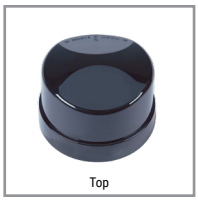
Project		Catalog #		Type	
Prepared by		Notes		Date	


Top


7-pin twist lock connector

WaveLinx

Outdoor Lighting Control (WOLC) Module

Extends the WaveLinx System to outdoor controls

Typical Applications

Outdoor • Parking areas • Pathways

Interactive Menu

Product Certification

Energy Management Equipment (UL916)

Part 15/ECES-003

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

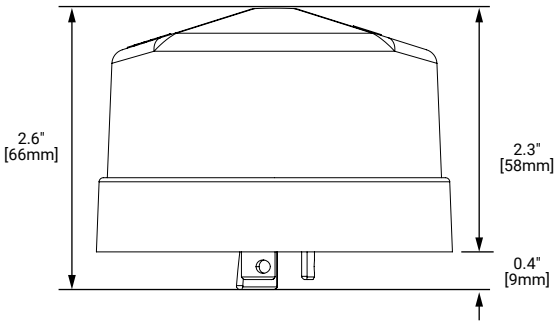
Product Features

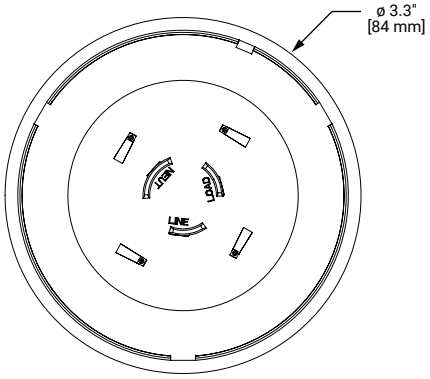
IEEE 802.15.4 | Device Security | Customer Security | Daylighting Control | Outdoor Control

Top Product Features

- Installs to ANSI 136.41-compliant 7-pin twist lock connector
- 120-347VAC 50/60Hz input
- IP66 rated enclosure
- Wireless mesh network based on IEEE802.15.4 standard
- Out of the box photocell switching or connect to WaveLinx
- Up to 1000W switching control
- Energy calculations available through Trellix based on max load input

Dimensional Details





additional product diagrams

Order Information

The WaveLinx Outdoor Lighting Control Module is an accessory to the WaveLinx Connected Lighting (WCL) system and requires a Wireless Area Controller (WAC) for full functionality.
The wireless relay is used to control plug loads or luminaires that do not include the wireless integrated sensor.

Catalog Number

Catalog Number	Description
WOLC-7P-10A	WaveLinx Outdoor Lighting Control Module
Notes	**Notes** When used as a component in the WaveLinx Connected Lighting system, WaveLinx system design best practices (including Wireless Area Controller placement, line of sight distances, number of hops, etc.) must be followed. For outdoor applications, the Wireless Area Controller should be located inside a conditioned building with a line of sight (LOS) through a window to an outdoor sensor (preferable 2-3 sensors) within the range specified below: LOS through a window: Best practice: 200ft (60m) - tinting / shade reduce range by 20ft (6m) No direct LOS, through concrete (up to 7in thick): Best practice: 60ft (18m)

Required Accessories

All WaveLinx 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
WAC-POE	Wireless Area Controller, POE powered

Optional Accessories

For connection to 120VAC outlets.

Catalog Number

Catalog Number	Description
WPOE-120	120VAC to PoE Injector

Product Specifications

Key Features

- 120-347VAC 50/60Hz input
- IP66 rated enclosure
- Wireless mesh network based on IEEE802.15.4 standard
- ANSI C136.41 compliant 7-pin twist lock connector
- Time schedule based ON / OFF and dimming control or autonomous operation via photosensor
- Up to 1000W switching control
- Energy calculations based on max load provided to Trellix

Mechanical

Size: Base diameter: 3.3" (84mm), Height: 2.6" (66mm)
Environment:
- **Operating temperature:** -40°F to 150°F (-40°C to 65°C)
- **Storage temperature:** -40° F to 158° F (-40° C to 70° C)
- **Relative humidity operating:** 0% to 95% RH

Mounting: Installs via ANSI C136.41 compliant twist-lock connector
Color: Black
Housing: Injection molded ABS housing with V-0 flame rating.
Plenum rated for external mounting.

