



## SLD DIM CB5-UL Multi-Function Dimming Module

GRE Alpha's Casambi enabled dimming module is a 500 Watt, 5- channel output Constant Voltage LED dimming module that allows for seamless integration with Casambi-enabled luminaires, sensors, wall mounted and wireless switches. This module enables RGB + Tunable White control and dimming, with user adjustable color and control characteristics via the Casambi App, enabling unparalleled flexibility and ease of use.

### Features

- Wireless Bluetooth Low Energy communication
- Five Channels\*\*: R-G-B-W-W Outputs
- Free Casambi App on Android and iOS
- Unlimited number of luminaire connections
- Comply with EN55015 and FCC Part 15 without additional input filter or capacitor
- Easy to Install, high reliability
- 3 years warranty

### Applications

- Retrofit lighting
- Commercial, retail, residential Lighting
- Museum, Hotel, Office lighting
- RGBWW color changing lighting

# SLD-DIM-CB5

## Casambi Ready Module



| Model           | Input Voltage Range(Vdc) | Channel(s) Current Per Channel(A) | Channel(s) Input | Channel(s) Output | Output Rating |                             | Max Output Power (Per Channel) (W) | Max Output Power (All Channels) (W) |
|-----------------|--------------------------|-----------------------------------|------------------|-------------------|---------------|-----------------------------|------------------------------------|-------------------------------------|
|                 |                          |                                   |                  |                   | Voltage (VDC) | Max. Current Per Channel(A) |                                    |                                     |
| SLD-DIM-CB5     | 8 - 48                   | 12                                | 1                | 5                 | Vin - 0.3V    | 5                           | 100                                | 500                                 |
| SLD-DIM-CB5-UL* | 8 - 48                   | 5                                 | 5                | 5                 | Vin - 0.3V    | 5                           | 100                                | 500                                 |

\*- SLD-DIM-CB5/SLD-DIM-CB5-UL dimming module requires an external CV LED driver, connected to the DC input, and should not exceed the above input voltage range.

\*- UL Class 2 certified for use with UL Class 2 LED Drivers.

\*\* - SLD-DIM-CB5-UL can operate with 1, 2, 3, 4 or upto 5 output channels for different applications such as Tunable White or RGBW using different profiles on the Casambi App. The Profiles can be set up at the factory. Please contact GRE Alpha for further support.

## Input Specification

|                          |                                                                     |                             |                                                  |
|--------------------------|---------------------------------------------------------------------|-----------------------------|--------------------------------------------------|
| Voltage Range            | Please refer model table                                            | Input Current               | Please refer model table                         |
| Control                  | Bluetooth 4.0                                                       | Over Voltage                | Auto Recovery upon input voltage under Vin (max) |
| Short Circuit Protection | Hiccup-Mode, Auto-Recovery upon removal of short circuit condition. | Over Temperature Protection | Auto recovery upon operating temperature <105°C  |

## Output Specification

|                  |             |                |                                     |
|------------------|-------------|----------------|-------------------------------------|
| Output Frequency | 1.6 kHz PWM | Output Current | 5A max. per channel at full load ** |
| Power Efficiency | 97% Typ     | Dimming Ratio  | 1:1000                              |

\*\* - SLD-DIM-CB5-UL 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       | Pollution Degree | Protection Against Electric Shock Class | Overvoltage Category | Storage Temp  | Relative Humidity |
|---------------------------|------------------|-----------------------------------------|----------------------|---------------|-------------------|
| - 20°C ~ 60°C (Full Load) | 2                | Class III                               | I                    | - 40°C - 85°C | 5% - 93 %         |

