

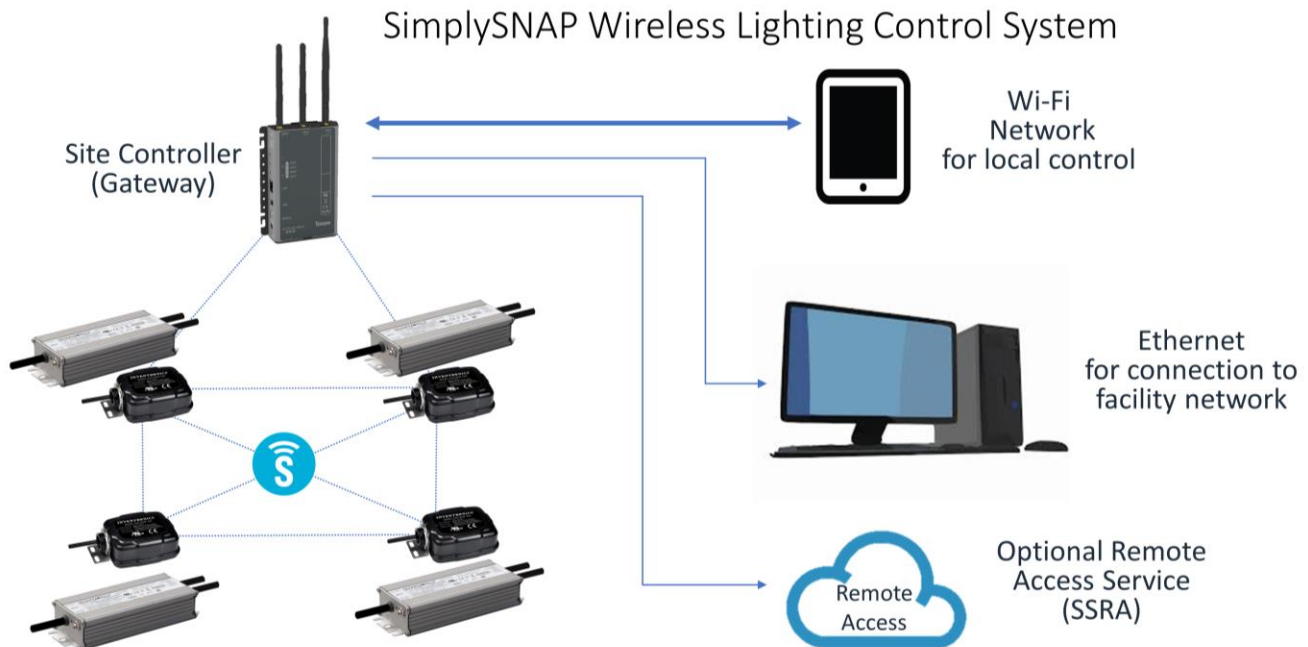
**Features**

- For Use with Synapse SNAP Mesh Networks, to Control One or More Inventronics Controls Ready Drivers
- Powered by Inventronics Always On 12V Auxiliary Supply
- Uses Driver Dim-to-Off Capability to Eliminate AC Switch or Relay
- Commissioned Using Synapse SimplySNAP
- Radio: SNAP 2.4GHz; 802.15.4
- Range: approx. 400 Feet/100 Meters
- Convenient Mounting: Outside a Junction Box or Luminaire Secured by a Single Nut
- Suitable for Direct Sunlight Applications
- IP66, and UL Dry/Damp/Wet Location rated
- Flame Class: 5VA



**Description**

The CNV-SNAP-AN0 is a self-contained, wireless network interface module that enables one or more Inventronics LED drivers to be controlled by Synapse Lighting Control networks. Synapse wireless control can be used for both indoor and outdoor lighting systems. Powered by compatible LED drivers, its compact design and flexible deployment options make it ideal for placement in a wide array of luminaires.



