

ENCELIUM EDGE™ Wireless Lighting Controller



The ENCELIUM EDGE™ Controller (EEC) is the central intelligence point of the ENCELIUM EDGE Standalone Wireless Light Management System. Each EEC is specifically designed to control a space of up to 10,000 square feet and/or up to 100 nodes. For larger footprints or where obstructions provide challenging communication environments, additional EECs can be installed, creating separately controlled spaces. The EEC can be ceiling or wall mounted.

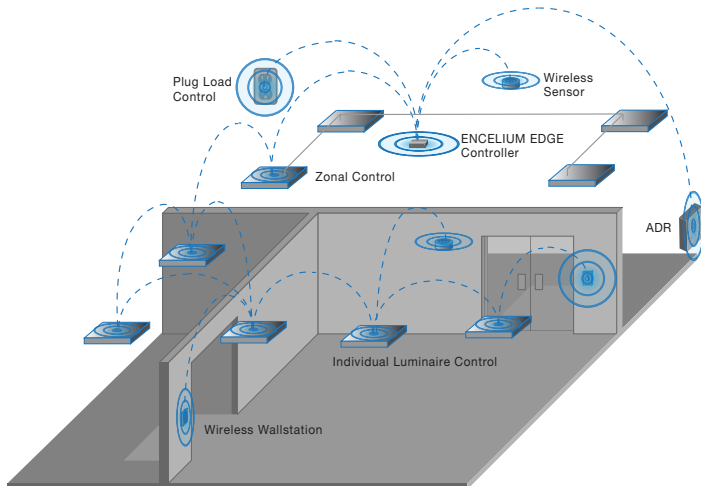
The EEC receives, processes and communicates control information to and from luminaires, wallstations, sensors and control modules within the space, leveraging a mesh network based on ZigBee® standards. Additional OSRAM hardware utilized includes the Wireless Area Lighting Control (WALC) Module to enable group- or zone-based control of multiple

Key Features & Benefits

- Controls up to 10,000 sq. ft. and or up to 100 nodes
- Quick and easy installation
- Intuitive Mobile App for Setup
- Upgradeable via software to ENCELIUM® EXTEND Networked Light Management System
- Sleek hardware design for seamless mounting (both ceiling and wall options)

luminaires; Wireless Plug Load (WPL) Control Module for general device control of an entire circuit of plug loads (20A) at the receptacle level; Wireless Fixture-Integrated Connected Lighting Module (CLM) to enable individually-addressable switching and dimming of a luminaire; Wireless Automated Demand Response (WADR) Module for accepting Demand Response (DR) signals from the Building Management System (BMS) and; Phase Cut Dimming Module (PCDM) for line voltage or phase cut dimming.

System setup is fast and easy using the ENCELIUM EDGE Mobile Setup App. No floor plan is required, and pre-set configurations can initialize lighting control in a room or group of rooms quickly based on the modules Scanned and grouped ('Scan, Group and Go'). In addition, the Mobile Setup App enables modification of settings as needed.



ENCELIUM EDGE System Highlights

- ASHRAE 90.1 2016 and Title 24 2016 code compliant
- Individual and zonal addressability and control
- Plug Load (PL) and Automated Demand Response (ADR) control
- Works with any manufacturer 0-10V dimmable ballast or LED driver
- Enables phase cut options for forward, reverse or both via a tetherable Phase Cut Dimming Module (PCDM)
- Fast on-site setup using ENCELIUM EDGE Mobile Setup App
- No floor plan required
- Just 'Scan, Group and Go'
- Android and iOS compatible
- Built on a mesh network based on ZigBee standards
- Can be upgraded to Polaris 3D® software and the ENCELIUM EXTEND Networked Light Management System



Ordering Information

Item Number	Item Name	Ordering Description	Wireless Communication Network	Modifiers
56331*	ENCELIUM EDGE Starter Kit	EN-ECKIT-ZB-SW	ZigBee	White - WH
56330	ENCELIUM EDGE Controller	EN-EC-ZB-SW	ZigBee	White - WH
56332	ENCELIUM EDGE Controller Power Supply Unit	EN-PS-ZB	ZigBee	White - WH
56306	OSRAM Wiring Test Tool	EN-WTT-ZB	ZigBee	White - WH

