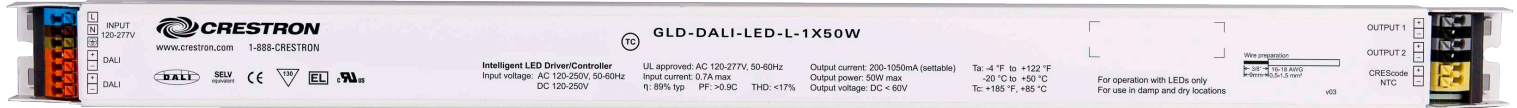


# GLD-LED-50W

## Crestron Green Light® 50W Dimmable LED Drivers



- > Programmable, dimmable, high-power LED drivers
- > DALI® or 0-10V 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
- > Lowers costs by reducing inventory requirements
- > Multiple outputs with independent LED current settings
- > 2-channel models support tunable white lighting and direct-indirect fixtures
- > NTC interface for robust thermal management
- > Available in long or short case form factors
- > Compatible with 120V, 230V, and 277V AC systems
- > 50W power rating (100W also available)

Crestron Green Light® Dimmable LED Drivers (GLD-LED) 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 into a wide range of enclosures and fixture designs. The choice of DALI® or 0-10V control enables compatibility with virtually any lighting control system. All models are operable between 120V and 277V, reducing inventory costs for manufacturers serving multiple regions.

### Superior, High-Power Dimming

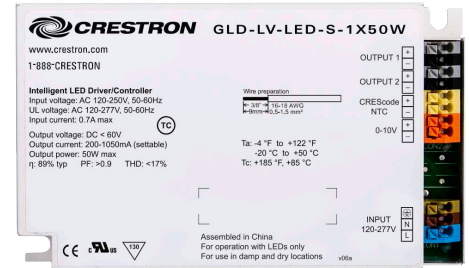
Employing a combination of duty-cycle and current dimming technologies, Crestron Green Light LED drivers provide smooth, deep dimming with excellent color stability to below 1%. A choice of 50W and 100W models affords high-power capability for use with a wide range of LED fixtures. (Refer to the GLD-LED-100W spec sheet for 100W 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 50W models include two LED outputs. The two outputs are controlled as one, however the output current for each can be set separately by the fixture manufacturer. The 2-channel 50W 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.

### 0-10V Dimming Control

This simple interface affords essential dimming control using a 0 to 10 Volt DC control signal. Crestron Green Light 0-10V 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/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 to deliver superior dimming, ease of commissioning, and complete control. All Crestron products are backed by our unparalleled training, design assistance, and support services.

To learn more about our OEM Fixture Partners or to become one, please contact [OEM@crestron.com](mailto: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:** ±5%

### Dimming

**Type:** Constant current

**Range:** 0-100%

**Curve:** Configurable for linear or logarithmic

**Control Interface:** DALI® or 0-10V (current sink and current source compatible) depending on model

### General

**Standby power:** <0.5 Watt

**Inrush current:** 30 mA<sup>2</sup>s @ 277 Volts

**Surge protection:** 1 kV differential mode surge, 2 kV common mode surge

**Efficiency:** 89% at full load, ≥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 CREStoCode™):** 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

**DALI (DALI models only):** (2) 2-position pushbutton terminal blocks for interface to DALI bus

**0-10V (LV models only):** (1) 2-position pushbutton terminal block for 0-10V control input

**OUTPUT 1 – 2:** (2) 2-position pushbutton terminal blocks for LED outputs

**CREStoCode/NTC:** (1) 2-position pushbutton terminal block for interface to CREStoCode configuration tool during factory setup, and for 47k Ohm NTC thermistor during operation

Note: All terminal blocks accommodate 20 to 16 AWG (0.5 to 1.5 mm<sup>2</sup>) solid or stranded copper conductors

### 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-CREStoCODE:** CREStoCode™ LED Driver Configuration Tool

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## Notes:

