SLD-DimTW

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

Dim - to - Warm

GRE Alpha's Dim-to-Warm dimming modules features smooth flicker free color transitions for retail, hospitality, and healthcare applications. Simple and easy to use, GRE Alpha's dim-to-warm module can be loaded up to 240 Watts for constant voltage applications and 68 Watts for constant current applciations. Designed to mimic color transitions of incandescent lamps, GRE Alpha's dim-to-warm module receives a single lighting control signal such as 0-10Vor DALI and connects to dim-to-warm COBs or lighting strips to enable warm dimming transitions.

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	Input Control	Channel Output	Output Voltage Range *	Max. Output Current (A) **	Max Output Power (W)	Power Efficiency (Typ)
SLD-DimTW	8 - 48 V	1	2	Vin - 0.2~0.5V	5	240	97%

*- SLD-DimTW 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 (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 mininum 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

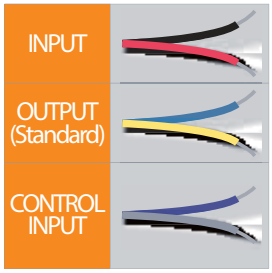
Ambient Temperature	Storage Temp	Relative Humidity
- 20°C - 60°C (Full Load)	- 40°C - 85°C	5% - 95 %

Compliance / Safety

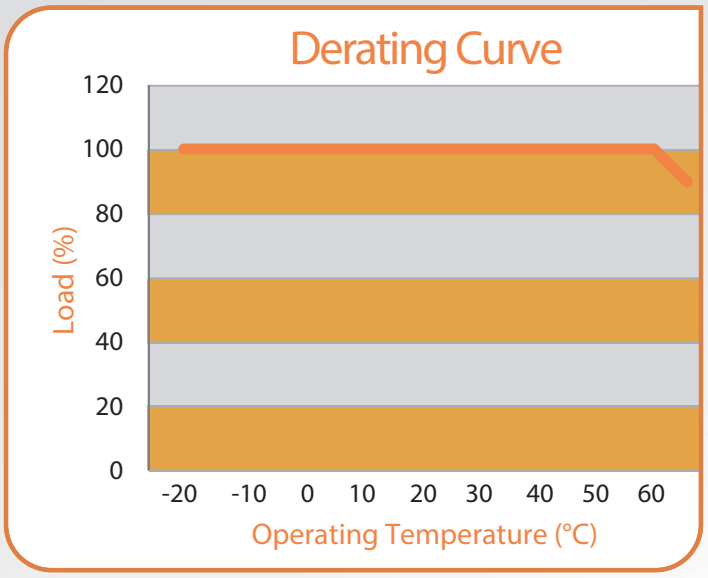
Safety Standards:	UL244A
Weatherability:	IP 65

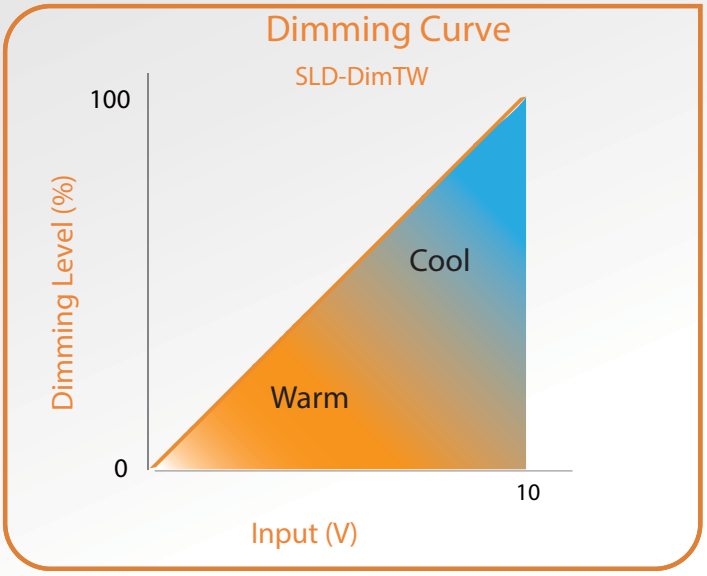
Mechanical Specification

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)



