

Luminaire Control Module



The Luminaire Control Module (LCM) is a key component of the ENCELIUM® EXTEND Networked Light Management System (LMS). This device provides an interface between ballasts and the GreenBus II® communication network. The LCM is automatically addressed as soon as it is connected to an ENCELIUM EXTEND Manager. Individually addressable, the LCM enables each ballast to be independently controlled and configured to best meet the needs of the facility.

The LCM switches a fixture ON or OFF via a relay contained in the module as well as delivers a low voltage dimming signal to any 0-10V dimming ballast/driver. LCMs can be connected to power relays or switch packs in order to switch larger electrical loads. An LCM can also be connected to LED drivers without isolation between the dimming section and the electrical output for added flexibility in LED driver options.

OSRAM offers a special Damp-Rated LCM for installations in interior locations subject to moderate degrees of moisture.

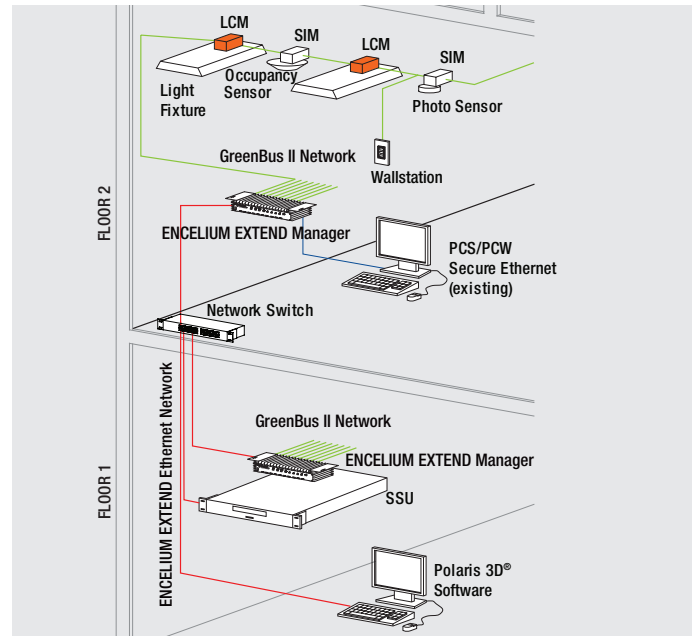
System Compatibility

- Works with ENCELIUM® EXTEND Networked Light Management System

Key Features & Benefits

- Connects 0-10V dimmable luminaires to the GreenBus II network
- Adjust light levels to respond to variable lighting requirements
- Customize lighting scenes for tailored experiences/tasks
- Schedule the operation of a luminaire to lower energy use during off-peak occupancy
- Provides for individual luminaire control

ENCELIUM® EXTEND Networked Light Management System Architecture



System Architecture

This illustration shows how each component is easily integrated into the ENCELIUM EXTEND Networked Light Management System (LMS). GreenBus II is a two-wire communication topology for supplying data and power to the system. Each light fixture, sensor, and wall controller is daisy-chained back to the ENCELIUM EXTEND Manager using pre-terminated 'click & go' GreenBus II communication cabling. Managers typically control individual floors and are linked via an Ethernet Network. Internet or LAN connection allows floor plan based control software to be operated anywhere on the network. For reference, the component shown on this data sheet is highlighted.

Specifications

Electrical (Absolute Maximum Ratings: all rated voltages have a tolerance of +/-10%)

- 2.5A 120-480 V_{AC} Electronic Ballast
- 4.5A 120-480 V_{AC} Ballast
- 4.5A 120-480 V_{AC} Resistive
- 4.5A 120-480 V_{AC} Tungsten
- 4.5A 120-480 V_{AC} General Purpose

Control Options

- Single 0-10V dimming output (IEC 60929 Annex E). Capable of sinking 25mA (this is equivalent to 10 typical dimming ballasts/drivers)¹
- Connects to the ENCELIUM EXTEND Networked Light Management System via two ports that accept pre-terminated GreenBus II[®] Communication Cable

¹Maximum wire length: 100ft., Class 2 only

Environmental

- Operating temperature range: -40°C (-40°F) to 55°C (131°F)

Physical

- Dimensions: 1.18" W X 2.38" L X 0.62" H (30mm W X 60.7mm L X 15.7mm H)
- Suitable for luminaire or junction box mounting in standard 1/2" knockout (7/8" dia.)

