GREAlpha®
LED Power Specialists

Constant Current Output LED dimming module

This compact dimming module is an add-on for the GLV constant voltage type LED Driver. Featuring a revolutionary snap-on design, the GLV powering platform can be easily upgraded with dimming for constant current or constant voltage applications. The GLD Dim series provide full range, flicker free dimming. 0-10V/1-10V/Switch Dim, and DALI type dimming modes supported.

GLD-DIM
Contant Current LED Dimming Module

CE   RoHS COMPLIANT   DALI

Features

· Spring-loaded terminal for easy installation to luminaires
· Constant current output for dimming CoBs
· Typical 90% Efficiency
· Wide range DC input 10-48V
· Dimming range: 0-100%
· User selectable output current
· 0/1-10V, Switch and DALI version available

Applications

. Down-Lights
. Light Panels
. Office General Illumination
. Retrofit Lighting
· Residential Lighting
· Spotlights
· Smart Lighting

Model Number	Input Voltage Range (V_{in})	Channel(s) Output	Output Rating		Max. Output Power (W)
			Current selectable values(A)	Compliance Voltage (V_{out})	
				min max	
GLD-DIM1	10 - 48	1	1.05/0.9/0.7/0.5/0.35 (Vin - 3V) / 2 Vin - 3V		50
GLD-DIM1X-R	10 - 48	1	1.05/0.9/0.7/0.5/0.35 (Vin - 3V) / 2 Vin - 3V		50
GLD-DIM1X-H	10 - 48	1	1.05/0.9/0.7/0.5/0.35 (Vin - 3V) / 2 Vin - 3V		50
GLD-DIM1-DALI	10 - 48	1	1.05/0.9/0.7/0.5/0.35 (Vin - 3V) / 2 Vin - 3V		50

DIM1 : 0/1-10V Dimming, CC output; DIM1X-R: Switch dimming for residential, CC output; DIM1X-H : Switch dimming for hotel, CC output; DIM-DALI: DALI dimming, CC output. The voltage difference between Vout(or input to LED) and Vin must not exceed 12V.

Input Specification

Voltage Range	10-48Vdc	Recommended input wire length	Max 3m
Over Voltage Protection	@Vin=50V	Dimming Range	0-100%

Output Specification

Output Voltage	Refer to Spec. Table	Selectable	1.05/0.9/0.7/0.5/0.35 A (Default Output Current Setting : 350mA)
Power Efficiency	Typical 90% Efficiency	Over Temperature Protection	Power MOSFET @ 105
PWM Frequency	1k Hz	Recommended LED output wire length	up to 30m*
Max. Output Power	50W	Other Protection Modes	Thermal shutdown with auto restart overload protection

* --Depends on LED specification

Environmental Specification

MTBF	Cooling	Max Case Temp	Operating Temp	Storage Temp
55,000 Hours @ 25°C full load	Convection	60°C	-25°C - 40°C @ Full load	-25°C - 85°C
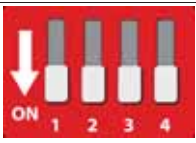
Compliance/Safety

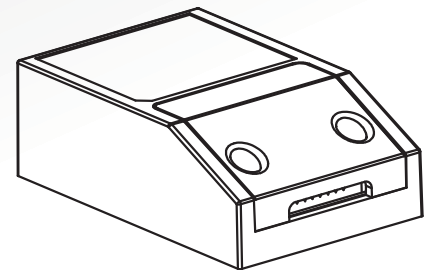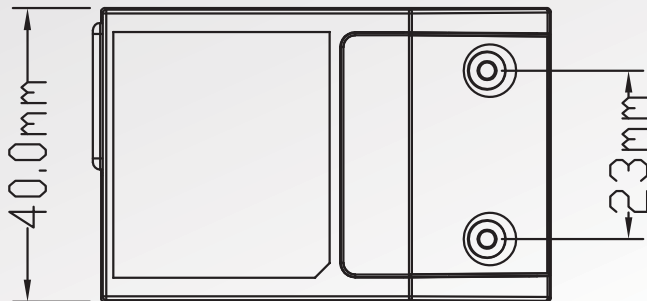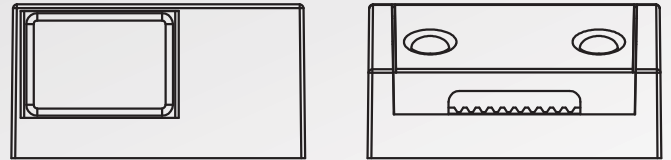| Safety Standards:	EU Standard: CE & CB, included EMC & EMI- EN55015, IEC61558-1, SELV, IEC 61347-2-13 Dimming Standard: IEC62386-101, 102 and 207(DALI Ver.)
Weatherability:	IP 20

