Project		Catalog #		Type	
Prepared by		Notes		Date	

WaveLinx Pro

Wireless 120VAC PoE Injector

Provides a 120VAC connection option for the PoE powered WaveLinx Pro Wireless Area Controller (WAC)

Typical Applications

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

Interactive Menu

Product Certification

UL CERTIFIED

FCC Part 15 Class B

RoHS COMPLIANT

- Complies with the following electromagnetic requirements:
  EN 55032 Class B (Emissions)
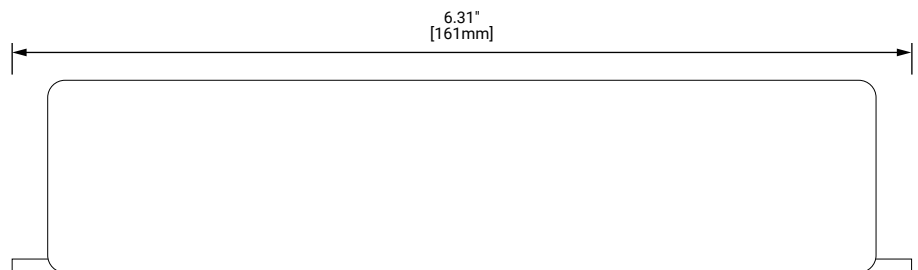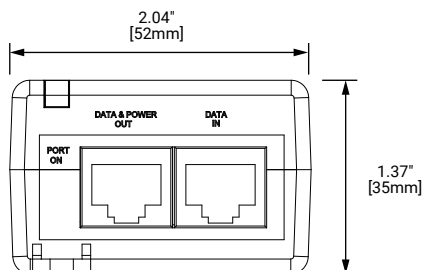 EN 55024 (Immunity)
  VCCI

Product Features

PoE 802.3af

CE

Top Product Features

- Compact and cost effective, fully IEEE 802.3af compliant solution
- 110-240VAC power connection for WaveLinx Pro Wireless Area Controller
- Safe and reliable power over existing Ethernet infrastructure
- Stackable and compact
- Plug-and-play installation
- Guaranteed uptime

Dimensional Details

2.04" [52mm]

1.37" [35mm]

DATA & POWER OUT   DATA IN

PORT ON

6.31" [161mm]

Order Information

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

Catalog Number

Catalog Number	Description
WPOE2-120	120VAC to PoE Injector

Required Accessories

All WaveLinx Pro connected lighting (WCL) system accessories require at least one WaveLinx Pro Wireless Area Controller (WAC2) for communications. Ensure the bill of material includes one of the following components.

Catalog Number

Catalog Number	Description
WAC2-POE	Wireless Area Controller G2, PoE powered

Product Specifications

Key Features
- Compact and cost effective, fully IEEE 802.3af compliant solution
- 110 - 240VAC power connection for WaveLinx Pro Wireless Area Controller
- Safe and reliable power over existing Ethernet infrastructure
- Stackable and compact
- Plug-and-play installation
- Guaranteed uptime

Mechanical
Size: 2.04" W x 1.37" H x 6.31" L (52mm x 35mm x 161mm)
Weight: 0.44 lbs (200g)
Environment:
- **Operating temperature:** 32°F to 104°F (0°C to 40°C)
- **Storage temperature:** -4° F to 158° F (-20° C to 70° C)
- **Relative humidity operating:** 10% to 90% RH (non-condensing)
- For indoor use only

Mounting: Surface
Connectors: Shielded RJ-45, EIA 568A and 568B

Electrical
AC Input Voltage:
- 110-240 Vac (+/-10%)

AC Input Current:
- 0.43A @100-240 Vac

Power over Ethernet Output:
- **Output Voltage:** 48Vdc
- **User Port Power:** 15.4W

