

Product specifications

# **DCDIM**

Power DC load controller for 0-10V dimming devices









### **PRODUCT OVERVIEW**

The Amatis DCDIM is a DC-powered dimming controller and constant current driver.

The updated hardware design simplifies installation with push-in color-coded terminals and an added second output for color-tuning. Also included is reverse-voltage protection and notification via both LEDs and software.

The DCDIM can be installed to operate in two different

- 1: 0-10V Mode. At the fixture level as a dimming controller for 0-10V dimming devices.
- 2. PWM-mode. As a dimmable driver for 24VDC constant voltage devices.

The DCDIM operates in-between the VDC power source and the PWM-dimmable loads. The PWM output can also be used as a wireless speed controller for 24VDC fans.

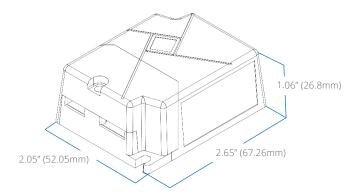
# **FEATURES**

LOAD CONTROL FUNCTIONALITY	Controls individual lights and light groupings
	5AMP DC load supply
	Button can be used for On/Off control and held down for manual dimming
	PWM output able to control dimming of one or more DC loads
	0-10V output able to control dimming of one or more fixtures
	Additional PWM or 0-10V output available for color tuning or up/down light configurations
	Ultra low power consumption
EASY, PLUG-AND- PLAY INSTALLATION	Push-In spring connectors make for quick and easy installation
	LEDs indicate power and network connection status
SIMPLE, WIRELESS COMMISSIONING	Remotely configurable / updateable
	Amatis app easily commissions and all devices on the mesh network via AMBR
	Unique IPv6 address
	Real-time data uploaded to the Energy Dashboard
CODE COMPLIANCE	Complies with ASHRAE 90.1-2016 and CA Title 24 requirements
WARRANTY	10-year limited warranty with uninterrupted connection of the Amatis Border Router device from a network

### LED INDICATOR REFERENCE TABLES

BLUE LED BEHAVIOR	MEANING
OFF	No power (unless disabled)
Slow blink	Looking for network
Fast blink	In pairing mode
Solid	Connected to AMBR (normal)
GREEN LED BEHAVIOR	MEANING
OFF	Load OFF
Slow blink	Load ON

#### **DIMENSIONED ISOMETRIC**



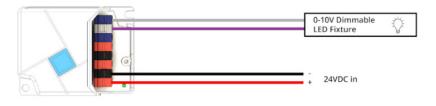
## **TECHNICAL SPECIFICATIONS**

COMMUNICATION	Wireless transmit range*	Up to 200 feet to nearest mesh connected device
	Communication Protocol	Embedded 6LoWireless
	Encryption	AES 128-bit
ELECTRICAL	Input power	24VDC
	Output	Class 2, PWM: Max 5 Amps 2 channels available for 0-10V or PWM 0/1-10V dimming, sourcing max: 4.7mA PWM voltage equal to Input Voltage
	Dimming	0-10V, 1-10V source or sink operation, PWM
MECHANICAL	Dimensions	2.65" (67.26mm) l 2.05" (52.05mm) h 1.06"(26.8mm) d
	Color	White
	Finish	Matte
	Enclosure	Type 2
	Mounting	2 x 4.25mm mounting holes
	External outputs	On-board button for manual control
ENVIRONMENTAL	Installation environment	Commercial, Indoor/Covered
	Temperature range	5°F (-15°C) to 130°F (+55°C)
GENERAL	Standards / Ratings	FCC, ETL (pending) Device contributes to Amatis system compliance with ASHRAE 90.1-2016 and CA Title 24 requirements

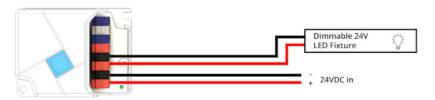
<sup>\*</sup>Based on clear line of sight. Interior obstructions may limit range.

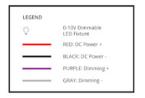
## **WIRING DIAGRAMS**

#### MODE 1: Wiring for Low Voltage 0-10V Dimmer



### **MODE 2: Wiring for LED Constant Voltage Driver**





Note: Actual performance may vary as a result of end-user environment and application. Specifications subject to change without notice.

