

Project	
Notes	
Type	Date
Cat. No.	

WLC/BT-PWPK Wireless Power Pack Load Controller - Line Voltage

DESCRIPTION

The AleoBlue wireless power pack controller provides On/Off switching and 0-10V dimming to a connected lighting load as directed by wireless sensors in the AleoBlue network. The power pack operates on line voltage input (120V-277V). The contractor-friendly form factor conveniently mounts in a KO hole of a standard junction box or luminaire driver box via a threaded chase nipple and lock nut. The unit can also be installed inside luminaire driver boxes.

APPLICATIONS

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



Specification Features



Features

- Wirelessly connects to sensors and dimmers
- Wireless communication allows easy retrofits without the need to pull control wires between devices
- On/Off and dimming control of a luminaire or group of luminaires
- Suitable for plug load control
- Bluetooth Mesh SIG wireless communication makes retrofits easy, no need to pull control wire
- Plenum Rated (UL 2043)
- Fast installation onto junction boxes using chase nipple and lock nut

Warning

- DO NOT install with power applied to device
- DO NOT expose the device to moisture

Operation

- Check the "aleoBlue Commissioning User Manual" for settings and commissioning.
- This device can be reset to the Unprovisioned Mode by pressing and holding the "Reset" button over 5 seconds till the indicator flashes.

Certification

UL Listed. All components have UL certification.

Warranty

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

WLC/BT-PWPK

AleoBlue, Wireless Bluetooth Control Node Power Pack, 120-277V input, 0-10V dim., Case A

Ordering Information

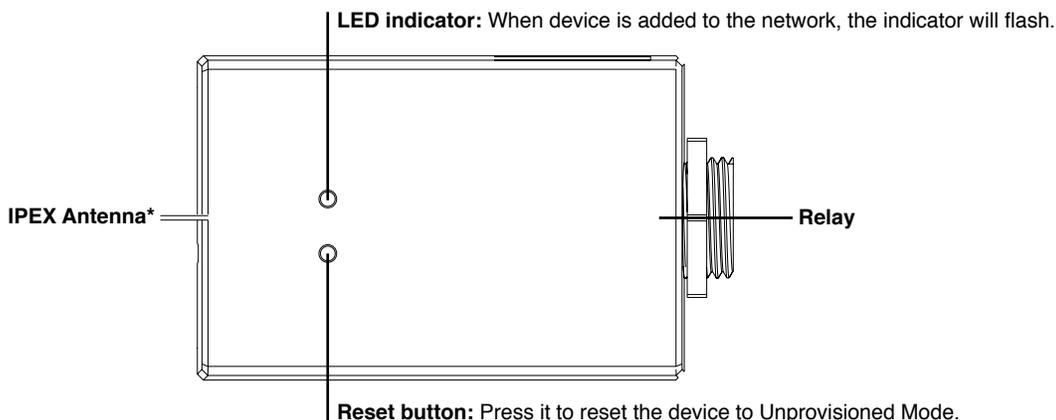
Example: WLC/BT-PWPK-20A-UNV-10V-A

WLC/BT	PWPK	20A	UNV	10V	A
Type WLC/BT Wireless Lighting Control Node - Bluetooth Mesh	Series PWPK Power Pack	Load (Nom.) 5A 5 amp 20A 20 amp	Operating Voltage UNV 120-277V	Dimming Type 10V 0-10V	Designator A

Performance Summary

Model No.	WLC/BT-PWPK-5A-UNV-10V-A	WLC/BT-PWPK-20A-UNV-10V-A
Operating Voltage	120V-277V	
Frequency	50/60 Hz	
Relay Type	Electromagnetic	
Max Dimming Load	Source 20mA; 0-10VDC dimmable LED drivers	
Security	Conforms with DLC NLC5.0 Cybersecurity Requirement	
Wireless Standard	Bluetooth® SIG mesh	
Max. Bluetooth Mesh Range	213-ft. (65m)	
Mounting	1/2" knockout	
Color	Blue	
Certifications	UL Listed, UL2043 Plenum rated, CE, ROHS	
Location	Dry	
Operating Temp.	0°C~50°C	
Relative Humidity	8-80%	
LOAD RATINGS		
General Use	5A @ 277VAC	20A @ 277VAC
Resistive	5A @ 125VAC	18A @ 120VAC
	5A @ 250VAC	18A @ 277VAC
Inductive	5A @ 277VAC	10A @ 240VAC
Tungsten	1000W, 4A @ 250VAC	2000W, 8A @ 250VAC
Motor	0.5 HP @ 120VAC	0.5 HP @ 120VAC
	1HP @ 240V	1 HP @ 240VAC

