



## Smart-Dim Dual Channel LED Dimming Module

The SLD Smart-DIM DC dimming module is designed to provide flicker (PWM) plus width modulated dimming in a 0/1-10V dimming applications. With over 97% efficiency, this smart, power saving module offers extreme flexibility, ease of use and is compatible with commercial 0/1-10V dimmer controls. (0/1V=0% brightness, 10V=100% brightness). This accessory is ideal when combined with an AC-DC driver to enable dimming of LED fixtures. The SLD Smart-DIM's can be incorporated into an XLD200 series enclosure, eliminating the need for external junction boxes, for quick and easy installation.

### SLD-DIM2 DC/DC (0/1-10V + PWM) LED Dimming Module



### Features

- Wide range DC input 8 - 48 VDC
- Flicker-free 0-100% Dimming
- High efficiency up to 97%
- High precision dimming ratio : >1:1000
- Fully isolated plastic housing
- Comply with EN55015 and FCC Part 15 without additional input filter and capacitors
- Suitable for LED lighting and signage applications
- Compact size, high reliability
- 3 year warranty

### Applications

- Architectural Lighting
- Effect & Contour Lighting
- Office General Illumination
- Warehouses
- Street Lighting
- Signage
- Strip Lighting
- Swimming Pools/Fountain lighting

Model	Input Voltage Range (Vdc)	Channel Output	Output Voltage Range *	Max. Output Current (A) **	Max Output Power (W)	Power Efficiency (Typ)
SLD-DIM2	8 - 48V	2	V <sub>in</sub> - 0.2V~0.5V	5	240	97%

\*- SLD-DIM dimming module requires an external CV LED driver, connected to the DC input, and should not exceed the above input voltage range.

## Input Specification

Voltage Range	Please refer model table	Input Current	5.1A max (per channel)
Control Voltage	0/1-10VDC Dimmer *The external control source to the SLD-DIM purple and grey control wires should have the capability to sink a min. of 10mA for multiple SLD-DIM modules connected together. * A minimum sink current of 2mA is recommended for a single module	Control Range	0-100%v ≤1V = 0% light output 10V =100% light output
Short Circuit Protection	Hiccup-Mode, Auto-Recovery upon removal of short circuit condition.	Over Voltage	Auto Recovery upon input voltage under Vin (max)
Over Temperature Protection	Auto recovery upon operating temperature <105°C	Under voltage Logout	Auto Recovery upon input voltage over Vin (min)

## Output Specification

Output Frequency	1kHz PWM	Output Current	5A max. at full load **
Power Efficiency	97% Typ	Dimming Ratio	1:1000

\*\* - SLD-DIM dimming module max. output current is dependent on LED driver output current , which should not exceed the Class 2 maximum of 5A or 100W per output channel.

## Environmental Specification

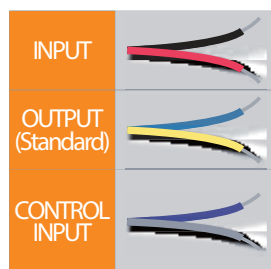
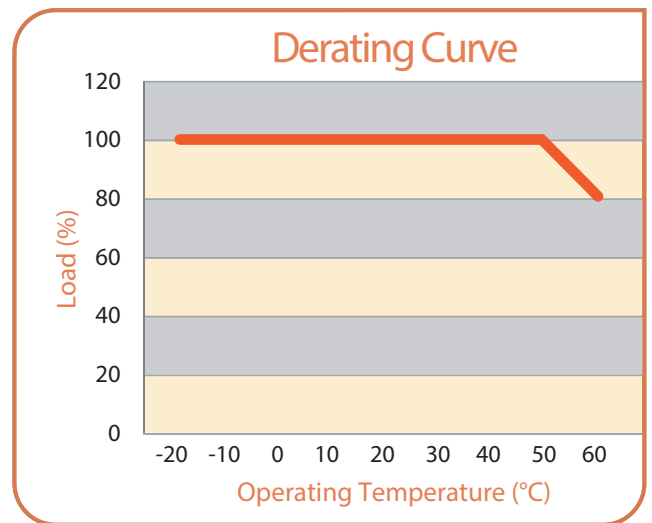
Ambient Temperature	Storage Temp	Relative Humidity
- 20°C - 60°C (Full Load)	- 40°C - 85°C	5% - 95 %

