

Zigbee Wireless Constant Voltage LED Dimming Module



GRE Alpha's Zigbee dimming module is a 240 watt Constant Voltage dimming device that operates based on IEEE 802.15.4 and the Zigbee 3.0 standard. Offering best-in-class interoperability between major lighting eco-systems (Philips, OSRAM, AMAZON Echo and more) and provides device to device vs cloud-to-cloud connectivity without the reliance on external gateway or connection to the internet. Simple and easy to install, this compact device also supports connecting directly to a ZigBee GreenPower switch for battery-less dimming enabling seamless upgrade to Zigbee Smart lighting networks.

SLD-DIM-ZB Zigbee Wireless LED Dimming Module



Features

- Based on international standards IEEE 802.15.4 and ZigBee 3.0 True interoperability with major eco-systems like Philips, IKEA, OSRAM and ubisys. Interoperability is device-to-device, not a cloud-to-cloud – no reliance on internet connectivity
- Can be controlled in multiple ways, seamlessly and concurrently: using a hub, remote controls, mains-powered (ubisys C4), battery-powered (e.g. Philips dimmer switch) or battery-less (e.g. EnOcean ZGP) switches, on/off occupancy sensors (e.g. IKEA), etc.
- Can be directly controlled by battery-less ZigBee Green Power switches (recommendation: new/upcoming enocean PTM216Z generic switch module)
- When combined with ubisys G1, lights can be controlled using smartphone apps, HomeKit, or Amazon Alexa, or based on schedules etc.
- Lights can be grouped and either controlled individually or as a group (either using a gateway or a simple remote control)
- Over-the-air firmware upgrade capable - ubisys G1 or any other Zigbee OTA server can deploy new firmware with enhancements and bug-fixes
- Prepared for Bluetooth Low-Energy for simple applications (requires a future firmware-upgrade)

Applications

- Architectural Lighting
- Warehouses
- Signage
- Strip Lighting
- Swimming Pools/Fountain lighting

Model	Input Voltage Range(Vdc)	Channel(s) Output	Output Rating		Max Output Power (All Channels) (W)
			Voltage (VDC)	Max. Current (All Channels) (A)	
SLD-DIM-ZB	8 - 48	1	Vin - 0.3V	5	240

*- SLD-DIM-ZB 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	Please refer model table	Input Current	5.2A max (per channel)
Control	Zigbee Standard	Over Voltage	Auto Recovery upon input voltage under Vin (max)
Short Circuit Protection	Hiccup-Mode, Auto-Recovery upon removal of short circuit condition.	Under voltage Logout	Auto Recovery upon input voltage under Vin (max)
Over Temperature Protection	Auto recovery upon operating temperature <105°C		

Output Specification

Output Frequency	7.8 kHz PWM	Output Current	5A max. at full load **
Power Efficiency	97% Typ	Dimming Ratio	1:100

** - SLD-DIM-ZBdimming 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

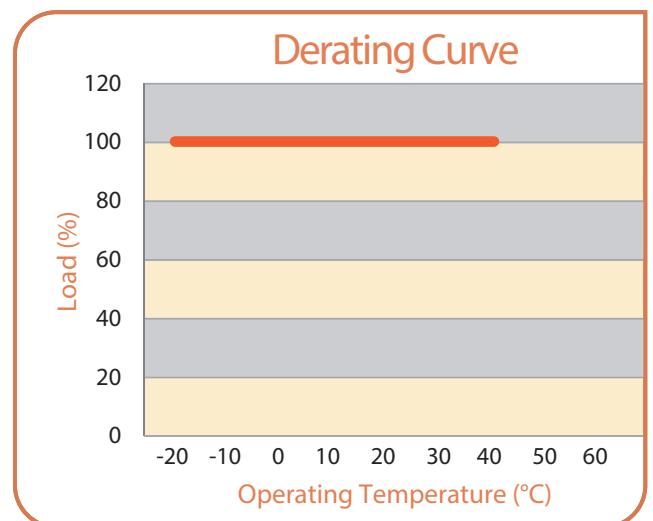
Ambient Temperature	Storage Temp	Relative Humidity
- 20°C ~ 40°C (Full Load)	- 40°C - 85°C	5% - 93 %

