

Features

- Convert Daintree Networks® Wireless Dimming Commands to 0-10V Dimming Input Signals for One or More Inventronics LED Drivers
- Compatible with Daintree Networks® ControlScope® Building Energy Management System.
- Use Driver Dim-to-Off Capability to Eliminate AC Switch or Relay
- Powered by 12Vdc with Simple 3-Wire Connection to Driver
- Low Standby Power < 0.5W
- Operating Frequency: 2.4GHz
- Flame Class: 5VA



Description

The CNV-ZIGB is a wireless dimming signal converter that enables one or more Inventronics LED drivers to be controlled by the Daintree Networks® ControlScope® building control solution. Using the CNV-ZIGB with other interoperable Daintree devices, ControlScope® delivers advanced lighting controls for a wide range of indoor and outdoor lighting applications.



Models

P/N	Connection to LED driver	Connection to Daintree System
CNV-ZIGB	UL Wire(black/white, purple, gray)	Zigbee

Input Specifications

Parameter	Min.	Typ.	Max.	Notes
Vaux Voltage	11.3 V	12 V	13.2 V	Support the maximum output current of LED driver to 100%Io
Iaux (Receive mode) standby	-	20 mA	-	
Iaux Transmit mode	-	100 mA	150 mA	Typical duration is 2ms, the max duty cycle 66%.

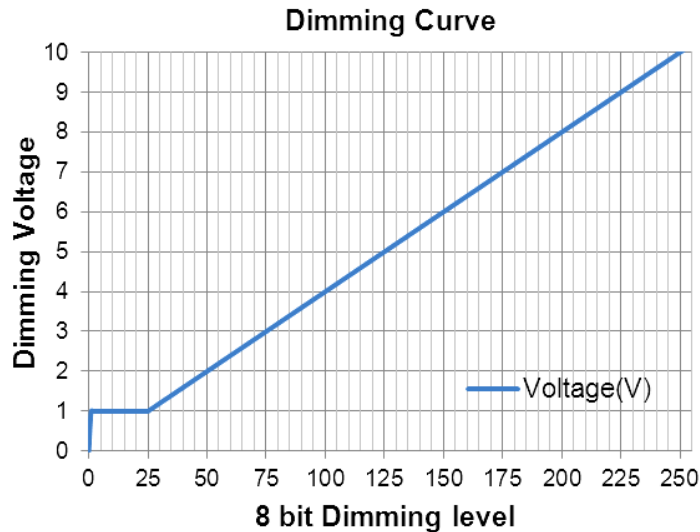
Dimming Specifications

Parameter	Min.	Typ.	Max.	Notes
Dim+ Voltage	0 V	-	10 V	Vaux>11.5V
	0 V	-	(Vaux-1.5)V	9.5V≤Vaux≤11.5V
Dim+ Sink Current	0 mA	-	20 mA	When dimming off, Dim+≤0.3V

Note: All specifications are typical at 25 °C unless otherwise stated.

Output Dimming Curve

This controller integrates a linear curve.



General Specifications

Parameter	Min.	Typ.	Max.	Notes
Dimensions Inches (L × W × H) Millimeters (L × W × H)		1.81 × 1.26 × 0.87 62 × 33 × 22		Without the bracket
Net Weight	-	60 g	-	With the bracket and nut

Note: All specifications are typical at 25 °C unless otherwise stated.

Environmental Specifications

Parameter	Min.	Typ.	Max.	Notes
Operating Temperature	-20 °C	-	+70 °C	
Storage Temperature	-20 °C	-	+85 °C	Humidity: 5% RH to 100% RH

Safety & EMC Compliance

Safety Category	Standard
UL/CUL	UL8750, CAN/CSA-C22.2 No. 250.13
CE	EN 62479, ETSI EN 301 489-1 V1.9.2, ETSI EN 301 489-3 V1.6.1, ETSI EN 300 328 V1.9.1
EMI Standards	Notes
EN 55022 ⁽¹⁾	Conducted emission Test & Radiated emission Test
FCC Part 15 ⁽¹⁾	ANSI C63.4 Class B
	This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: [1] this device may not cause harmful interference, and [2] this device must accept any interference received, including interference that may cause undesired operation.
EMS Standards	Notes
EN 61000-4-2	Electrostatic Discharge (ESD) : 8KV air discharge, 4KV contact discharge
EN 61000-4-3	Radio-Frequency Electromagnetic Field Susceptibility Test-RS

Note: (1)The CNV-ZIGB is considered as a component that will be operated in combination with final equipment. Since EMI performance will be affected by the complete installation, the final equipment manufacturers must requalify EMI Directive on the complete installation again.

