-OSDL/BT-CM-DC201

AleoBlue, Wireless Bluetooth PIR Occ Sensor w/ Daylight Harvesting

DESCRIPTION

The SPIR-OSDL/BT-CM-DC201 combines occupancy sensing, daylight harvesting, 0-10V dimming and Bluetooth® mesh radio circuits into a small package. The result is increased occupant comfort and significant energy savings that meet the most demanding building energy codes. By leveraging Bluetooth® mesh, the first wireless standard for professional lighting applications which ensures unmatched scalability and reliability, the wireless lighting control system can be seamlessly expanded with Bluetooth® mesh-certified products and/or compatible Bluetooth® switches as needed.



APPLICATIONS

Indoor: Open offices, Individual offices, Conference rooms, Classrooms, Retail stores, Hospitals, Lobbies.

Specification Features



SPIR-OSDL/BT-CM-DC201

Ceiling Mount | PIR Occ Sensor with Daylight Harvesting

Overview

- Bluetooth® mesh compliant
- PIR sensing with daylight harvesting
- Built-in 20mA 0-10V signal output
- On-board antenna

Benefits

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

Certification

UL Listed.

Warranty

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

Ordering Information

Example: SPIR-OSDL/BT-CM-DC201*

SPIR	OSDL/BT	CM	DC	201
Series SPIR PIR Sensor	Controls OSDL/BT Wireless Bluetooth Occupancy Sensor with Daylight Harvesting	Mounting CM Ceiling Mount	Input Power DC Direct Current	201 Designator 201

*This sensor requires low voltage input (12V-36VDC). If it needs to be used between 120V- 277V AC, please order a 12V power pack (model no PSC-AC-PP-400).

Specifications and Dimensions subject to change without notice.

Performance Summary

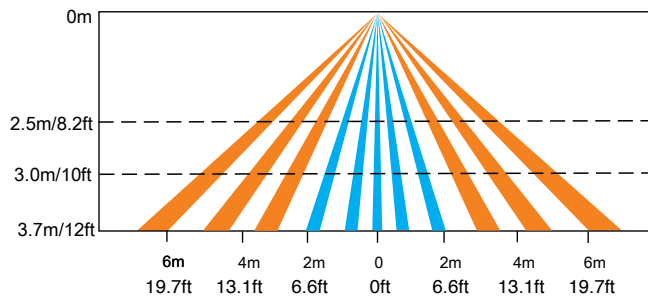
Input Voltage	12-36VDC
Current Consumption	< 30mA
Factory Reset	Button Reset & Magnet Reset
Status Indicators	Green (network status), Red (occupancy detection)
Wireless Protocol	Bluetooth® mesh / Bluetooth® 5
Wireless Range	82 feet(25m)*
Occupancy Sensing Type	Passive infrared (PIR)
Daylight Harvesting Type	Ambient light sensor/light pipe (closed loop)

Sensing Information	Can be shared within Bluetooth® mesh network
Operating Temperature Range	-20°C to 50°C (indoor use only)
Operating Humidity	8%-80% (non condensing)
Color	White
Warranty	5 years

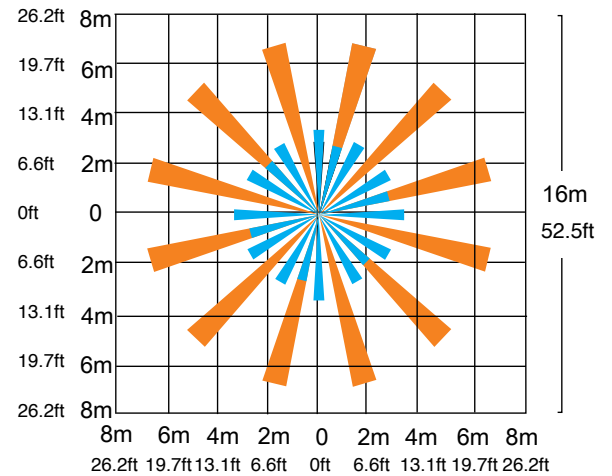
*Bluetooth Range is highly dependent on the integration of fixtures, surrounding environment and conditions. It is recommended to conduct testing for range accuracy.

