

Project	
Notes	
Type	Date
Cat. No.	

## SDT-OSDL/BT-CM-AC Wireless Bluetooth® Dual Tech Occ Sensor w/ Daylight Harvesting

### DESCRIPTION

The SDT-OSDLBT-CM-AC is a dual-tech Bluetooth sensor, which merge Passive Infrared (PIR) and Ultrasonic technologies for highly accurate occupancy detection. It also include daylight harvesting and 0-10V dimming to further reduce energy consumption in commercial indoor spaces. This combination enhances performance in complex spaces and provides a cost-effective solution for energy savings that meets building energy codes. By leveraging Bluetooth® NLC, 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® NLC-certified products and/or compatible Bluetooth® switches as needed.

### APPLICATIONS

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



**SDT-OSDL/BT-CM-AC**

**Ceiling Mount | Dual Tech Occ. Sensor w/ Daylight Harvesting**



### Specification Features

#### Overview

- Bluetooth® mesh compliant
- Bluetooth® NLC Certified
- PIR and Ultrasonic Dual Tech Sensor
- Built-in 5A Relay
- 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
- Easy button and remote control reset

#### Certification

UL Listed.

#### Warranty

5-year Limited Warranty.

### Ordering Information

Example: SDT-OSDL/BT-CM-AC

SDT	OSDL/BT	CM	AC
<b>Series</b> SDT Dual Tech Sensor	<b>Controls</b> OSDL/BT Wireless Bluetooth Occupancy Sensor with Daylight Harvesting	<b>Mounting</b> CM Ceiling Mount	<b>Input Power</b> AC 120-277V AC

Specifications and Dimensions subject to change without notice.

**Performance Summary**

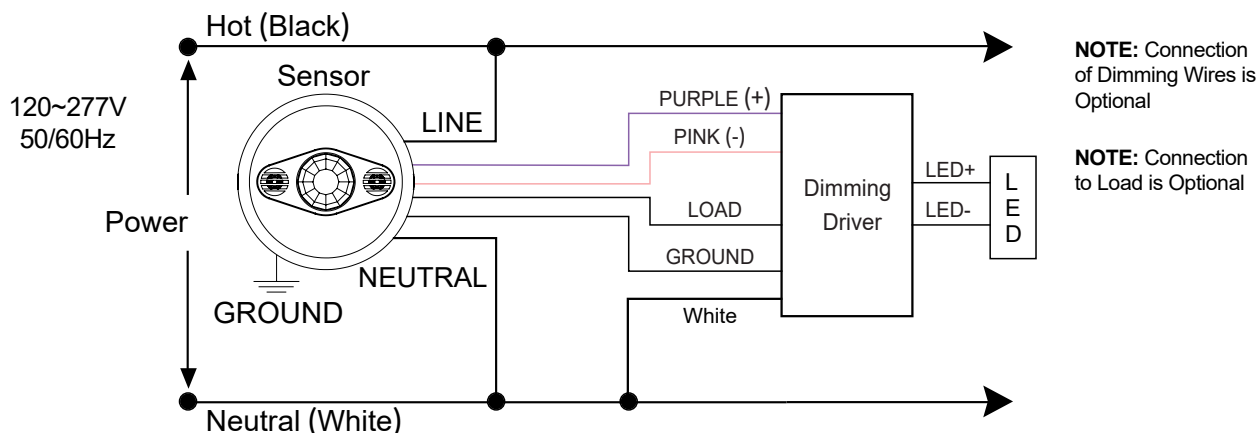
ELECTRICAL	
Operating Voltage	120-347VAC, 50/60Hz
Max Output	Electronic Ballast/LED: 800W@120V, 1200W@230V, 1200W@277V, 1500W@347V Standard Ballast/LED: 800W@120V, 1200W@230V, 1200W@277V, 1500W@347V Tungsten/Incandescent: 800W@120V, 1200W@230V, 1200W@277V
Ultrasonic Frequency	40kHz
PHYSICAL	
Integral Photosensor (Daylight)	Works from 10-300 footcandles (107.6 to 3,229.2 lux)
Operating Temperature	32°F to +131°F (0°C to +55°C)
Movement Detection	360° Fresnel lens / Ultrasonic
Ultrasonic Frequency	40kHz
Mounting Height	Max. 12ft (3.7m)
Certification	UL
Wireless Standards	5.0 Bluetooth® Mesh
Bluetooth Range (Max.)	150ft. (40m)*

Lead Information		
Color	Length (in)	Parameter
Purple	16	22AWG, 300V
Pink	16	22AWG, 300V

\*LINE, NEUTRAL & LOAD is terminal block.