## Compliance / Safety

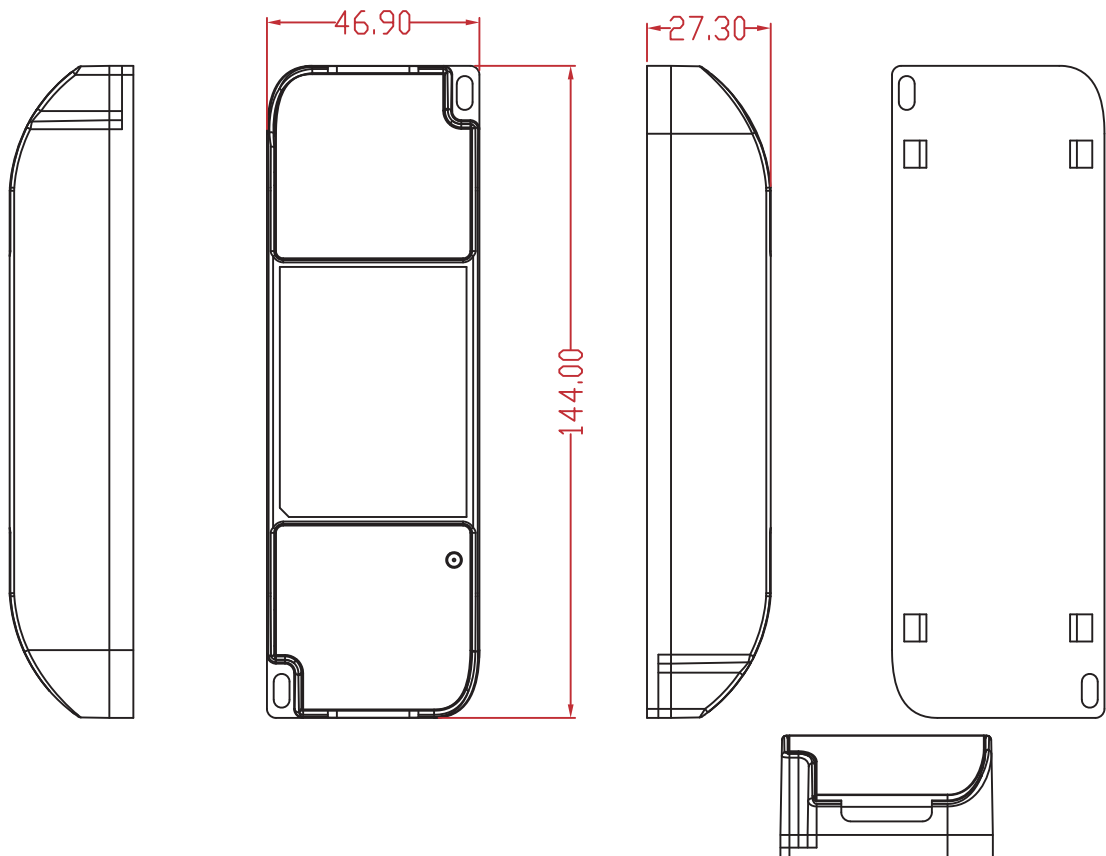
|                     |                                           |
|---------------------|-------------------------------------------|
| Wireless Standards: | Bluetooth 4.0                             |
| Weatherability:     | IP20: SLD-DIM-CB5<br>IP65: SLD-DIM-CB5-UL |

## Mechanical Specification

|                       |                                                                                                   |
|-----------------------|---------------------------------------------------------------------------------------------------|
| Power Unit Dimensions | SLD-DIM-CB5:144mm (L) x46.9mm (W) x 27.3mm (H)<br>SLD-DIM-CB5-UL: 98mm (L) x44mm (W) x 14.5mm (H) |
| Case Design/Material  | Polycarbonate White                                                                               |
| Wire Length           | 6 inches/152.4mm                                                                                  |
| Wire Size             | 18 AWG standard, 300V, 105°C                                                                      |

