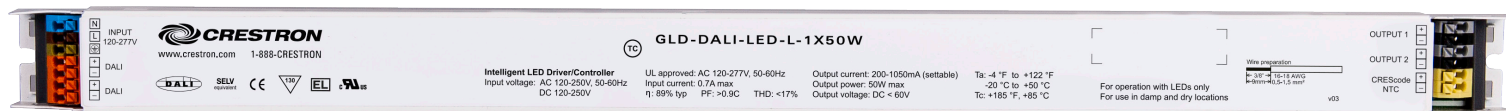


GLD-LED-50W

Crestron Green Light® 50W Dimmable LED Drivers



- > Programmable, dimmable, high-power LED drivers
- > DALI® or 0-10 Volt controllable
- > Superior, smooth dimming to below 1%
- > Excellent color stability, even at low dimming levels
- > Linear or logarithmic dimming curve
- > High efficiency over a wide power and voltage range
- > CREScode™ programmable for use with a wide variety of LED fixtures
- > Cost-reducing due to fewer inventory requirements
- > Multiple outputs with independent LED current settings
- > 2-channel models that support tunable white lighting and direct-indirect fixtures
- > NTC interface for robust thermal management
- > Available in long or short case form factors
- > Compatible with 120 Volt, 230 Volt, and 277 Volt AC systems
- > 50 Watt power rating (100 Watt also available)

Crestron Green Light® Dimmable LED Drivers (GLD-LED Series) provide manufacturers of dimmable LED lighting fixtures with a high-performance, cost-saving LED driver solution. Offered in two compact case styles, the GLD-LED series fits easily in a wide range of enclosures and fixture designs. The choice of DALI® or 0-10 Volt control enables compatibility with virtually any lighting control system. All models are operable between 120 and 277 Volts, reducing inventory costs for manufacturers serving multiple regions.

Superior, High-Power Dimming

Employing a combination of duty-cycle and current-dimming technologies, Crestron Green Light LED drivers provide smooth, deep dimming with excellent color stability to below 1%. A choice of 50 Watt and 100 Watt models affords high-power capability for use with a wide range of LED fixtures. (Refer to the GLD-LED-100W spec sheet for 100 Watt models.)

2-Channel Option

Models featuring DALI control are available in either single or 2-channel configurations. The 2-channel option provides two independently-controllable channels in one housing, offering a cost-saving, space-efficient solution for use with tunable white lighting and fixtures with separate direct and indirect lighting components.

Multiple Outputs

To support a wider variety of fixture configurations, the single-channel 50 Watt models include two LED outputs. The two outputs are controlled as one; however, the output current for each can be separately set by the fixture manufacturer. The 2-channel 50 Watt models provide just one output per channel.



DALI Lighting Control

DALI (Digital Addressable Lighting Interface) is a lighting control protocol that allows multiple lighting fixtures to be networked using a single daisy-chained control wire. Up to 64 fixtures can exist on a single DALI channel. DALI provides a bidirectional interface enabling independent control and monitoring of each individual fixture. DALI is optimal for use in applications that require granular control of each fixture, such as open office floor plans, AV-equipped conference rooms, and daylight harvesting. In addition to DALI dimmable LED drivers, Crestron® offers a full line of lighting control products utilizing DALI technology.

0-10 Volt Dimming Control

This simple interface affords essential dimming control using a 0 to 10 Volt DC control signal. Crestron Green Light 0-10 Volt dimmable LED drivers afford high-quality, single-channel dimming, and are compatible with both current sink and current source controls.

CREScode™ Programmability

Crestron Green Light Dimmable LED Drivers are programmable using the [CREScode LED Driver Configuration Tool](#), allowing each LED driver to be matched perfectly to its fixture at the factory. The hardware and software utility provides a simple means of selecting the dimming curve and setting the minimum dimming level, NTC temperature and output current. The output current can be set individually for each LED output. The use of programmable LED drivers reduces inventory requirements, allowing a single driver model to be used with numerous different fixtures.

OEM Fixture Partner Program

Crestron® works directly with leading global fixture manufacturers to provide complete access to its entire line of ballasts and drivers. Crestron works with each partner to ensure excellence in quality, performance, and function and to deliver superior dimming, ease of commissioning, and complete control. All Crestron products are backed by our unparalleled design assistance and support services.

This product is for sale to Crestron OEM Fixture Partners Only. To learn more about our OEM Fixture Partners or to become one, please contact OEM@crestron.com.

