



Smart-Dim 120 / 150W LED Dimming Module

The SLD Smart-DIM DC dimming module is designed to provide flicker-free (PWM) pulse width modulated dimming in 1-10V dimming applications. With over 95% efficiency, this smart, power saving module offers extreme flexibility, ease of use and is compatible with commercial 1-10V dimmer controls. (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 SLD/XLD series enclosure, eliminating the need for external junction boxes, for quick and easy installation.

SLD-DIM

DC/DC (1-10V + PWM)
LED Dimming Module



Features

- Wide range DC input SLD-DIM1B (8-30VDC), SLD-DIM1H (15 - 48VDC)
- Flicker-free 0-100% Dimming
- High efficiency up to 95%
- 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)	Output Voltage Range *	Max. Output Current (A) **	Max Output Power (W)	Power Efficiency (Typ)
SLD-DIM1B	8 - 30V	Vin - 0.2V~0.5V	5	120	97%
SLD-DIM1H	15 - 48V		3	150	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.

* UL marking: for products manufactured in Vietnam only, effective October 2020.

Input Specification

Voltage Range	Please refer model table	Input Current	5.1A max(1B) / 3.1A max(1H)
Control Voltage	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 current sink of 1mA 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	SLD-DIM1B: 5A max. at full load ** SLD-DIM1H: 3A 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(SLD DIM1B) or 3A(SLD DIM 1H).

Environmental Specification

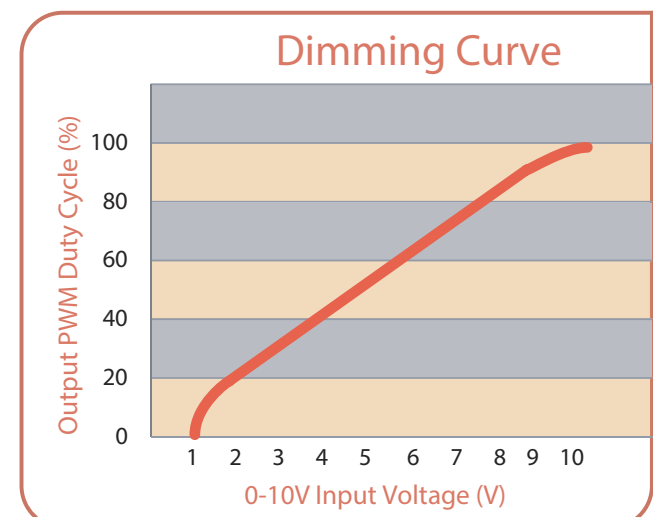
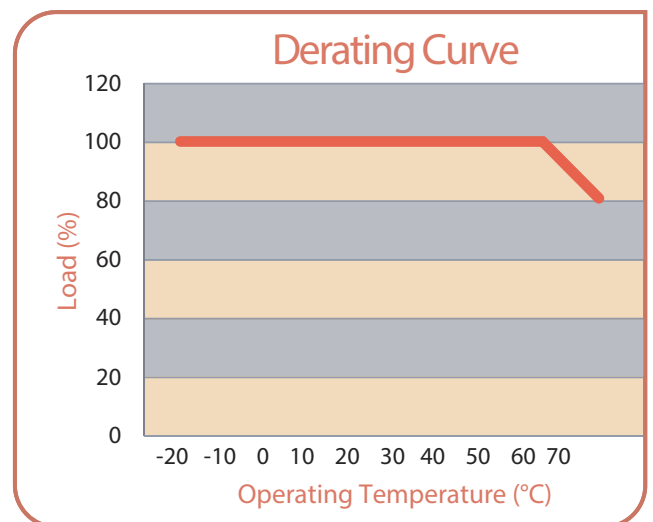
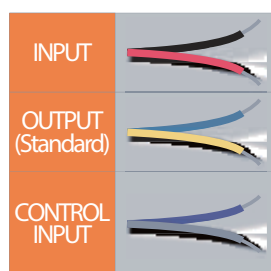
Ambient Temperature	Storage Temp	Relative Humidity
- 20°C - 60°C (Full Load)	- 40°C - 85°C	5% - 95 %

Compliance / Safety

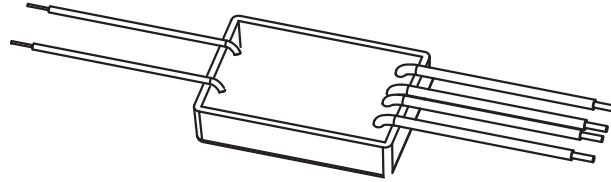
Safety Standards:	UL244A
Weatherability:	IP 65

Mechanical Specification

Power Unit Dimensions	56mm (L) x 37mm (W) x 14.5mm (H)
Case Design/Material	Plastic Casing
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(1-10V control wires)



