

Project		Catalog #		Type	
Prepared by		Notes		Date	



# WaveLinx

## PRO Universal Dimming Switchpack with Dry Contact Input (WSP-CA-010)

Wireless 0-10V dimming switchpack for 120-347V (Single Phase) lighting applications - includes low-voltage sensor / contact closure input

### Typical Applications

Office • Education • Healthcare • Hospitality • Retail  
Industrial • Manufacturing

### Interactive Menu

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- Product Warranty

### Product Certification\*



- Meets latest ASHRAE Standard 90.1 requirements
- Meets latest IECC requirements
- Meets latest CEC Title 24 requirements
- Manufactured in an ISO 9001 certified factory

### Product Features



### Compatibility



### Overview

The WaveLinx PRO Universal Dimming Switchpack with Dry Contact Input (WSP-CA-010) control is an integral part of the WaveLinx PRO Connected Lighting (WCL) system and offers 120-347VAC (Single Phase) 20amp zero crossing relay control and continuous 0-10V dimming control of LED and non-LED loads. The 347V Dimming Switchpack also supports 20amp plug load control. The WSP-CA-010 is powered by the 120-347VAC (Single Phase) circuit it is controlling and provides simple 1/2" knockout mounting.

The Universal Dimming Switchpack operates on a wireless mesh network based on IEEE 802.15.4 standards.

The WaveLinx PRO Universal Dimming Switchpack with Dry Contact Input may also be used to integrate Greengate low-voltage occupancy (PIR or Dual Tech) sensors or contact closure input for a control area.

WaveLinx Mobile Application is used to commission contact closure behavior either as a sensor input or a contact closure. When used as a contact closure, the closure action may be used to drive one of up to 16 defined scenes.

### Product Features & Benefits

- Relay control of loads up to 20amps (including receptacles)
- 0-10V dimming control of up to 15 typical ballasts / LED drivers
- Plenum rated
- Fails safe to 100% if communications are lost
- Energy calculations available through WaveLinx CORE based on max load input
- Greengate low-voltage sensor integration or contact closure input

\*T24 and RoHS are self-tested by Cooper Lighting Solutions. Not a third party certification.

## Order Information

The WaveLinx PRO Universal Dimming Switchpack with Dry Contact Input is an accessory to the WaveLinx PRO Connected Lighting (WCL) system and requires a WaveLinx Area Controller (WAC) for full functionality.

The wireless relay is used to control plug loads or luminaires that do not include WaveLinx integrated controls. Greengate low-voltage occupancy (PIR or Dual Tech) sensor integration or contact closure input is also available for a control area.

### Catalog Number

Catalog Number	Description
<b>WSP-CA-010</b>	WaveLinx Universal Dimming Switchpack with Dry Contact Input

## Required Accessories

All WaveLinx connected lighting (WCL) system accessories require at least one WaveLinx Area Controller (WAC) for communications. Ensure the bill of material includes one of the following components.

### Catalog Number

Catalog Number	Description
<b>WAC2-POE</b>	WaveLinx Area Controller G2, PoE powered
<b>WAC2-120</b>	WaveLinx Area Controller G2, with 120VAC to PoE Injector

## Optional Accessories

For connection to 120VAC outlets.

### Catalog Number

Catalog Number	Description
<b>WPOE2-120</b>	120VAC to PoE Injector

## Product Specifications

### Mechanical

**Size:** 3.5"L x 2.7"W x 1.6"H (90mm x 68mm x 40mm)

**Weight:** 6.3 oz (178 g)

### Environment:

- **Operating temperature:**  
20A: -40°F to 131°F (-40°C to 55°C)  
10A: -40°F to 149°F (-40°C to 65°C)
- **Storage temperature:** 32°F to 158°F (0°C to 70°C)
- **Relative humidity operating:** 10% to 90% RH (non-condensing)
- For indoor use only

**Mounting:** Mounts to the side of a 4" (102mm) square box via ½" (13mm) knockout

**Color:** Black

**Housing:** Injection molded housing, ABS resin with V-0 flame rating. Plenum rated for external junction box mounting.

### Electrical

#### Power:

- 120-347VAC (+/- 10%) 50/60Hz (Single Phase)
- 10A (347VAC)

