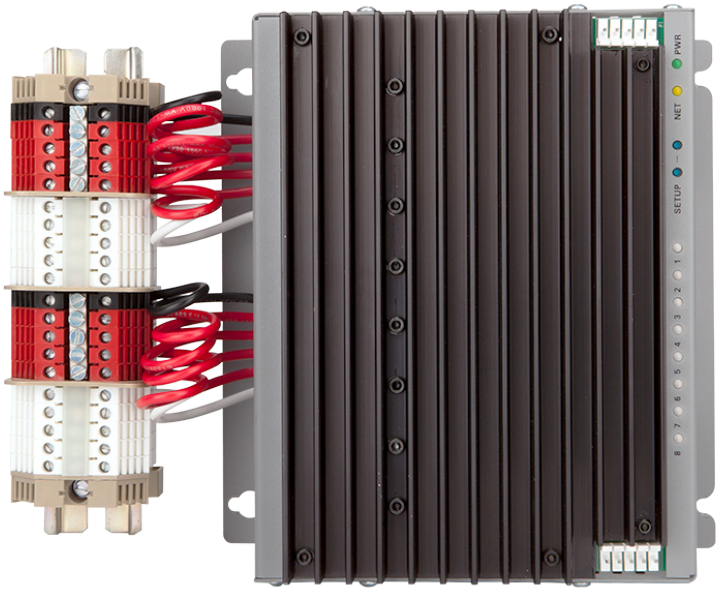
GL-CAEN-2DIMU8-277 KIT

8 Channel Universal Dimmer Module w/Terminal Block, 2 Feeds, 277V

- *Eight-channel universal dimmer module for commercial lighting applications*
- *Installs in a Crestron® CAEN enclosure*
- *Supports dimmable LED, incandescent, electronic low-voltage, magnetic low-voltage, and 2-wire fluorescent lighting loads*
- *Single or dual feeds — two four-channel dimmers in one module*
- *Rated 2.5 Amps per channel at 277 Volts AC*
- *Auto load type detection*
- *Forward and reverse phase modes*
- *Customizable dimming curves via software*
- *Patented Constant Power dimming technology*
- *Zero-cross filter technology*
- *Extreme stability under noisy power line conditions*
- *Dramatically reduced lamp flicker*
- *Over-current, over-voltage, and over-temperature protection*
- *Built-in air gap relay per channel*
- *Convection cooled for silent operation*
- *Closure-activated override mode*
- *UL® 924 and CSA® C22.2 No. 141-15 listed for emergency lighting control*
- *Crestron system integration via Cresnet®*
- *Includes terminal block for high-voltage wiring*
- *CEC Title 24 2013 compliant*



The Crestron® GL-CAEN-2DIMU8-277 is an eight-channel, two-feed universal dimmer module designed for 277V commercial lighting system applications. It installs in a CAEN enclosure and provides control of a wide range of dimmable lighting load types including electronic and magnetic low-voltage, LED, incandescent, and 2-wire fluorescent. It may also be used to switch non-dimmable lighting loads. Dual feed capability provides two independent four-channel dimmers in one module space. Each output channel is rated for 692 Watts (2.5 Amps), with a total module rating of 5540 Watts (20 Amps) when fed from two separate 15 or 20 Amp feeds.

Auto-Detecting Universal Dimming

Under normal operation, the GL-CAEN-2DIMU8-277 detects the connected load type on each channel and selects the appropriate operating mode for each channel automatically. Reverse phase (trailing edge) mode supports incandescent and electronic low-voltage load types, while forward phase (leading edge) mode handles magnetic low-voltage, neon, and other inductive load types. The operating mode may also be selected manually via software or programmatically via the control system.

Ultra-Reliable Performance

The GL-CAEN-2DIMU8-277 is a technologically advanced universal dimmer that delivers unparalleled reliability and optimal dimming performance, even in noisy electrical environments. Patented "Constant Power" technology dramatically reduces lamp flicker and maximizes stability under noisy power conditions. This cutting-edge technology quickly adjusts the dimmer's on-time response to changes in input voltage so that power is constantly and consistently delivered to the load. Voltage sag and peak overshoot no longer cause changes in load output, ensuring reliable lighting performance and a comfortable working environment.

To further reduce lamp flicker, the GL-CAEN-2DIMU8-277 features proprietary zero-cross filter technology which compensates for line voltage and frequency fluctuations for superior immunity to noise on the power line. Built-in protection against over-current, over-voltage, and over-temperature conditions helps to prevent failure due to temporary wiring faults and other abnormalities. An air-gap relay on each channel output allows individual circuits to be serviced without disabling the entire module. Low-maintenance convection cooling with over-sized heatsinks affords silent operation with no mechanical components to wear out.

