

Project		Catalog #		Type	
Prepared by		Notes		Date	



WaveLinx

CAT Emergency Dimming Switchpack (ESP-C-*.*)

Relay Switchpack with 0-10V dimming control for emergency fixtures

Typical Applications

Office • Education • Healthcare • Hospitality • Retail

Interactive Menu

- Order Information [page 2](#)
- Additional Resources [page 2](#)
- Wiring Diagrams [page 3](#)
- Connected Systems [page 5](#)
- Product Warranty



- cULus Listed - Emergency Lighting and Power Equipment (UL924)
- Meets latest ASHRAE 90.1 - 2019 requirements
- Meets latest IECC - 2021 requirements
- Meets latest Title 24 - 2019 requirements
- Manufactured in an ISO 9001 certified factory

Product Features



Compatibility



Overview

The Emergency Dimming Switchpack is used to control luminaires powered via an emergency circuit. It offers 120/277VAC or 347VAC (Single Phase) relay control and continuous 0-10V dimming control of LED and non-LED loads. The ESP-C Relay Switch Pack is ideally suited for use in conjunction with a standard RSP-C Relay Switch Pack that controls a zone's normal powered lighting.

The CAT Emergency dimming switchpack automatically overrides emergency fixtures to ON upon loss of normal power and communication with CAT dimming switchpacks.

Product Features & Benefits

- **UL924 Compliant** – Meets UL924 emergency power supply requirement by automatically overriding emergency fixture to full brightness upon normal power loss
- **20A, 277V (OR 16A, 347V) Latching Relay** - Allows to turn on/off LED or non LED loads and receptacle control
- **0-10V dimming with 30mA sink** - Allows to raise and dim fixtures powered with 0-10V drivers
- **Digital communication over CAT** - Enables remote configuration of the device settings such as zone assignment via WaveLinx apps (mobile or web-based apps)

[product diagrams](#)

Order Information

Catalog Number

Catalog Number	Description
ESP-C-010-Z1	WaveLinx CAT ESP-C Emer Relay Switchpack - Zone 1
ESP-C-347-Z1	WaveLinx CAT ESP-C 347V Emer Relay Switchpack - Zone 1

Required Accessory

The WaveLinx CAT network requires termination of the local CAT bus network on both ends.

Catalog Number

Catalog Number	Description
ACC-C-TP-6PK	ACC-C Canbus Termination Plug - 6PK

Optional Accessories

Catalog Number

Catalog Number	Description
GGRJ45-03-G	RJ45 cables 3 feet
GGRJ45-10-G	RJ45 cables 10 feet
GGRJ45-25-G	RJ45 cables 25 feet
GGRJ45-50-G	RJ45 cables 50 feet
GGRJ45-100-G	RJ45 cables 100 feet
GGRJ45-10P-G	RJ45 cables 10 feet plenum rated
GGRJ45-25P-G	RJ45 cables 25 feet plenum rated
GGRJ45-50P-G	RJ45 cables 50 feet plenum rated
GGRJ45-100P-G	RJ45 cables 100 feet plenum rated

Product Specifications

Mechanical

Size: 4.3" x 3.6" x 1.7" (109.4mm x 91.31mm x 42.64mm)

Weight: 0.25 lbs (0.113 kg)

Mounting: Extended Chase Nipple

Color: Black

Environmental:

- **Operating temperature:** 32°F to 122°F (0°C to 50°C)
- **Operating relative humidity:** 5% to 85% non-condensing
- **Storage temperature:** -22°F to 158°F (-30°C to 70°C)
- For indoor use only

Electrical

Input:

- 120/277VAC +/- 10% 47-63Hz
- 120/277/347VAC +/- 10% 47-63Hz

Output:

- Switched: Latching, NEMA 410 rated
 - 20A, 277V General Purpose
 - 16A, 347V General Purpose
 - 16A, 347V Standard Ballast
 - 16A, 347V Electronic Ballast
- 0-10V, isolated, 30mA Sink
- SCCR rating: 5kA
- Isolated Form C Relay: 1A, 30V AC/DC

