

ALC

Wired Area Lighting Controller

Date: _____

Quantity: _____

Company: _____

Project: _____



The Area Lighting Controller (ALC) provides a high-power switching and dimming interface between a group of luminaires and the GreenBus™ communication network. Individually addressable with the Encelium X Networked Light Management System, the ALC switches a single wired zone of multiple luminaires ON or OFF via an integral high current relay while setting the zone's overall light level with a 0-10V dimming output wired to the luminaires' dimming ballasts or LED drivers.

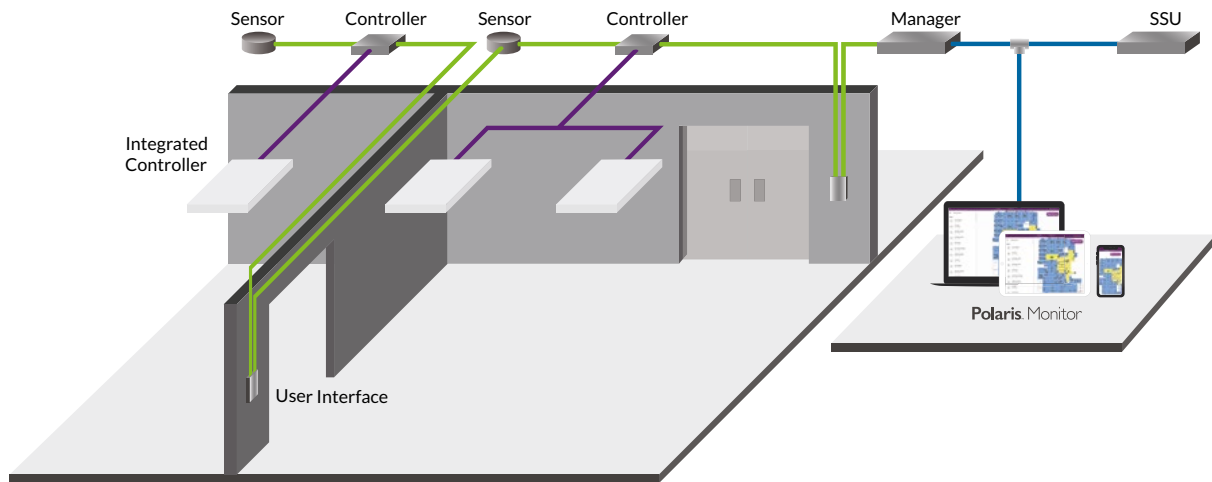
The ALC's dimming output is fully isolated and suitable for installation as either an NEC Class 2 or Class 1 circuit. The ALC can switch an entire circuit of electrical loads and is suitable for general-purpose plug load control. It replaces the need for standard power relays or switch packs.

Key Features & Benefits

- Adjusts light levels to respond to variable lighting requirements
- Enables scheduling luminaire group operation to lower energy use during off-peak occupancy
- Customizing lighting scenes for tailored experiences/tasks
- Allows adjustment of luminaire group assignments for modified space layouts
- Damp rated model available to suit environments with moderate degree of moisture such as basements and garages
- Works with:
 - Encelium X
 - Encelium Extend

Wired System Overview

GreenBus technology makes wiring fast and error-free, since it's intuitive to install. With Encelium X, you can control DALI devices exclusively or a mixture of GreenBus and DALI. With any Encelium wired design, you get a reliable, on-site light management system that can be installed quickly and easily.



Specifications

SENSING AND CONTROL

Communication Port

- Connects to the Encelium X Light Management System via two ports that accept pre-terminated GreenBus Communication Cable

Dimming Output

- Single 0-10V dimming output (IEC 60929 Annex E). Capable of sinking 3 mA (this is equivalent to 30 typical dimming ballasts/drivers)¹

ELECTRICAL

Absolute Maximum Ratings

- 20A 120 – 347 VAC Ballast
- 20A 120 – 347 VAC Resistive
- 20A 120 – 347 VAC Tungsten
- 20A 120 – 347 VAC General Purpose
- 1.5 HP 120 – 277 VAC Motor

Input Current

- Typically <40 mA

Radio Frequency

- 2.4 GHz

ENVIRONMENTAL

Operating Temperature

- 32° – 131°F (0° – 55°C)

PHYSICAL

Dimensions (H x W x L)

- 1.75 x 1.9 x 2.4 inch (44.4 x 48.3 x 61 mm)

Mounting

- Suitable for luminaire or junction box mounting in 0.5 inch (Pg-7) trade size knockout – Ø 0.875 inch (22.2 mm)