Mechanical Specification

Power Unit Dimensions	61.0mm (L) x 40.0mm (W) x 21.0mm (H)
Case Design/Material	Polycabonate White
Connector Type	Terminal block connectors
Connectors	Vin+, Vin-, LED+, LED-, 0-10V: Gray-, Purple+; DALI: DALI, DALI
Wire Size	24-16 AWG(0.25-1mm²)

Pin Assignment

Setting	Output Current
ON 1 2 3 4	1050 mA
ON 1 2 3 4	900 mA
ON 1 2 3 4	700 mA
ON 1 2 3 4	500 mA
ON 1 2 3 4	350 mA

Mechanical Diagram

21.0mm

61.0mm

40.0mm

23mm
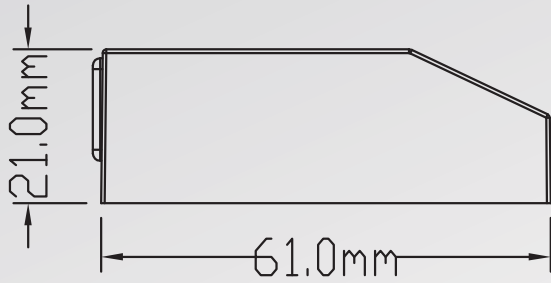
Packing Information:

Weight: 0.05kg/pcs; 8.00kg/carton;
150pcs/ carton; L435*W250*H193(mm)

GLD-DIM_201708

Wiring Diagrams

Driver DC Out

L
N
GND

GREAlpha
The LED Driver Expert

SLD/XLD/GLV Series
Class 2 LED Drivers
(≤48V, 5A per Channel)
OR
Any Class 2, CV Driver
(≤48V, 5A max)

Vin+
Vin-

**GLD-DIM1
Dimming Module**

LED+
LED-

Purple +   Gray -

**Customer Supplied
Dimming Devices Options:**

a) 1-10V Electronic Dimmer Control
from Levitron, Lutron, Hunt, etc.

b) Adjustable DC Source

(e.g. DC Power supply or 0-10V Control System)
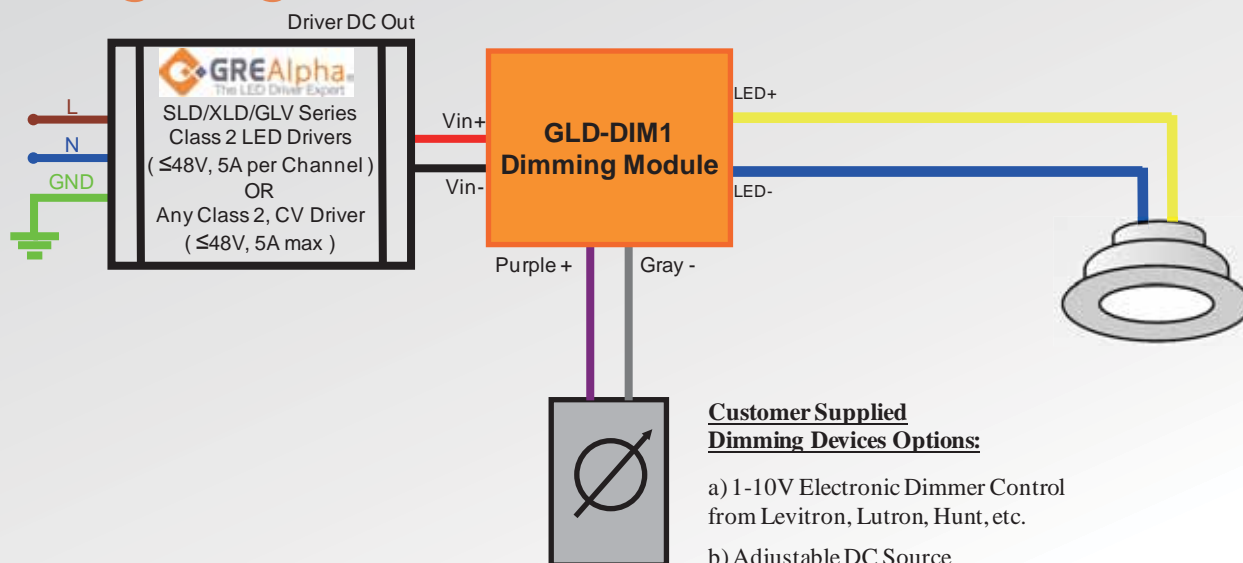
** Note alternate simple on-off operation:
- Connecting the Purple and Grey output together will provide 0% brightness.
- Leave Purple and Grey output open will provide 100% brightness.

