

| Project  |      |
|----------|------|
| Notes    |      |
| Туре     | Date |
| Cat. No. |      |

# CM-DC-OS/BT

# Wireless aleoBlue, DC powered, Ceiling-Mount Occ. Sensor

## **DESCRIPTION**

The CM-DC-OS/BT uses digital PIR Motion Detector Architecture and Quad Element passive infrared (PIR) technology for improved detection coverage for ceiling mount applications. The sensor is suitable for a variety of indoor applications. It supports ceiling mounts up to 12ft high. Both sensor and power pack are rated for use in temperatures ranging from - 30° to 70°C and relative humidity from 90 to 95% at 30°C. High Vin-2.5V 100mA source. Low 100mA sink current.

#### **APPLICATIONS**

Indoor: retail, education, hospitality, corporate, warehouse, self storage.







CM-DC-OS/BT

Ceiling Mount I PIR

# **Specification** Features

## **Overview**

- · PIR sensor
- · Bluetooth® SIG mesh
- · LED Motion indicator
- · Mounting height up to 12ft (3.6m).
- · 360° coverage pattern

# **Accessories**

**Power Pack**: The CM-DC-OS/BT operates on 12-24VDC input and requires a separate power pack. Alternatively, the sensor can also operate with a driver that has an auxiliary output (12V).

# Certification

UL Listed. All components have UL certification.

#### Warrantv

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

#### **Sensor Operation**

aleoBlue Controls: Qualified for Bluetooth® Mesh 1.0.1 (SIG), the sensor can pair with an iOS application to allow initial setup and subsequent sensor adjustments. The mobile application enables adjustment of sensor parameters such as time delay, and more. Additionally, features such as parameter profiles, and real-time feedback from the sensor can speed up configuration and provide custom user control. See aleoBlue Commissioning User Manual for more info.

# **Ordering** Information

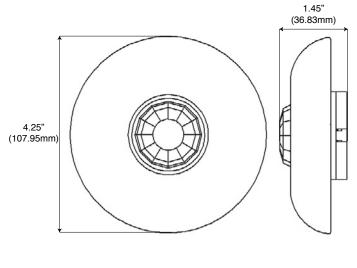
Example: CM-DC-OS/BT

| СМ                               | DC                               | OS/BT  | [Blank]               |
|----------------------------------|----------------------------------|--|-----------------------|
| Series<br>CM<br>Ceiling<br>Mount | Power Source<br>DC<br>DC Powered | Controls OS/BT Wireless Bluetooth Occupancy Sensor | Options PP Power Pack |

# **Performance** Summary

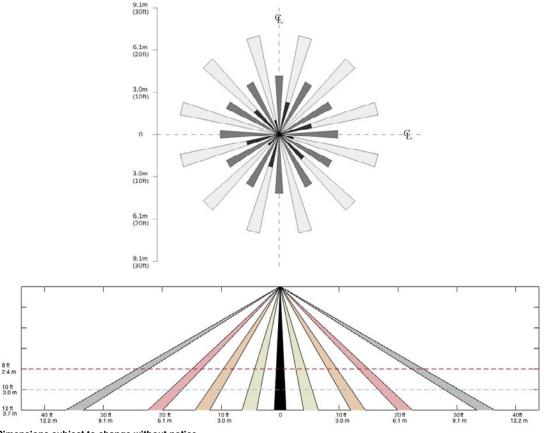
# Dimensions

| Sensor Type           | PIR occupancy sensor            |  |
|-----------------------|---------------------------------|--|
| Input Voltage         | 12-24VDC                        |  |
| Current Consumption   | 50mA                            |  |
| Mounting Height       | Ceiling mount up to 12ft (3.6m) |  |
| Max Range*            | 37ft (11.3m) radius             |  |
| Max Bluetooth Range** | 49 ~ 65ft (15 ~ 20m)            |  |
| Photocell             | N/A                             |  |
| Operating Temperature | -30° C to 70°C                  |  |
| Storage Temperature   | -40° C to 80°C                  |  |
| Relative Humidity     | 90-95% non-condensing at 30°C   |  |
| Color                 | White                           |  |
| Warranty              | 5 years                         |  |



