



## 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

### Constant Current LED Dimming Module



### 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	$(V_{in} - 3V) / 2$	$V_{in} - 3V$	50
GLD-DIM1X-R	10 - 48	1	1.05/0.9/0.7/0.5/0.35	$(V_{in} - 3V) / 2$	$V_{in} - 3V$	50
GLD-DIM1X-H	10 - 48	1	1.05/0.9/0.7/0.5/0.35	$(V_{in} - 3V) / 2$	$V_{in} - 3V$	50
GLD-DIM1-DALI	10 - 48	1	1.05/0.9/0.7/0.5/0.35	$(V_{in} - 3V) / 2$	$V_{in} - 3V$	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  $V_{out}$ (or input to LED) and  $V_{in}$  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 °C
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

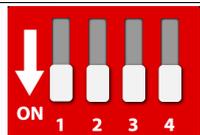
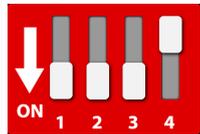
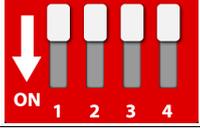
## Compliance/Safety

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

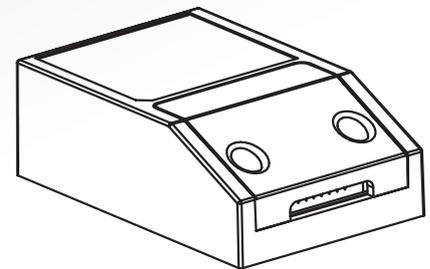
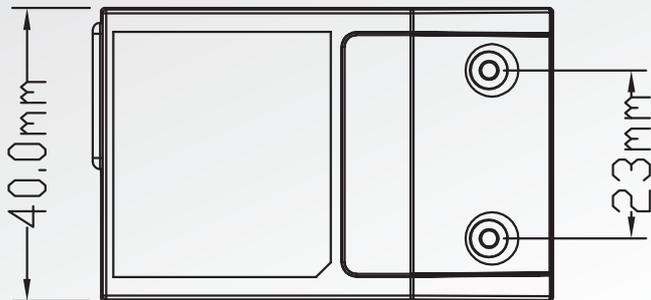
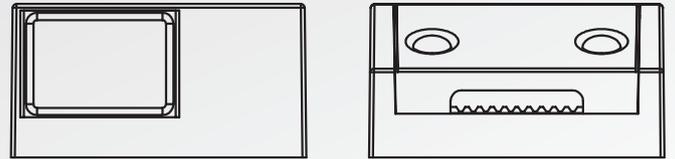
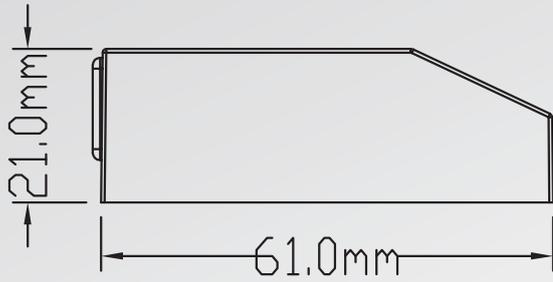
## Mechanical Specification

Power Unit Dimensions	61.0mm (L) x 40.0mm (W) x 21.0mm (H)
Case Design/Material	Polycarbonate White
Connector Type	Terminal block connectors
Connectors	Vin+, Vin-, LED+, LED-, 0-10V: Gray-, Purple+; DALI: DALI, DALI
Wire Size	24-16 AWG(0.25-1mm <sup>2</sup> )