## Compliance / Safety

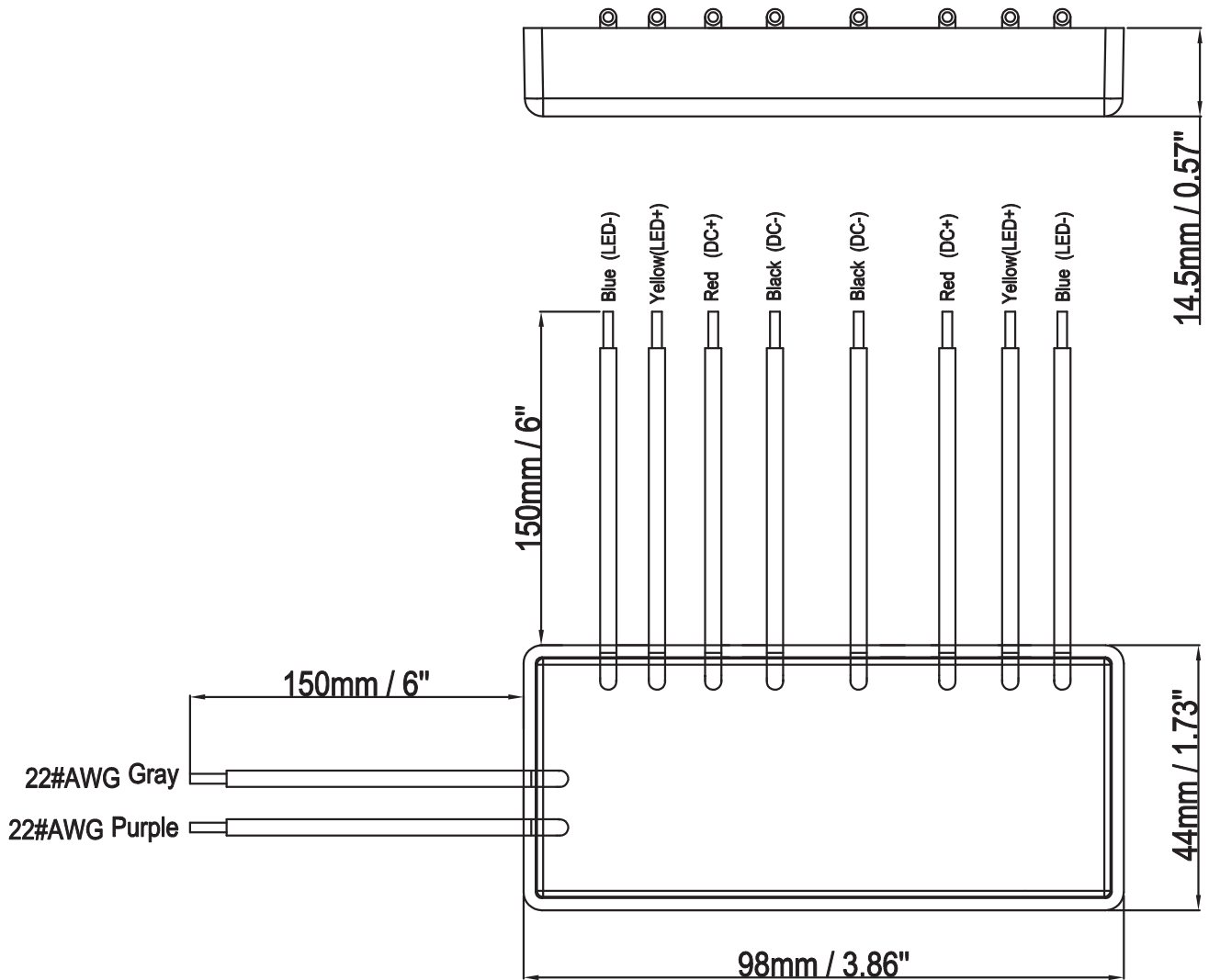
Safety Standards:	UL8750,UL879,
Weatherability:	IP 65

## Mechanical Specification

Power Unit Dimensions	98mm (L) x 44mm (W) x 14.5mm (H)
Case Design/Material	Polycarbonate White
Wire Length	6 inches 152.4mm
Wire Size	a. 18AWG standard, 300V, 105deg C (DC input and Dim Output wires) b.22AWG standard, 300V, 105deg C(0/1-10V control wires)