SPECIFICATIONS

Input

Voltage: 120-277 Volts AC
Frequency: 50/60 Hz
Current: 0.7 Amp maximum

Output

Number of Class 2 LED Outputs: Single-channel 50W models = 2;
2-channel 50W models = 1 per channel;
Number of Dimming Channels: 1 or 2 depending on model
Voltage: 55 Volts typical
Power: 50 Watts maximum
Current Range: configurable from 200 mA to 1050 mA per output
Current Accuracy: $\pm 5\%$

Dimming

Type: Constant current
Range: 0-100%
Curve: Configurable for linear or logarithmic
Control Interface: DALI® or 0-10 Volts DC (current sink and current source compatible), depending on model

General

Standby power: <0.5 Watt
Inrush current: 30 mA²s at 277 Volts
Surge protection: 1 kV differential mode surge, 2 kV common mode surge
Efficiency: 89% at full load, $\geq 85\%$ above 67% load
Power Factor: >0.9
THD: <17% at full load
Thermal Management: Supports LED temperature feedback using 47k Ohm NTC thermistor (not included)
Configurable Parameters (via CREScode™): Output current (per LED output), dimming curve, minimum dimming level, NTC temperature

Connections

INPUT 120-277V: (1) 3-position pushbutton terminal block for Line, Neutral, and Ground^[1]
DALI (DALI models only): (2) 2-position pushbutton terminal blocks for interface to DALI bus^[1]
0-10V (LV models only): (1) 2-position pushbutton terminal block for 0-10 Volt control input^[1]
OUTPUT 1 – 2: (2) 2-position pushbutton terminal blocks for LED outputs^[1]
CREScode/NTC: (1) 2-position pushbutton terminal block for interface to CREScode configuration tool during factory setup, and for 47k Ohm NTC thermistor during operation^[1]

Environmental

Temperature Range: -4° to 122° F (-20° to 50° C)
Maximum Tc: 185° F (85° C)

Life Expectancy: 50,000 hours at or below maximum rated ambient temperature
MTBF: 480,000 hours

Enclosure

Metal, painted

Dimensions

Long Case: Height: 1.18 in (30 mm);
Width: 17.48 in (444 mm);
Depth: 0.83 in (21 mm)
Short Case: Height: 2.99 in (76 mm);
Width: 5.12 in (130 mm);
Depth: 1.18 in (30 mm)

Weight

Long Case: 12.7 oz (360 g)
Short Case: 12.4 oz (350 g)

Certifications

CE;
UL: Recognized Component for US and Canada according to UL1310 and UL8750; US: Class 2 output; Canada: Non-Class 2 output; IEC 61347-1, IEC 61347-2-13, IEC 62384 + A1, EN 55015 + A1, EN 55022 + A1, IEC 61000-3-2, IEC 61547 + A1, IEC 62386-101/102/207;
FCC: Title 47CFR Part 15 Class B

MODELS & ACCESSORIES

Available Models

GLD-DALI-LED-L-1X50W: 50W DALI Dimmable LED Driver, Long Case
GLD-DALI-LED-S-1X50W: 50W DALI Dimmable LED Driver, Short Case
GLD-DALI-LED-L-2X50W: 2 Channel 50W DALI Dimmable LED Driver, Long Case
GLD-DALI-LED-S-2X50W: 2 Channel 50W DALI Dimmable LED Driver, Short Case
GLD-LV-LED-L-1X50W: 50W 0-10V Dimmable LED Driver, Long Case
GLD-LV-LED-S-1X50W: 50W 0-10V Dimmable LED Driver, Short Case

Available Accessories

GLDA-LED-PROG-CRESCODE: CREScode™ LED Driver Configuration Tool

Notes:

1. All terminal blocks accommodate 20 to 16 AWG (0.5 to 1.5 mm²) solid or stranded copper conductors.

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, visit www.crestron.com/opensource.

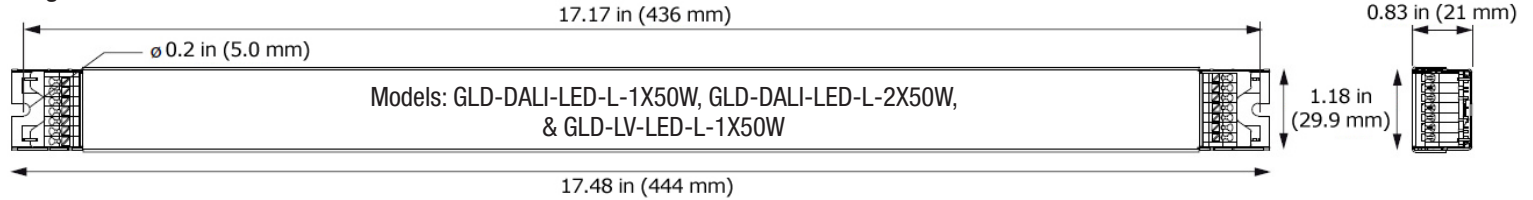
GLD-LED-50W Crestron Green Light® 50W Dimmable LED Drivers

