

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 Lighting Control 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.

Works with

- Encelium X
 - ▶ GreenBus Wired



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

ENCELIUM

Specifications

SENSING AND CONTROL

Control

- GreenBus Communication

Control Options

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

ELECTRICAL

Absolute Maximum Ratings

- 20A 120 to 347 VAC Ballast/LED Driver
- 20A 120 to 347 VAC Resistive
- 20A 120 to 347 VAC General Purpose
- 1.5 HP 120 to 277 VAC Motor

Connections

- Black: Line In/Out, Relay Contact
- Black: Line In/Out, Relay Contact
- Purple: 0-10V +
- Pink: 0-10V -

ENVIRONMENTAL

Operating Temperature

- 0° to 55°C (32° to 131°F)

PHYSICAL

Dimensions (H x W x D)

- 61 x 45.7 x 48.25 mm (2.4 x 1.8 x 1.9 inches)

Weight

- 93 g (3.3 oz)

Housing Color

- Black

Housing Material

- ABS Plastic

Mounting Options

- Luminaire Mount
- Junction Box Mount (Standard PG-7 (0.5 inch) trade-size knockout)

WARRANTY

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

CERTIFICATIONS & SAFETY

Approbations

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

Complies with Electromagnetic Compatibility

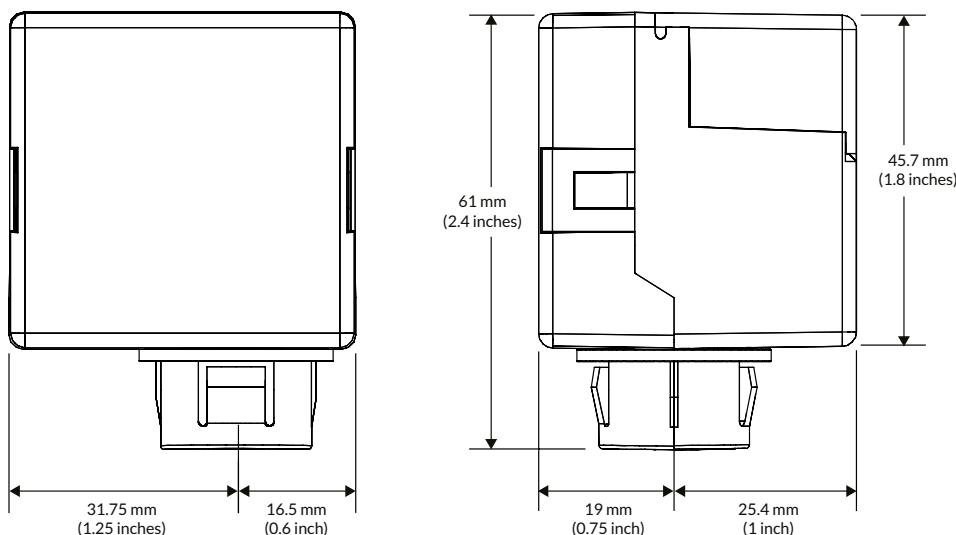
(EMC) Standards:

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



GreenBus[®]

Dimensions



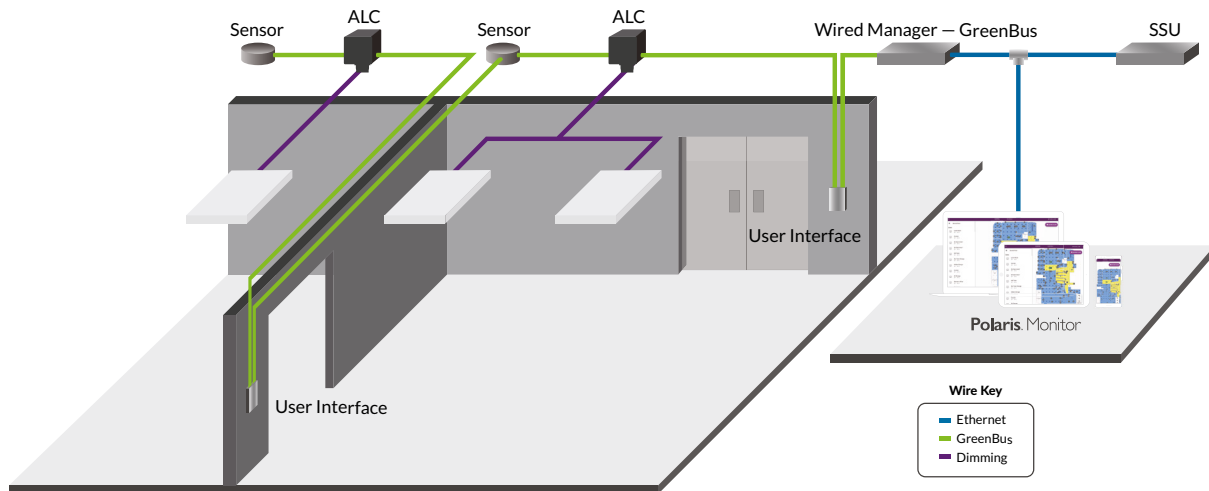
Footnotes: ¹ Maximum wire length: 100 ft (30 m), Class 1; 250 ft (76.2 m), Class 2.