#### Output Information:

- 20amp 120-347VAC General Purpose (Single Phase)
- 16amp 120-347VAC electronic ballast (LED load) (Single Phase)
- Single class 2 0-10V dimming output (IEC 60929 Annex E) capable of sinking up to 30mA
- 0-10V output supports up to 15 typical ballasts / LED drivers (assuming 2mA per typical ballast / driver)

### Wireless Specifications

**Radio:** 2.4GHz

**Standard:** IEEE 802.15.4

**Transmitter Power:** + 7dBm

**Range:** 150ft (46m) LOS

50ft (15m) through standard walls when mounted outside junction box

### System Performance

**Maximum number of Devices:** 200 per WaveLinx Area Controller (best practice 150 devices)

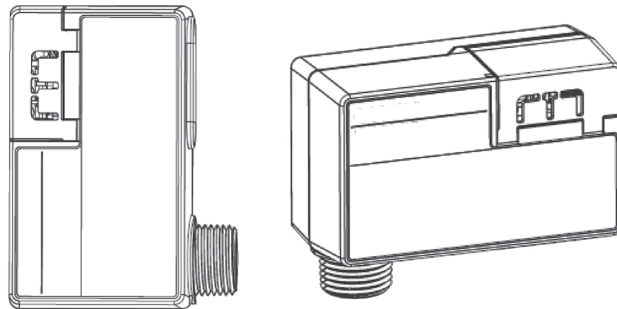
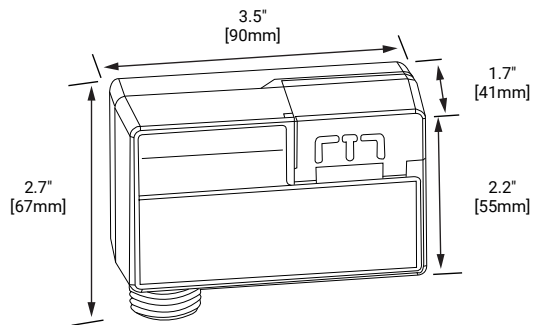
### Standards/Ratings\*

- cULus Listed - Energy Management Equipment (UL916)
- RoHS Compliant
- Manufactured in an ISO 9001 certified factory
- Meets latest ASHRAE Standard 90.1 requirements
- Meets latest IECC requirements
- Meets latest CEC Title 24 requirements