Electrical

Input Requirements:
- Range input voltage: 120/347VAC
- Rated input current: < 1W at no load
- Rated input frequency: (+/- 10%) 50/60Hz

Power Measurement Accuracy: +/- 1% (0.5 to 10A loads)
Power supply output:
- 10A load rating (electronic driver/ballast, magnetic ballast, resistive load)
- Single class 2 0-10V dimming output capable of sinking up to 10mA

Hardware Specifications

Photocell range: 50 - 1500 lux (typical)

Wireless Specifications

Radio: 2.4GHz
Standard: 802.15.4
Transmitter Power: + 20dBm
Range: Sensor to sensor; 200ft (60m) (LOS best practice)
See notes for Wireless Area Controller placement and guidance

System Performance

Maximum number of Devices: 150 per Wireless Area Controller (best practice 100 devices)

Standards/Ratings

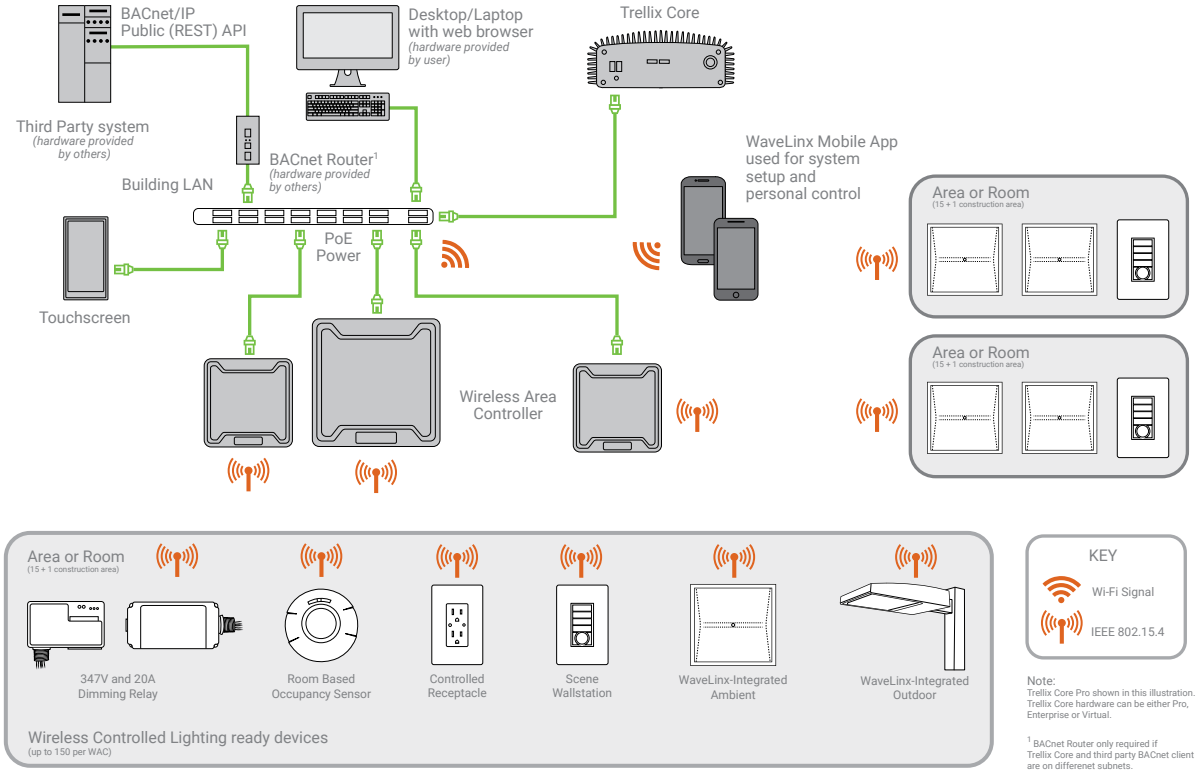
- cULus Listed - Energy Management Equipment (UL916)
- FCC Part 15/ECES-003
- Manufactured in an ISO 9001 certified factory
- Meets latest ASHRAE Standard 90.1 requirements
- Meets latest IECC requirements
- Meets latest CEC Title 24 requirements

Warranty

Five year warranty standard

System Architecture

This diagram shows the main components of the WaveLinx Connected Lighting (WCL) system. The WaveLinx system communicates using wireless mesh technology based on the IEEE 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.

