

Project		Catalog #		Type	
Prepared by		Notes		Date	



# WaveLinx




## LITE Emergency Universal Dimming Switchpack

### 20A 120/277/347VAC Emergency relay switchpack with 0-10V control

**Typical Applications**  
Office • Education • Healthcare • Hospitality • Retail  
Industrial • Manufacturing

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- 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

-  LITE Mobile App
-  IEEE 802.15.1
-  Device Security
-  Customer Security
-  Receptacle Control

### Compatibility



## Overview

The WaveLinx LITE Emergency Universal Voltage Dimming Switchpack with 0-10V (ESP-L-010-347) control is an integral part of the WaveLinx LITE system and offers 120-347VAC (+/- 10% Single Phase) 20amp control and continuous 0-10V dimming control. The emergency switchpack provides the ability to provide wireless control without the need for any additional emergency hardware. The ESP-L-010-347 provides Wireless Emergency capabilities by integration through the WaveLinx LITE Mobile App. Assignment of the Normal Power Sensing (NPS) devices is done through the mobile app. Use in conjunction with any WaveLinx LITE NPS rated device to provide Emergency capabilities without additional wiring or devices. The emergency switchpack operates on a wireless mesh network based on IEEE 802.15.1 (Bluetooth® 4.2 Low Energy).

Note: A 20A circuit breaker is required in the AC power source circuit where Wavelinx LITE (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 and 0-10V dimming control
- Plenum rated design with easy junction box mounting
- **120-347VAC** – Ability to support all commercial applications across North America (US, Canada and Mexico)
- **Device Identification** – provides additional detection information during provisioning process.

## Order Information

The LITE Emergency Switchpack is an integral part of the WaveLinx LITE system. The LITE Emergency Switchpack is used to control luminaires.

### Catalog Number

Catalog Number	Description
ESP-L-010-347	Wireless Emergency Universal Voltage Dimming Switchpack - 20 amp

## 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 802.15.1
- **Transmitter Power:** + 10dBm
- **Range:** 100ft (30.48m) LOS typical  
50ft (15m) through standard walls when mounted outside junction box
- **# of Walls:** 2 interior walls standard construction
- Standards/Ratings
- cULus Listed - Energy Management Equipment (UL916)
- UL924 Listed
- 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
- WaveLinx LITE is DLC Listed for interior applications - meeting the NLC5 Technical Requirements
- Warranty