WARRANTY

- For warranty details, refer to the full warranty documentation at www.encelium.com

CERTIFICATIONS & SAFETY

Approbations

- UL916 (Energy Management Equipment)
- UL924 cUL US Listed (Emergency Lighting Equipment)
- UL2043 Plenum Rated
- FCC Part 15/ICES-003

Complies with Electromagnetic Compatibility (EMC) Standards:

- EN 61000-4-2
- EN 61000-4-4
- EN 61000-4-5



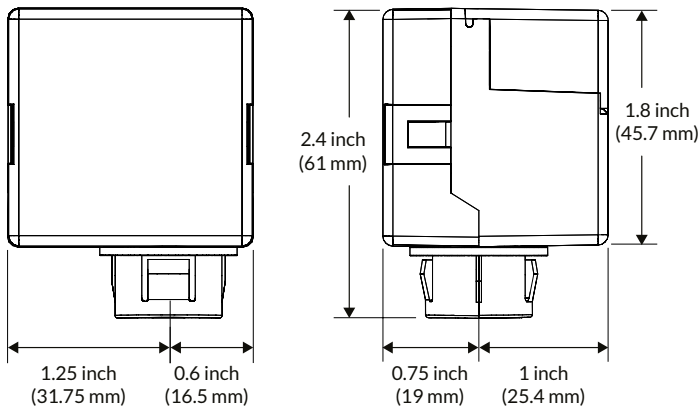
Footnotes:

¹ Maximum wire length: 100 ft (30 m), Class 1; 250 ft (76.2 m), Class 2.

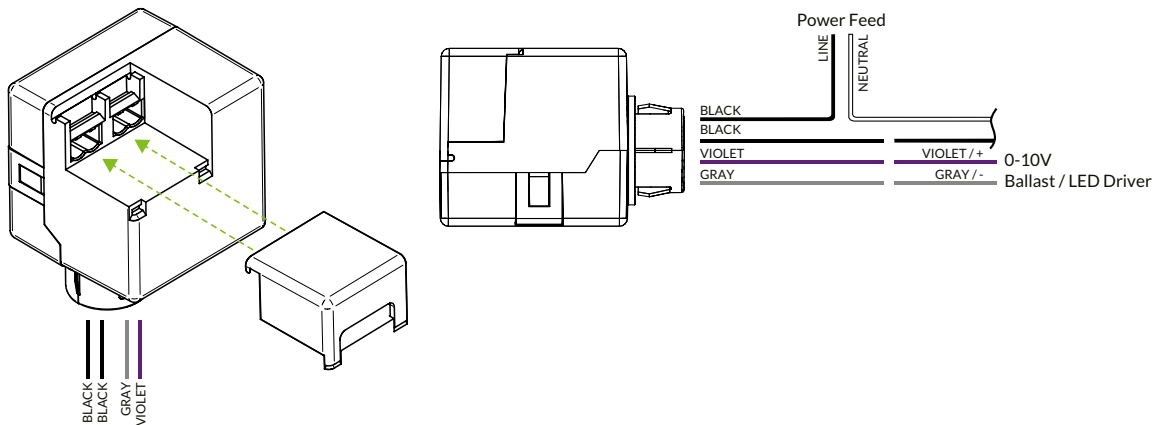
Ordering Information

Item Number	Ordering Code	Description	Communication Network	Modifiers
45270	EN-ALC-1R10V-GB2-BK	Area Lighting Control Module	GreenBus	Black
45431	EN-ALC-1R10V-GB2-BK-DR	Area Lighting Control Module	GreenBus	Black/Damp Rated

Dimensions



Wiring Diagrams



Wiring Information

Wire Color	Function	Wire Gauge
Black	Line In/Out – Relay Contact	6 inch (152 m)
Black	Line In/Out – Relay Contact	6 inch (152 m)
Violet	NEC Class 1 or 2, Low-Voltage, 0-10 VDC, 30 mA maximum	6 inch (152 m)
Gray	NEC Class 1 or 2, Low-Voltage, 0-10VDC, 30 mA maximum	6 inch (152 m)

Mounting Options

The mechanical construction allows for simple installation of the ALC to an available 0.5 inch (Pg-7) trade size knockout on the side or on top of a luminaire. GreenBus communication wiring is still accessible from the outside of the luminaire, while all necessary wiring to the electronic dimming ballast/LED driver is available on the inside.

For some installations, a junction box may be required. It is recommended to securely mount the ALC to the junction box using an available 0.5 inch (Pg-7) trade size knockout.

Junction Box Mounting