Ordering Information

Catalog Number	Description	Approbation	Communication Network	Modifiers
EN-ALC-1R10V-GB2-BK	Area Lighting Control Module	UL	GreenBus	Black
EN-ALC-1R10V-GB2BKDR	Area Lighting Control Module	UL	GreenBus	Black/Damp Rated

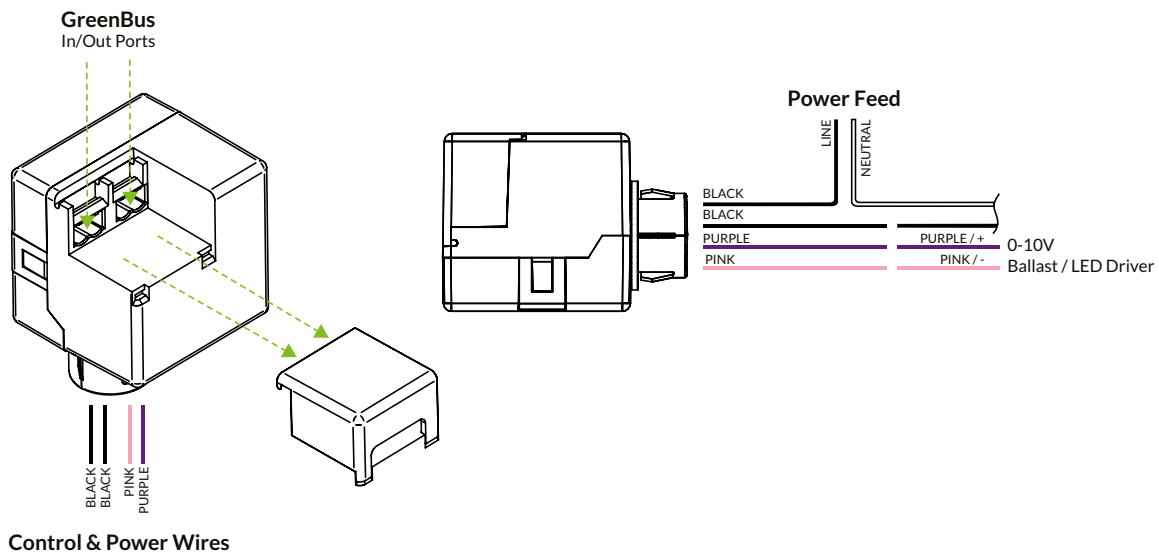
Wired System Overview

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.



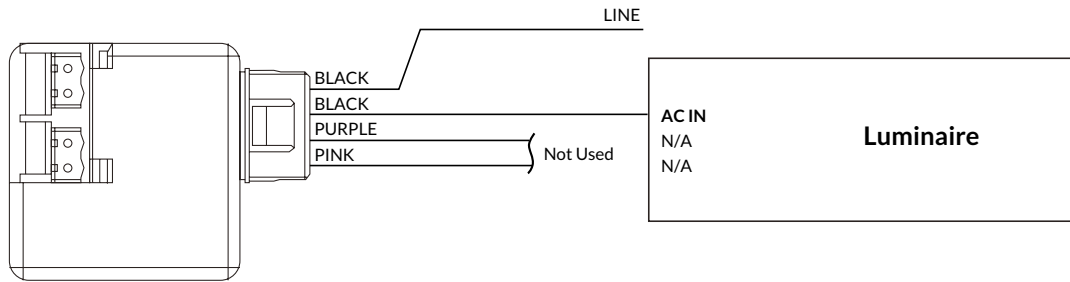
Wiring Diagrams

ALC Wiring

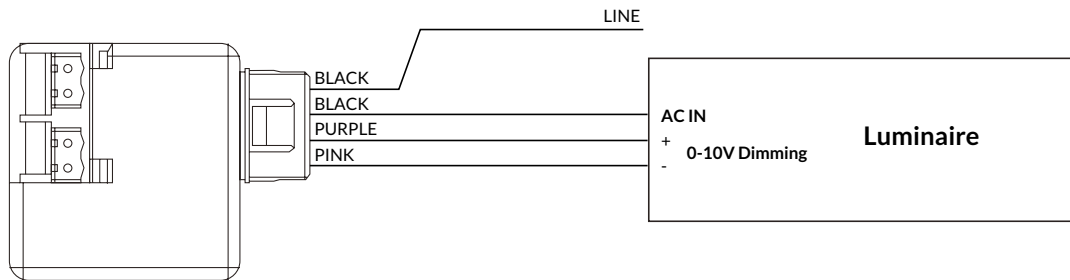


Wiring Diagrams (cont.)