*Kit includes ENCELIUM EDGE Controller, ENCELIUM EDGE Controller Power Supply and OSRAM Wiring Test Tool

Compatible OSRAM Hardware Modules

45585	Wireless Area Lighting Control Module	EN-ALC-ZB-BK	ZigBee	Black - BK
45678	Wireless Fixture-Integrated Connected Lighting Module	ZBHA-CLM DIM	ZigBee	White - WH
56310	Wireless Plug Load Control Module	EN-ALC-PL-ZB	ZigBee	Black - BK
56311	Wireless Automated Demand Response Module	EN-ALC-ADR-ZB	ZigBee	Black - BK
45570	Wireless PIR and Photo Sensor (1500 sq. ft.)	EN-SCPPH-1500-ZB	ZigBee	White - WH
45571	Wireless PIR and Photo Sensor (450 sq. ft.)	EN-SCPPH-0450-ZB	ZigBee	White - WH
56302	Wireless High Bay PIR and Photo Sensor	EN-SCPPH-HB-ZB	ZigBee	White - WH
45573	Wireless Wallstation (2-Button)	EN-WS-2B-ZB-WH	ZigBee	White - WH
45574	Wireless Wallstation (3-Scene)	EN-WS-SC3-ZB-WH	ZigBee	White - WH
45575	Wireless Wallstation (5-Scene)	EN-WS-SC5-ZB-WH	ZigBee	White - WH
45582	Surface Mount Kit	EN-SMK-ZB-WH	ZigBee	White - WH
56315	Phase Cut Dimming Module	EN-PCDM-GB2	Tethered-GB2	—

To view compatible OSRAM wired hardware modules, visit www.osram.us/edge

Specifications

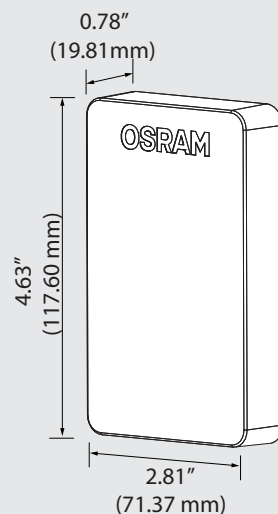
ENCELIUM EDGE Controller

- Communication Range: 100' line of sight, 50' through standard walls
- Input Power via Power over Ethernet port
 - Custom Power Supply or PoE enabled switch
 - Input Voltage: 42-48 Vdc, typical 45 Vdc
 - Input Current (typical): < 60 mA
 - Cable Required: Cat. 5 or higher
 - Power @ Full Load: 3W
- Status LED on front of unit
- Configuration stored in non-volatile flash memory
- Radio Frequency: 2.4GHz
- Protocol: ZigBee, IEEE 802.11 b/g/n
- Ceiling or wall mount options
- Weights: 4.06 oz (115g) ENCELIUM EDGE Controller; 1.41 oz (40g) ceiling mounting kit
- Operating Temperature Range: 32°F to 104°F (0°C to 40°C)
- AES 128-bit encryption for wireless communication
- Dimensions: 2.81" W x 4.631" H x 0.78" D (71.37mm W x 117.6mm H x 19.81mm D)
- cULus Listed
 - Energy Management Equipment (UL 916)
- FCC Part 15/ICES-003
- Electromagnetic compatibility:
 - EN 61000-4-2
 - EN 61000-4-4
 - EN 61000-4-5