### Warranty

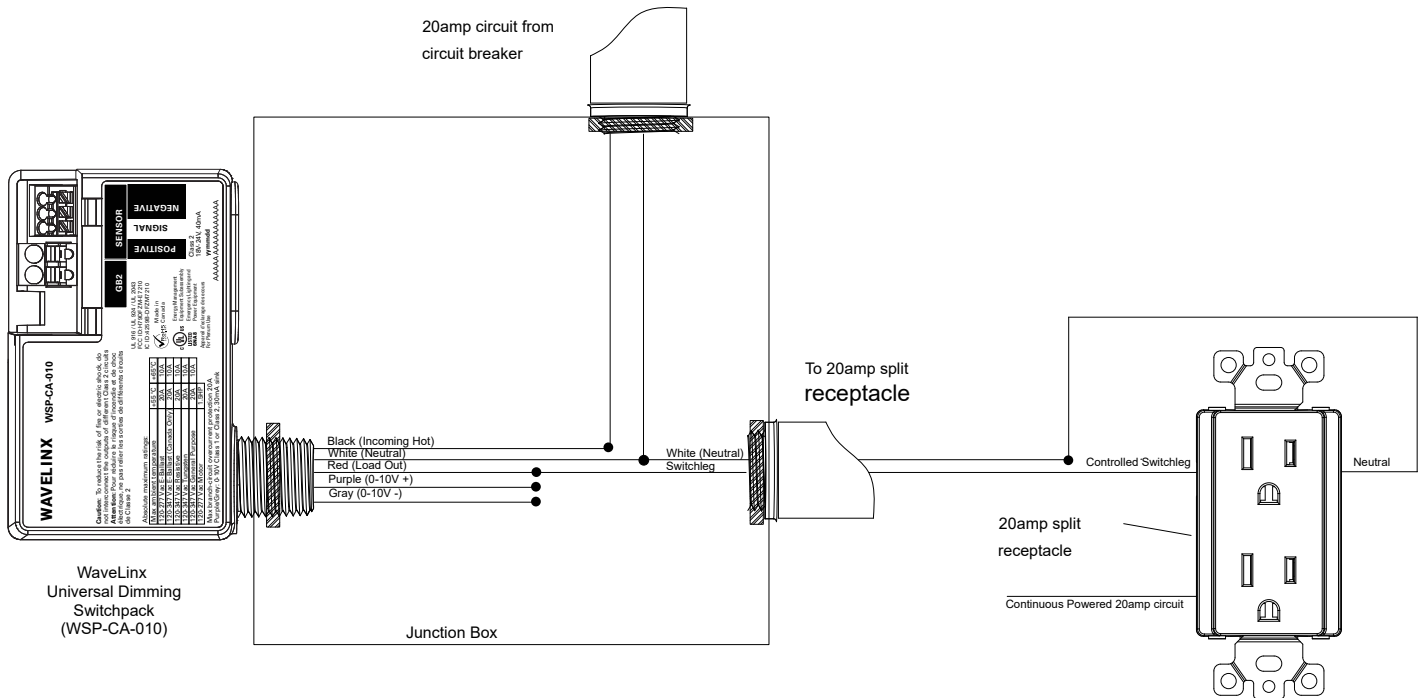
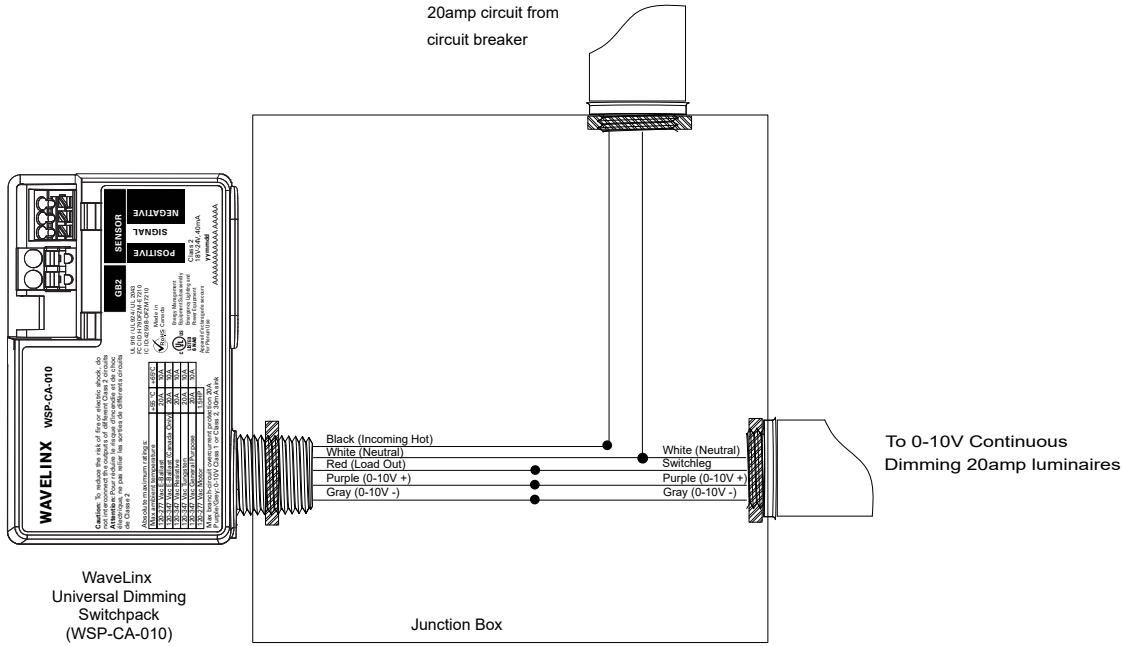
Five year warranty standard