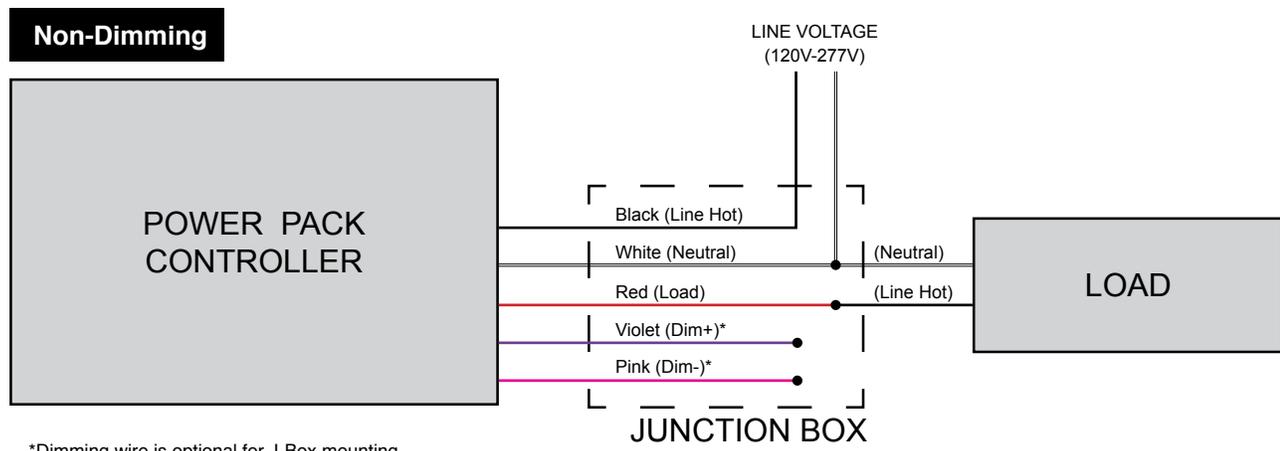
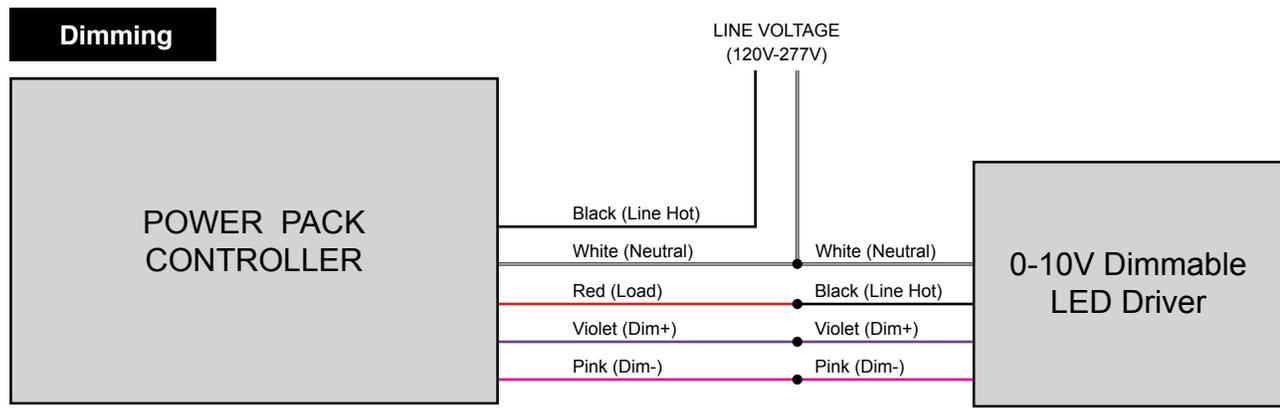
Product Info



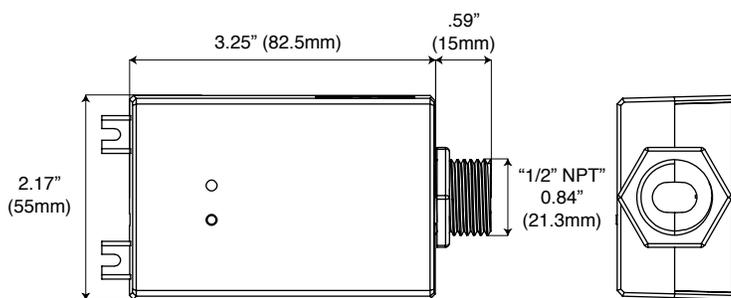
*Note: Use a non-metal electrical enclosure for best wireless communication performance.