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## Synapse SimplySNAP

SimplySNAP is a site-based solution for monitoring and controlling LED lights via an encrypted, self-forming, self-healing, 802.15.4 SNAP® mesh network. The network doesn't require internet access, and allows for system setup and configuration through a mobile-friendly Wi-Fi or LAN-accessible interface. The system stores power data, alarms, and critical events locally for maintenance and troubleshooting, and provides California Title 24 compliant daily schedules for multiple dimming levels. With programmable schedules and easy setup, SimplySNAP is the perfect solution for remote sites where internet access is difficult; you just configure it and it runs. Easy access from a laptop or tablet means your system can be reconfigured whenever needed.

- No Internet Required – All control is site based
- Android App for commissioning and control
- Each controller's location can be stored and displayed on a map
- Multiple zones, scenes, sensors, events, and weekly schedule
- Data and events are stored on the local site controller
- Multiple user login levels for specialized control scenarios

## Models

P/N	Connection to LED Driver	Connection to Synapse System
CNV-SNAP-AN0	UL Wire(black/white, purple, gray)	SNAP Mesh Network

## Input Specifications

Parameter	Min.	Typ.	Max.	Notes
Vaux Voltage	5 V	12 V	24 V	Support the maximum output current of LED driver to 100%Io
Iaux (Vaux Current) at 12V	-	60 mA	-	0.7W Max.

## General Specifications

Parameter	Min.	Typ.	Max.	Notes
Dimensions Inches (L x W x H) Millimeters (L x W x H)		3.62 x 2.71 x 1.14 92 x 69 x 29		Without the bracket
Net Weight	-	235 g	-	With the bracket and nut

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

## Environmental Specifications

Parameter	Min.	Typ.	Max.	Notes
Operating Temperature	-40 °C	-	+70 °C	
Storage Temperature	-40 °C	-	+85 °C	Humidity: 5% RH to 100% RH

## Dimming Specifications

Parameter	Min.	Typ.	Max.	Notes
Dim+ Voltage	0 V	-	10 V	
Dim+ Sink Current	0 mA	-	10 mA	

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

## Radio Specifications

- SNAP 2.4GHz; 802.15.4
- +20 dBm Transmit Power
- -103 dBm Receive Sensitivity

## Safety & EMC Compliance

Safety Category	Standard
UL/CUL	UL8750,CAN/CSA-C22.2 No. 250.13
CE	EN 61347-2-11, EN 61347-1, EN 62479, ETSI EN 300 220-1 V2.4.1, ETSI EN 300 220-2 V2.4.1, ETSI EN 301 489-1 V1.9.2, ETSI EN 301 489-3 V1.6.1
EMI Standards	Notes
EN 55022 <sup>(1)</sup>	Conducted emission Test & Radiated emission Test
FCC Part 15 <sup>(1)</sup>	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): 8 kV air discharge, 4 kV contact discharge
EN 61000-4-3	Radio-Frequency Electromagnetic Field Susceptibility Test-RS

**Note:** (1) The CNV-SNAP-AN0 is considered as a component that will be operated in combination with final equipment. since EMI performance without the bracket will be affected by the complete installation, the final equipment manufacturers must re-qualify EMI Directive on the complete installation again.

## Function Definition of Interface (Connection to LED Driver)

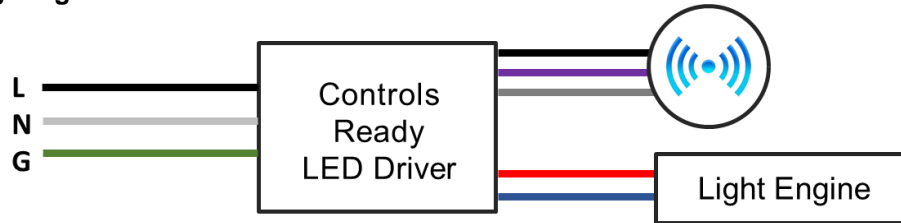
Wire Color	Name	Description
BLACK/WHITE	Vaux	Input from driver's 12V auxiliary power
PURPLE	Dim+	The dimming signal output to control the driver