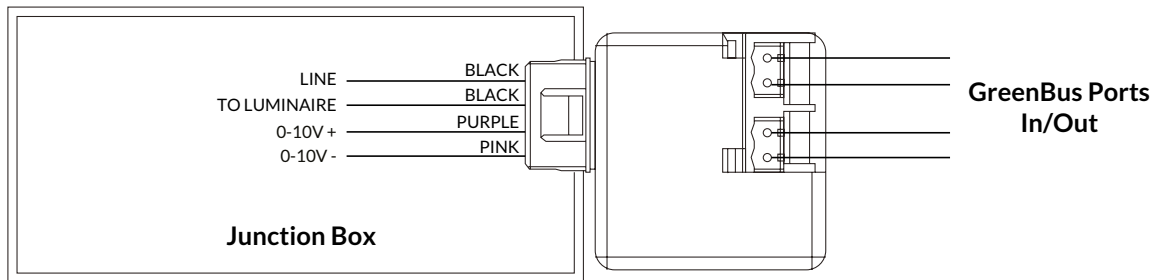
Non-Dimmable Luminaire Wiring



Dimmable Luminaire Wiring



Junction Box Wiring

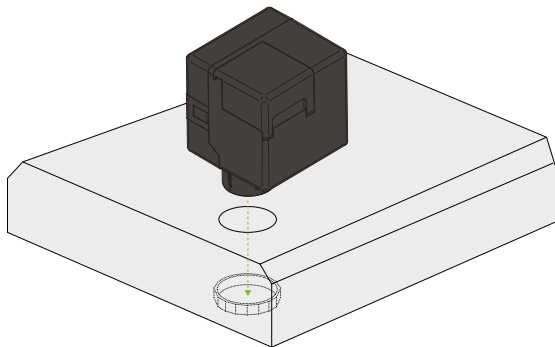


Mounting Options

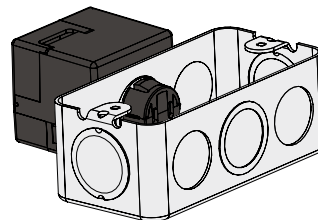
The mechanical construction allows for simple installation of the ALC to an available PG-7 (0.5 inch) trade-size knock-out on the side or on top of a luminaire. GreenBus communication wiring is still accessible from the outside of the luminaire, while all necessary wiring to the electronic dimming ballast/LED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

Luminaire Mount

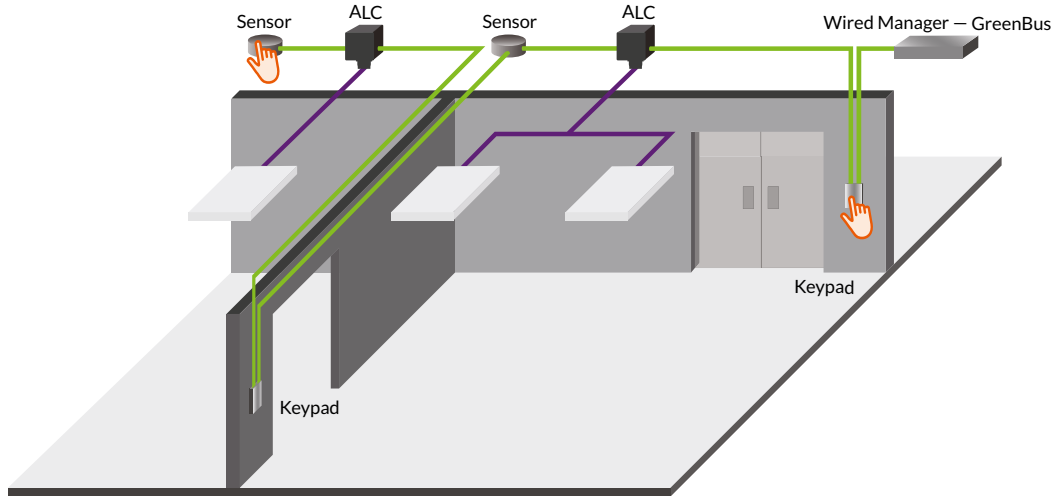


Junction Box Mount



Installation Testing

Installer can quickly test if the devices have been wired correctly by pressing any button on the wallstation or the sensor which triggers all the load controllers on the channel to change the dimming level by 25%. Every press will trigger this function to enable testing of the AC line wiring, dimming wiring, and communication integrity over the GreenBus lines.



Manual Pairing

Installers can easily pair devices in a room or a zone to gain manual control (on, off and dimming) and occupancy time outs. Holding any buttons on a wallstation or sensor for 10 seconds enters the system in the Manual Pairing mode. The system then guides the user by blinking the load controllers on the GreenBus wiring scheme as a means of identifying and pairing them to the wallstation or sensor.