Hardware Specifications
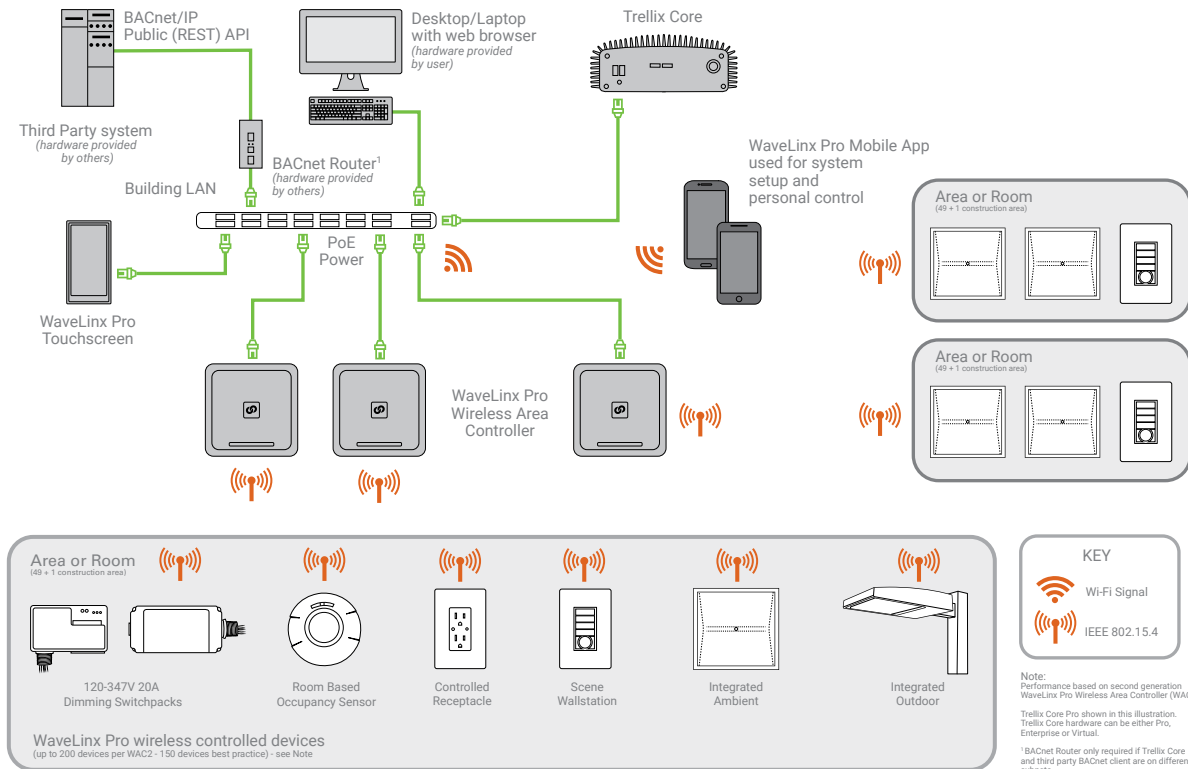**Channel Power:**
- Green LED

Standards/Ratings
- cULus Listed - Information Security Equipment Safety (UL 60950)
- FCC Part 15, Class B
- Complies with the following electromagnetic requirements:
  - EN 55032 Class B (Emissions)
  - EN 55024 (Immunity)
- Power over Ethernet IEEE 802.3af
- RoHS Compliant
- WEEE Compliant
- CE

Warranty
Five year warranty standard

System Architecture

This diagram shows the main components of the WaveLinx Pro connected lighting (WCL) system. The WCL system communicates using wireless mesh technology based on the 802.15.4 standard. A POE LAN connection for each Wireless Area Controller (WAC) is required for power and data access to the building wireless network. System setup is achieved through a simple mobile application via wireless communication to the system.

BACnet/IP Public (REST) API

Third Party system
(hardware provided by others)

Building LAN

BACnet Router[1]
(hardware provided by others)

Desktop/Laptop with web browser
(hardware provided by user)

Trellix Core

WaveLinx Pro Mobile App used for system setup and personal control

WaveLinx Pro Touchscreen

PoE Power

WaveLinx Pro Wireless Area Controller

Area or Room
(49 + 1 construction area)

Area or Room
(49 + 1 construction area)

Area or Room
(49 + 1 construction area)

120-347V 20A Dimming Switchpacks

Room Based Occupancy Sensor

Controlled Receptacle

Scene Wallstation

Integrated Ambient

Integrated Outdoor

WaveLinx Pro wireless controlled devices
(up to 200 devices per WAC2 - 150 devices best practice) - see Note

KEY

Wi-Fi Signal

IEEE 802.15.4

Note:
Performance based on second generation WaveLinx Pro Wireless Area Controller (WAC2)

Trellix Core Pro shown in this illustration. Trellix Core hardware can be either Pro, Enterprise or Virtual.