Emergency Lighting Control

The GL-CAEN-2DIMU8-277 is UL® 924 and CSA® C22.2 No. 141-15 listed for use in controlling emergency lighting loads. In the event of a power failure, a contact closure from a power loss sensor (Crestron GLS-PLS-120/277, sold separately) activates the override mode in the GL-CAEN-2DIMU8-277 to turn on each designated lighting load if it is off (assuming line power is supplied by a backup power source). The override dimming level can be preset to any value when commissioning the lighting system, so even if the load is already on prior to a power failure, it will change to the preset level when override mode is activated.

Centralized Lighting Cabinet Installation

Crestron GL-CAEN series commercial lighting control modules are designed to be installed in a CAEN wall mount enclosure. Available in a variety of sizes, CAEN enclosures provide a scalable, high-density centralized lighting control solution for any-sized commercial building or facility. A selection of GL-CAEN module types is offered to accommodate a wide range of load types and system configurations.

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Each lighting control module, including the GL-CAEN-2DIMU8-277, ships complete with a DIN rail terminal block for termination of the high-voltage feed and load wiring. This terminal block mounts beside the module within the enclosure. Low-voltage control signals are bussed between each of the modules within an enclosure via a simple 5-wire link (interconnect jumpers included), which terminates to a single terminal block (model CAEN-BLOCK, sold separately) at the bottom of the enclosure.

Cresnet® Communications

The GL-CAEN-2DIMU8-277 interfaces with a Crestron control system (a.k.a., control processor or automation processor) via Cresnet. Cresnet is a simple 4-wire network bus that provides the communications backbone for a system of Crestron lighting dimmers, switches, keypads, shades, thermostats, and other devices.

SPECIFICATIONS

Load Control

Dimmer Channels: 8
Dimmable Load Types: LED, incandescent, electronic low voltage, magnetic low voltage [1], 2-wire fluorescent
Switched Load Types: Non-dimmable lighting [1]
Per Channel Load Rating: 2.5 Amps (692 Watts)
Per Group Load Rating: Group 1 (Channels 1-4): 10 Amps (2770 Watts); Group 2 (Channels 5-8): 10 Amps (2770 Watts)
Module Total Load Rating: 20 Amps (5540 Watts) [2]
Minimum Load: 0 Watts
Line/Load Voltage: 277 Volts AC, 50/60 Hz; requires one or two single-phase feeds (may be same or different phases)

Connections

Via Terminal Block (included):

LINE 1 – 2: (2) Screw terminals, black, line power feed inputs (per group)
DIM 1 – 8: (8) Screw terminals, red, load outputs (per channel)
N IN 1 – 2: (2) Screw terminals, white, line power feed neutrals (per group)
N OUT 1 – 8: (8) Screw terminals, white, load neutrals (per channel)

Note: Each terminal accepts one 14-10 AWG wire.

Module Interconnect: (2) 5-pin 0.156 inch headers;
Cresnet/Override interconnect ports;
Each connects to the adjacent module using the interconnect jumper provided; connects to a CAEN-BLOCK (sold separately) when installed in the lowest position within the enclosure

Controls & Indicators

PWR: (1) Green LED, indicates line power is applied to the LINE 1 terminal
NET: (1) Yellow LED, indicates Cresnet communication with the control system
MODE (not labeled): (1) Pushbutton, selects the dimming mode when in Local mode
SETUP: (1) Pushbutton, used to enter Local mode and test each channel
1 – 8: (8) Tri-color LEDs, each indicates the status, dimming mode, or error condition for the corresponding channel

Environmental

Temperature: 32° to 104° F (0° to 40° C)
Humidity: 10% to 90% RH (non-condensing)
Heat Dissipation: 12 BTU/hr + (3.8 BTU/hr x Load Current in Amps); 88 BTU/hr at maximum load

Enclosure

Gray metal with black heat sink, surface mount module with (2) integral mounting flanges;
Occupies 1 module space in a CAEN enclosure

Dimensions

Height: 7.63 in (194 mm)
Width: 6.92 in (176 mm)
Depth: 3.43 in (87 mm)
Dimensions do not include the terminal block

Weight

3.5 lbs (1.6 kg)

Compliance

UL Listed for US & Canada, IC, UL 508, UL 924, CSA C22.2 No. 14, CSA C22.2 No. 141-15, CEC Title 24 2013, FCC Part 15 Class A digital device

MODELS & ACCESSORIES

Available Models

GL-CAEN-2DIMU8-277 KIT: 8 Channel Universal Dimmer Module w/Terminal Block, 2 Feeds, 277V

Available Accessories

CAEN: Automation Enclosures

Notes:

1. Do not use to dim or switch large magnetic transformers greater than 100 VA. Do not connect more than eight magnetic transformers per channel regardless of lamp wattage.
2. When connecting to a third-party arc fault breaker, the total load should not exceed 1,000 Watts per feed.