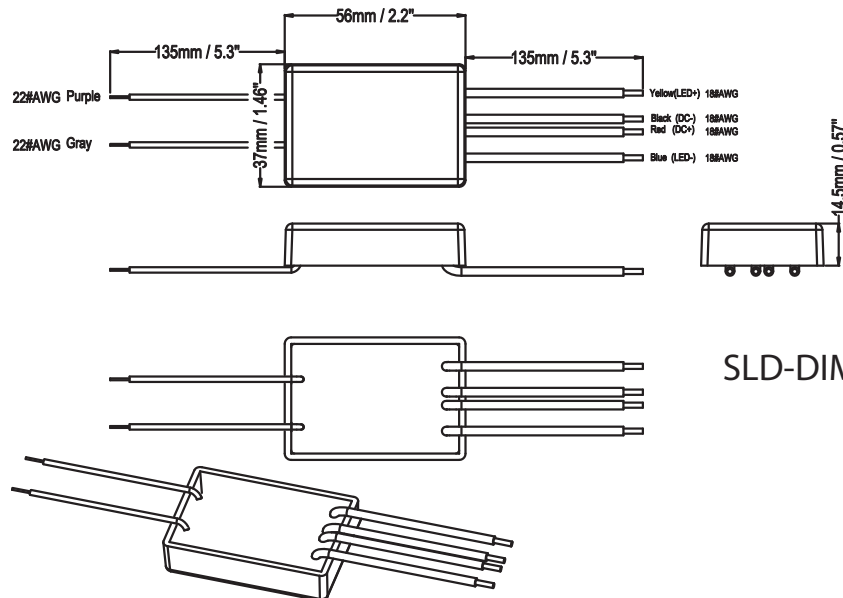
Mechanical Diagram



Power Unit Dimensions: 56mm(L)*37mm(W)*14.5mm(H)

Wire Size: a. 18AWG standard, 300V, 105degC (DC input and Dim Output wires)

b. 22AWG standard, 300V, 105degC (1-10V control wire)



Input Wire		Output Wire	
Red	DC + Input	Yellow	Dim Output +
Black	DC - Input	Blue	Dim Output -
Purple	to 1-10V Control		
Gray	to 1-10V Control		

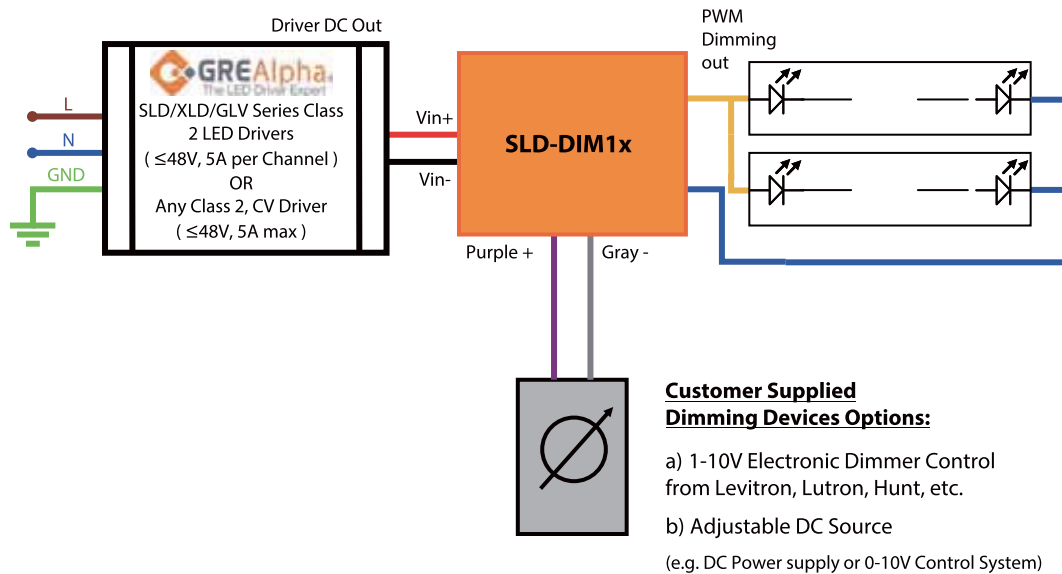
Packing Information

Weight: 55 g/pcs,

60pcs/ carton - 4.66 kg /carton; L245xW230xH185 (mm)

Wiring Diagrams

SLD-DIM1x Configuration Arrays using 1-10V dimmer or Adjustable DC Source Control Option



** Note alternate simple on-off operation:

- Connecting the Purple and Grey wires together will provide 0% brightness. -
 Leave Purple and Grey wires open will provide 100% brightness.

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

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