Function Definition of Interface(Connection to LED Driver)

Wire Color	Function	Notes
BLACK/WHITE	Vaux	To LED driver's auxiliary power
PURPLE	Vdim	Output to driver's 0-10V dimming line
GRAY	Return	Return for auxiliary power and dimming signal

Operation Notes

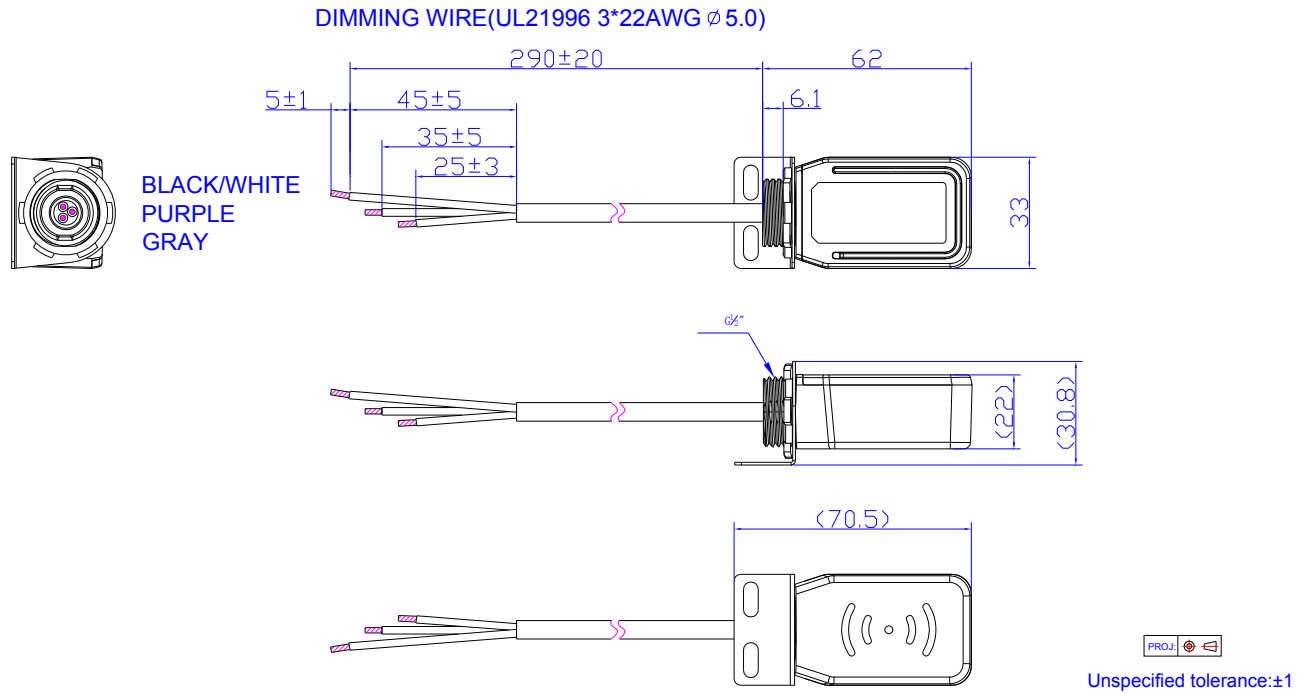
- To reset the CNV-ZIGB, short Dim+ to Vaux for approximately 10 seconds. Vaux must be between 11.5V and 13V. Resetting the CNV-ZIGB will cause it to forget the last network and allow it to join a currently available one.
- If multiple Zigbee based networks are present, it is recommended that they be set to not automatically allow new devices to join.

- If you an “OFF” command is sent two or more times continuously, and then an “ON” command is switch on, the output will be 10%.

Compatible Driver List See the Link Below

<http://www.inventronics-co.com/resources/compatibility-lists/>

Mechanical Outline



RoHS Compliance

Our products comply with the European Directive 2011/65/EU, calling for the elimination of lead and other hazardous substances from electronic products.

Revision History

Change Date	Rev.	Description of Change		
		Item	From	To
2016-12-08	A	Datasheet Release	/	/
2017-03-06	B	Flame Class	UL94-V0	5VA
		Dimming Specifications - Note of Dim+ Voltage	Vaux≥11.5V	Vaux>11.5V
		Safety & EMC Compliance	/	Updated
2017-07-28	C	Mechanical Outline	/	Updated
2017-08-15	D	Mechanical Outline	/	Updated
2018-02-11	E	Link in the Compatible Driver List See the Link Below	/	Updated