## Note:

# **Detection** Area

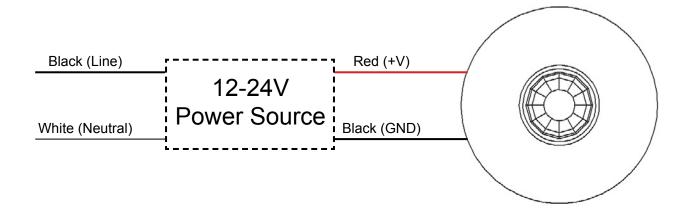


Specifications and Dimensions subject to change without notice.

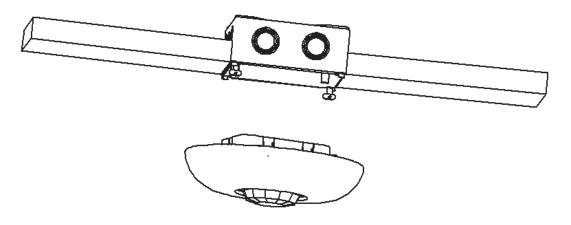
<sup>\*</sup>The absolute range of the sensor is subject to variation because of different types of clothing, backgrounds, and ambient temperature. Therefore, ensure that the lens is properly oriented along routes with expected traffic and conduct testing along those routes.

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

# Wiring **Diagram**



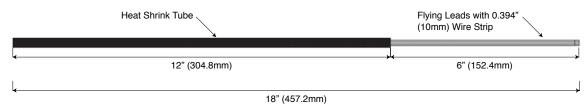
## Installation



# Lead Info

Leads: Minimum 22AWG

Tolerance ±1" (25.4mm)









# **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 expertize 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)

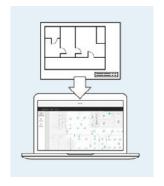


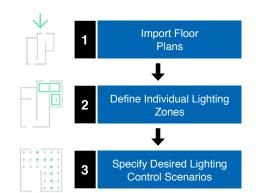




# **Planning**

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.







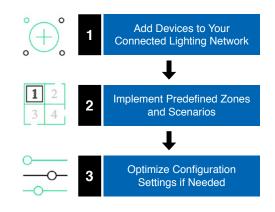


# **Implementation**

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



Wireless, DC Powered, Ceiling-Mount Occ. Sensor Model: CM-DC-OS/BT



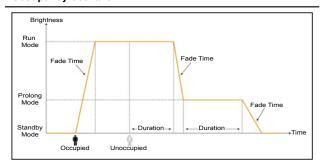
# **Lighting Control Scenarios**

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.

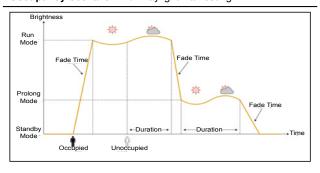


| Mode / Scenario                    | Wireless Switch   | Occupancy Sensor | Ambient Light Sensor |
|------------------------------------|-------------------|------------------|----------------------|
| Unprovisioned Mode                 | -                 | -                |                      |
| 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              |

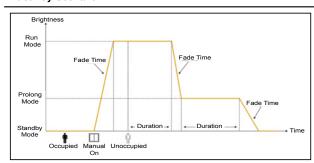
## **Occupancy** Scenario



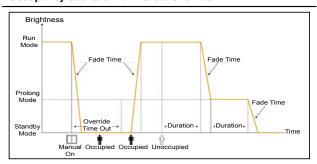
## Occupancy Scenario - with Daylight Harvesting



## Vacancy Scenario



# Occupancy Scenario with Manual Override



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