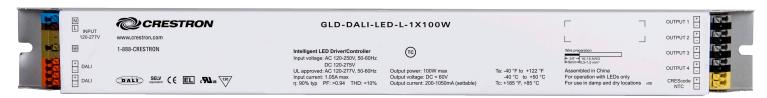
## GLD-LED-100W

# Crestron Green Light® 100W 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
- > 100 Watt power rating (50 Watt also available)

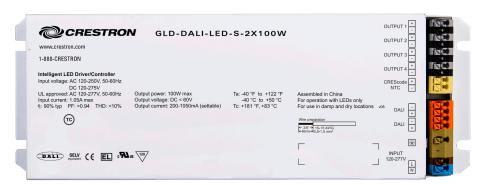
Crestron Green Light® Dimmable LED Drivers (GLD-LED Series) provide manufacturers of dimmable LED lighting fixtures with a high-performance, cost-saving LED driver solution. Offered in two compact case styles, the GLD-LED series fits easily in a wide range of enclosures and fixture designs. The choice 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-50W spec sheet for 50 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, Crestron Green Light LED drivers include multiple LED outputs. The outputs are controlled as one; however, the output current for each can be separately set by the fixture manufacturer. The single-channel 100 Watt models have four outputs, while the 2-channel 100 Watt models provide two outputs 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.



## GLD-LED-100W Crestron Green Light® 100W Dimmable LED Drivers

## **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 (100W models): 1.05 Amps maximum at 120 Volts, 60 Hz; 0.5 Amp maximum at 230 Volts, 50 Hz; 0.45 Amp maximum at

277 Volts, 60 Hz

#### Output

Number of Class 2 LED Outputs: Single-channel 100W models = 4; 2-channel 100W models = 2 per chan.

Number of Dimming Channels: 1 or 2 depending on model

Voltage: 57 Volts typical, 60 Volts maximum

Power: 100 Watts maximum

Current Range: Configurable from 200 mA to 1050 mA per output

Current Accuracy: ±5%

## Wiring Data

Wire type: Solid or stranded copper Wire strip length: 9mm, 0.35 in

Wire core cross section: 0.5 - 1.5 mm<sup>2</sup>, AWG 20 - 16

Maximum LED wiring length:

AWG value	20	19	18	17	16
Distance (m)	14	18	22	28	36
Distance (ft)	46	59	72	92	118

## 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: 35 Amps 240  $\mu$ S at 120 Volts, 60 Hz; 67 Amps 240  $\mu$ S at

230 Volts, 50 Hz; 75 Amps 240 µS at 277 Volts, 60 Hz Surge protection: 3 kV L to N, 4 kV L/N to ground

Efficiency: 90% at full load, ≥87% above 50 Watt output

Power Factor: >0.94 THD: <10% 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

0-10V control input [1]

**OUTPUT 1 – 4:** (4) 2-position pushbutton terminal blocks for LED outputs<sup>[1]</sup> **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: -40° to 122° F (-40° to 50° C) Maximum Tc (Long Case Models): 185° F (85° C) Maximum Tc (Short Case Models): 181° F (83° C)

Life Expectancy: 50,000 hours at or below maximum rated

ambient temperature MTBF: 480,000 hours

#### **Enclosure**

Metal, painted

#### **Dimensions**

Long Case: Height: 1.61 in (41 mm);

Width: 14.57 in (370 mm); Depth: 1.18 in (30 mm)

Short Case: Height: 3.15 in (80 mm);

Width: 9.06 in (230 mm); Depth: 1.18 (30 mm)

#### Weight

**Long Case:** 31.1 oz (880 g) **Short Case:** 31.1 oz (880 g)

## Certifications

CF:

