

Project		Catalog #		Type	
Prepared by		Notes		Date	



# WaveLinX

## PRO Emergency Switchpack (ESP-P-010-347)

120/277/347 VAC Wireless Emergency Switchpack with 20A Relay and one 0-10V Dimming Output

### Typical Applications

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

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- Product Warranty



### Product Features



### Compatibility



## Overview

The PRO Emergency Switchpack (ESP-P-010-347) is a 120/277/347 VAC powered device with a 20A relay and one continuous 0-10V dimming output used to control LED and non LED luminaires as well a plug load. The PRO Emergency Switchpack is powered by the 120/277/347VAC (+/- 10% Single Phase) circuit it is controlling and provides simple 1/2" knockout mounting. The relay is used to turn on/off the fixtures powered by the circuit while the 0-10V output is used to raise and lower the light levels of the luminaires equipped with 0-10V drivers. The emergency switchpack provides the ability to provide wireless control without the need for any additional emergency hardware. The ESP-P-010-347 provides Wireless Emergency capabilities by integration through the WaveLinX PRO Mobile App. Assignment of the Normal Power Sensing (NPS) devices is done through the mobile app. Use in conjunction with any WaveLinX PRO NPS rated device to provide Emergency capabilities without additional wiring or devices.

The PRO Dimming Switchpack communicates with other Pro devices over the WaveLinX IEEE 802.15.4 wireless mesh network.

Note: A 20A circuit breaker is required in the AC power source circuit where WaveLinX PRO RSP is connected to provide line protection.

## Product Features & Benefits

- Emergency device provides the capability to wirelessly meet UL924 code Output control loads up to 20 amps or 1.5 HP and 0-10V dimming control
- Plenum rated design with easy junction box mounting
- Universal voltage input (120-347 +/-10% Single Phase)
- Fails safe to 100% if communications are lost

## Order Information

The PRO Emergency Switchpack is an integral part of the WaveLinx system. It communicates with the WaveLinx Area Controller and other PRO devices. The PRO Switchpack is used to control luminaires and plug loads.

### Catalog Number

Catalog Number	Description
ESP-P-010-347	Wireless Emergency Switchpack - 20 amp
<b>Note</b> Replaces WSP-LV-010 and WSP-MV-010	

## Required Accessories

All WaveLinx connected lighting 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
WAC2-POE	WaveLinx Area Controller G2, PoE powered
WAC2-120	WaveLinx Area Controller G2 with 120VAC to PoE Injector

## Optional Accessories

For connection to 120VAC outlets.

### Catalog Number

Catalog Number	Description
WPOE2-120	120VAC to PoE Injector

## Product Specifications

### Mechanical

**Size:** 1.7"H x 2.6"W x 6.1"L (43mm x 66mm x 155mm)

### Environment:

- **Operating temperature:** 32°F to 104°F (0°C to 40°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:** Matte White

**Housing:** Medium impact injection molded housing. ABS resin with 5VA flame rating. Plenum rated for external junction box mounting with Teflon coated leads.

### Electrical

#### Power:

- 120/277/347VAC (+/- 10%) 50/60Hz (Single Phase)

#### Output Information:

- 20amp 120/277/347VAC General Purpose (Single Phase)
- 16amp 120/277/347VAC electronic ballast (LED load) (Single Phase)
- Single class 2 0-10V dimming output (IEC 60929 Annex E) sinks up to 120mA per (40 µA max per circuit leakage to line)
- 0-10V output supports up to 60 ballasts/drivers that source up to 2mA each

#### Out-of-the-Box Operation:

- Once power is applied, the Emergency Switchpack output will go to ON/100% and remain in **Emergency Mode**.
- The Emergency Switchpack LED turns ON when the output is ON.

## Emergency Provisioning

### To ensure proper Emergency Mode operation:

- The Emergency Switchpack must be powered from an emergency lighting circuit and be connected to emergency lighting fixture(s). Fixtures may be ON/OFF or dimmable via 0-10V connection.

