



Smart-Dim-PWM 240W LED Dimming Module

The SLD Smart-DIM DC dimming module is design to provide flicker-free (PWM) pulse width modulated dimming in PWM dimming applications. With over 95% efficiency, this smart, power saving module offers extreme flexibility, ease of use and is compatible with commercial PWM dimmer controls. This accessory is ideal when combined with an AC-DC driver to enable dimming of LED fixtures. The SLD-DIM-PWM can be incorporated into an SLD/XLD series enclosure, eliminating the need for external junction boxes, for quick and easy installation.

Features

- Wide range DC input 8V - 48V
- 0-100% Dimming
- High efficiency up to 95%
- Suitable for LED lighting and signage applications
- Fully isolated plastic housing
- Comply with EN55015 and FCC Part 15 without additional input filter and capacitors
- Compact size, high reliability
- 3 year warranty

Applications

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

SLD-DIM-PWM

LED Dimming Module



Model	Input Voltage Range (Vdc)	Output Voltage Range *	Max. Output Current (A) **	Max Output Power (W)	Power Efficiency (Typ)
SLD-DIM-PWM-5A/ SLD-DIM-PWM-5A(I)	8 - 48V	Vin-0.2~0.5V	5	240	95%

*- SLD-DIM-PWM 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	8V-48V	PWM Input Frequency	150Hz-1KHz	PWM Input Voltage Range	5V-48V
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Output Specification

Output Frequency	150Hz-1kHz	Output Current	SLD-DIM-PWM-5A: 0.1A-5A
Power Efficiency	95% Typ	Dimming Ratio	Upon PWM Dimming Control Source
Max Output Power	240W	Over Current Protection	Hiccup-Mode, Auto-Recovery upon removal of short circuit condition
PWM Output Delay	<1uS	Over Voltage Protection	Auto-Recovery upon input voltage over Vin(Max)
Over Temp. Protection	Auto-Recovery upon Tc<95°C(+/-5%)	PWM Output	PWM Input(Pass Through)

Environmental Specification

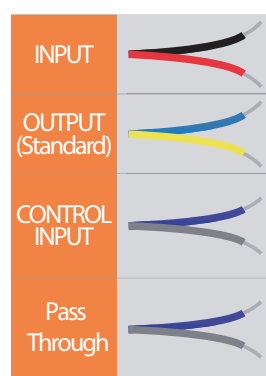
MTBF	Ambient Temperature	Case Temp	Storage Temp	Relative Humidity
>50,000 hrs@60°C Ta Full Load	-20°C - 60°C (Full Load)	-20°C - 95°C	-40°C - 85°C	5% - 95 %

Compliance / Safety

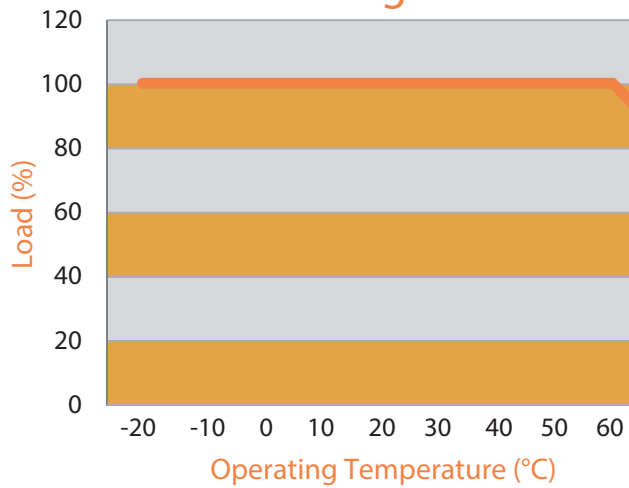
Safety Standards:	CE,FCC Title 47 FCR 15 Class B Compliant
Weatherability:	IP 65

Mechanical Specification

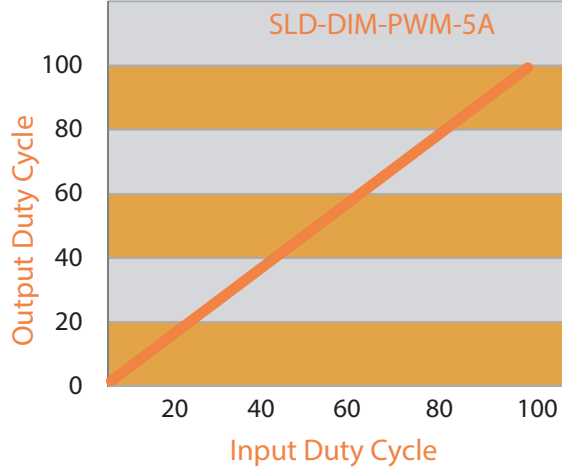
Power Unit Dimension	56mm (L) x 37mm (W) x 14.5mm (H)
Case Design/Material	Polycarbonate White
I/O Wire Length	125mm(+/-5mm)
Wire Size	a. 18AWG standard, 300V, 105deg C(DC input and Dim Out put wires) b. 22AWG standard, 300V, 105deg C(1-10V control wires)