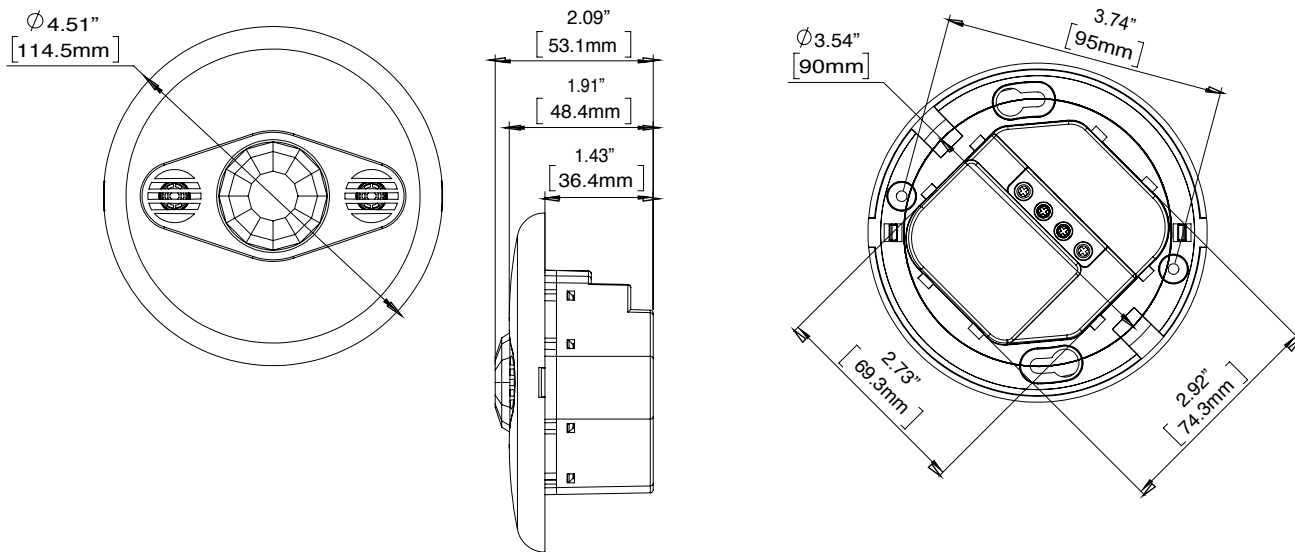
\*Bluetooth® Range is highly dependent on the integration of fixtures, surrounding environment and conditions. It is recommended to conduct testing for range accuracy.

**Wiring Diagram**

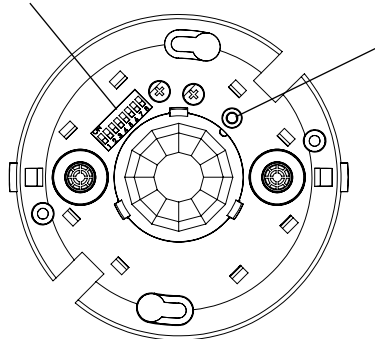


Dimming wire and load wire connection is optional. If the ceiling sensor and lighting control nodes/sensors are on the AleoBlue mesh network, dimming and On/Off switching can be achieved through wireless Bluetooth® communication.

Dimensions and Product Information

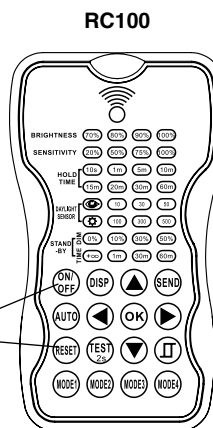


Dip switch settings



**Button Reset:** Hold it to reset the device. Sensor indicator quickly flashes to indicate success.

**Remote Control Reset:** Point it to sensor. First press "RESET" button, then press "ON/OFF" button. Luminaire quickly flashes to indicate success.