## Pin Assignment

Setting	Output Current
	1050 mA
	900 mA
	700 mA
	500 mA
	350 mA

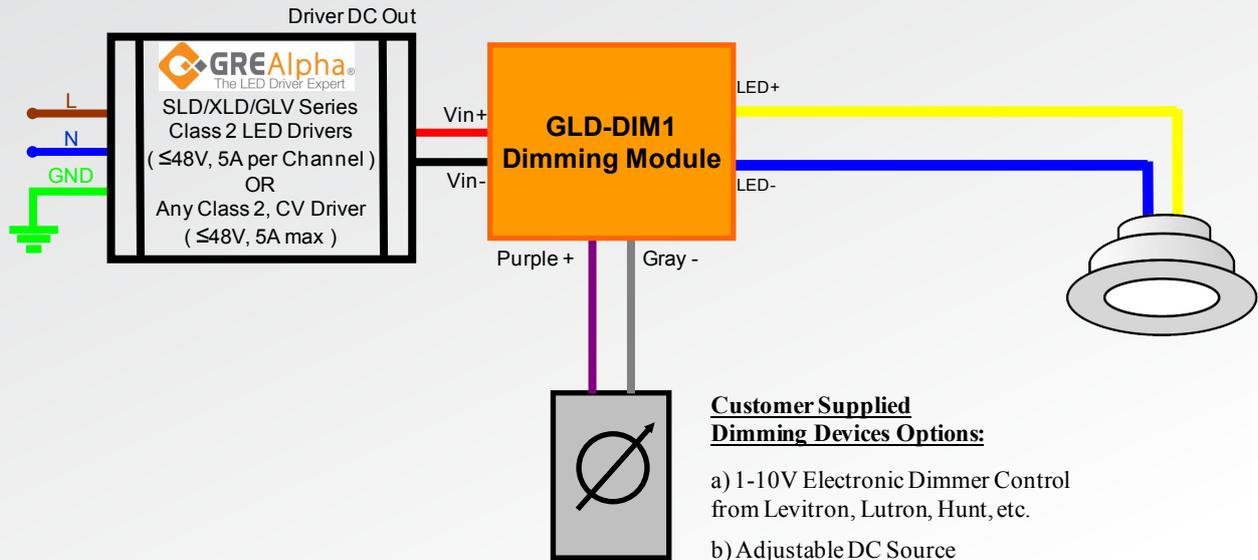
## Mechanical Diagram



### Packing Information:

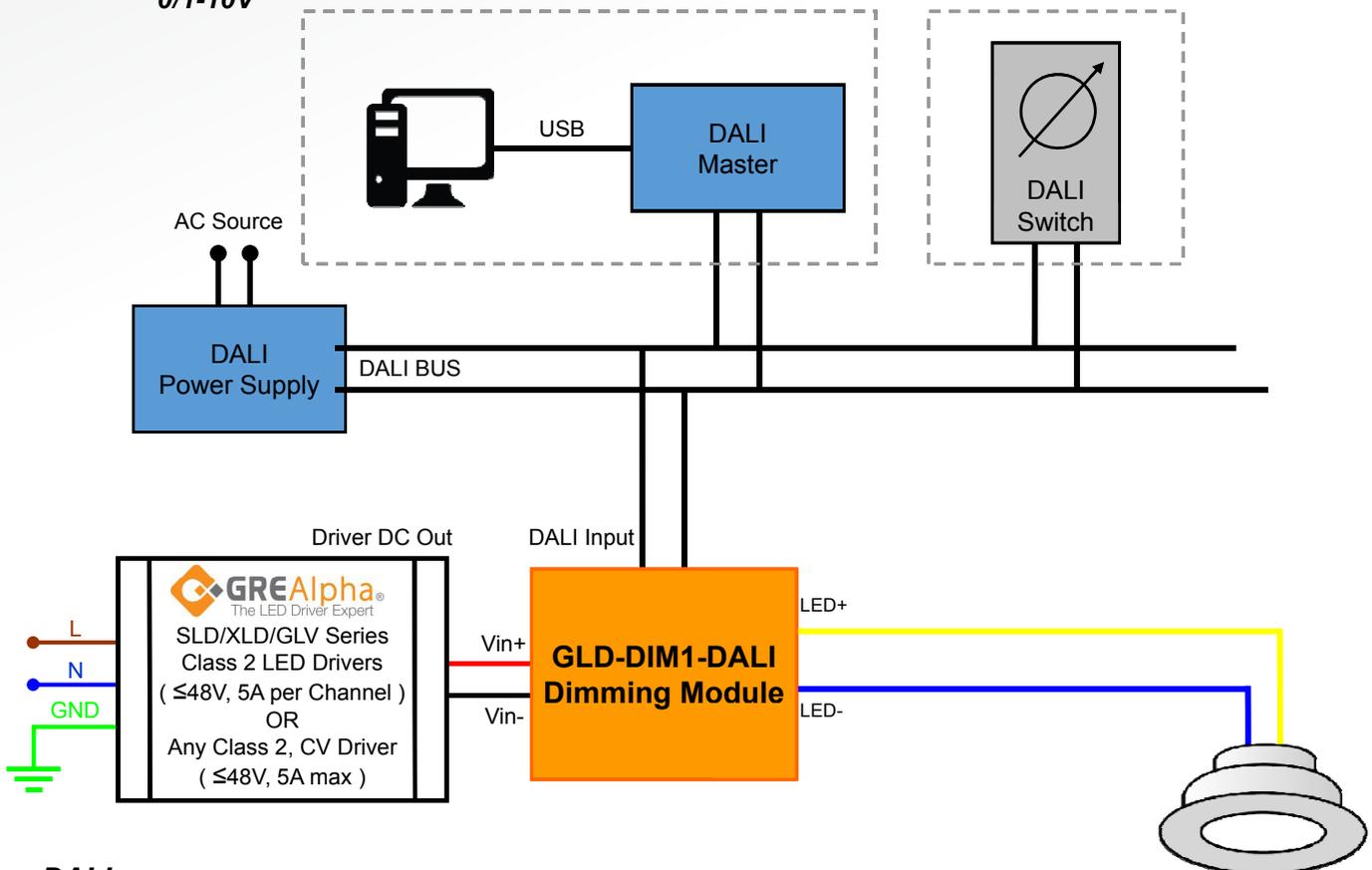
Weight: 0.05kg/pcs; 8.00kg/carton;  
150pcs/ carton; L435\*W250\*H193(mm)

# Wiring Diagrams



\*\* 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



## DALI

GRE Alpha undertakes extensive testing on its dimming modules to ensure dimming compatibility and performance to our best ability. However due to rapidly evolving technology and the wide number of dimmers available GRE Alpha makes no specific recommendations on dimming system selection for its dimming modules and there are no warranties of performance or compatibility implied. Please test product for dimming compatibility before use.

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