### Warranty

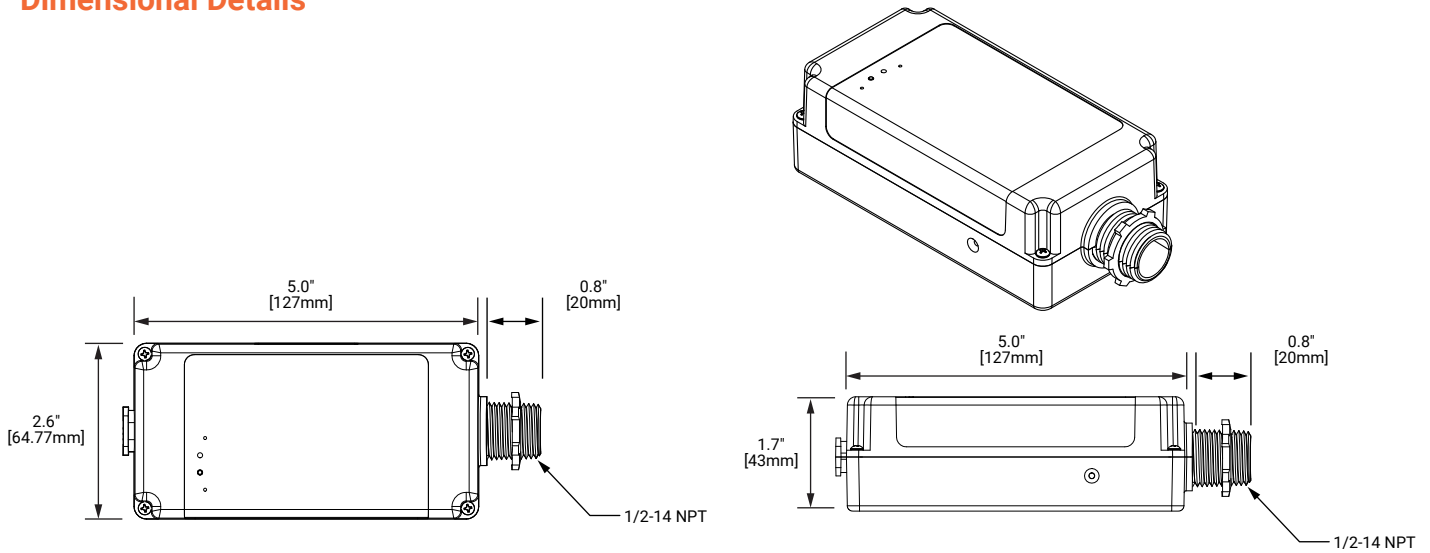
Five year warranty standard



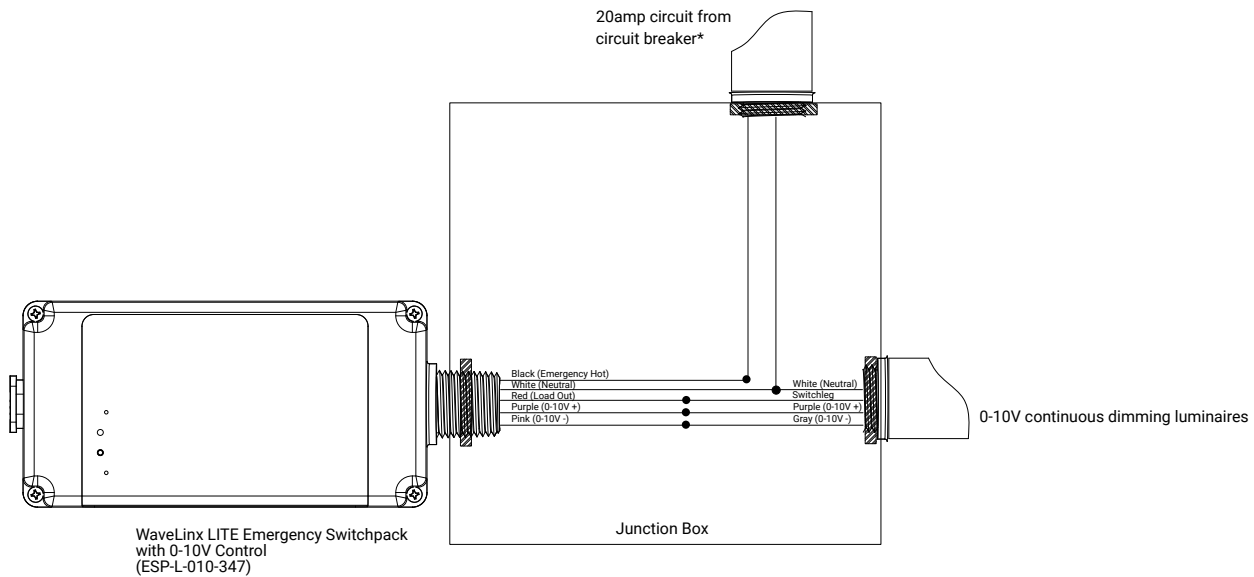
Download the WaveLinx LITE Mobile App from either the Google Play or Apple Store®

		NPS Compatible Devices			
		RSP-L-010-347	WLS (-WNPS)	WLS2 (-WNPS)	WLS4 (-WNPS)
Emergency Compatible Device	<b>ESP-L-010-347</b>	Y	Y	Y	Y

