



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 |
|---------------|--------|---------------------|------------|-------------------------|--------|

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

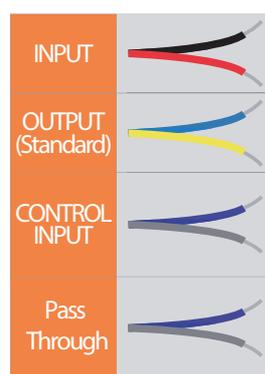
| MTBF | Ambient Temperature | Case Temp | Storage Temp | Relative Humidity |
|----------------------------------|---------------------------|--------------|--------------|-------------------|
| >50,000 hrs@60°C Ta Full Load | -20°C - 60°C (Full Load) | -20°C - 95°C | -40°C - 85°C | 5% - 95 % |

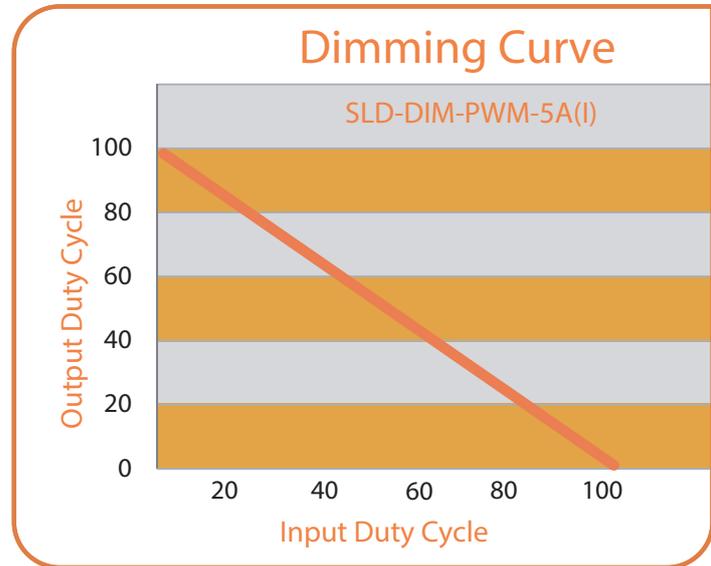
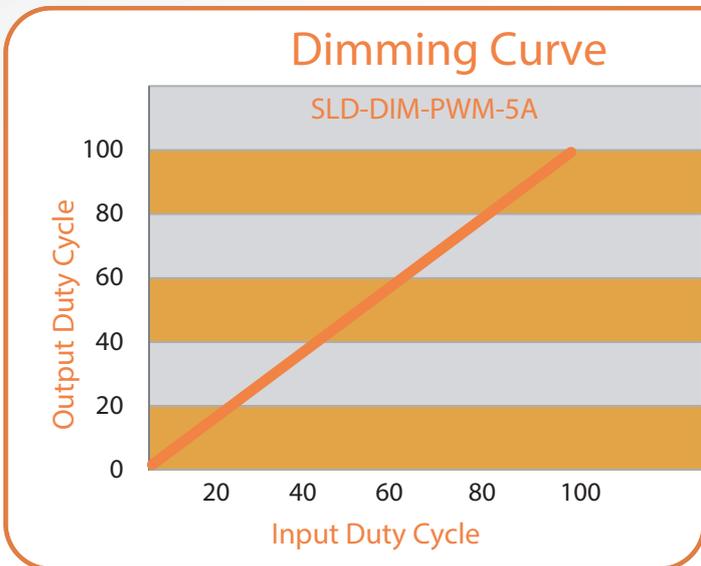
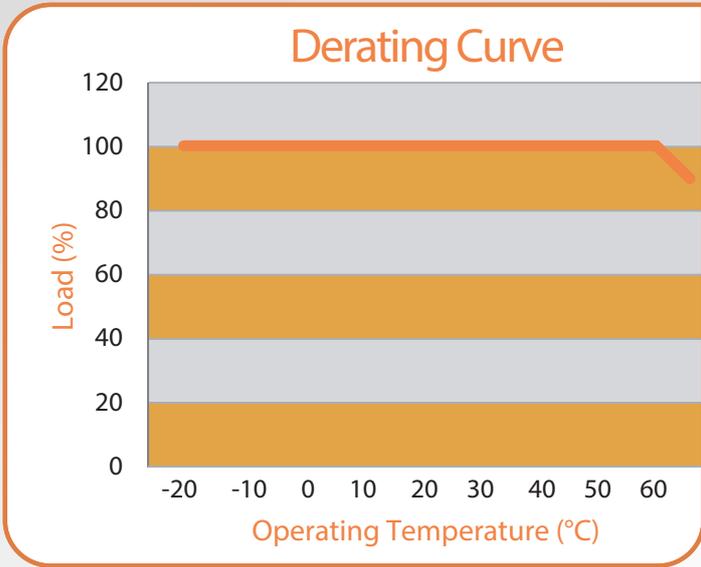
Compliance / Safety