[1] BACnet Router only required if Trellix Core and third party BACnet client are on different subnets.
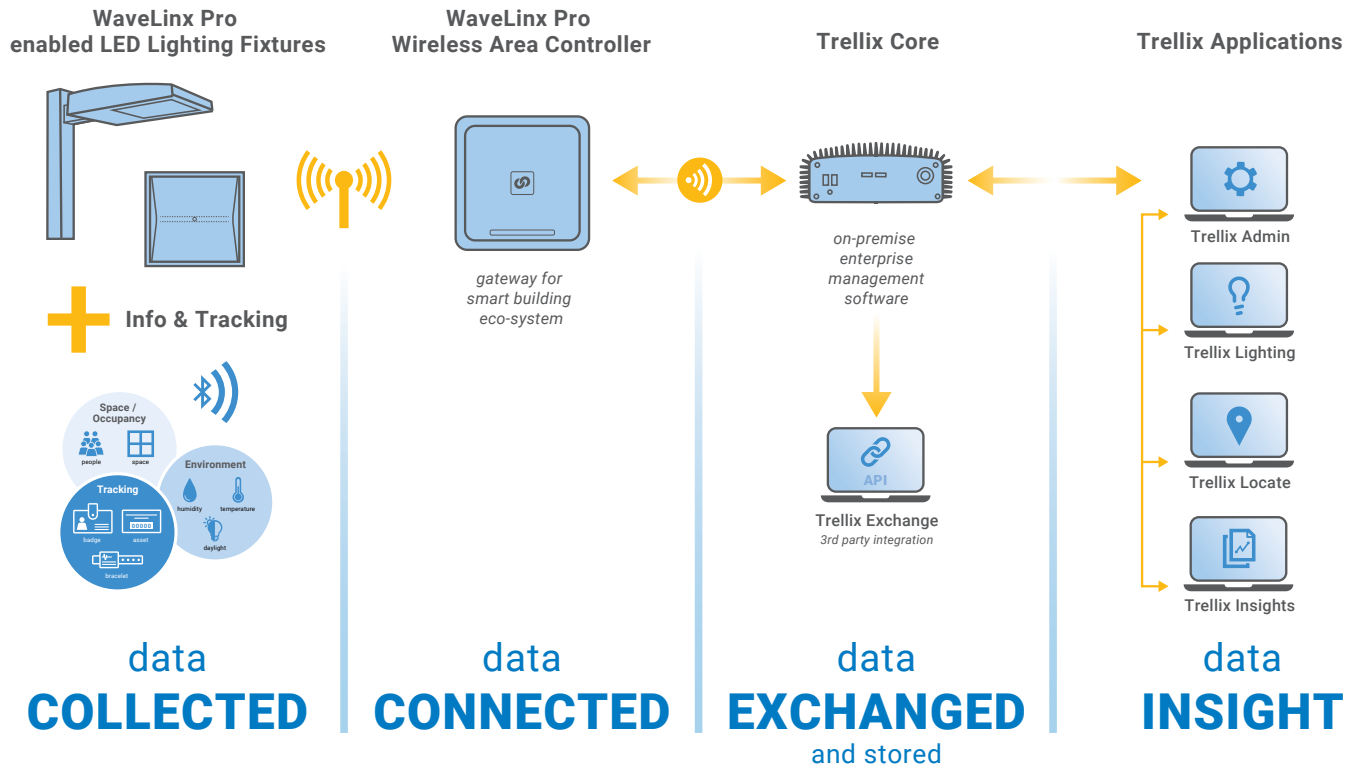
Overview

The 120VAC PoE Injector provides IEEE802.3af power for the WaveLinx Pro Wireless Area Controller. The injector enables 120VAC connectivity for the Wireless Area Controller, particularly useful for non-enterprise applications. Two output Ethernet ports are included, one provides 15.4W of PoE power and the second data only.

Better Data. Better Decisions.

Trellix combined with our WaveLinx Pro connected lighting system is a distributed network of LED lighting fixtures with integrated sensing and beacon technology that captures real-time data; making your facility smarter so you can make smarter decisions.

Trellix provides an open IoT platform and infrastructure that connects intelligent sensors leveraging the real-estate of the physical light fixture to solve higher complexity problems in a commercial building to deliver actionable insights through the aggregation of valuable data.

WaveLinx Pro enabled LED Lighting Fixtures

Info & Tracking

Space / Occupancy — people, space

Tracking — badge, asset, bracelet

Environment — humidity, temperature, daylight

data COLLECTED

WaveLinx Pro Wireless Area Controller

gateway for smart building eco-system

data CONNECTED

Trellix Core

on-premise enterprise management software

API

Trellix Exchange
3rd party integration

data EXCHANGED
and stored

Trellix Applications

Trellix Admin

Trellix Lighting

Trellix Locate

Trellix Insights

data INSIGHT

Control Systems
- Trellix
- WaveLinx Pro wireless

COOPER
Lighting Solutions