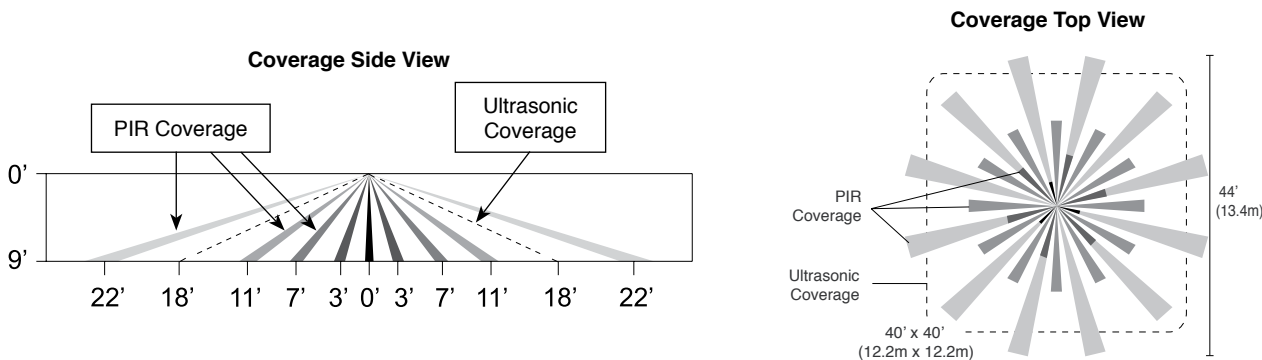


Download the iOS AleoBlue App



Watch Device Set Up Tutorial Video

Detection Pattern



Specifications and Dimensions subject to change without notice.



## AleoBlue Wireless Bluetooth® Controls

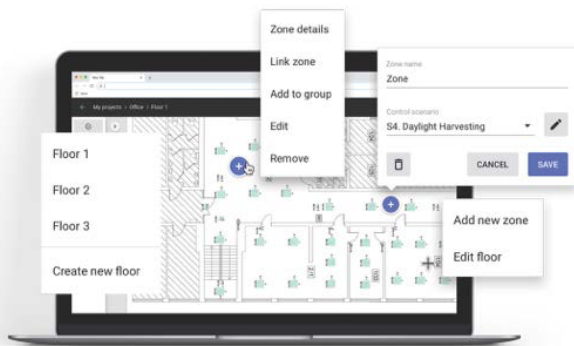


The AleoBlue is a complete solution for managing connected lighting systems using a Bluetooth® NLC lighting network. This enables seamless implementation of simple to complex lighting control scenarios without specialized training or lighting control engineering expertise.

DLC NLC Qualified.

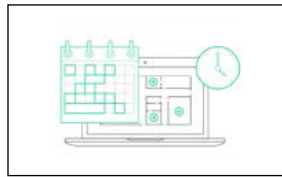
### Features and Benefits

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

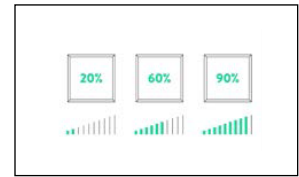


- Optimized Energy Consumption
- Less Hassle with On-Site Adjustments
- More Savings
- Increased Safety
- More Flexibility

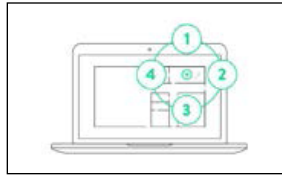
#### Scheduling



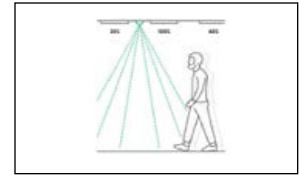
#### High and Low End Trim



#### 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® NLC Technology Advantages



The fastest low-power communication



Scalability to thousands of devices



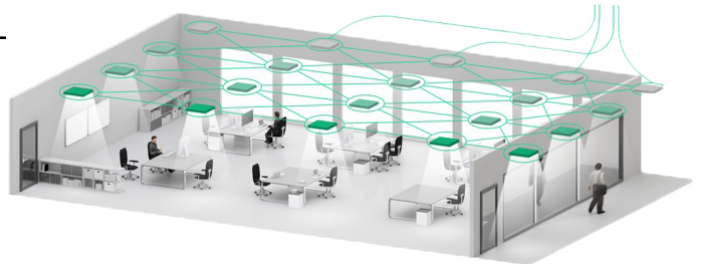
The most advanced encryption standards as well as the cutting-edge device authentication

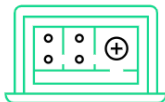


No single point of failure (no central device)