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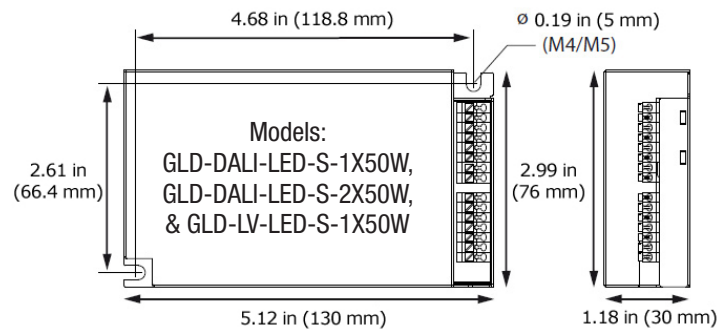
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DIMENSIONAL DIAGRAMS

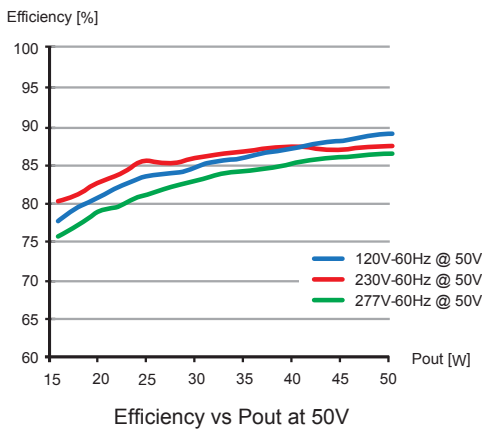
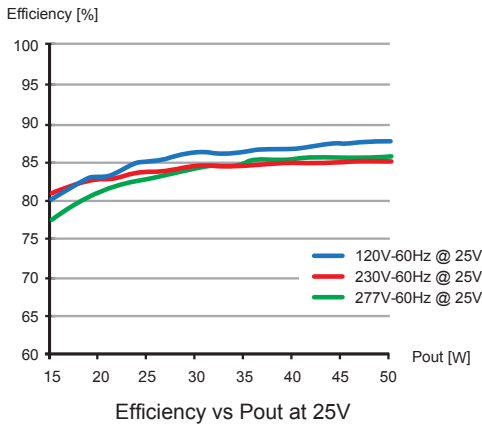
Long Case



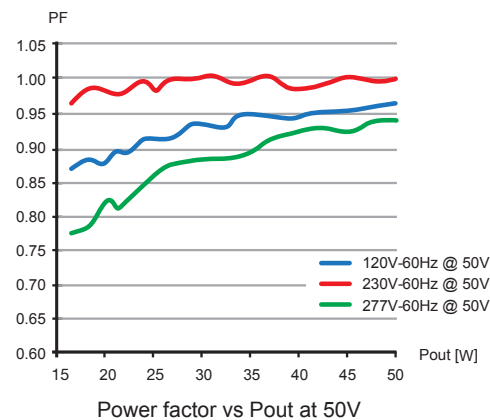
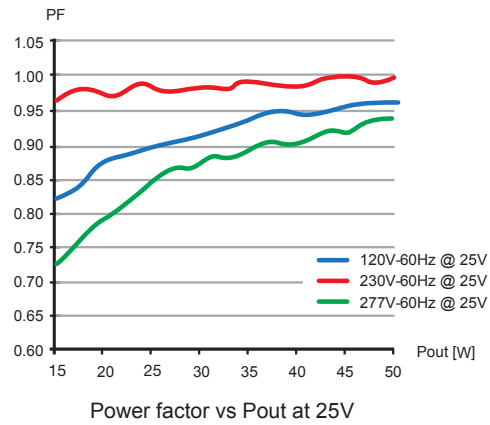
Short Case