## Mechanical Diagram

### SLD-DIM-CB5



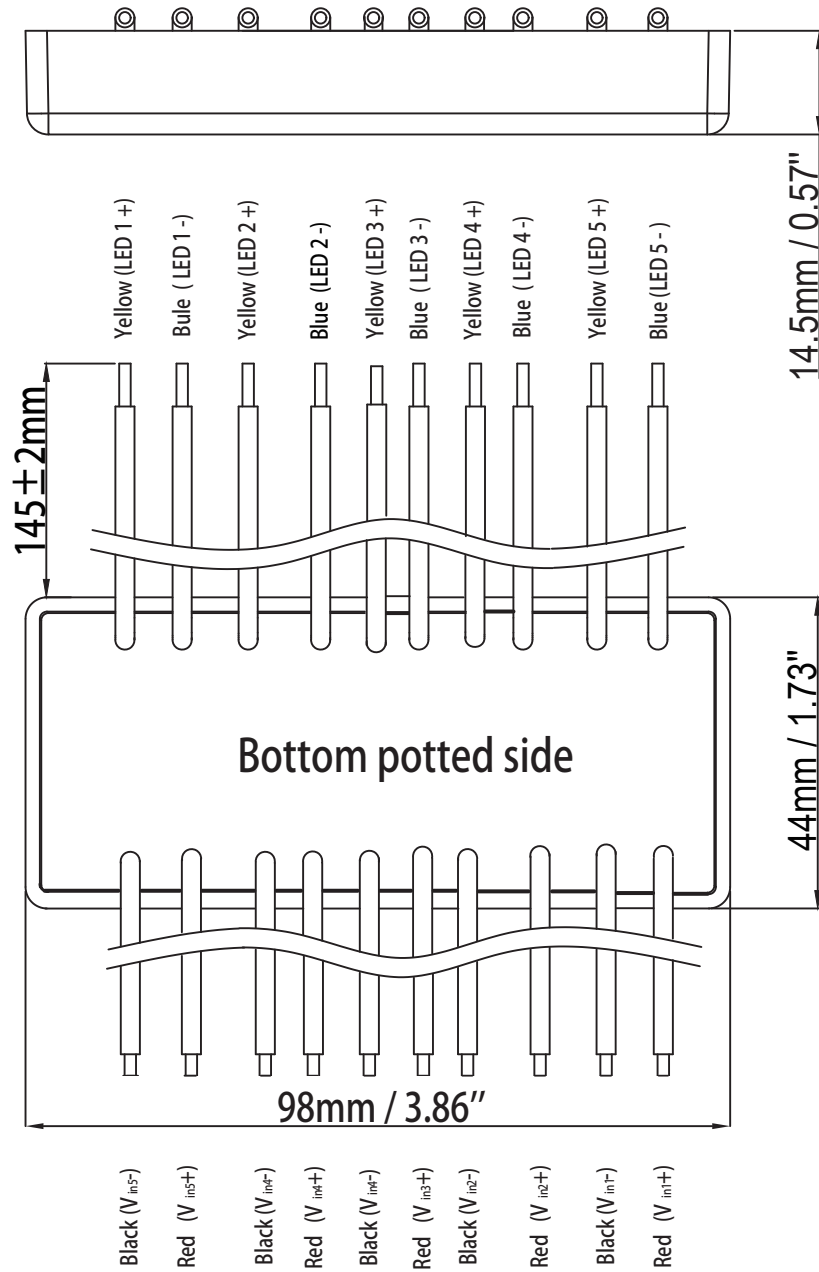
#### Packing Information:

0.08kg/pc; 50 pcs/carton;

5.4kg/ carton; L312\*W158\*L268(mm)