## Dimensional Details

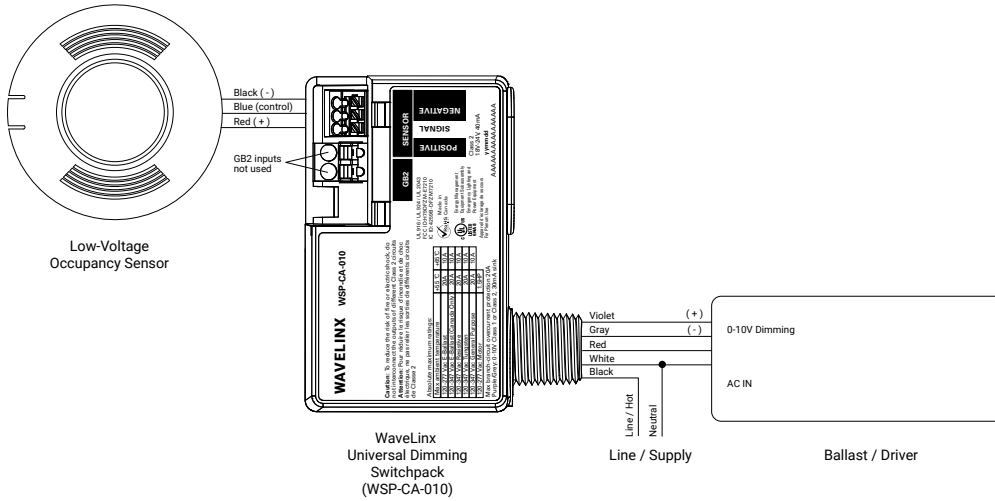


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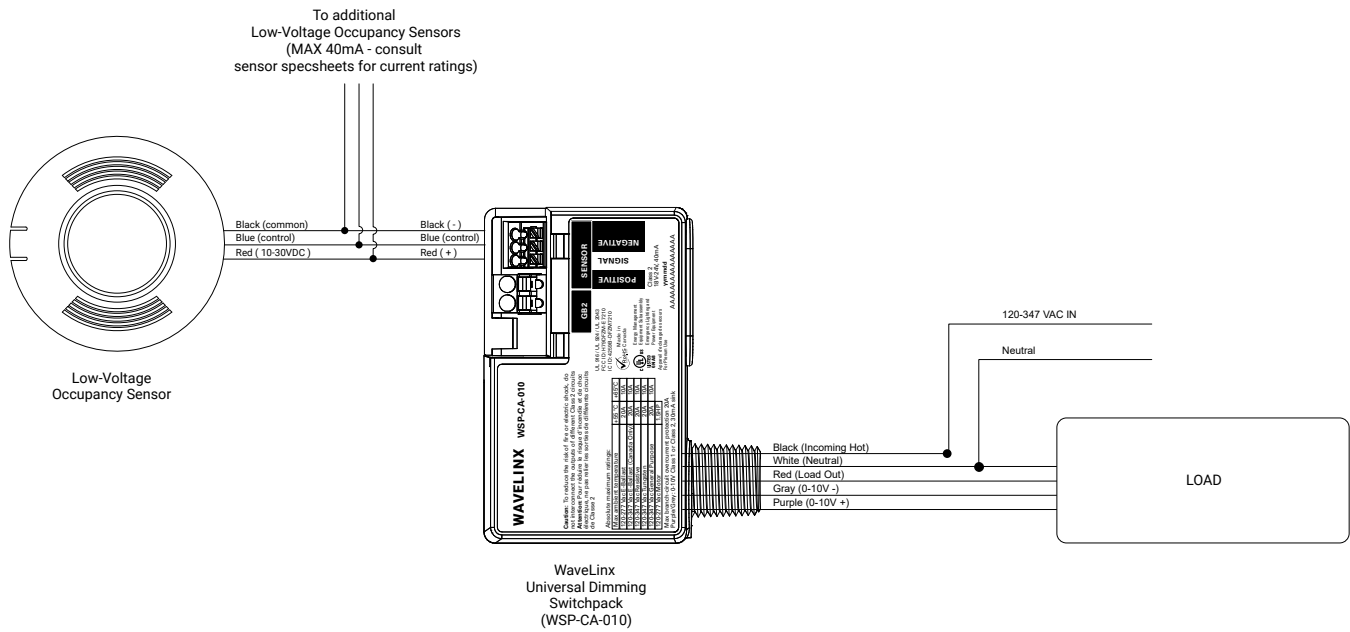
## Mounting