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



## GLD-LED-100W Crestron Green Light® 100W Dimmable LED Drivers

## **MODELS & ACCESSORIES**

#### **Available Models**

GLD-DALI-LED-L-1X100W: 100W DALI Dimmable LED Driver, Long Case GLD-DALI-LED-S-1X100W: 100W DALI Dimmable LED Driver, Short Case GLD-DALI-LED-L-2X100W: 2 Channel 100W DALI Dimmable LED Driver, Long Case

GLD-DALI-LED-S-2X100W: 2 Channel 100W DALI Dimmable LED Driver, Short Case

GLD-LV-LED-L-1X100W: 100W 0-10V Dimmable LED Driver, Long Case GLD-LV-LED-S-1X100W: 100W 0-10V Dimmable LED Driver, Short Case

#### Available Accessories

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

#### Notes:

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

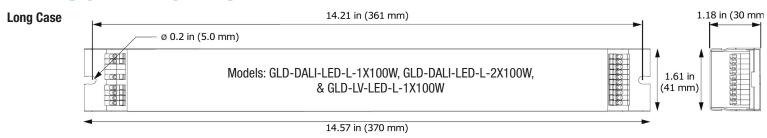
This product may be purchased from an authorized Crestron dealer. To find a dealer, please contact the Crestron sales representative for your area. A list of sales representatives is available online at www.crestron.com/salesreps or by calling 800-237-2041.

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

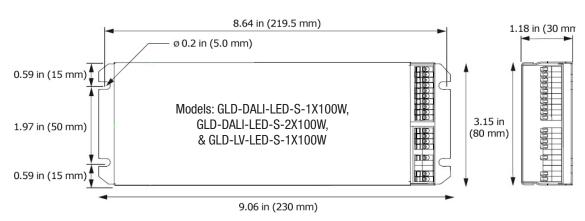
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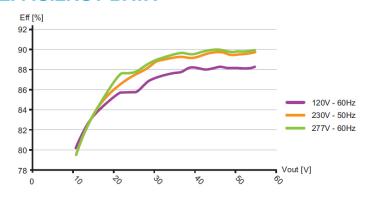
#### **DIMENSIONAL DIAGRAMS**



**Short Case** 

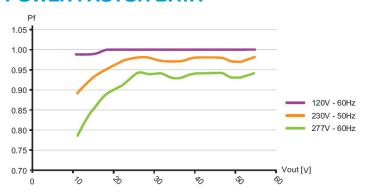


#### **EFFICIENCY DATA**



Efficiency vs Vout at Ta 25 °C / 77 °F

#### **POWER FACTOR DATA**

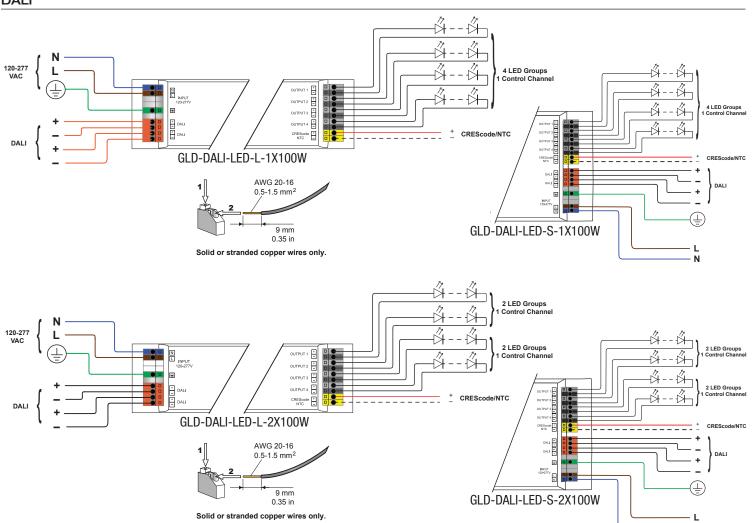


Power factor vs Vout at Ta 25 °C / 77 °F

## **GLD-LED-100W** Crestron Green Light® 100W Dimmable LED Drivers

## **WIRING DIAGRAMS**

#### **DALI**



#### 0-10V