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

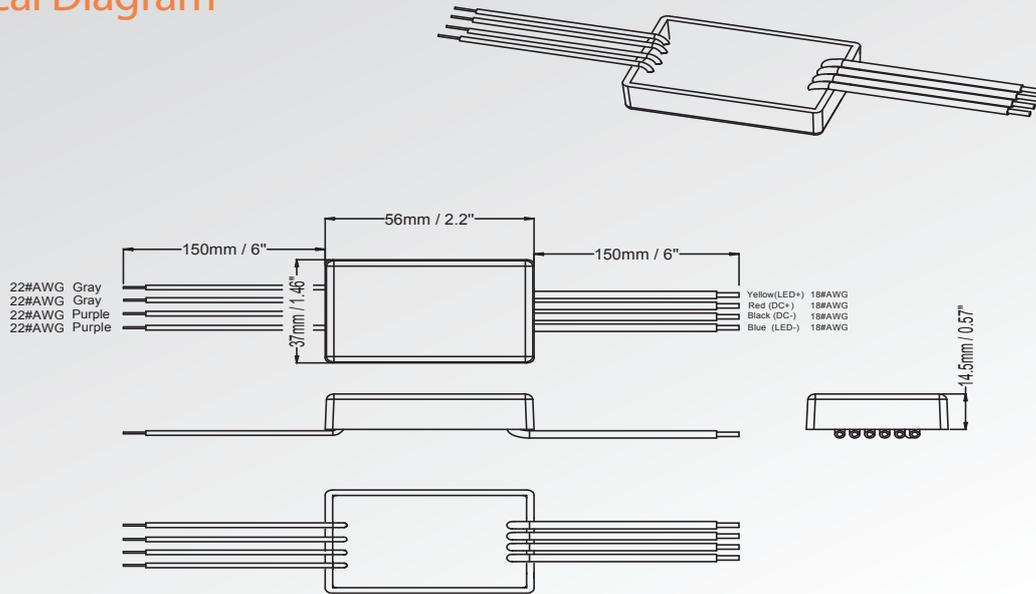
Mechanical Specification

| | |
|----------------------|---|
| 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) |





Mechanical Diagram

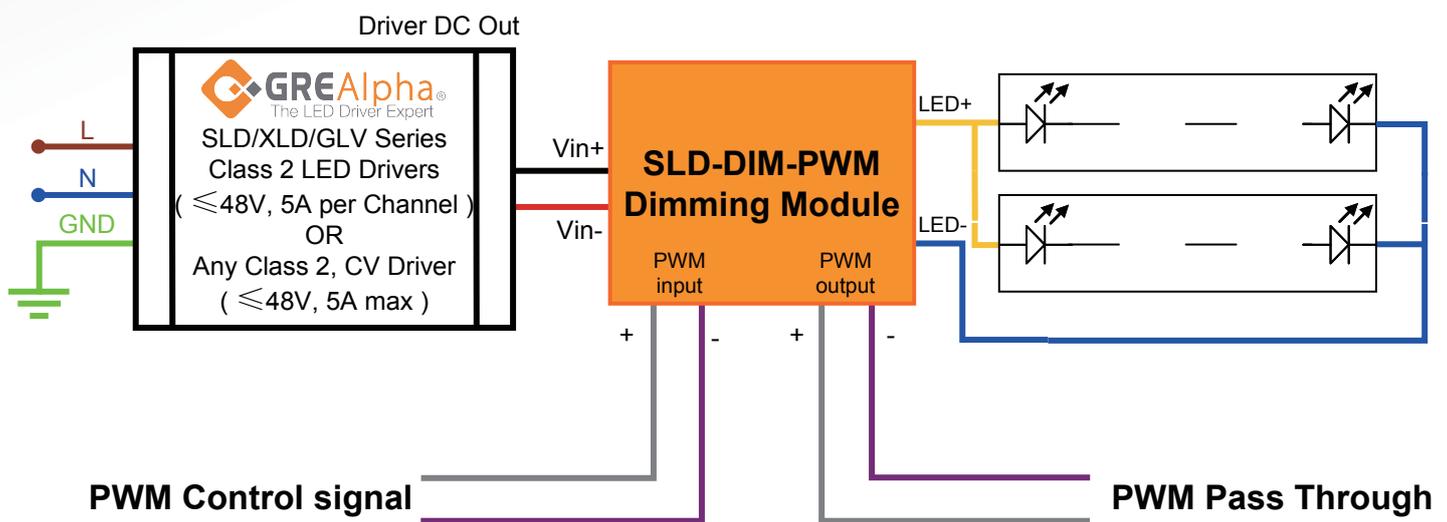


| Input Wire | | Output Wire | |
|------------|--------------|-------------|-----------------------------|
| Red | DC + Input | Yellow | LED Output + |
| Black | DC Input GND | Blue | LED Output - |
| Gray | PWM Input+ | Gray | PWM Output+ (Pass Through) |
| Purple | PWM Input- | Purple | PWM Output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