Compliance / Safety

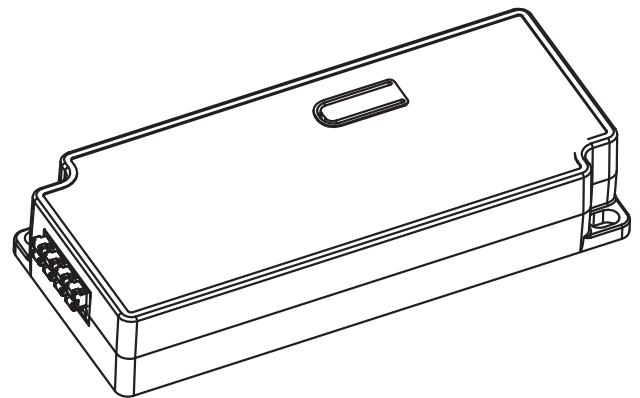
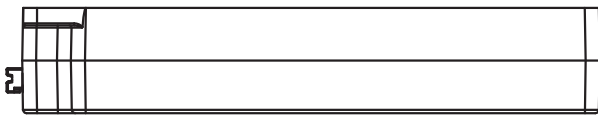
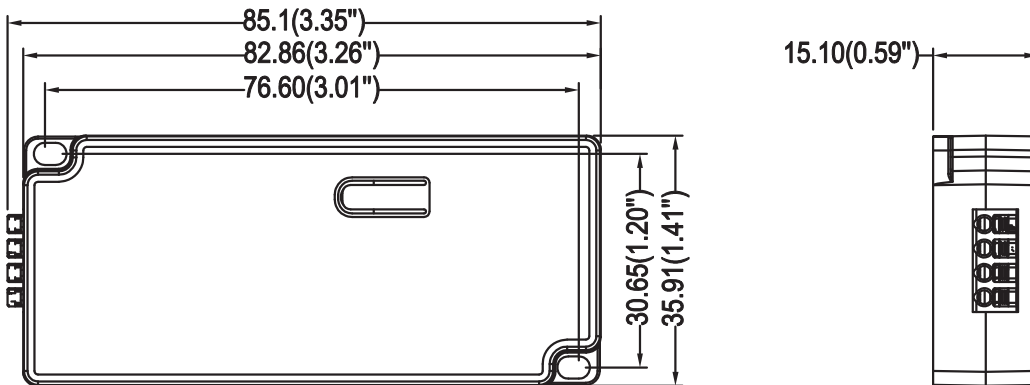
Wireless Standards:	Zigbee Standard
Weatherability:	IP 20

Mechanical Specification

Power Unit Dimensions	85.1mm (L) x35.9 mm (W) x 15.1mm (H)
Case Design/Material	Polycarbonate White
Connectors	Vin+, Vin-, LED+, LED-



Mechanical Diagram



Packing Information:
 Weight: 0.031kg/pc; 4.5kg/carton;
 100pcs/carton; 212(L)*192(w)*220(H)mm