## Mechanical Diagram

### SLD-DIM-CB5-UL



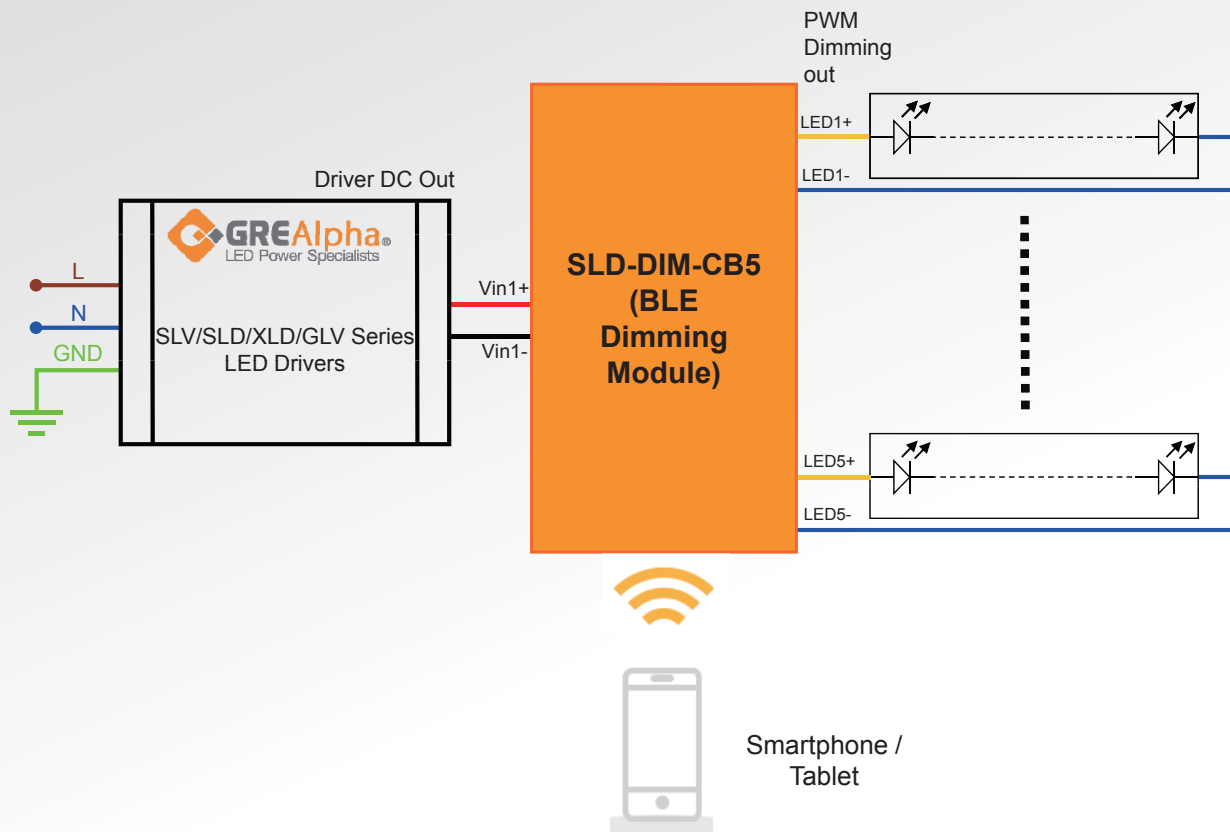
| Input Wire |                                        | Output Wire |                                        |
|------------|----------------------------------------|-------------|----------------------------------------|
| Red        | Vin1 +, Vin2 +, Vin3 +, Vin4 +, Vin5 + | Yellow      | LED1 +, LED2 +, LED3 +, LED4 +, LED5 + |
| Black      | Vin1 -, Vin2 -, Vin3 -, Vin4 -, Vin5 - | Blue        | LED1 -, LED2 -, LED3 -, LED4 -, LED5 - |

#### Packing Information

0.11 kg/pcs ; 100pcs/carton;

12.8 kg /carton; L270xW220xH430 (mm)