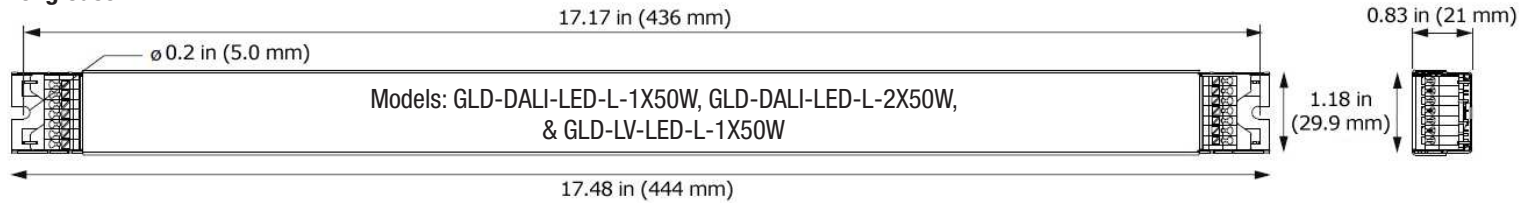
The specific patents that cover Crestron products are listed online at: [patents.crestron.com](http://patents.crestron.com).

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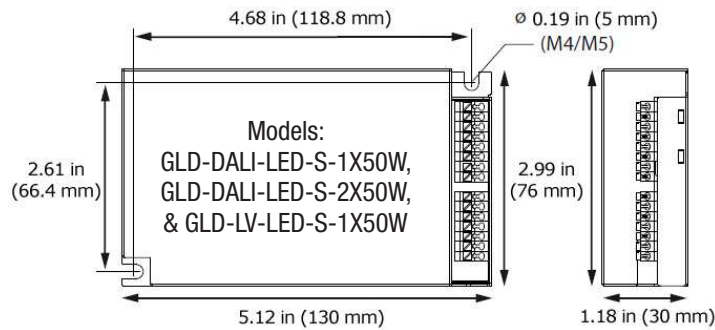
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## DIMENSIONAL DIAGRAMS

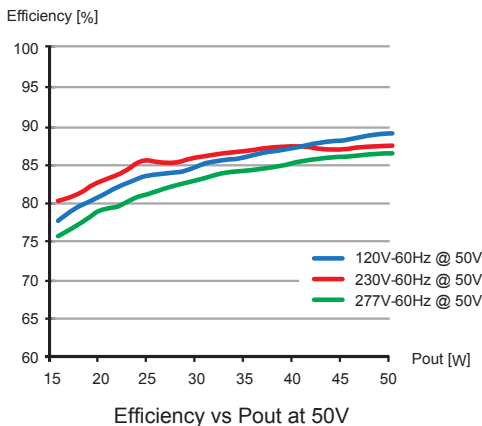
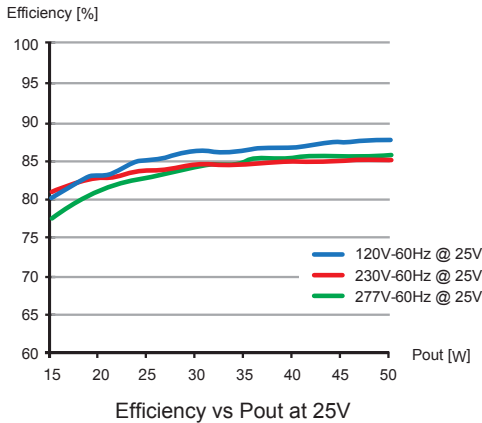
### Long Case



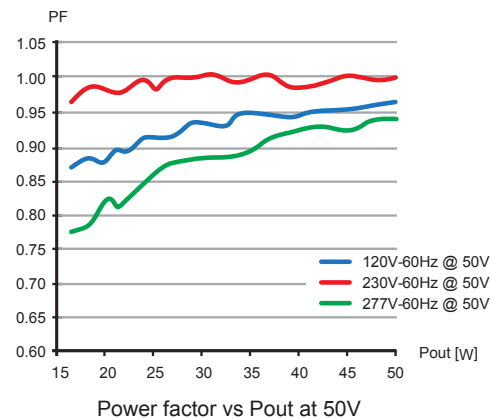
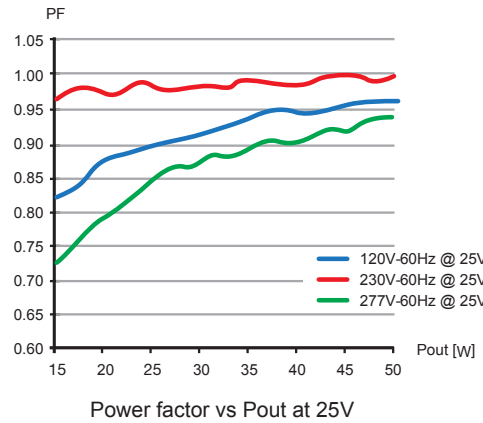
### Short Case