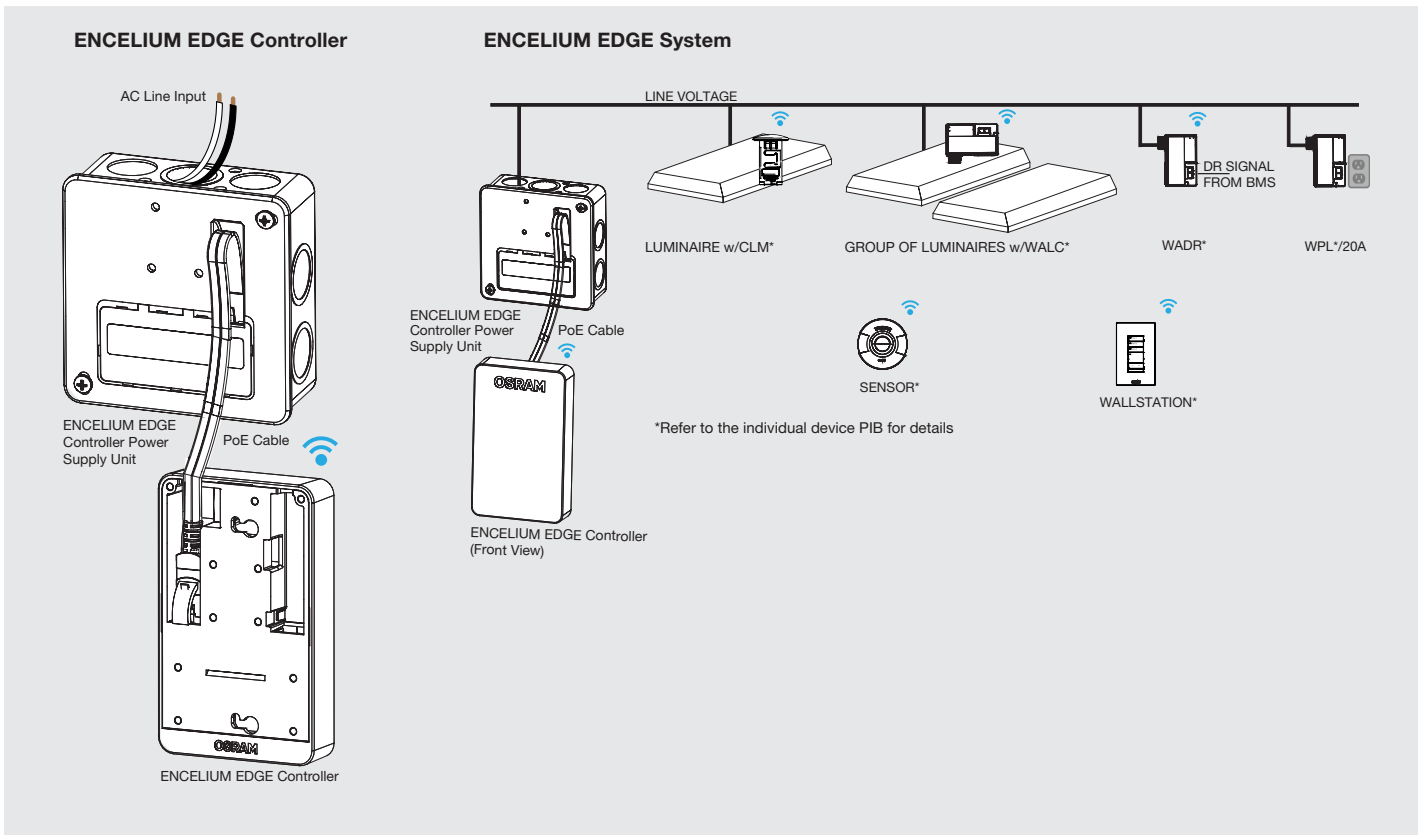
ENCELIUM EDGE Controller Power Supply

- Input: 120/347 VAC
- Output:
 - Voltage: 42-48 VDC, typical 45 Vdc
 - Current (typ): < 60 mA
 - Power @ Full Load: 3W
- Operating Temperature Range: 32°F to 104°F (0°C to 40°C)