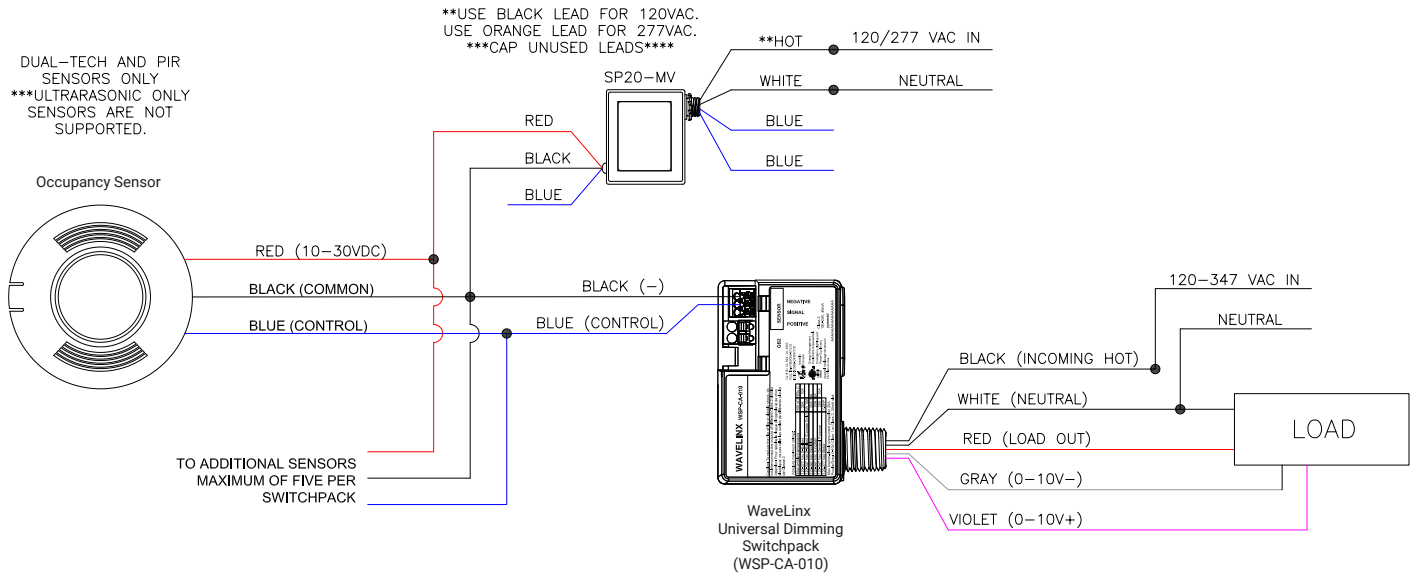
## Contact Closure - Single Sensor



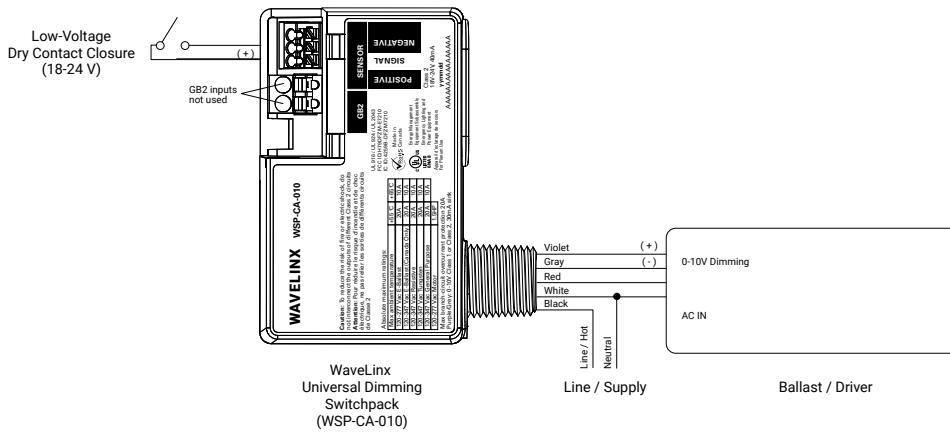