Detection Area

Coverage Side View

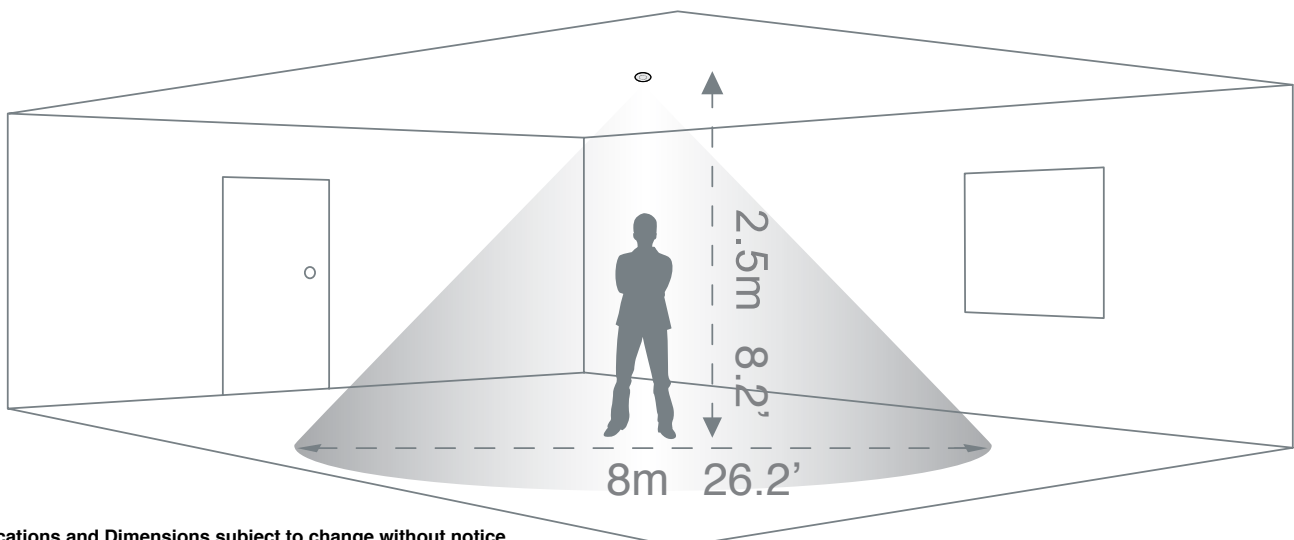


Coverage Top View



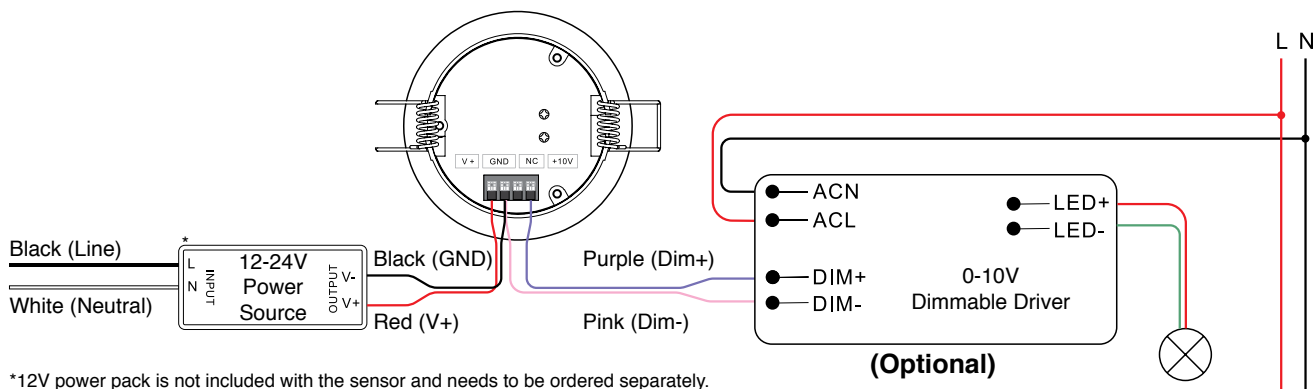
The detection area for movement sensor can be roughly divided into two parts:

- Slow movement (person moving < 10'/s or 0.3m/s)
- Quick movement (person moving > 1.3'/s or 0.4m/s)

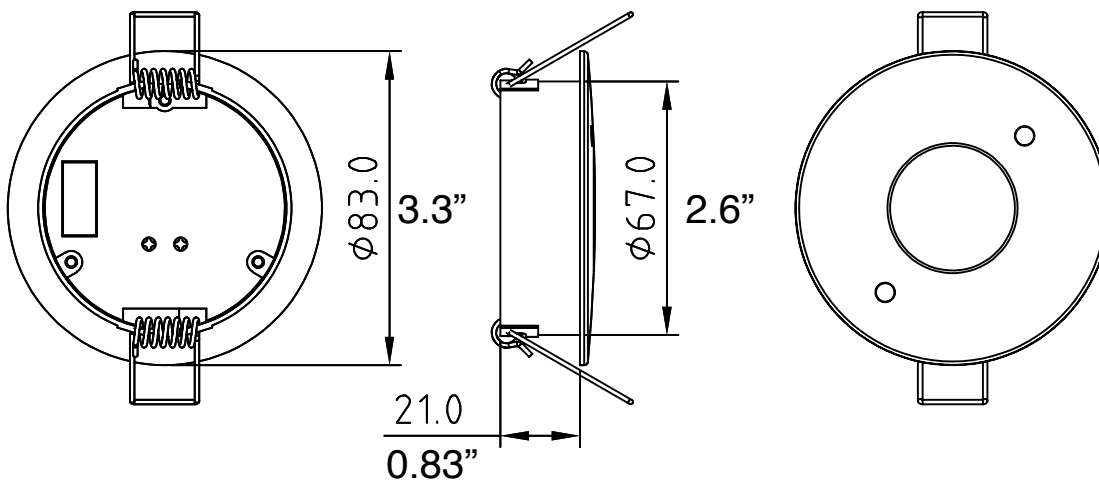


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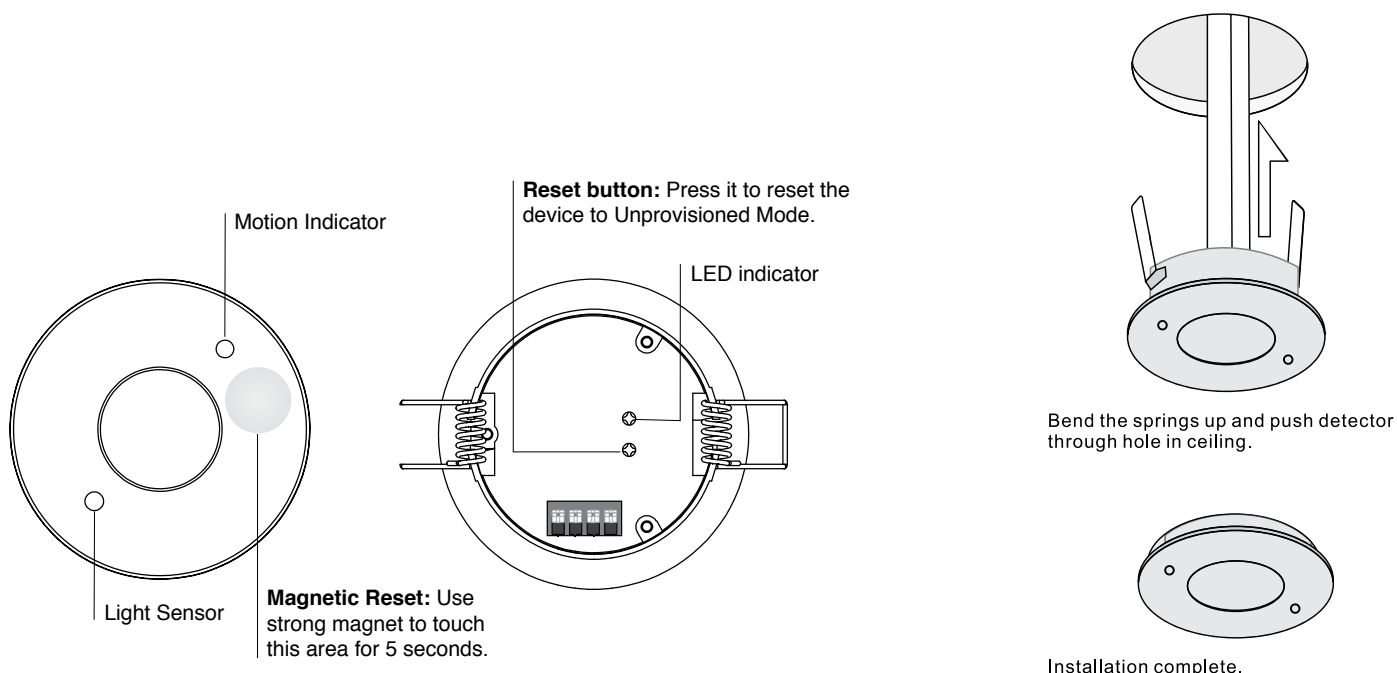
Wiring Diagram



