



# Intelligent DALI(R) Dimmer For Home Automation

Designed to meet the newest in DALI (Digital Addressable Lighting Interface) Lighting control protocol IEC 62386, the GRE Alpha DALI(R) Dimmer provides flexibility and ease of use for smart home lighting automation projects. Working with DALI Lighting controllers has never been easier. With wide input voltage settings and compatibility with DALI(R) enabled Lighting control systems, the GRE Alpha DALI Dimmer module provides smooth, 0-100% linear dimming with <0.1 Watts of standby power.

#### **Features**

- · Wide range DC input
- 0-100% Dimming
- Low standing Power
- High Efficiency up to 97%
- 255 Dimming levels
- With terminal block connectors for easy connection
- 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 years warranty

### **Applications**

- DALI Lighting Control
- Home Automation
- DALI LED Lighting Fixtures
- · Interior and Exterior LED lighting

Model	Input Voltage Range (Vdc)	Output Voltage Range *	Max Output Current (A)**	Max Output Power (W)	Power Efficiency (Typ)
SLD-DIM-DALI	8 - 48V	Vin-0.2V	5	240	97%

<sup>\* -</sup>SLD-DIM-DALI dimming module requires an external CV LED driver, connected to the DC input, and should not exceed the above input voltage range. The voltage drop is measured directly from the input connector to the output connector.

<sup>\*</sup> UL marking: for products manufactured in Vietnam only, effective October 2020.



Input Specification			
Voltage Range	8-48 V	Input Current	5A max
Control Voltage	DALI BUS	Control Range	0-100% DALI protocol
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	1k Hz PWM	Output Current	5A max. at full load **
Power Efficiency	97% Typ	Dimming Level	255 dimming levels

<sup>\*\* -</sup> Max. output current is dependent on LED driver output current, which should not exceed the Class 2 maximum of 5A

## Environmental Specification

Ambient Temperature	Storage Temp	Relative Humidity
-20°C to 50°C (Full Load )	-40°C - 85°C	5% - 95 %

# Compliance / Safety

Safety Standards	EN55015, IEC62386-101 / 102 / 207		
Jaiety Standards	UL244A		

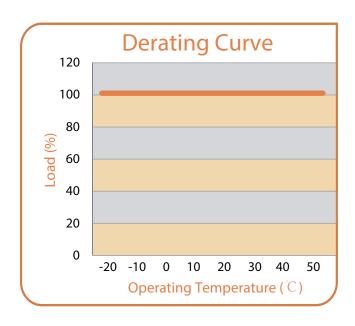
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Power Unit Dimensions	61mm(L) x 40mm(W) x 21mm(H)
Case Design/Material	Polycarbonate White
Connector Type	WAGO terminal block connectors
Connectors	Vin+, Vin-, DALIx2, LED+, LED-
Wire Size	AWG 24 - 16 (0.25-1mm²)

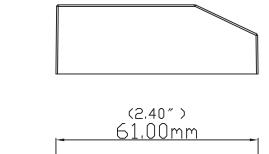
# **LED Status**

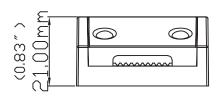
LED Status	Description
Green flashing	Normal / Ready
Green rapid flashing	Communication in progress
Red ON	OCP / OVP/ OTP/ UVP / Lamp
	failure (<100mA)

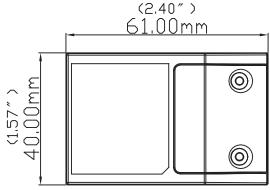


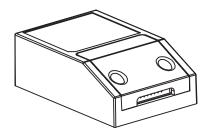


# **Mechanical Diagram**









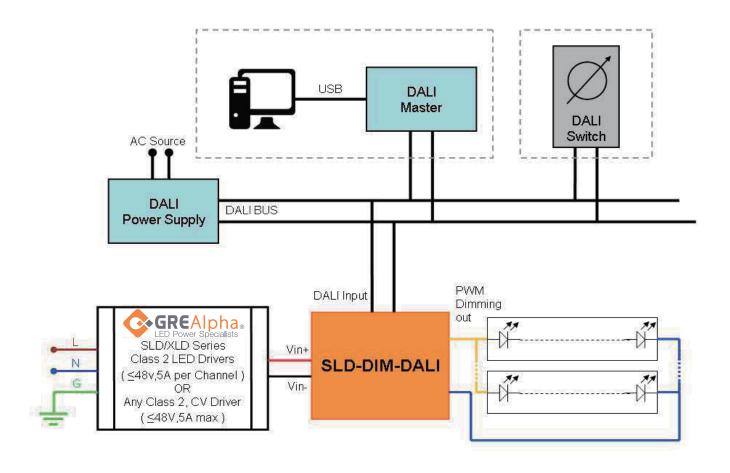
Packing Information:

0.04kg/pc; 150 pcs/carton;

6.8kg/carton; L435\*W250\*H193(mm)



# Wiring Diagrams



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

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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