Wiring:

- 0-10V positive: 18AWG stranded (Violet)
- 0-10V negative 18AWG stranded (Pink)
- AC Line In: 12AWG stranded (Black)
- AC Line Out: 12AWG stranded (Blue)
- AC Neutral In 12AWG stranded (White)

Network connection:

- CAT5 Solid Copper 24AWG
- T568B pin/pair assignment is recommended for all CAT5 cable

Standards/Ratings*

- cULus Listed - Energy Management Equipment (UL916)
- UL Listed (UL508)
- cULus Listed - Emergency Lighting and Power Equipment (UL924)
- FCC Part 15, Part B
- Manufactured in an ISO 9001 certified factory
- Meets latest ASHRAE 90.1 - 2019 requirements
- Meets latest IECC - 2021 requirements
- Meets latest Title 24 - 2019 requirements
- Plenum UL2043
- Chicago Plenum rated
- RoHS
- WaveLinx CAT is DLC Listed for interior applications - meeting the NLC5 Technical Requirements

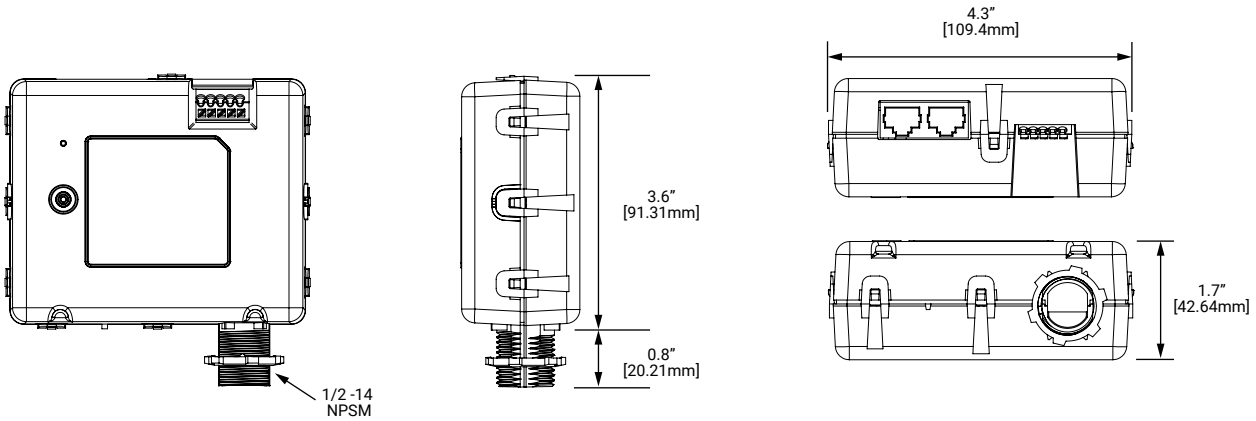
Warranty

Five year warranty standard

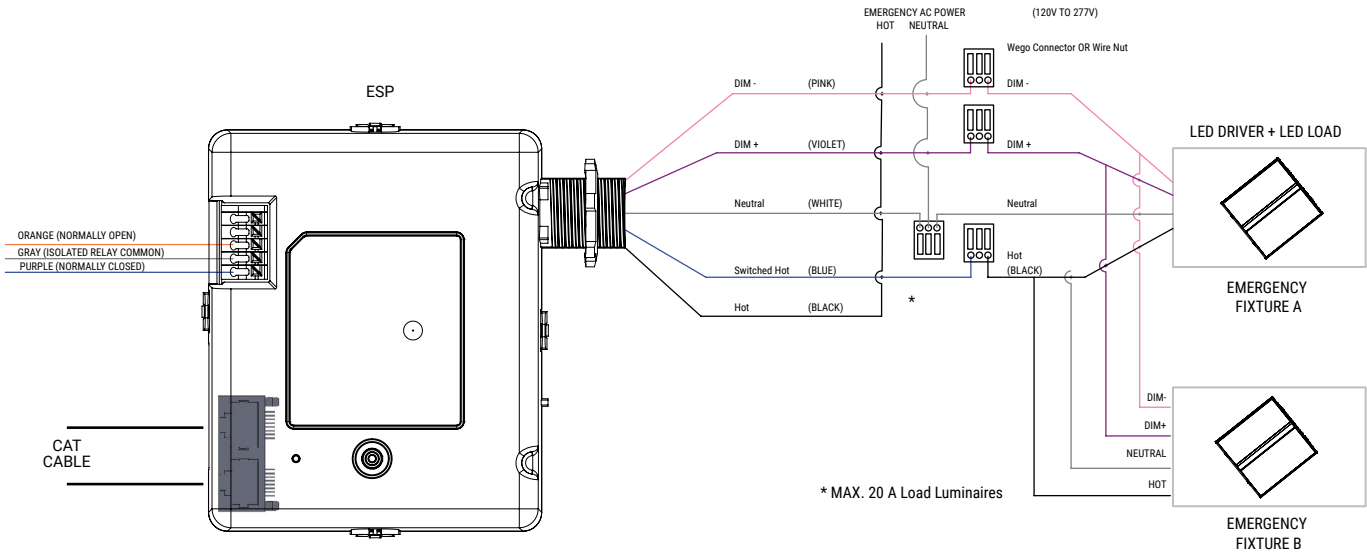


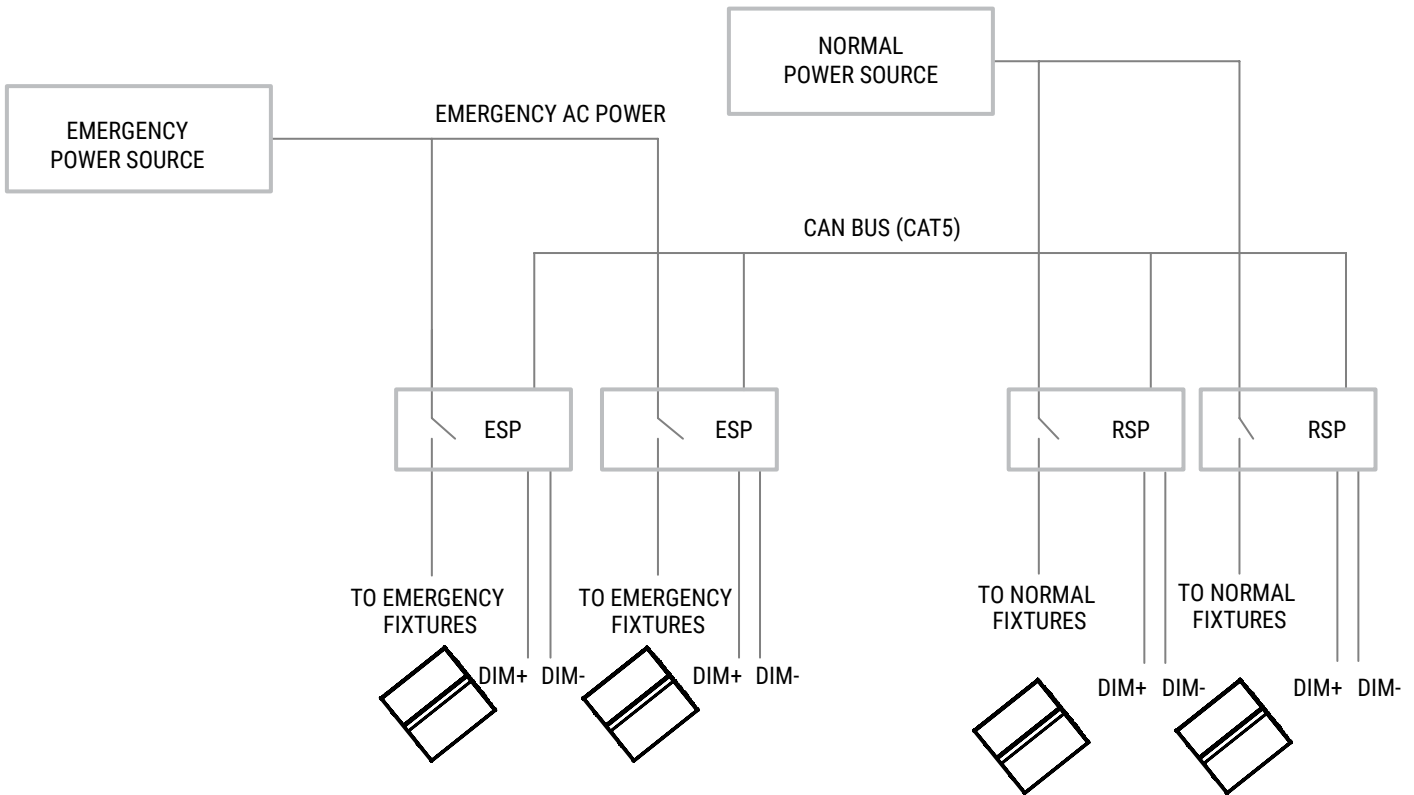
Download the WaveLinx CAT Mobile App from either the Google Play or Apple Store®