Dimensions



Product Info



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AleoBlue Wireless Bluetooth Controls

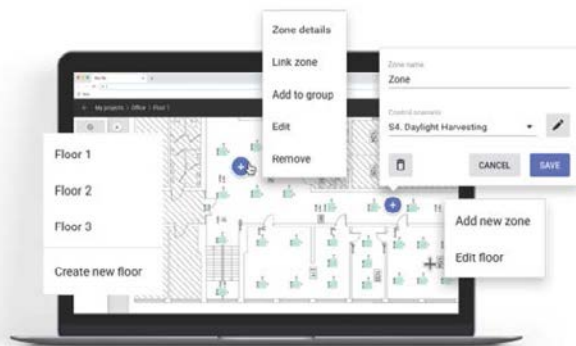


The AleoBlue is a complete solution for managing connected lighting systems using a Bluetooth Mesh lighting network. This enables seamless implementation of simple to complex lighting control scenarios without specialized training or lighting control engineering expertise.

DLC NLC Qualified.

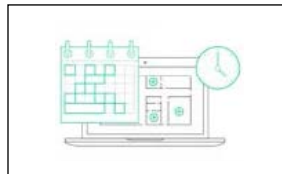
Features and Benefits

- 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

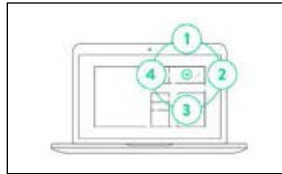
Scheduling



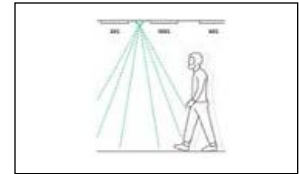
High and Low End Trim



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



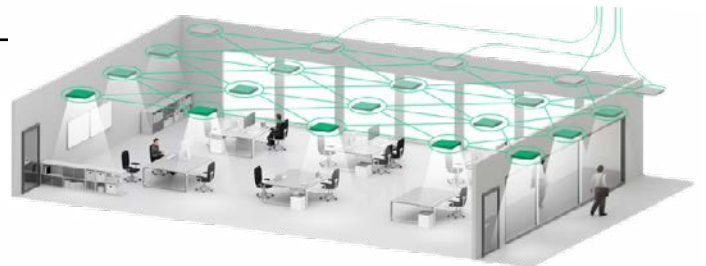
The most advanced encryption standards as well as the cutting-edge device authentication

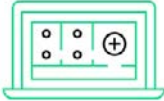


No single point of failure (no central device)



