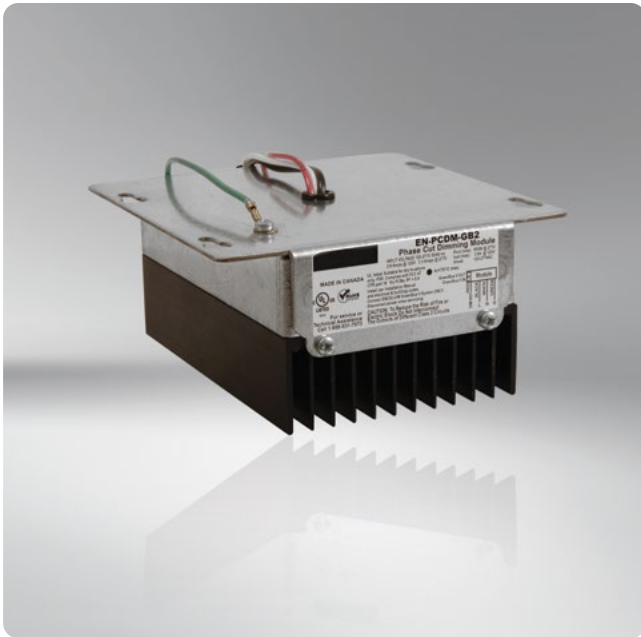


# PCDM

## Phase-Cut Dimming Module



The Phase-Cut Dimming Module (PCDM) provides an interface between the phase-cut dimmable (forward- and reverse-phase) ballasts/LED drivers and the Encelium X Light Management Systems. The PCDM is automatically addressed as soon as it is connected to the GreenBus™ network. Individually addressable, the PCDM enables each group or zone of luminaires to be independently controlled and configured to best meet the needs of the facility.

The PCDM is designed to control common load types such as Incandescent/Halogen lamps, Fluorescent ballasts, LED luminaires, and LED/CF lamps. The phase-cut dimmable luminaires connected to a PCDM can then be controlled by any of the Encelium wall station controllers, Touch Screen Panels, or from Polaris™ software through the GreenBus network. The PCDM has a built-in relay that provides ON/OFF switching control, in addition, to smoothly dimming the luminaires.

Date: \_\_\_\_\_

Quantity: \_\_\_\_\_

Company: \_\_\_\_\_

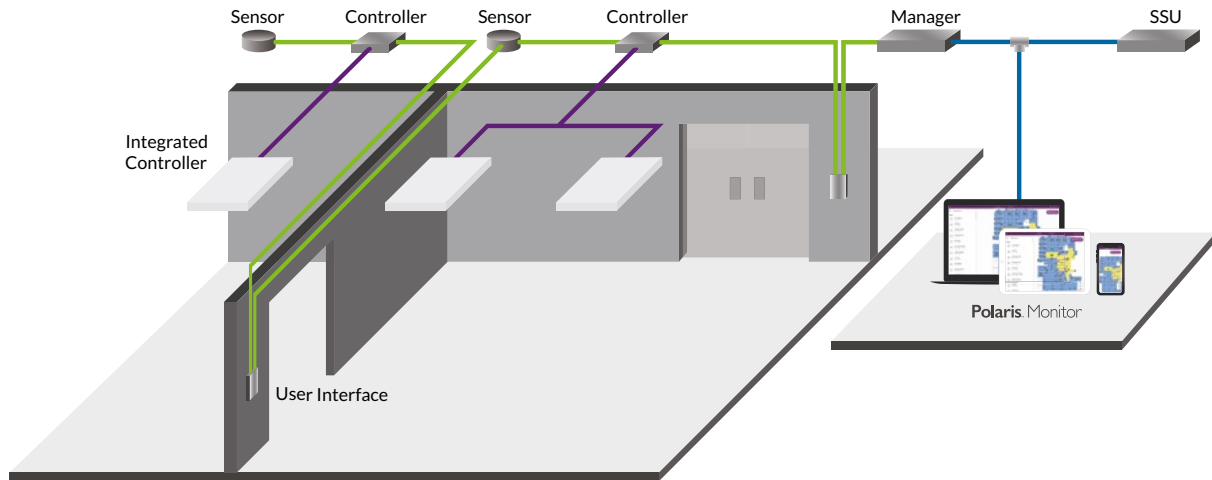
Project: \_\_\_\_\_

### 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
- 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 GreenBus Network connections

#### Dimming Type

- Phase Cut (Forward, Reverse and Ballast)

#### Controllable Load Types

- Incandescent/Halogen
- Fluorescent ballasts,
- LED luminaires
- Compatible LED/CFL lamps

### ELECTRICAL

#### Maximum Output Load Ratings

- 120 VAC, 450 W, 3.8 A maximum
- 277 VAC, 900 W, 3.3 A maximum

#### Input Voltage

- 120 – 277 VAC, 50/60 Hz

#### Short Circuit Protection

- Built-in

#### Transient Protection

- ANSI C62.41 Category A

### ENVIRONMENTAL

#### Operating Temperature

- 32° – 104°F (0° – 40°C)