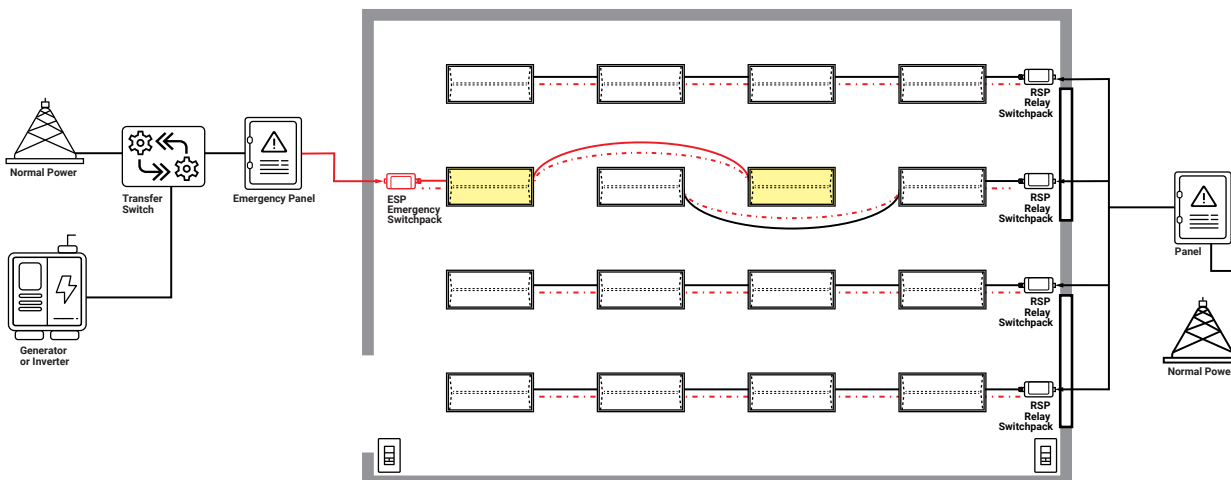
## Dimensional Details



## Wiring

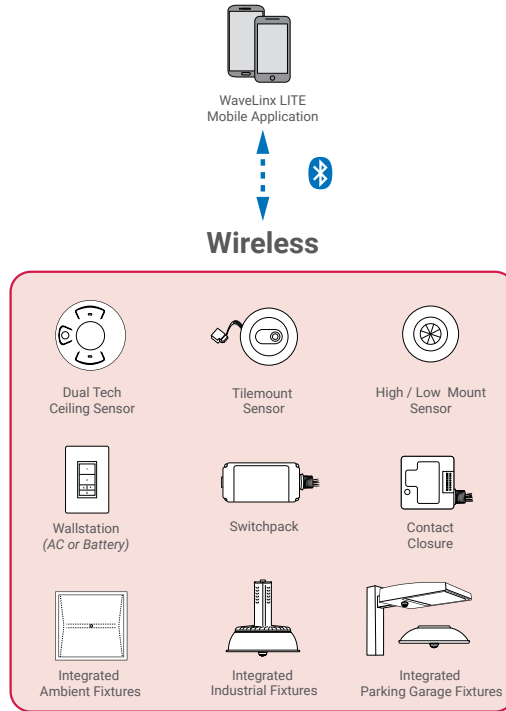



## Configuration example



## System Diagram:

This diagram shows the main components and topology of the WaveLinx system with LITE devices. The WaveLinx LITE devices use standardized IEEE 802.15.1 (Bluetooth® 4.2 Low Energy) mesh technology for device to device communications without the requirement of a gateway. The WaveLinx LITE enabled luminaires provide out-of-the-box functionality for independent operation when energized. With the use of the WaveLinx LITE mobile application with MyApps secure cloud portal access, groups of independent luminaires may be created and maintained with areas, control zones, and occupancy sets. WaveLinx LITE devices are not currently compatible with the WaveLinx Area Controller.



 **Control Systems**  
• WaveLinx