- The Emergency Switchpack must be provisioned to a zone within a Networked Area
- At least one normal power sensing (NPS) device must be provisioned to a zone belonging to the same Networked Area. The NPS device must be connected to a normal power circuit. Up to three NPS devices may be assigned to trigger EM Mode if desired (allows for three phase monitoring if one NPS device is connected to a normal circuit from each electrical phase).

### Wireless Specifications

**Radio:** 2.4GHz

**Standard:** IEEE 802.15.4

**Transmitter Power:** +10dBm

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

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

**# of Walls:** 2 interior walls standard construction

### System Performance

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

### Standards/Ratings\*

- cULus Listed - Emergency Lighting and Power Equipment (UL924)
- cULus Listed - Energy Management Equipment (UL916)
- FCC part 15 Sub Part B
- Manufactured in an ISO 9001 certified factory
- Meets latest ASHRAE Standard 90.1 requirements
- Meets latest IECC requirements
- Meets latest CEC Title 24 requirements

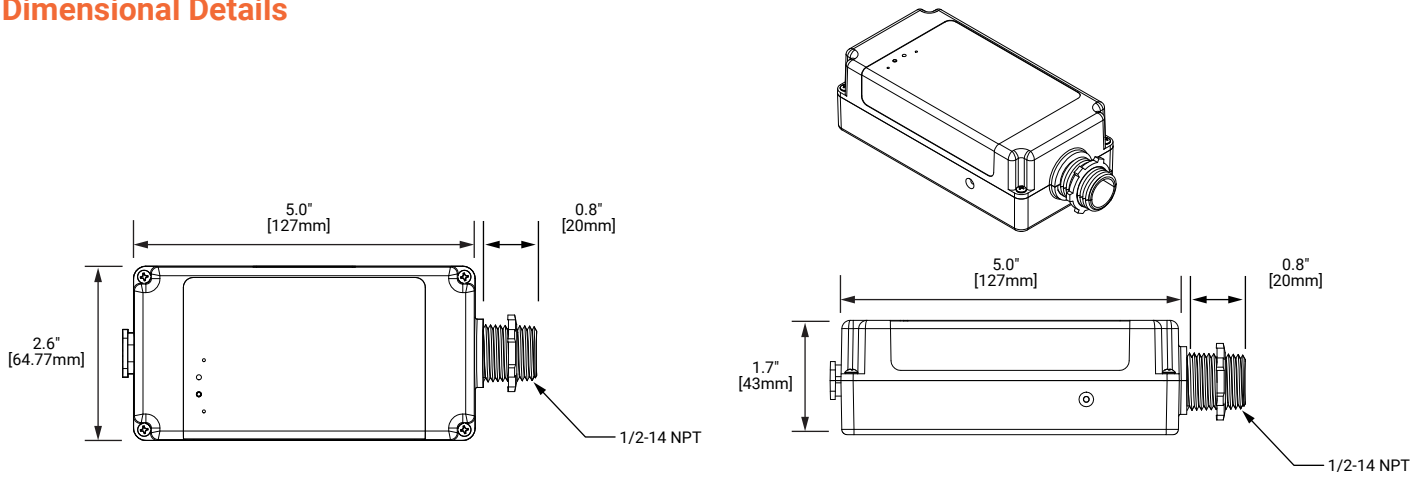
### Warranty

Five year warranty standard

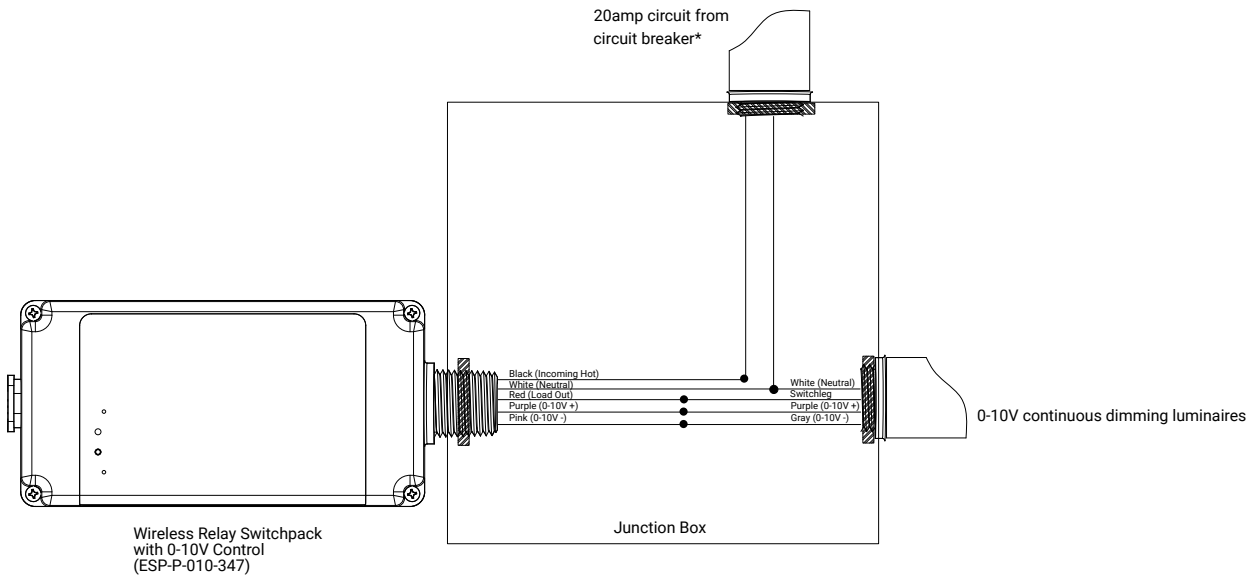


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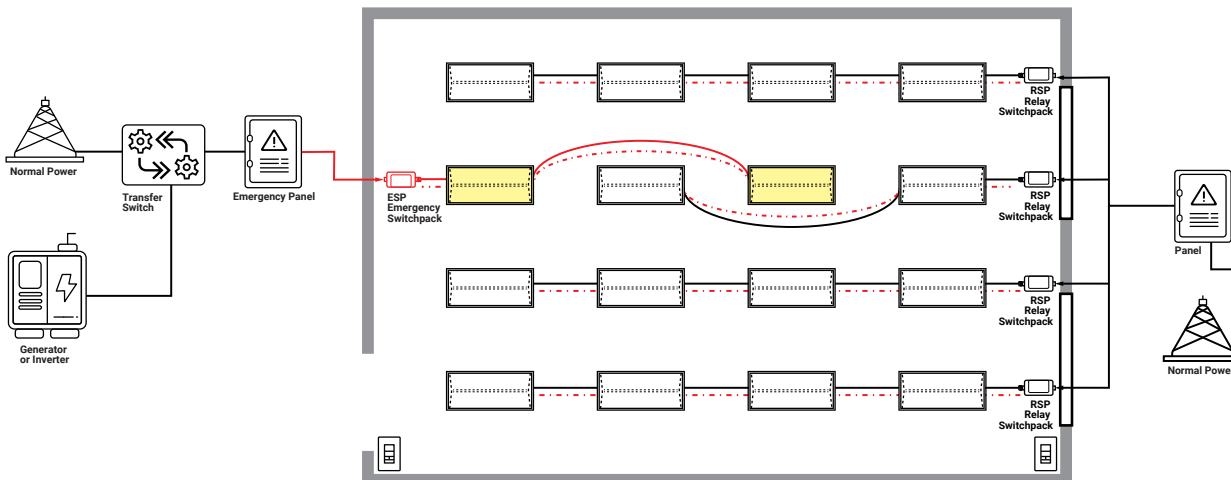
## Dimensional Details