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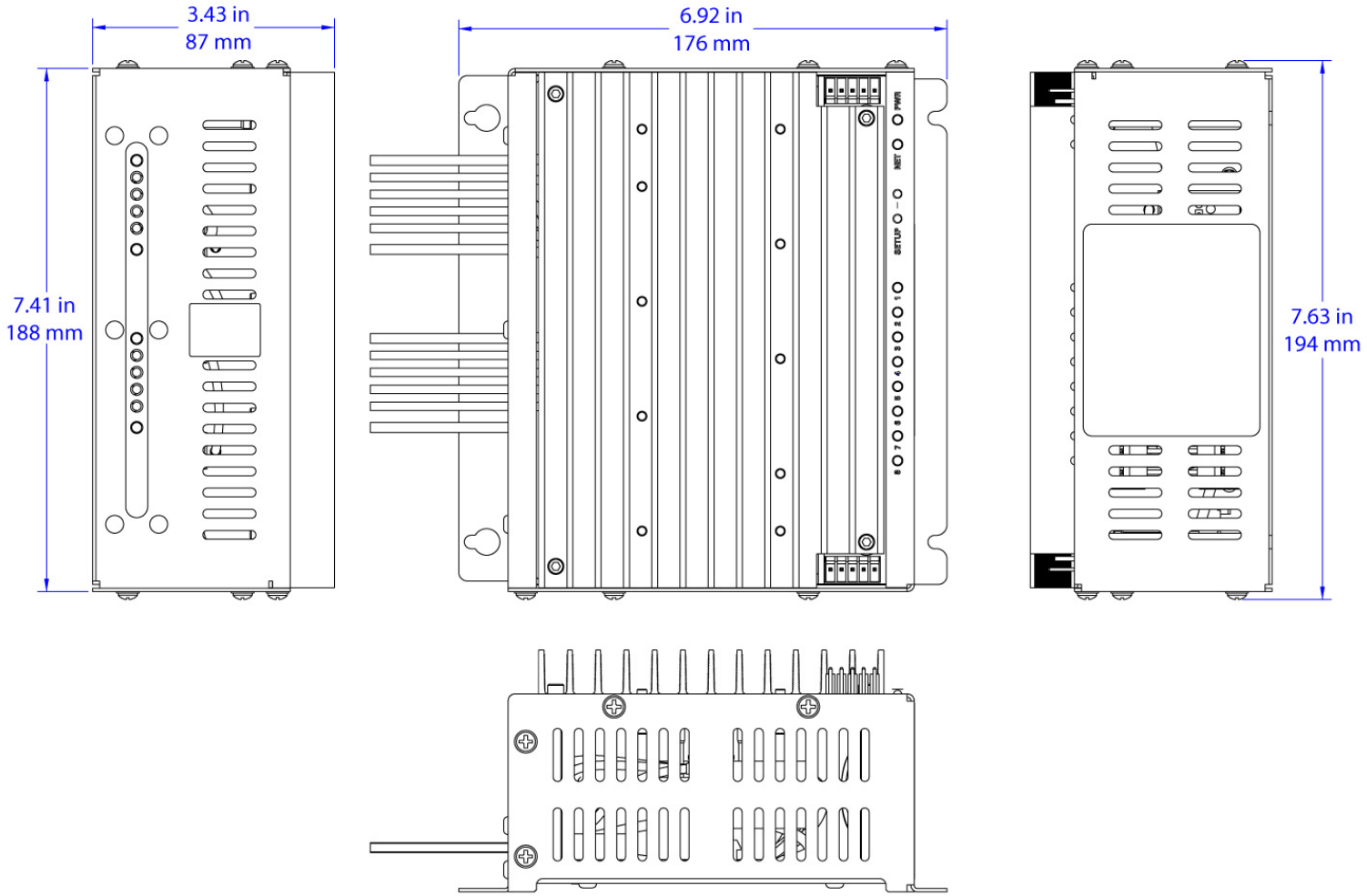
This product may be purchased from an authorized Crestron dealer. To find a dealer, please contact the Crestron sales representative for your area. A list of sales representatives is available online at www.crestron.com/salesreps or by calling 800-237-2041.

The specific patents that cover Crestron products are listed online at: patents.crestron.com.

Certain Crestron products contain open source software. For specific information, please visit www.crestron.com/opensource.



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Specifications subject to change without notice. Revised 08/10/17