0/1-10V

USB

**DALI
Master**

**DALI
Switch**

AC Source

**DALI
Power Supply**

DALI BUS

Driver DC Out

DALI Input

L
N
GND

GREAlpha
The LED Driver Expert

SLD/XLD/GLV Series
Class 2 LED Drivers
(≤48V, 5A per Channel)
OR
Any Class 2, CV Driver
(≤48V, 5A max)

Vin+
Vin-

**GLD-DIM1-DALI
Dimming Module**

LED+
LED-
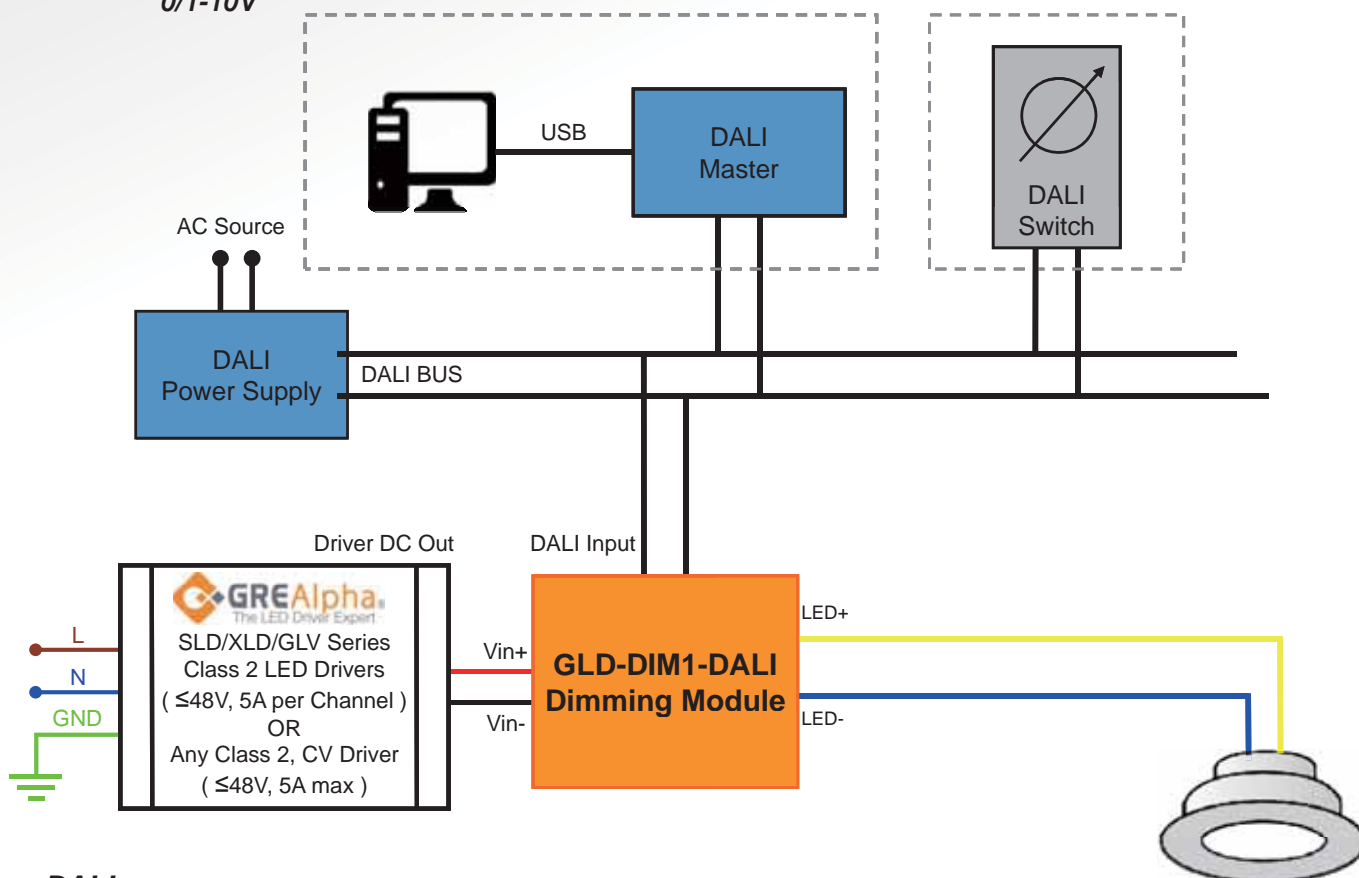
DALI

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