Specifications and Dimensions subject to change without notice.

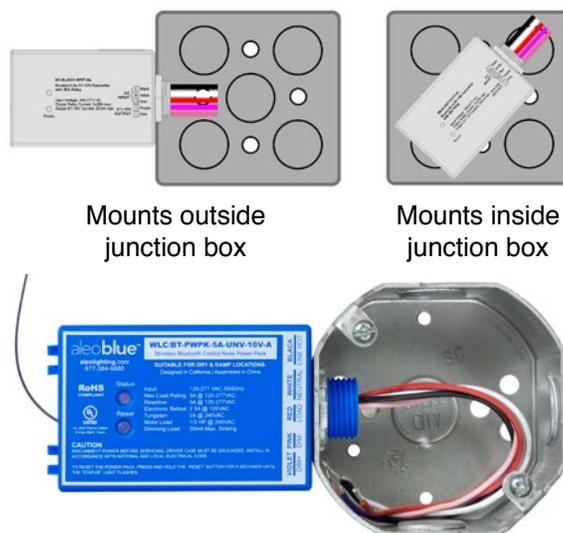
Wiring Diagram



Dimensions



Easy Mounting



Color	Length (in)	Lead Information	
		5A	20A
Black	6	18AWG, 300V	12AWG, 600V
White	6	18AWG, 300V	12AWG, 600V
Red	6	18AWG, 300V	12AWG, 600V
Purple	6	24AWG, 300V	22AWG, 300V
Pink	6	24AWG, 300V	22AWG, 300V

Specifications and Dimensions subject to change without notice.



AleoBlue Wireless Bluetooth Controls

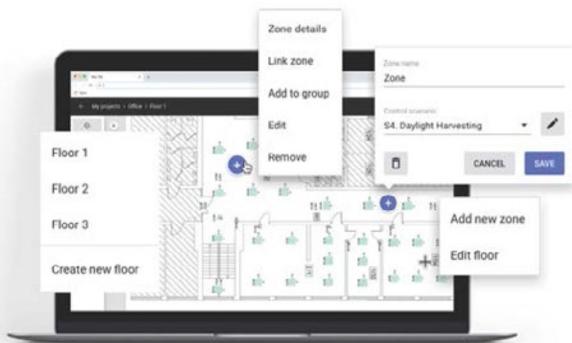


The AleoBlue is a complete solution for managing connected lighting systems using a Bluetooth Mesh lighting network. This enables seamless implementation of simple to complex lighting control scenarios without specialized training or lighting control engineering expertise.

DLC NLC Qualified.

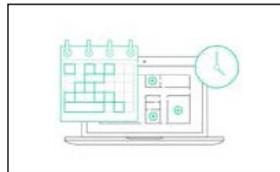
Features and Benefits

- 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

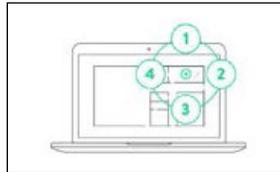
Scheduling



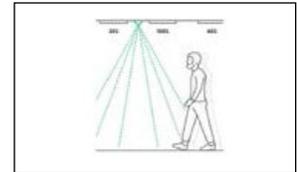
High and Low End Trim



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



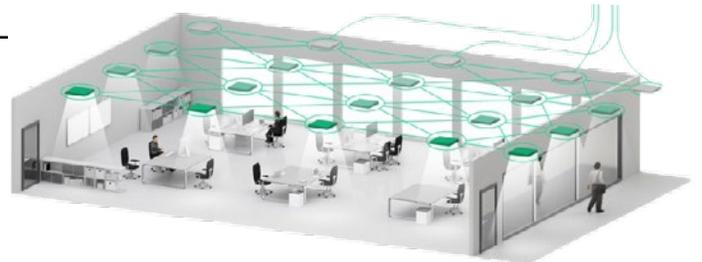
The most advanced encryption standards as well as the cutting-edge device authentication

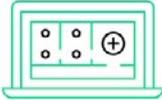


No single point of failure (no central device)