## Mounting



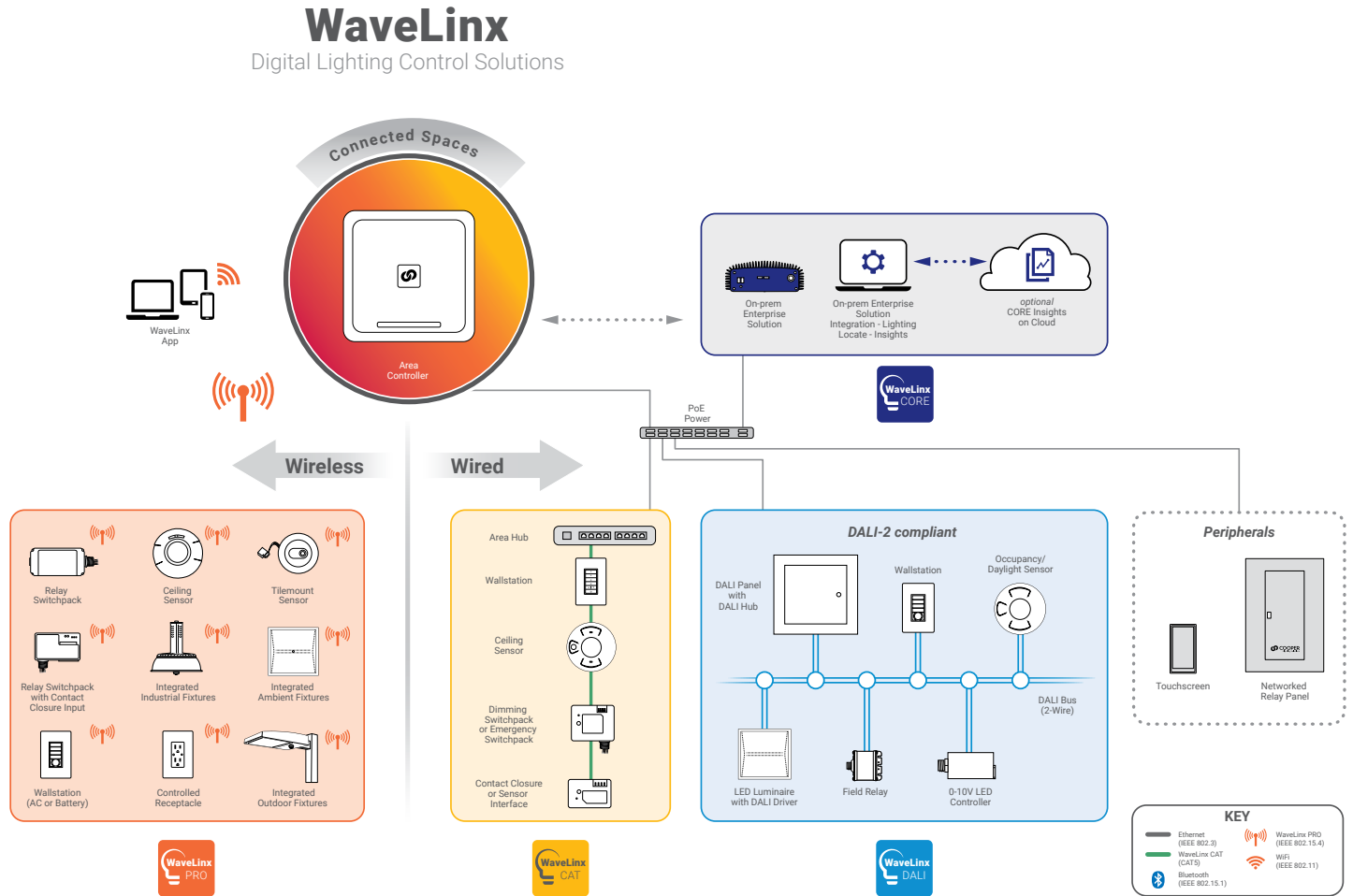
## Wiring example



## System Diagram:

This diagram shows the main components of the WaveLinx connected lighting system with WaveLinx DALI, 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 DALI devices communicate via a DALI bus (2 wires), which connects various components including DALI fixtures, a DALI DAC (DALI to 0-10V converter), DALI field relays, DALI wallstations, and DALI occupancy sensors. WaveLinx Area Controllers (WAC) communicate with WaveLinx CORE Apps over the Ethernet network.

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



**Control Systems**

- WaveLinx