#### Maximum Case Temperature

- 158°F (0° – 70°C)

### PHYSICAL

#### Dimensions (H x W x L)

- 2.24 x 4.75 x 5 inch (57 x 120.7 x 127 mm)

#### Weight

- 13 lbs (0.59 kg)

#### Mounting

- Suitable for mounting on a standard square 4.6875 inch (119.1 mm) junction box

### WARRANTY

- For warranty details, refer to the full warranty documentation at [www.encelium.com](http://www.encelium.com)

### CERTIFICATIONS & SAFETY

#### Approbations

- UL916 (Energy Management Equipment)
- UL924 cUL US Listed (Emergency Lighting Equipment)
- FCC Part 18/CRR 47

#### Environmental Suitability

- Indoor Dry Locations Only

#### Complies with Electromagnetic Compatibility (EMC) Standards:

- EN 61000-4-2

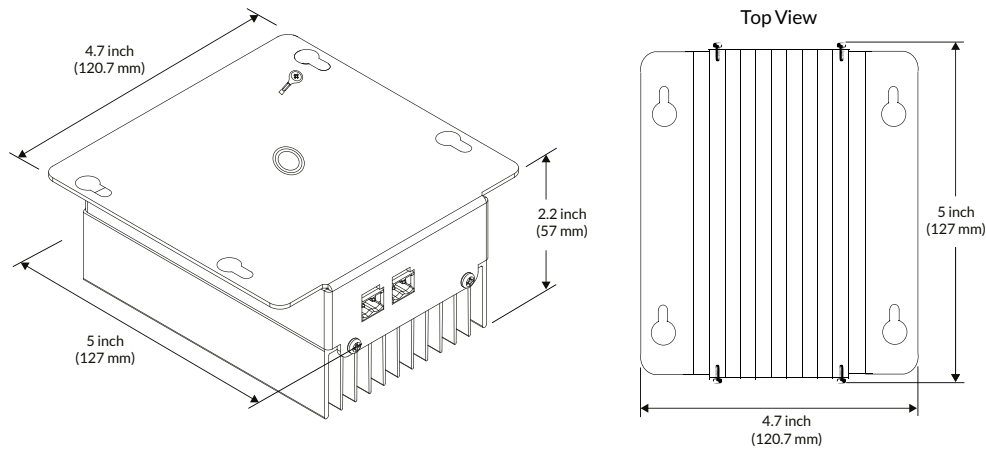


## Ordering Information

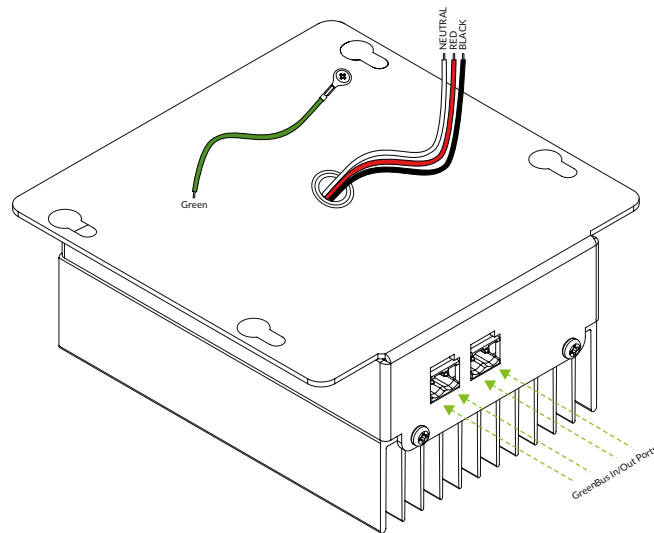
The PCDM is compatible with incandescent/Halogen lamps and ELV LED lamps or LED drivers. It is not compatible with ELV/MLV transformers or MLV LED drivers. The parts listed below are identified as incompatible loads.

Manufacturer	Item Number	Description
Luminii	PSD Series	Class 2
Luminance	L7510-1 A19	Dimmable LED Light Bulb

## Dimensions



## Wiring Diagrams



## Wiring Information

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

## Mounting Options

The mechanical construction allows for simple installation of the PDCM on top of a standard square 4.6875 inch (119.1 mm) junction box. It is recommended to use a 4.6875 inch (119.1 mm) junction box as the mounting holes on the PCDM properly align with the holes on the junction box. GreenBus communication wiring is still accessible from the outside of the junction box, while all necessary wiring to the load (single or multiple ballasts/LED luminaires) is done on the inside.

The recommended maximum distance between the PCDM and the last fixture it controls is 50 ft (15.2 m). For detailed mounting and wiring instructions, refer to the Encelium X Contractor Installation Manual.