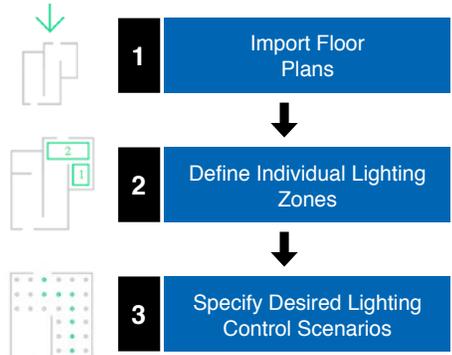
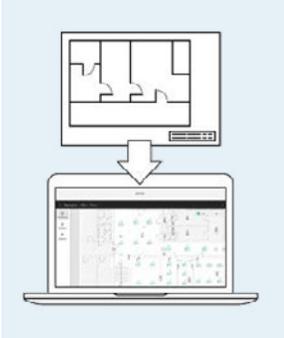
Compatibility with a widely available devices (smart phones & tablets – both with Bluetooth 4.0 and Bluetooth 5)





Planning

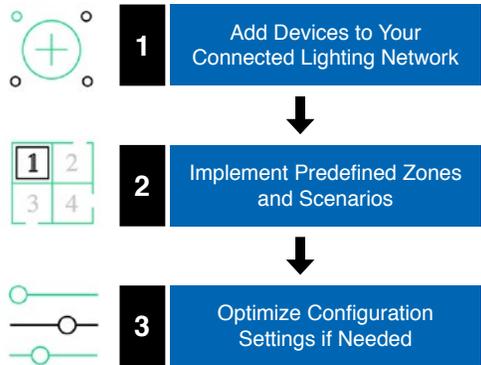
Remote preparation of a retrofit project with the use of our web app. Uploading floor plans, defining individual lighting zones and choosing lighting control scenarios.



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.

Ordering Information



Wireless Bluetooth Control Node Power Pack

Model: WLC/BT-PWPK-xxA-UNV-10V-A

Specifications and Dimensions subject to change without notice.

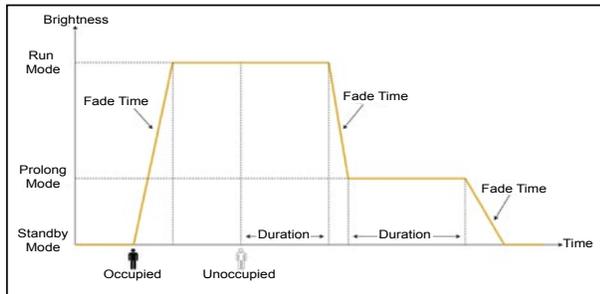
Lighting Control Scenarios

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.

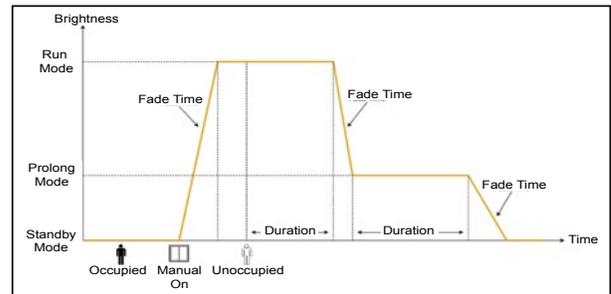


Mode / Scenario	Wireless Switch	Occupancy Sensor	Ambient Light Sensor
Unprovisioned Mode	-	-	-
Switch	On / Off / Scenes	-	-
Occupancy	On / Off / Scenes	Auto On / Off	-
Vacancy	On / Off / Scenes	Auto Off	-
Occupancy with Daylight Harvesting	On / Off / Scenes	Auto On / Off	Enabled
Vacancy with Daylight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

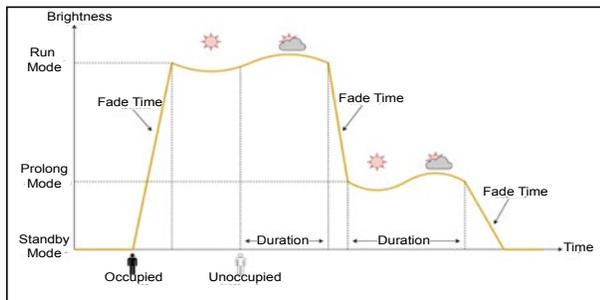
Occupancy Scenario



Vacancy Scenario



Occupancy Scenario - with Daylight Harvesting



Occupancy Scenario with Manual Override