EFFICIENCY DATA



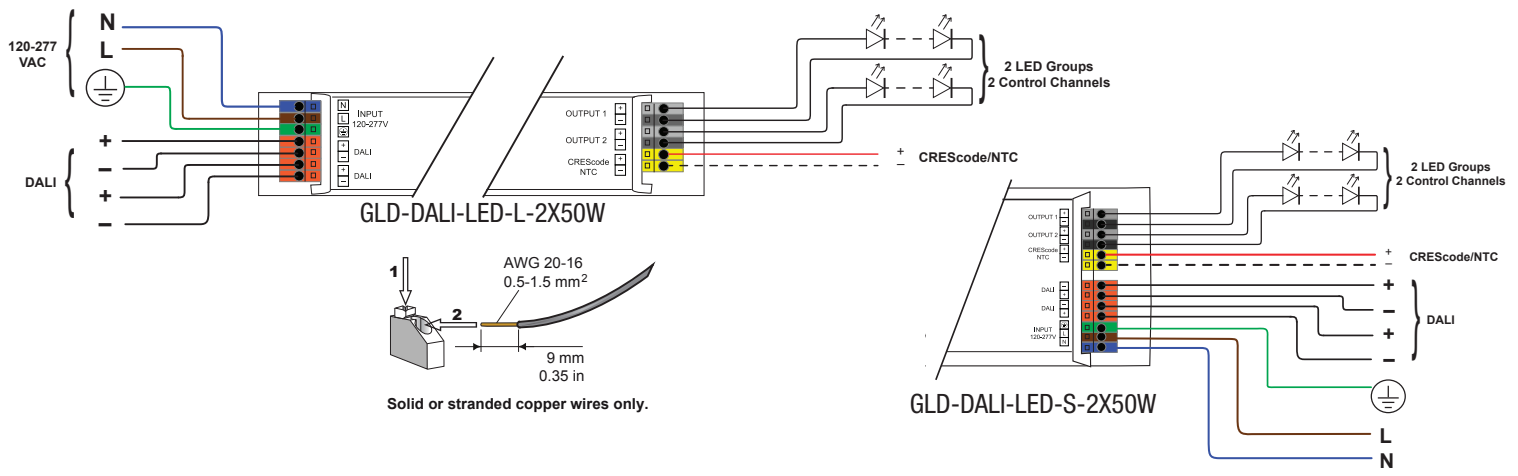
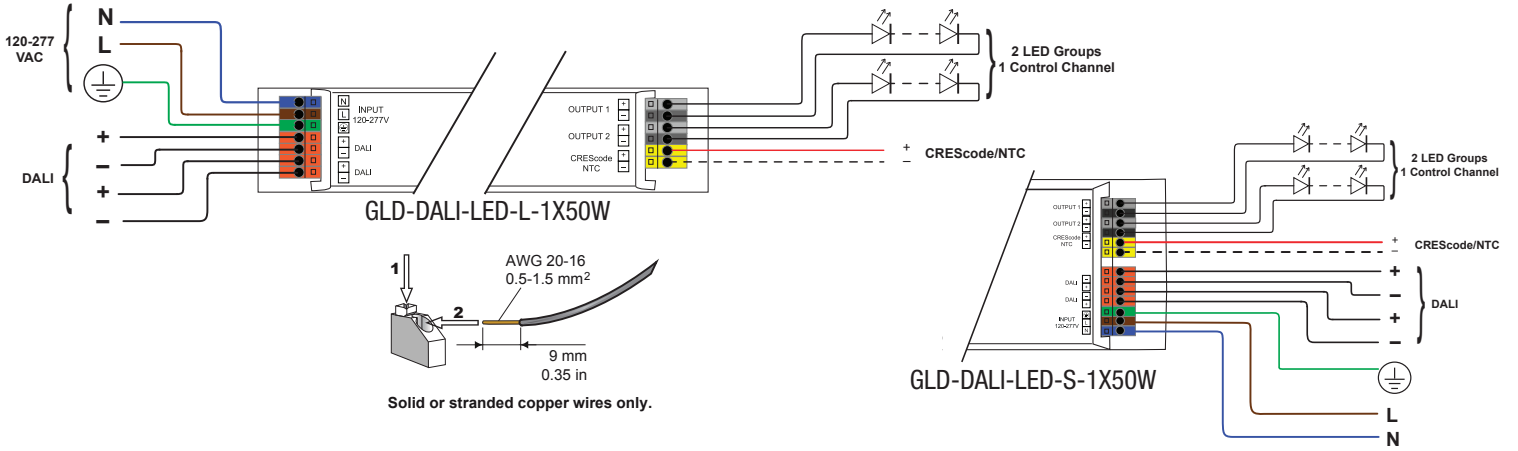
POWER FACTOR DATA



GLD-LED-50W Crestron Green Light® 50W Dimmable LED Drivers

WIRING DIAGRAMS

DALI



0-10V