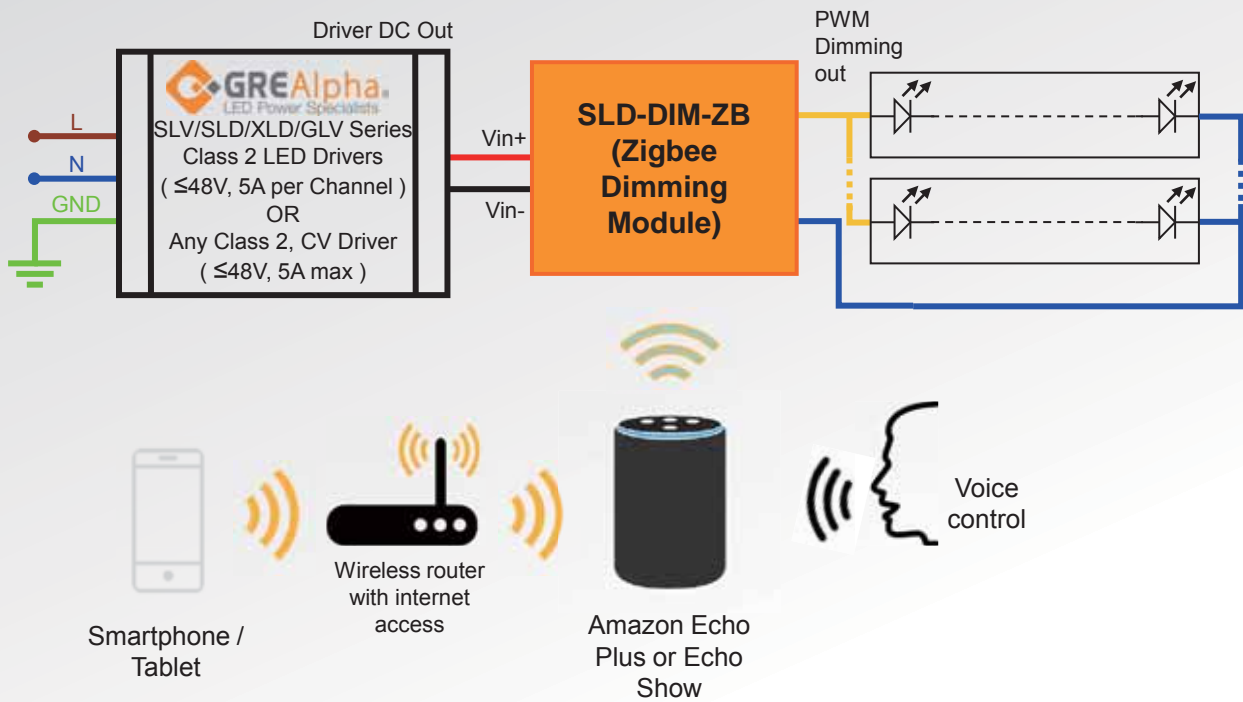
Linking Instructions

1. For linking with a switch/dimmer, follow the linking instructions from the switch/dimmer installation guide to search for a new device
2. Turn on the SLD-DIM-ZB dimming module and press the Link button for around 10 sec to enter into linking mode
3. Red light on the Link button flashes rapidly - Dimming module enters into linking mode
4. If linking is successful, red light stays on for a few seconds
5. Return to and follow the switch/dimmer's instructions to complete the setup
6. To unlink a linked switch/dimmer or to link to a different switch/dimmer, press the Link button for around 10 sec (to enter into linking mode again). Repeat the above steps to link to a new switch/dimmer

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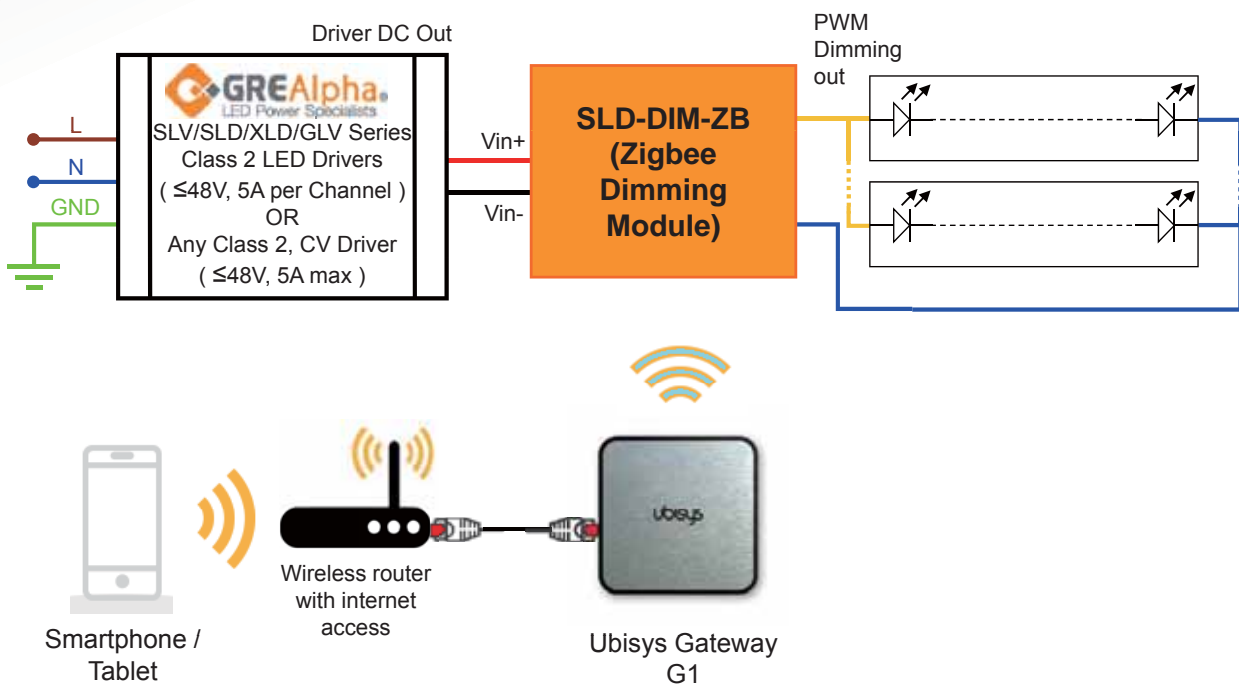
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Wiring Diagrams