**Function Definition of Interface (Connection to LED Driver)(Continued)**

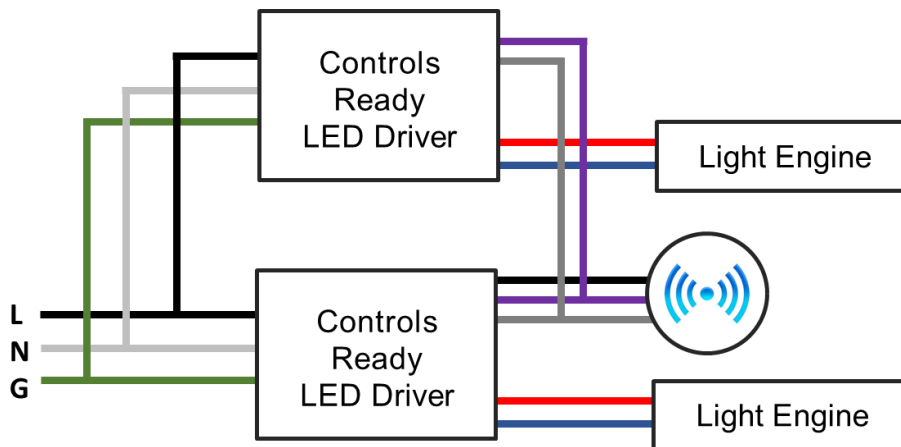
Wire Color	Name	Description
GRAY	Return	Return for auxiliary power and dimming signal

**Wiring**

- 1:1 Wiring Diagram



- 1: Many Wiring Diagram



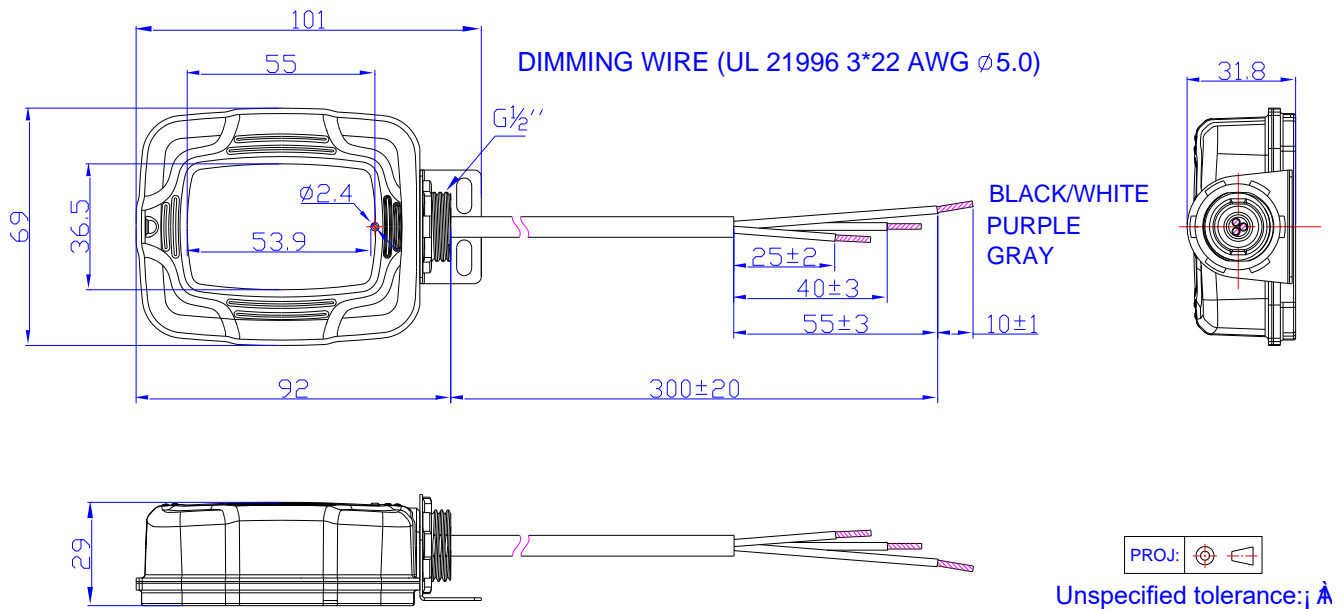
**Operation Notes**

- For more operation details, check <https://help.synapsewireless.com/>

**Compatible Driver List**

- Compatible driver list please refer to the: [CNV-SNAP-AN0 Compatible List](#)

### 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
2018-04-12	A	Datasheet Release	/	/

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