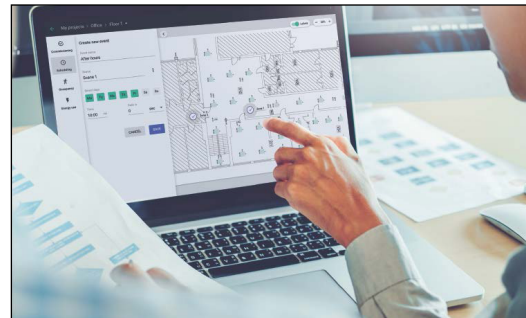
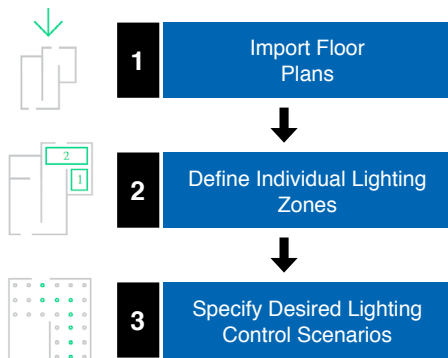
Compatibility with a widely available devices (smart phones & tablets – both with Bluetooth® 4.0 and Bluetooth® 5)





### Planning

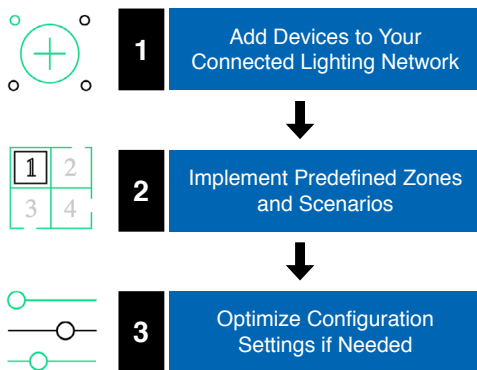
Remote preparation of a retrofit project with the use of our web app. Uploading floor plans, defining individual lighting zones and choosing lighting control scenarios.



### Implementation

Adding lighting devices to the Bluetooth® NLC 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® NLC Node is in the Unprovisioned Mode until it is provisioned by a “Provisioner”, which typically is a smart phone with a Bluetooth® NLC compatible app.

### Ordering Information



**AleoBlue Wireless Bluetooth® Dual Tech Occ Sensor w/ Daylight Harvesting**  
Model: SDT-OSDL/BT-CM-AC

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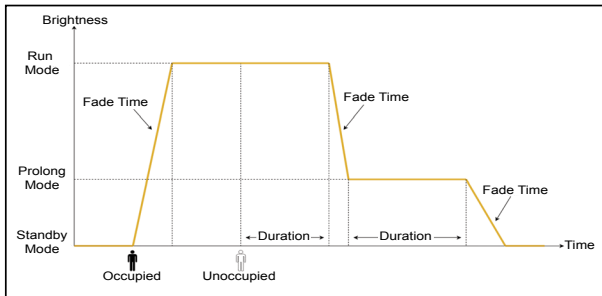
## Lighting Control Scenarios

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

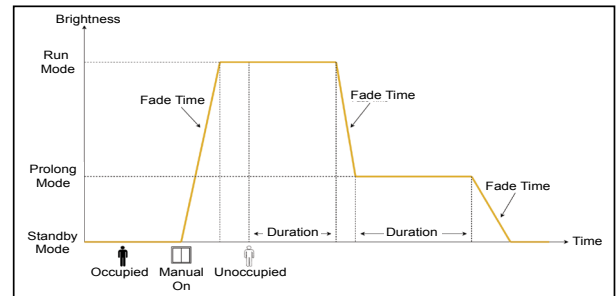


Mode / Scenario	Wireless Switch	Occupancy Sensor	Ambient Light Sensor
Unprovisioned Mode	-	-	-
Switch	On / Off / Scenes	-	-
Occupancy	On / Off / Scenes	Auto On / Off	-
Vacancy	On / Off / Scenes	Auto Off	-
Occupancy with Daylight Harvesting	On / Off / Scenes	Auto On / Off	Enabled
Vacancy with Daylight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

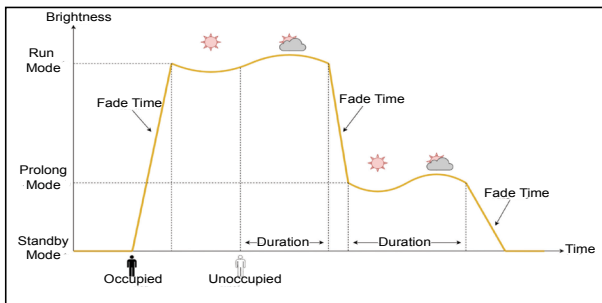
### Occupancy Scenario



### Vacancy Scenario



### Occupancy Scenario - with Daylight Harvesting



### Occupancy Scenario with Manual Override

