

Specification Data	
Job Name	
Type	
Catalog #	
Comments	

## PRODUCT OVERVIEW

The DIM10-087-06-IP embedded wireless controller opens an exciting integration path for LED Luminaires. The smaller size and lower cost make this DC-powered wireless controller versatile enough to be embedded in nearly any wattage LED Luminaire.

Pairing the DIM10-087-06-IP with a SimplySnap Site Controller makes it easy to comply with ASHRAE 90.1, Title 24, DLC NLC Indoor/Outdoor, and other energy requirements today and in the future.

## KEY FEATURES:

- Seamless SimplySnap Integration
- Simplified DC Design — mates with LED Drivers
- Secure AES128 Encryption
- DLC Certification for both Indoor and Outdoor
- Self-healing 2.4GHz SNAP Mesh Networking
- Secure, over-the-air software upgrades
- 2 Sensor Inputs: DC Motion and 0-10V Photocells
- IP66 rated for indoor and outdoor applications

### IEC 62386 DALI-2 Certified – D4i

- DALI-2 Certified DATA Bus – Part 101
- D4i Power Monitoring – Part 252
- D4i – Type D – Single-Master Controller – Part 351
- DALI-2 Linear Dimming, ON/OFF – Part 218
- Compatible with WattStopper DALI-2 FDP-301 Motion and Photocell
- RGBA Color Support
- Requires DALI Power Supply on D4i Driver
- Requires D4i Aux Power Supply

### DIM to OFF LED Drivers

- 0-10V Dimming, ON/OFF
- No Power Monitoring
- Powered via LED Driver Aux Power

**Note-** LED Driver must support DIM to OFF functionality



Powered by SimplySnap

## Future D4i Enhancements

- Luminaire Run Time - Part 253
- Luminaire Model Data - Part 251 - Memory Bank 1
- LED Driver Model Data - Part 102 - Memory Bank 0
- Surge Detection - Part 253
- Over Temperature Counters - Part 253
- Over Current Counters - Part 253
- Diagnostics and Alerts - Part 253

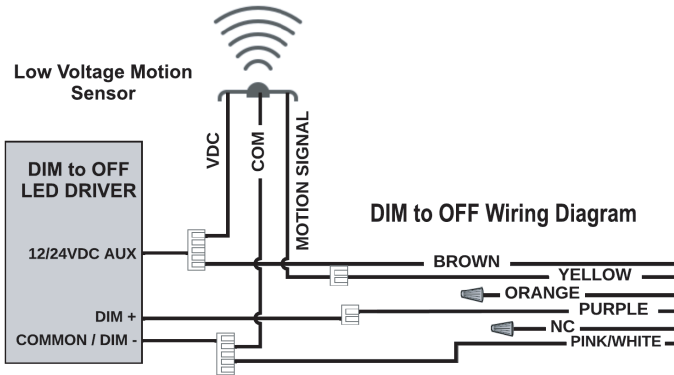
## SPECIFICATIONS

<b>Dimensions</b>	3.7" x 2.8" x 0.9"	
	See <a href="#">Mechanical Datasheet</a> for Engineering dimensions	
<b>Input Power</b>	12-24 VDC +/- 10% , 900mW max	
<b>Temperature</b>	-40°C to +80°C	
<b>IP Rating</b>	IP66	
<b>Wire Size</b>	18AWG, 7" Wires, 600V	
<b>Dimming</b>	0-10V, 10mA Souce/Sink (Max) or D4i Dimming	
<b>D4i LED Drivers<sup>1</sup></b>	Limited to 4 D4i LED Drivers	
<b>Sensor Input Specifications</b>	Analog: 0-10V	Software selectable
	Digital: 0-24V	
<b>Radio</b>	SNAP 2.4GHz ; 802.15.4 +20 dBm Transmit Power -103 dBm Receive Sensitivity	
	c(UL)us; FCC/IC; CE; UKCA; DLC- Indoor/Outdoor; DALI-2 - D4i Certification	
<b>Warranty<sup>2</sup></b>	5 Years	

1. Maximum of 4 LED Drivers per controller, consult Synapse Support if a greater ratio is needed.  
2. See [www.synapsewireless.com/warranty](http://www.synapsewireless.com/warranty) for warranty terms.



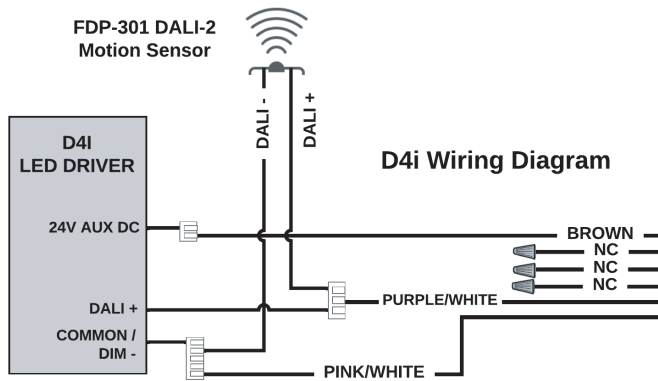
# WIRING DIAGRAM EXAMPLES



Product #	Description
DIM10-087-06-IP	Board in IP66 Case with Wires, internal antenna



Note: Deployment is for inside fixtures only.  
Do NOT use in a fixture to fixture design.



LIGHTING CONTROLLER

## Status LED- when powered

Color	Meaning
RED	No Network Found (Communication Lost)
BLINKING GREEN	Network Found, Controller Not Configured (Device not yet added to SimplySnap)
GREEN	Network Found, Controller Configured (Normal Operation)

## Signal/Wire Colors

Signal	Wire Color
DALI-/COMMON	PINK/WHITE STRIPE
DALI+	PURPLE/WHITE STRIPE
DIM+	PURPLE
SENSOR INPUT B	ORANGE
SENSOR INPUT A	YELLOW
POWER	BROWN

Note: Cap Unused Wires with a Wire Nut!

## SimplySnap Site Controller options- required for all deployments

Part #	Description	Application
SS450-002	SimplySnap, WiFi, Verizon LTE, Industrial Metal Enclosure	Indoor
CBSSW-450-002	Central Base Station SS450-based Model with 5-button switch and NEMA 4X enclosure	Indoor/Outdoor

Patented – Virtual marking at <https://www.synapsewireless.com/about/patents>