## Contact Closure - Multiple Sensors



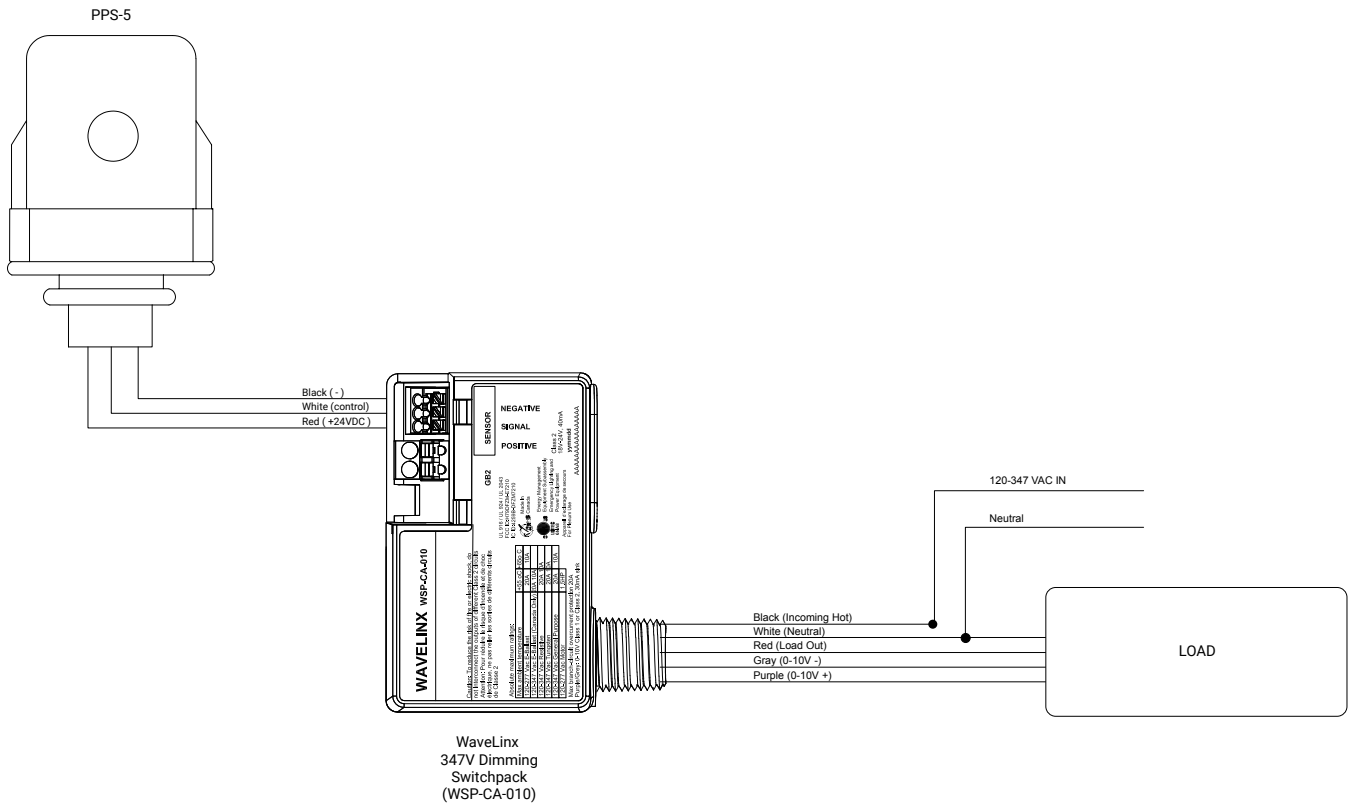
## Contact Closure - Sensors Externally Powered