## EFFICIENCY DATA



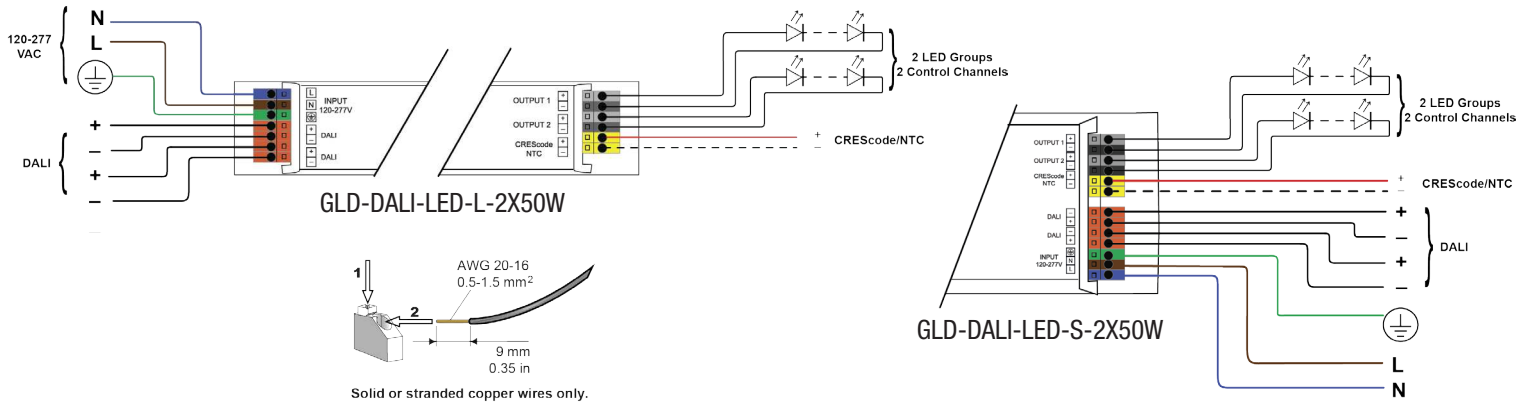
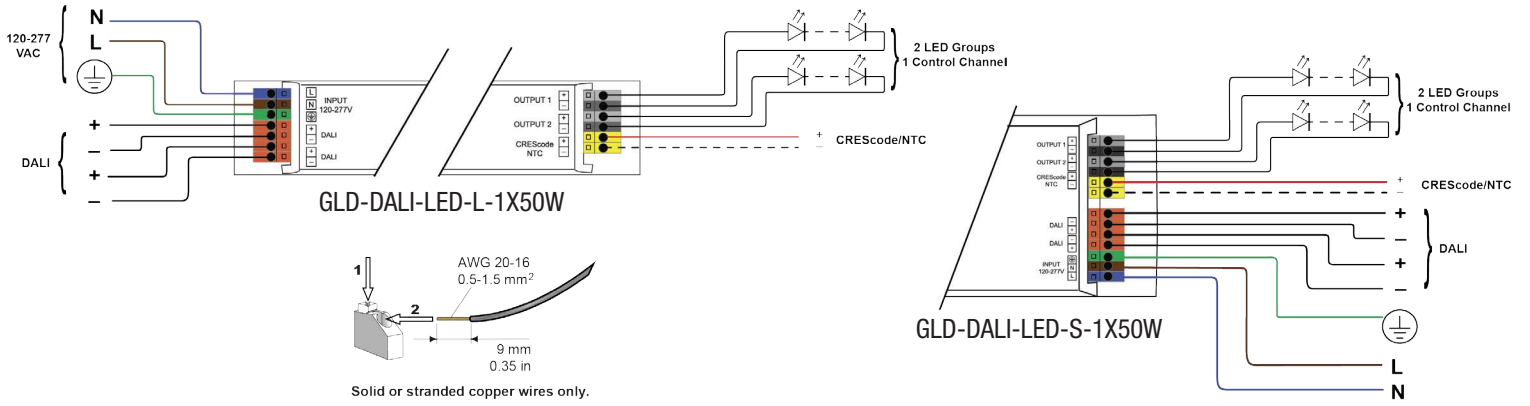
## POWER FACTOR DATA



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## WIRING DIAGRAMS

### DALI



### 0-10V