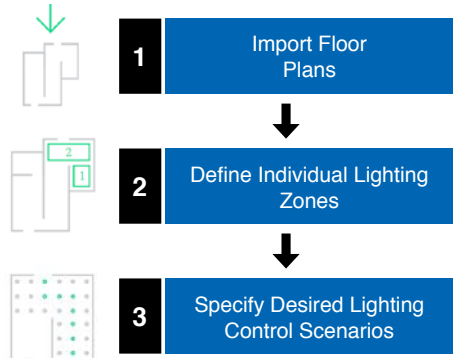
Compatibility with a widely available devices (smart phones & tablets – both with Bluetooth 4.0 and Bluetooth 5)





Planning

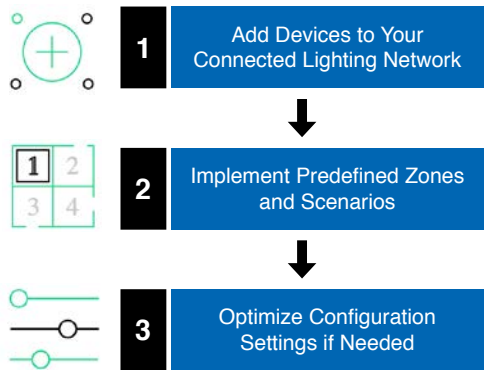
Remote preparation of a retrofit project with the use of our web app. Uploading floor plans, defining individual lighting zones and choosing lighting control scenarios.



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.

Ordering Information



AleoBlue, Wireless Bluetooth PIR Occ Sensor w/ Daylight Harvesting
Model: SPIR-OSDL/BT-CM-DC201

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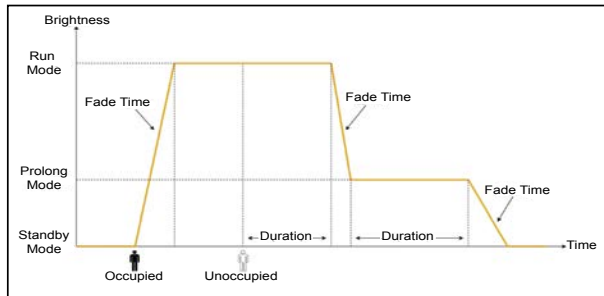
Lighting Control Scenarios

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.

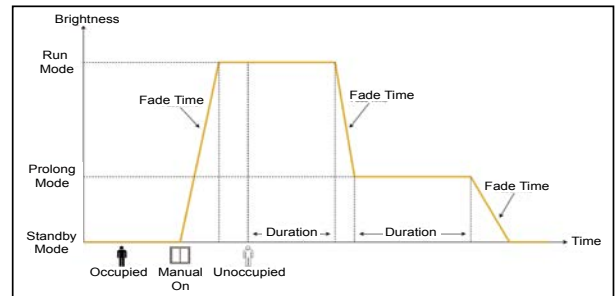


Mode / Scenario	Wireless Switch	Occupancy Sensor	Ambient Light Sensor
Unprovisioned Mode	-	-	-
Switch	On / Off / Scenes	-	-
Occupancy	On / Off / Scenes	Auto On / Off	-
Vacancy	On / Off / Scenes	Auto Off	-
Occupancy with Daylight Harvesting	On / Off / Scenes	Auto On / Off	Enabled
Vacancy with Daylight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

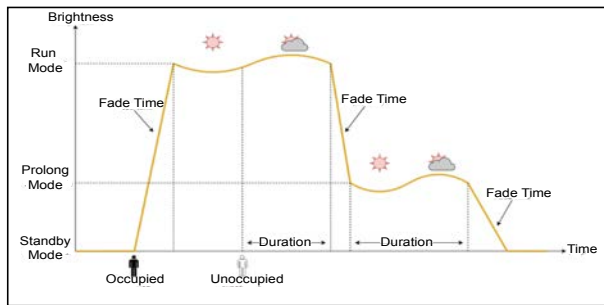
Occupancy Scenario



Vacancy Scenario



Occupancy Scenario - with Daylight Harvesting



Occupancy Scenario with Manual Override