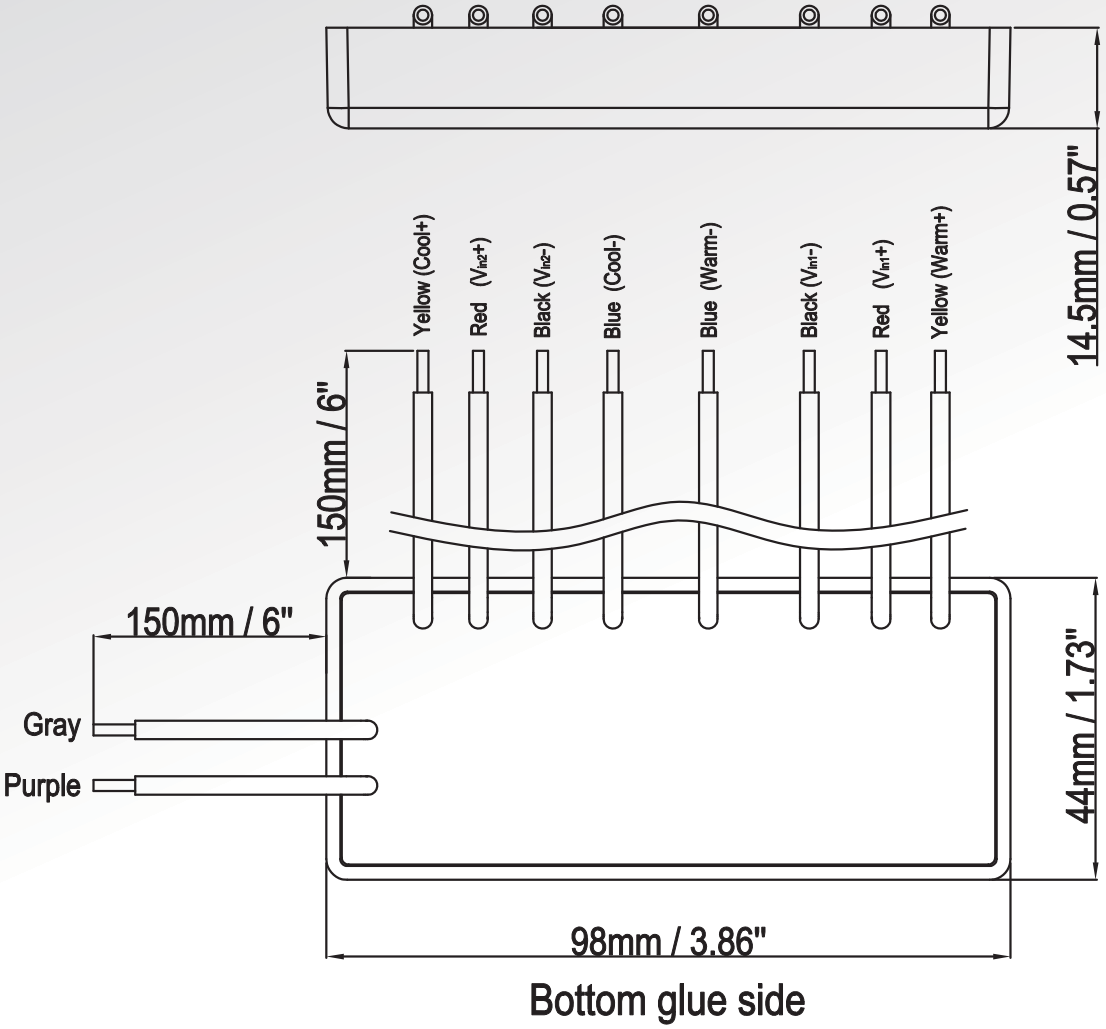
Performance Curve





Mechanical Diagram

SLD-DimTW(Ver. B)