Dimensional Details

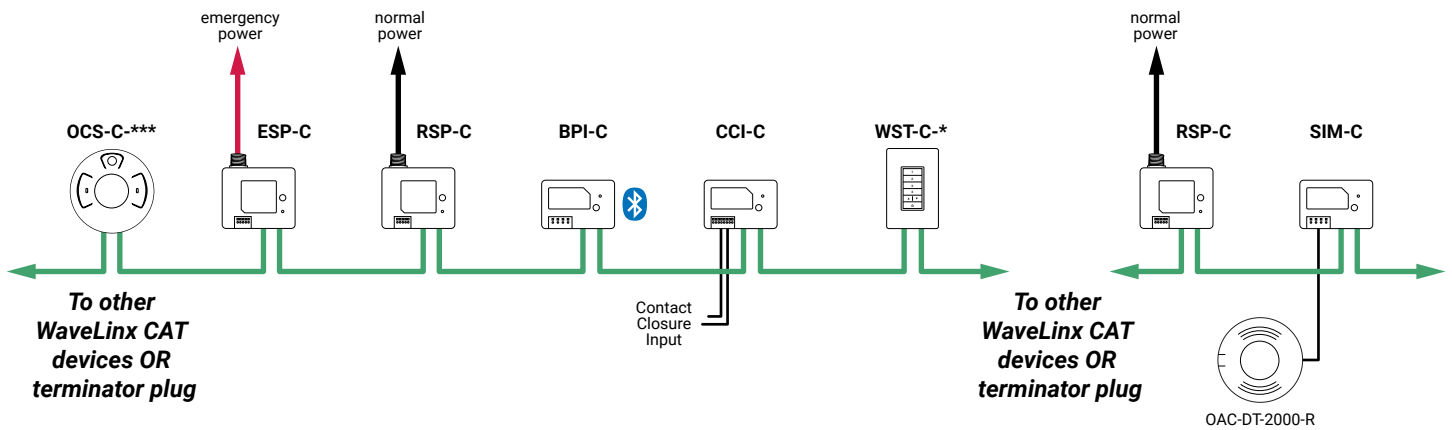


Wiring Diagrams





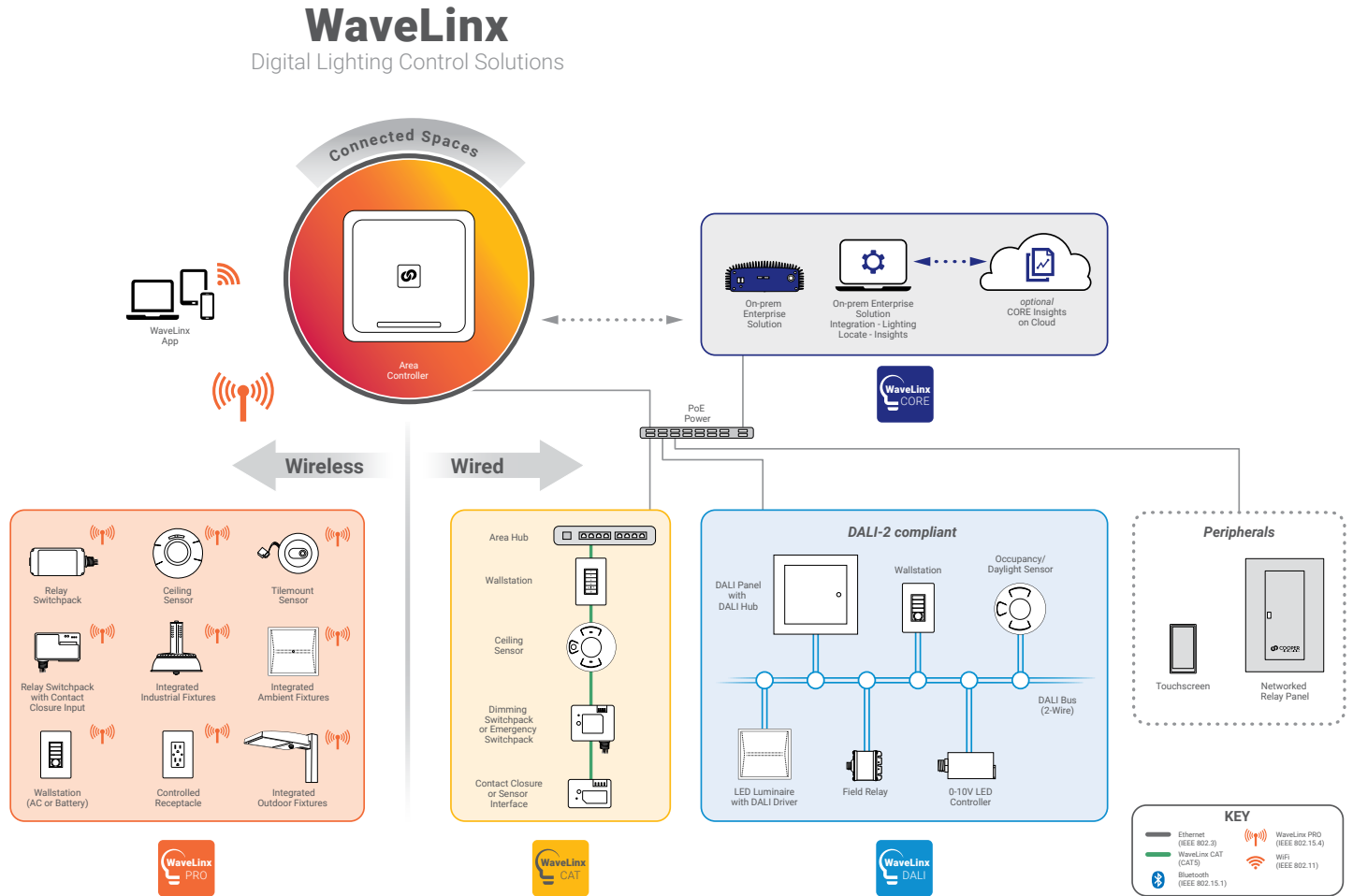
Typical Topology



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 PRO Network and IT Guidance Technical Guide](#)



Control Systems
• WaveLinx