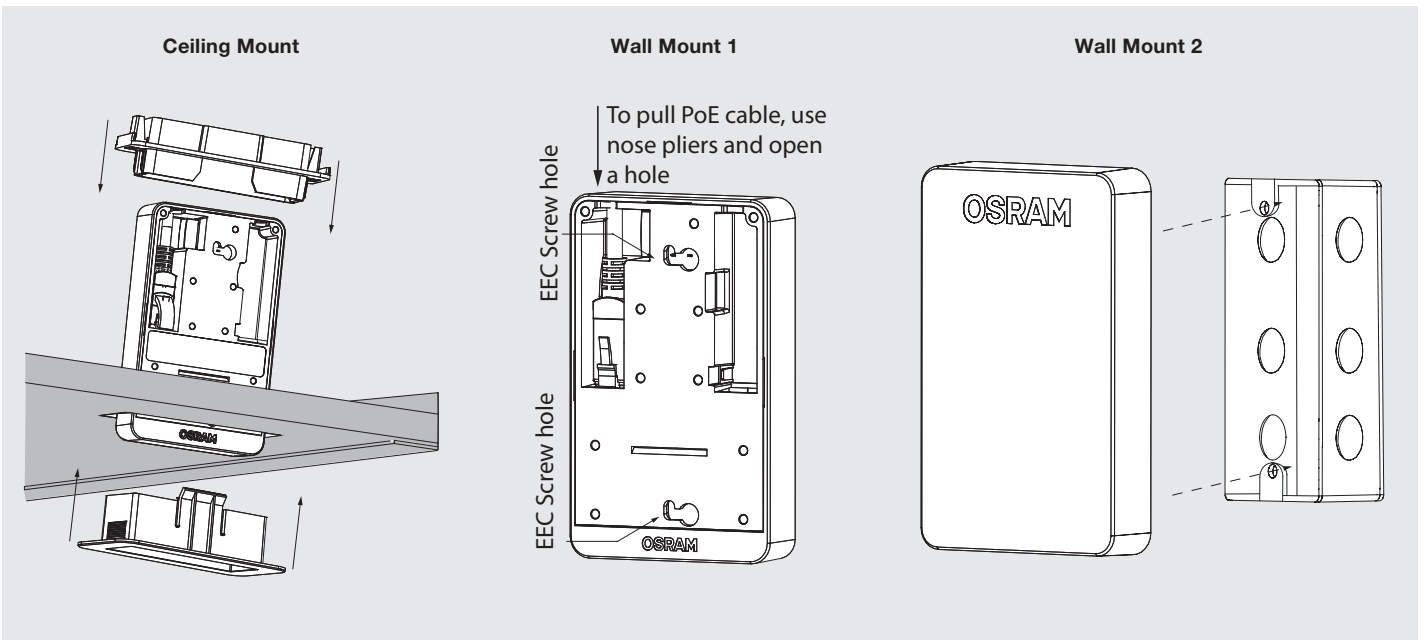
Dimensions



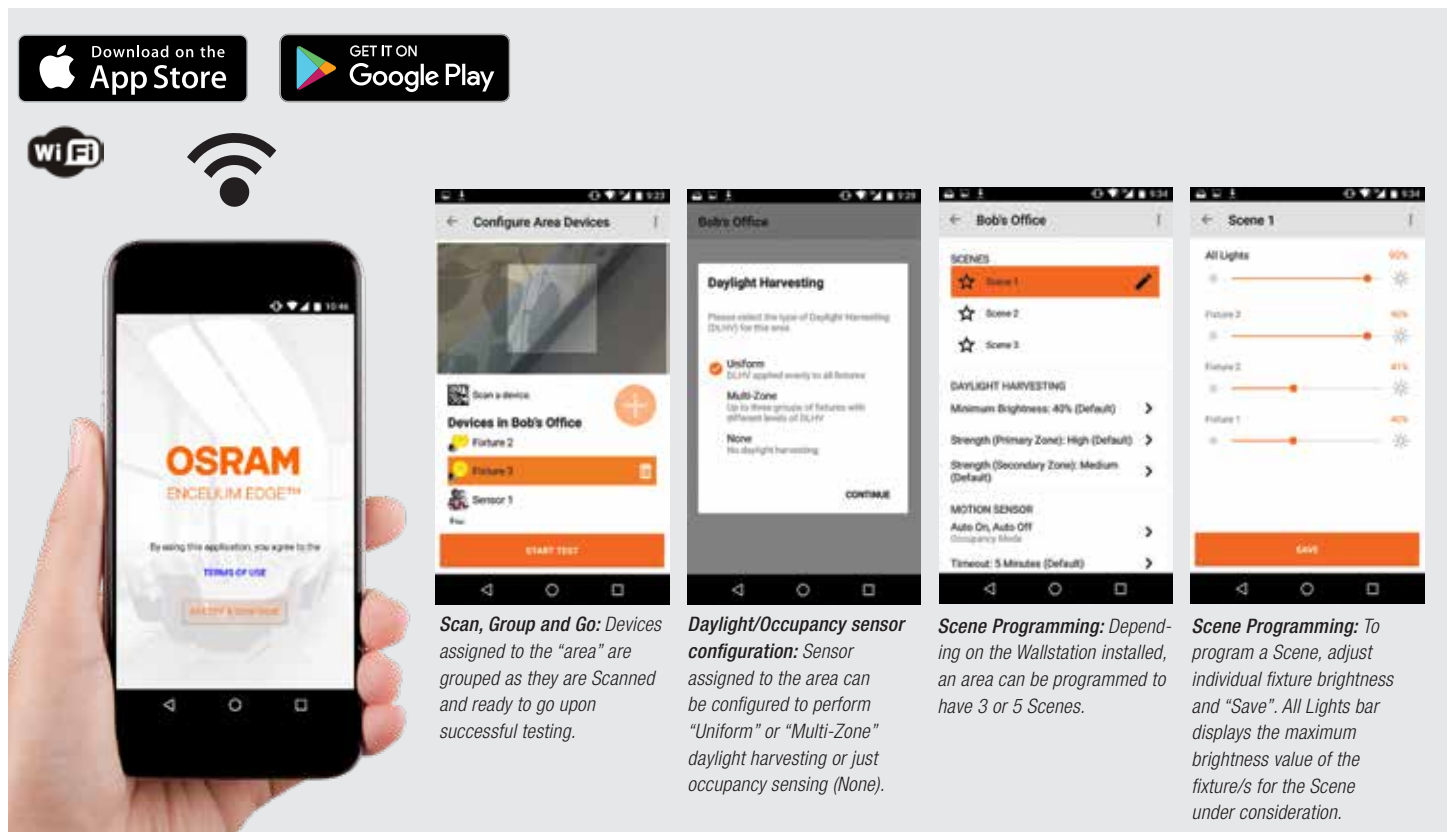
Wiring Diagrams



Mounting Diagrams



Mobile Setup App



Download on the **App Store** | GET IT ON **Google Play**

Wi-Fi | Wireless Signal

OSRAM ENCELUM EDGE™

By using this application, you agree to the [TERMS OF USE](#)

Configure Area Devices

Scan a device

Devices In Bob's Office

- Fixture 2
- Fixture 3
- Sensor 1

START TEST

Daylight Harvesting

Please select the type of Daylight Harvesting (DLHF) for this area.

- Uniform**
DLHF applied evenly to all fixtures
- Multi-Zone**
Up to three groups of fixtures with different levels of DLHF
- None**
No daylight harvesting

continue

Bob's Office

SCENES

- ★ Scene 1
- ★ Scene 2
- ★ Scene 3

DAYLIGHT HARVESTING

Minimum Brightness: 40% (Default)

Strength (Primary Zone): High (Default)

Strength (Secondary Zone): Medium (Default)

MOTION SENSOR

Auto On, Auto Off

Occupancy Mode

Timeout: 5 Minutes (Default)

Scene 1

All Lights: 90%

Fixture 2: 90%

Fixture 2: 40%

Fixture 1: 40%

SAVE

Scan, Group and Go: Devices assigned to the "area" are grouped as they are Scanned and ready to go upon successful testing.

Daylight/Occupancy sensor configuration: Sensor assigned to the area can be configured to perform "Uniform" or "Multi-Zone" daylight harvesting or just occupancy sensing (None).

Scene Programming: Depending on the Wallstation installed, an area can be programmed to have 3 or 5 Scenes.

Scene Programming: To program a Scene, adjust individual fixture brightness and "Save". All Lights bar displays the maximum brightness value of the fixture/s for the Scene under consideration.

Mobile app screenshots shown may not reflect the latest updates.

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