## Mechanical Diagram



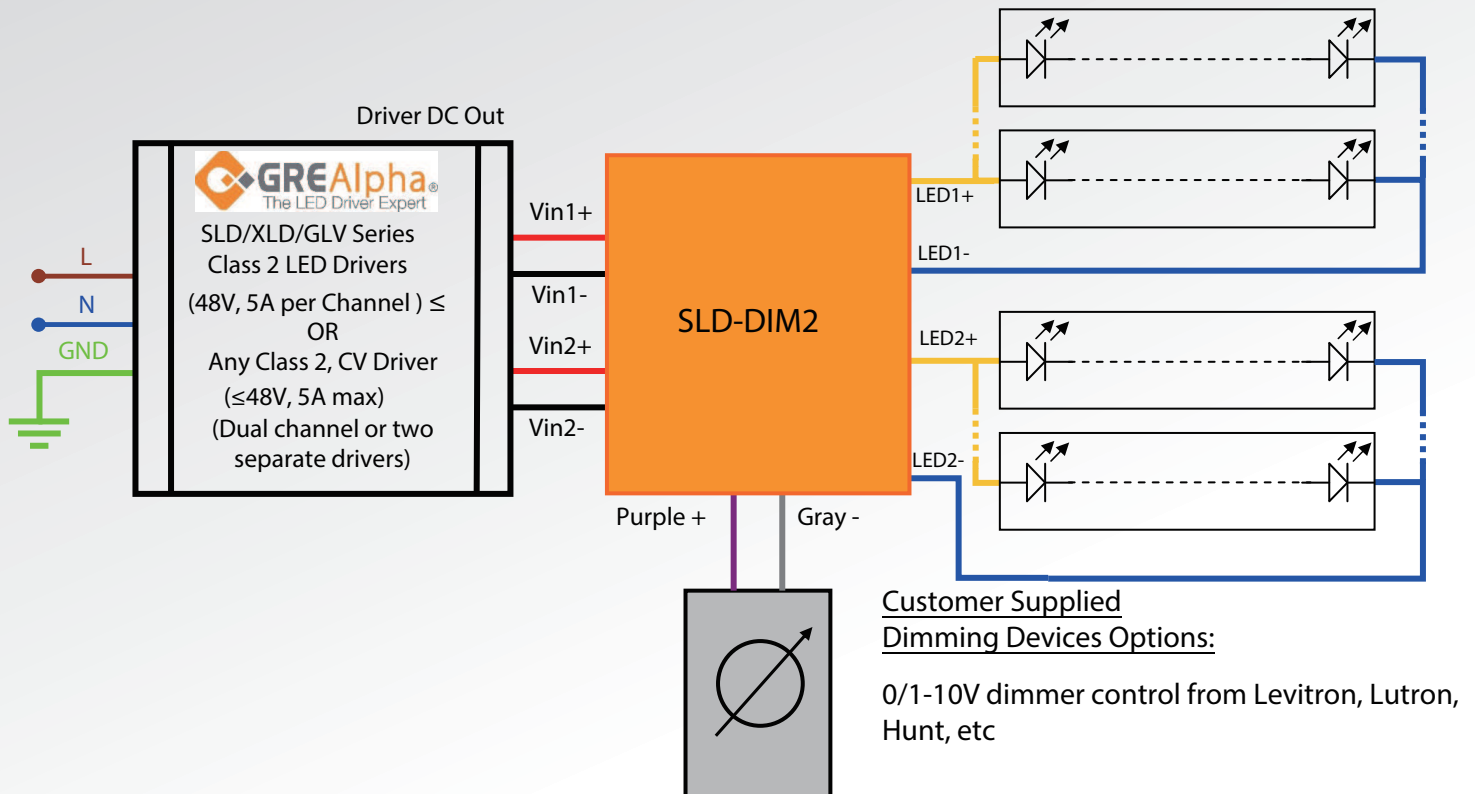
Input Wire		Output Wire	
Red	DC + Input1/2	Yellow	LED +1
Black	DC - Input1/2	Yellow	LED +2
Purple	to 0/1-10V Control	Blue	LED -1
Gray	to 0/1-10V Control	Blue	LED -2

### Packing Information

Weight: 110g/pcs,  
100pcs/ carton; 11 kg /carton; L245xW220xH520 (mm)

# Wiring Diagrams

## SLD-DIM2 Configuration Arrays using 0/1-10V dimmer or Adjustable DC Source Control Option



\*\* 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.

\* 0-100% flicker-free performance not guaranteed when used with non-GRE Alpha CV Drivers

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