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

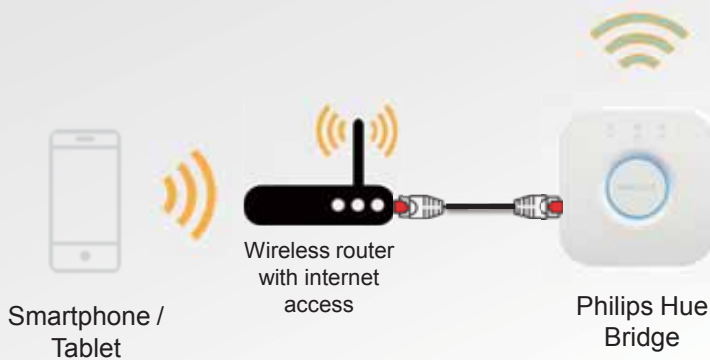
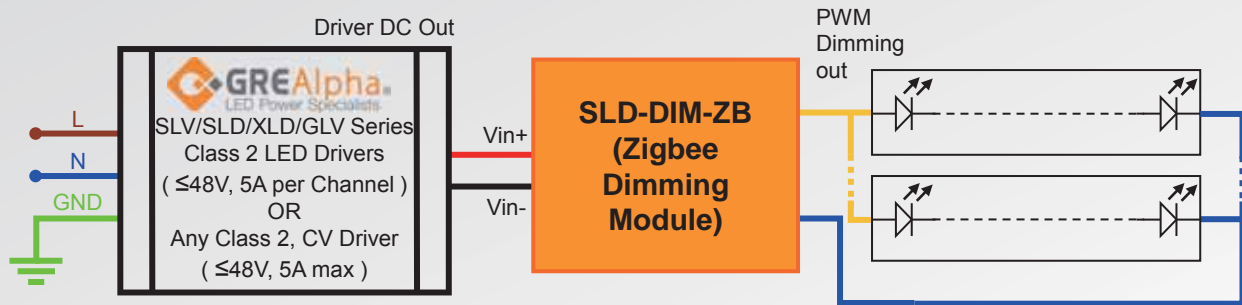
Amazon Echo Plus / Echo Show