Input Wire	
Black	Vin1 -
Red	Vin1 +
Red	Vin2 +
Black	Vin2 -

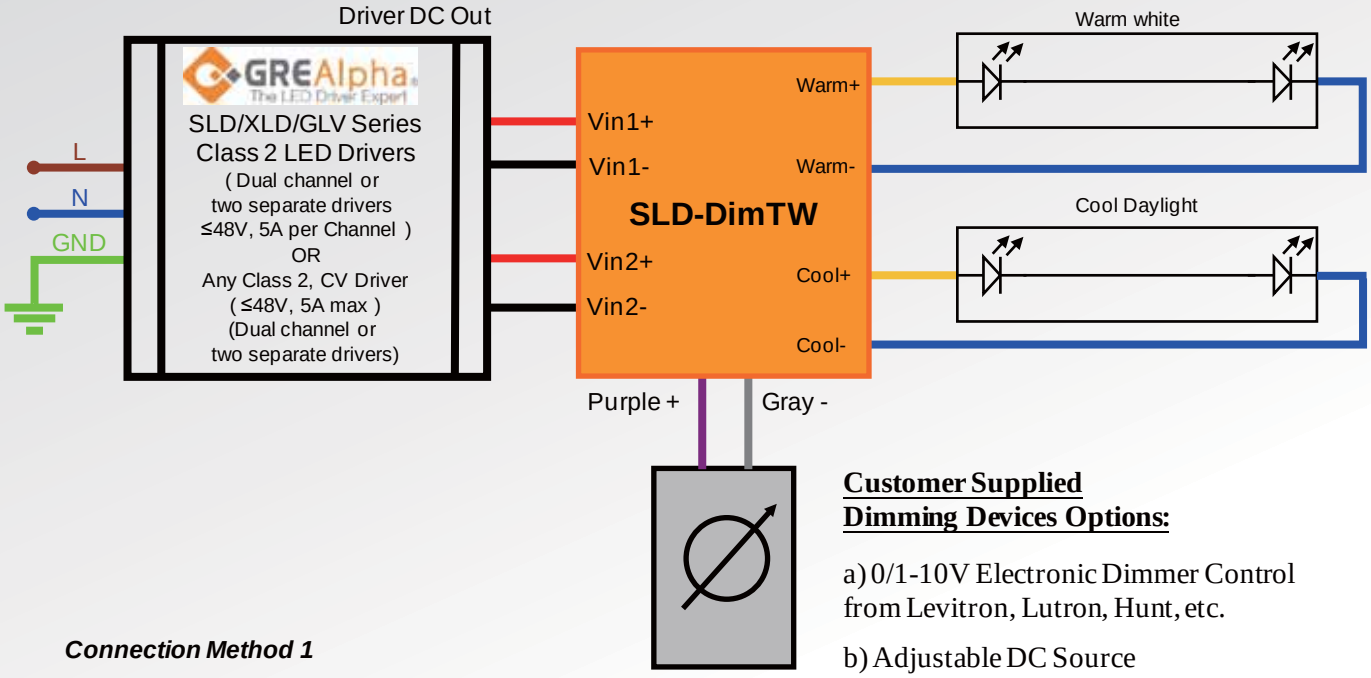
Output Wire	
Yellow	Warm +
Yellow	Cool +
Blue	Warm -
Blue	Cool -

Control Wire	
Purple	to 0/1-10V Control
Gray	to 0/1-10V Control

Packing Information
0.096 kg/pcs, 100pcs/carton;
11.6 kg /carton; L270xW220xH430 (mm)

Wiring Diagrams

SLD-DimTW



Connection Method 1

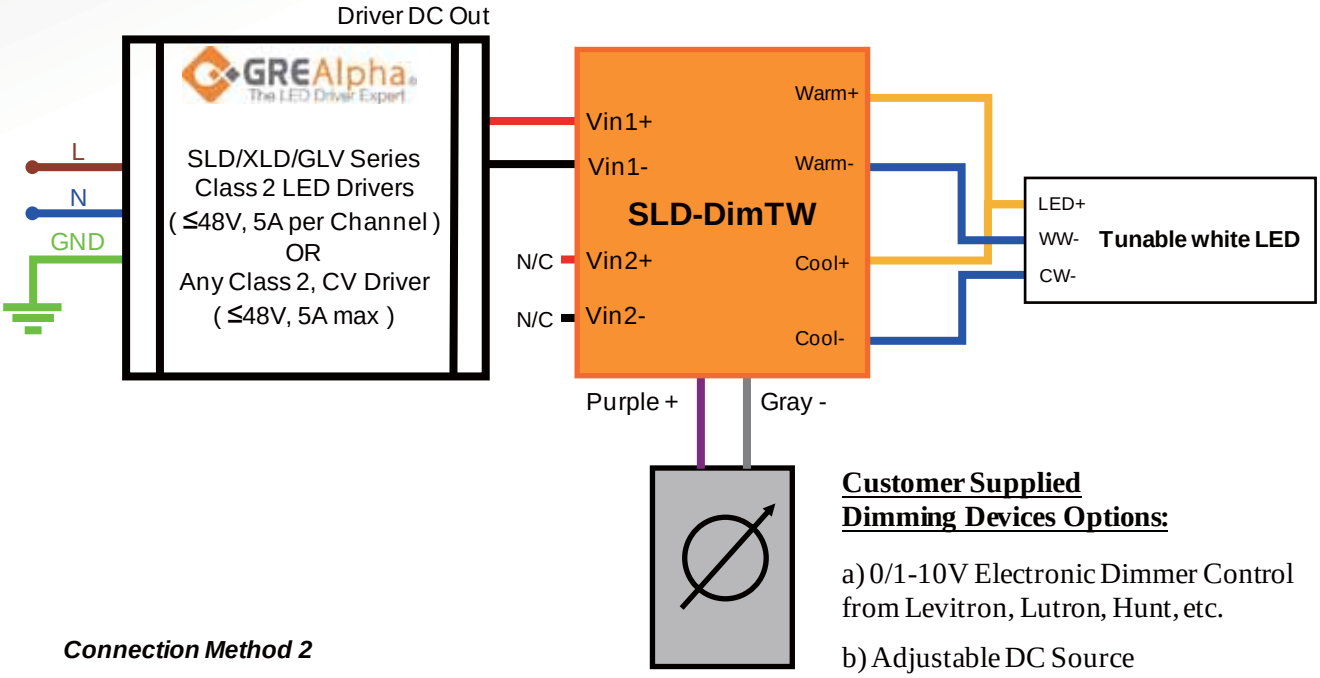
Customer Supplied
Dimming Devices Options:

a) 0/1-10V Electronic Dimmer Control from Levitron, Lutron, Hunt, etc.

b) Adjustable DC Source

(e.g. DC Power supply or 0-10V Control System)

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



Connection Method 2

Customer Supplied
Dimming Devices Options:

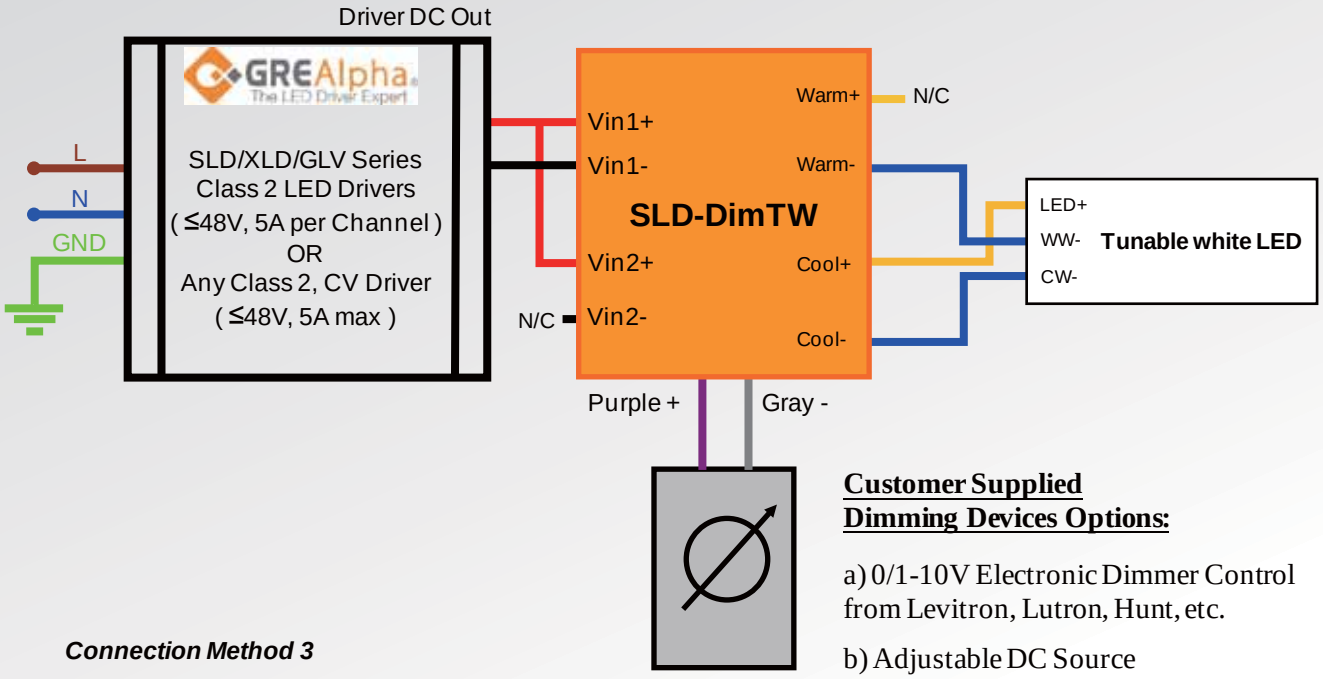
a) 0/1-10V Electronic Dimmer Control from Levitron, Lutron, Hunt, etc.

b) Adjustable DC Source

(e.g. DC Power supply or 0-10V Control System)

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

Wiring Diagrams



Connection Method 3

Customer Supplied Dimming Devices Options:

a) 0/1-10V Electronic Dimmer Control from Levitron, Lutron, Hunt, etc.

b) Adjustable DC Source

(e.g. DC Power supply or 0-10V Control System)

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