Regulatory

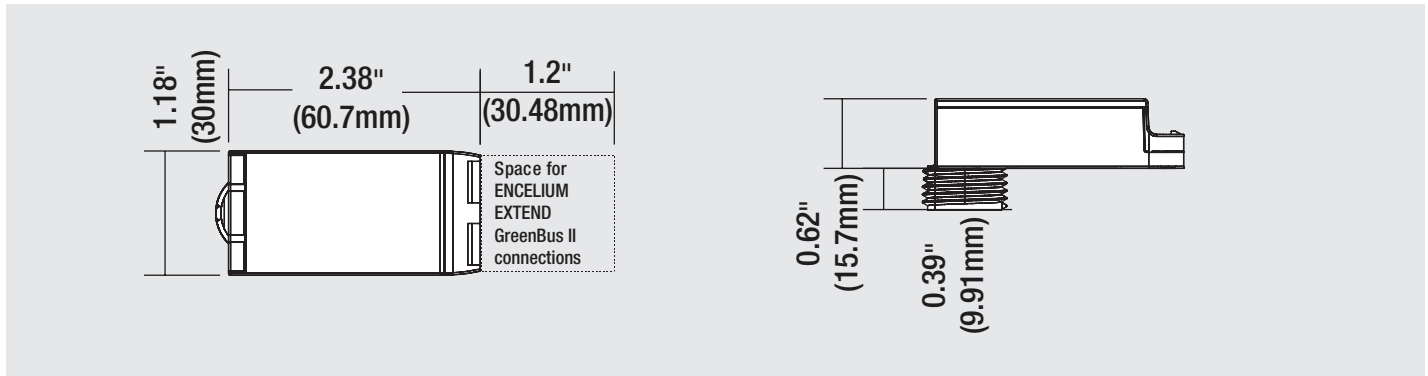
- Energy Management Equipment (UL 916 cULus Listed)
 - Emergency Lighting Equipment (UL 924 cULus Listed)
 - Heat and Smoke Release for Air-Handling Spaces (UL 2043)
 - FCC Part 15/ICES-003
- Complies with the following electromagnetic requirements:
- EN 61000-4-2
 - EN 61000-4-4
 - EN 61000-4-5
- Install in accordance with all applicable national and local electrical and building codes.

Ordering Information

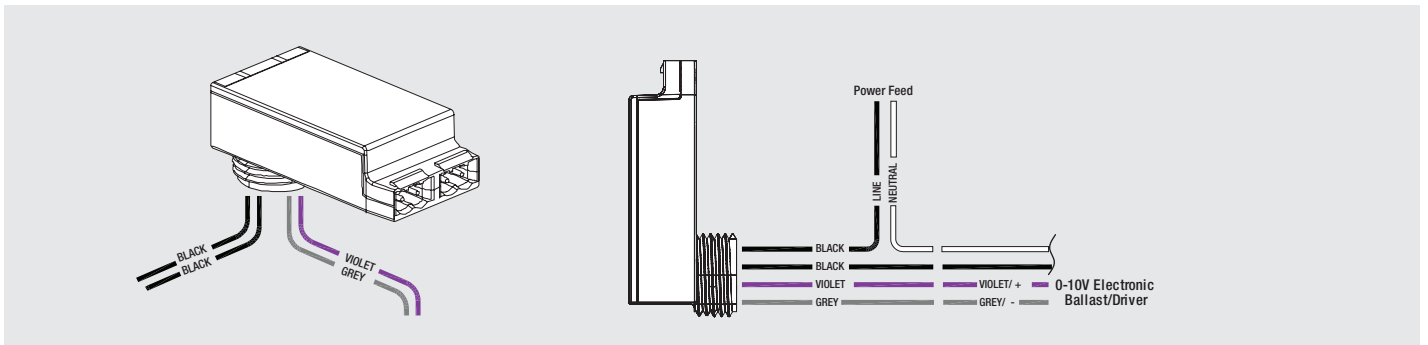
Item Number	Ordering Description	Field Bus	Modifiers	Label Color
45552	EN-ILCM-1R10V-GB2-BK	GB2	Black Housing (BK)	Orange
45553	EN-ILCM-1R10V-GB2-BKDR	GB2	Black Housing/Damp-Rated (BK/DR)	Orange

NAED 45552 & 45553 (with orange labeling) replace NAED 45244 & 45245 (with black labeling) for added flexibility with a range of LED drivers.

Dimensions



Wiring Diagrams



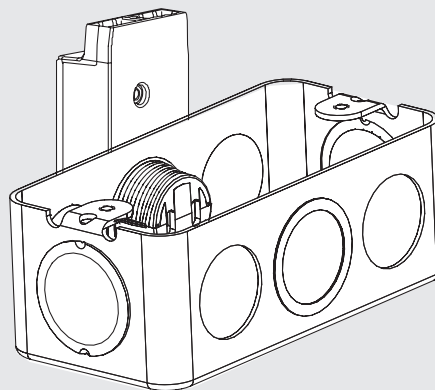
Wire Table

Wire Color	Function	Wire Length
BLACK	Line In/Out – Relay Contact	12"
BLACK	Line In/Out – Relay Contact	12"
VIOLET	Class 2, Low Voltage, 0-10V _{dc} , 25mA max.	36"
GREY	Class 2, Low Voltage Return/Common	36"

Mounting Details

The mechanical construction allows for simple installation of the LCM to an available 1/2 inch knock-out on the side or on top of a fixture (as shown to the right). GreenBus II® communication wiring is still accessible from the outside of the fixture, while all necessary wiring to the electronic dimming ballast is available on the inside.

For some installations, a junction box may be required. It is recommended to securely mount the LCM to the junction box (as shown to the right) using an available 1/2 inch knock-out and a retainer nut.



Warranty

Warranty documentation is available at www.osram.us.

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