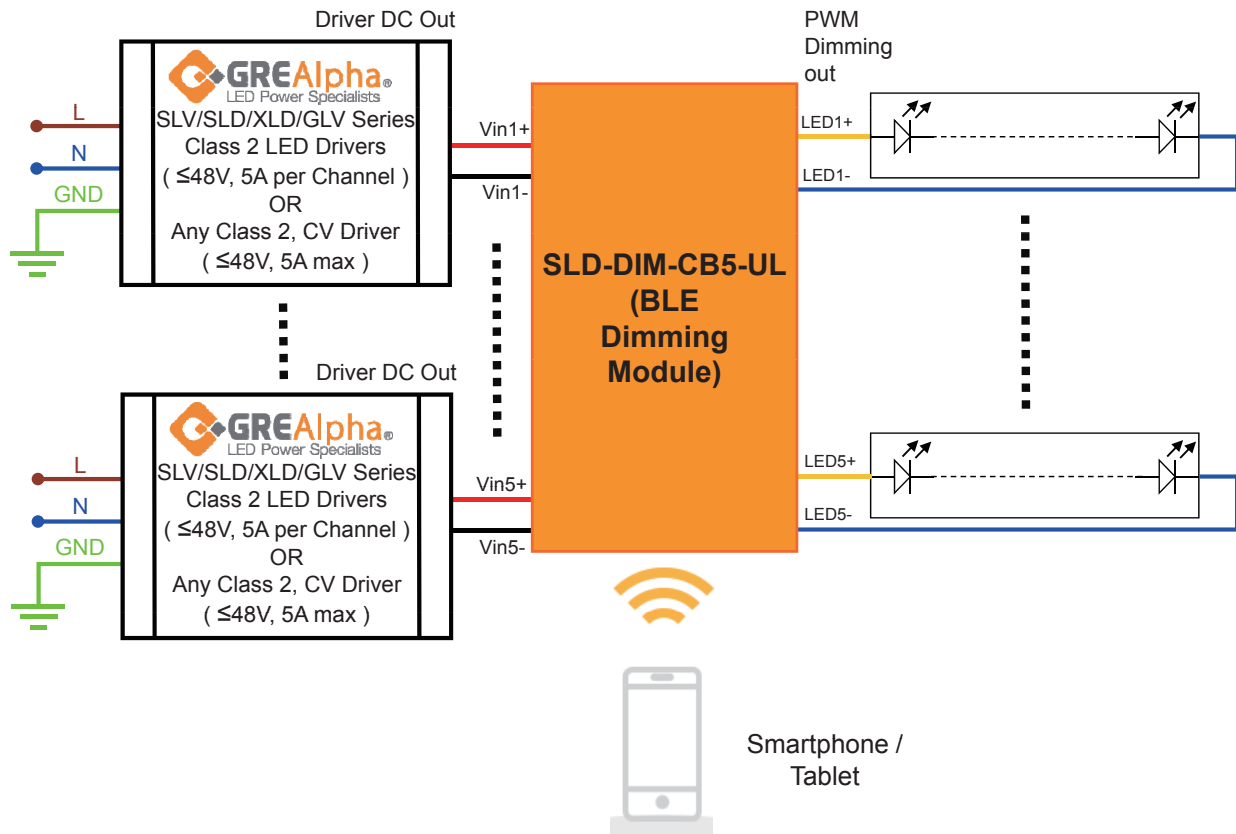
# Wiring Diagrams



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

**SLD-DIM-CB5**

# Wiring Diagrams



- \* 0-100% flicker-free performance not guaranteed when used with non-GRE Alpha CV Drivers
- One LED driver can be used to connect to more than one input on the SLD-DIM-CB5-UL, given that the LED driver is a constant voltage UL Class 2 driver, and the total output does not exceed the limits of the LED driver..

## SLD-DIM-CB5-UL

## First Time Use/Pairing Instructions

1. Connect the SLD-DIM-CB5-UL dimming module per the Wiring Diagram.
2. Power on.
3. Download the Casambi App from the App Store (for iOS devices) or Google Play (Android devices) and follow the instructions on the Casambi App.

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