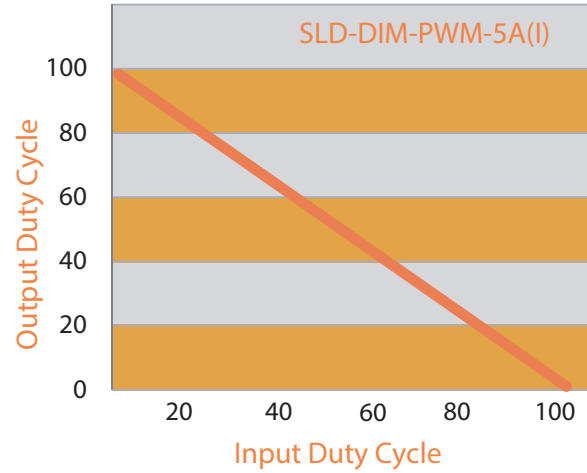
Derating Curve



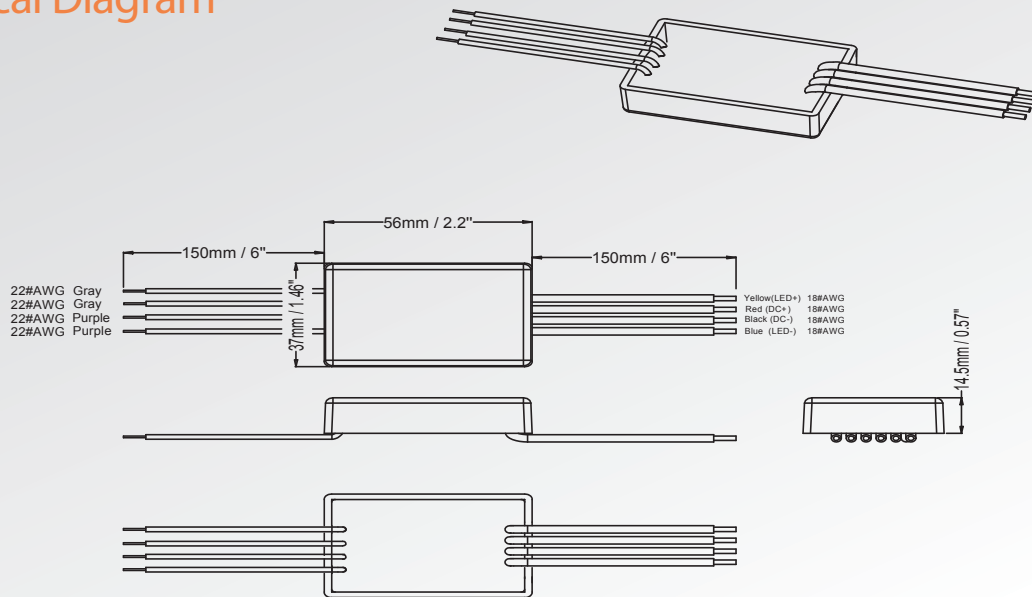
Dimming Curve



Dimming Curve



Mechanical Diagram

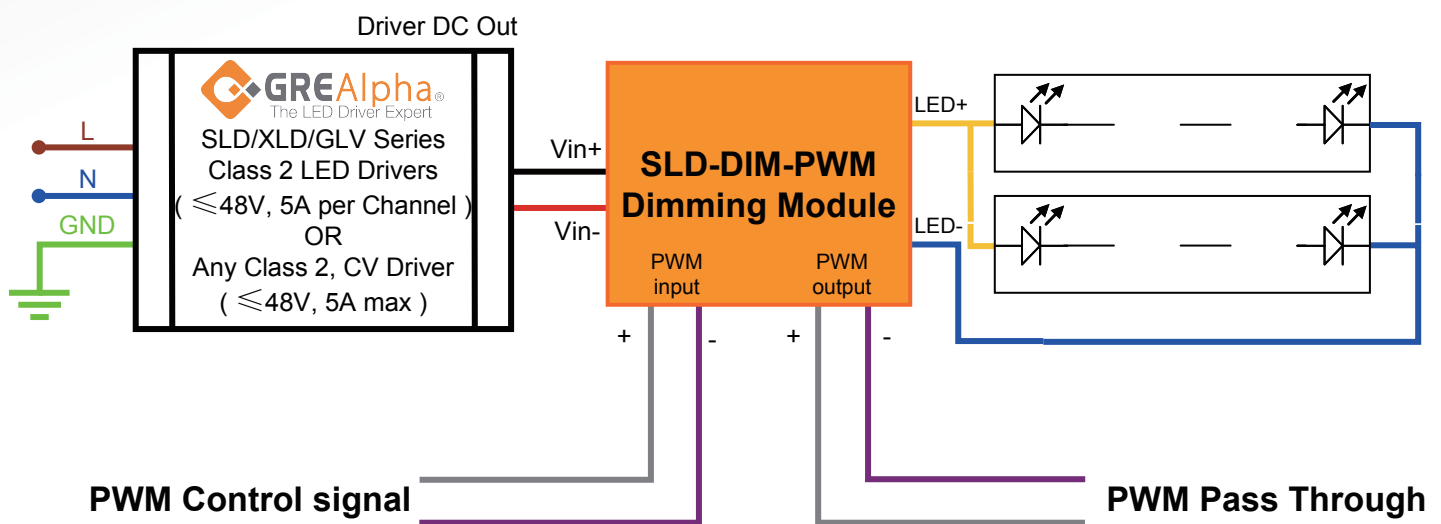


Input Wire		Output Wire	
Red	DC + Input	Yellow	LED Output +
Black	DC Input GND	Blue	LED Output -
Gray	PWM Input+	Gray	PWM Output+ (Pass Through)
Purple	PWM Input-	Purple	PWM Output - (Pass Through)

Packing Information

Weight: 55 g/pcs,
60pcs/ carton - 4.66 kg /carton; L245xW230xH185 (mm)

Wiring Diagrams



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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