## Low-Voltage Dry Contact Closure



## Greengate PPS-5 Outdoor Contact Input Photosensor used to drive scene



## System Diagram:

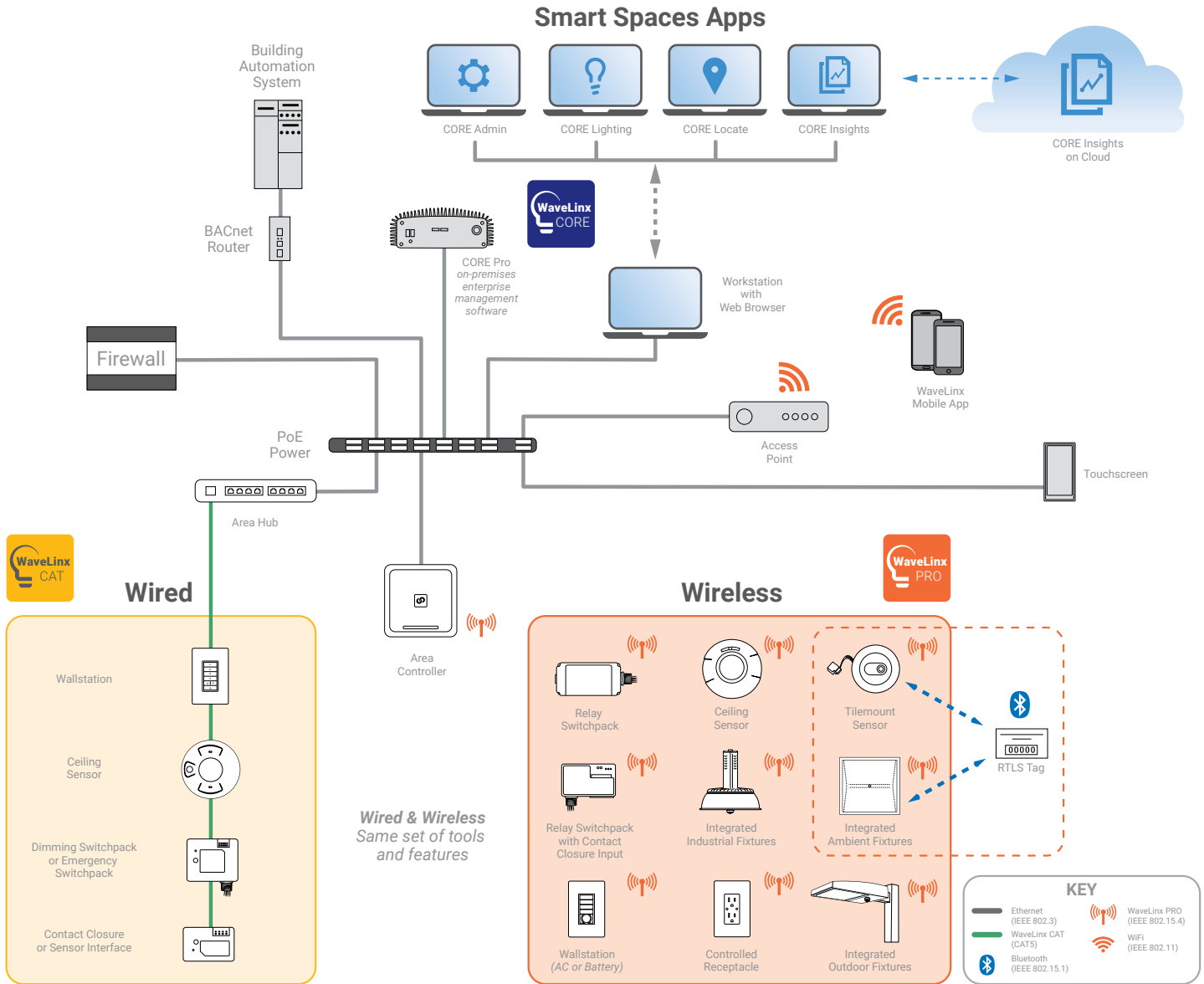
This diagram shows the main components of the WaveLinX connected lighting system with CAT and PRO devices.

The PRO devices communicate using wireless mesh technology based on the IEEE 802.15.4 standard. A PoE LAN connection for each WaveLinX Area Controller (WAC) is required for power and data access to the building lighting network.

The CAT devices communicate over the category 5 based communication bus and control the light fixtures using a relay (on/off) and 0-10V output (dim/raise).

WaveLinX Area Controllers (WAC) communicate with WaveLinX CORE Apps over the Ethernet network.

[View WaveLinX Network and IT Guidance Technical Guide](#)



**Control Systems**

- WaveLinX