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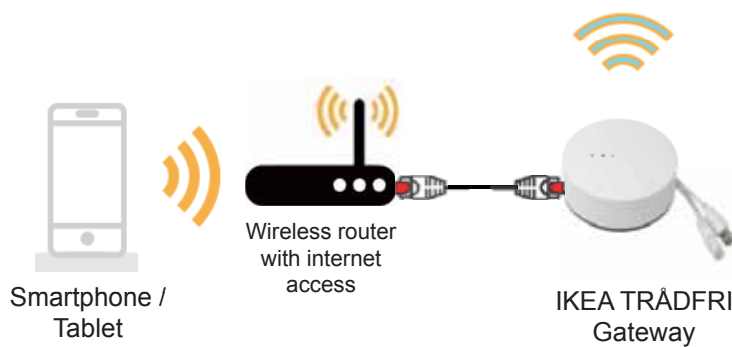
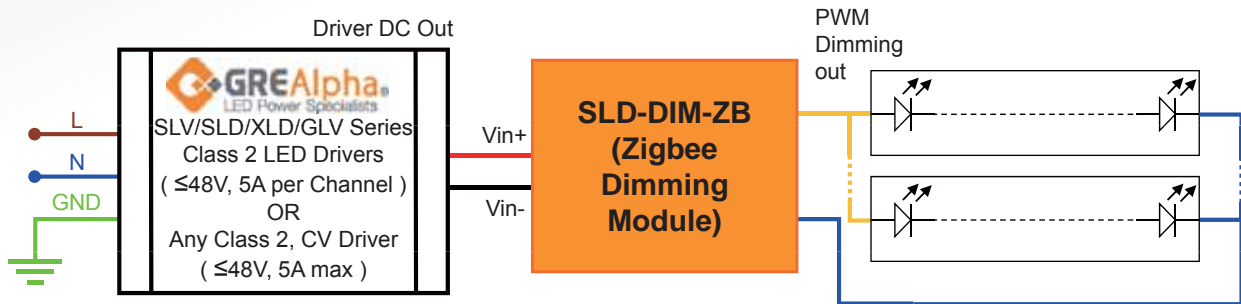
Ubisys Gateway G1

Wiring Diagrams



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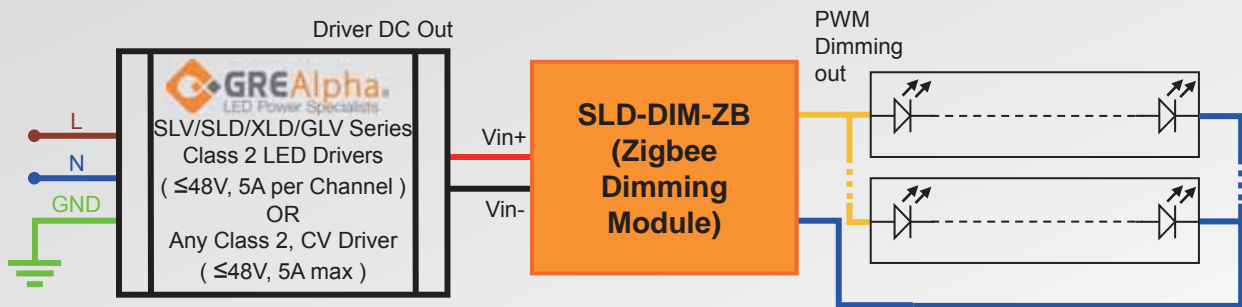
Philips Hue



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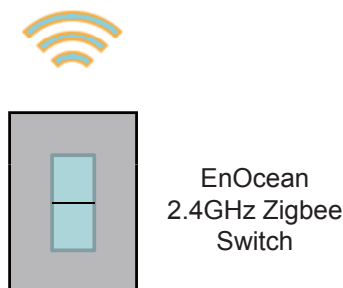
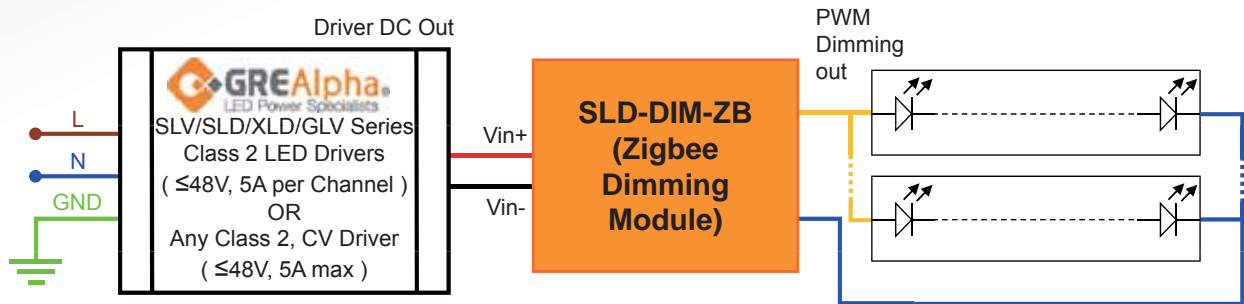
IKEA TRÅDFRI

Wiring Diagrams



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Osram LIGHTIFY



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EnOcean