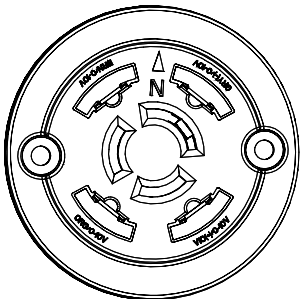


Overview

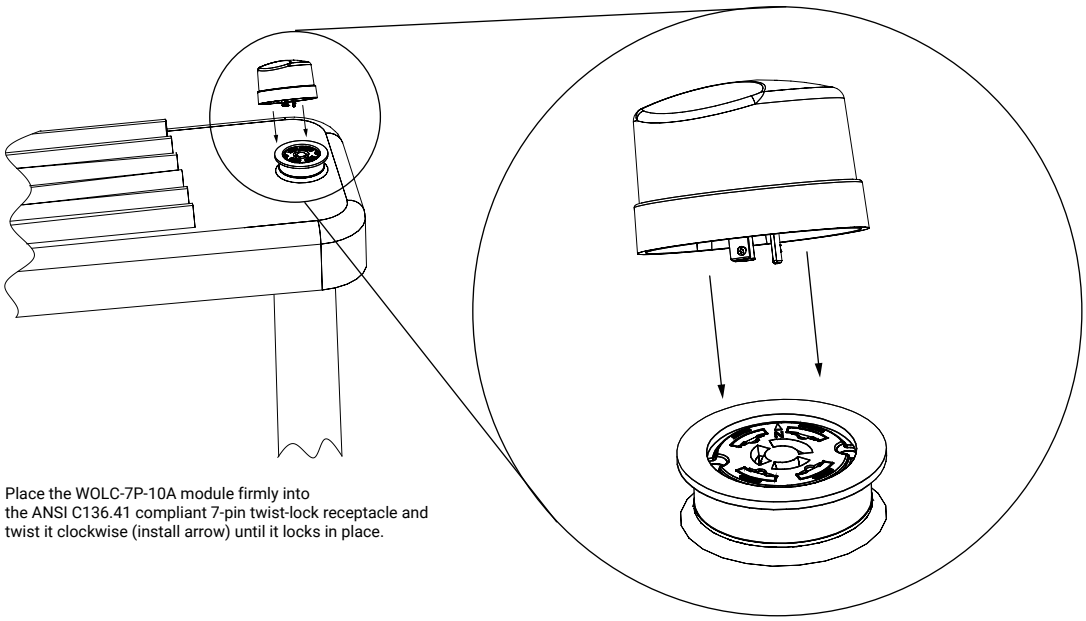
The WaveLinx Outdoor Lighting Control (WOLC) Module extends the WaveLinx System's controls capability to a building's surroundings or site such as parking lots and short pathways.

The WOLC Module is individually addressable and installs on top of a light pole via an ANSI 136.41-compliant, 7-pin twist-lock connector. It can switch luminaires ON/OFF via an integrated high current relay and dim luminaires equipped with 0-10V dimming drivers or ballasts. It communicates with the WaveLinx Wireless Area Controller over an IEEE 802.15.4 network.

Installation



BROWN:	unused
ORANGE:	unused
BLACK:	Line In
WHITE:	Neutral
RED:	AC to Driver
VIOLET / +:	Control to Driver
GREY /-:	Control to Driver



Place the WOLC-7P-10A module firmly into the ANSI C136.41 compliant 7-pin twist-lock receptacle and twist it clockwise (install arrow) until it locks in place.

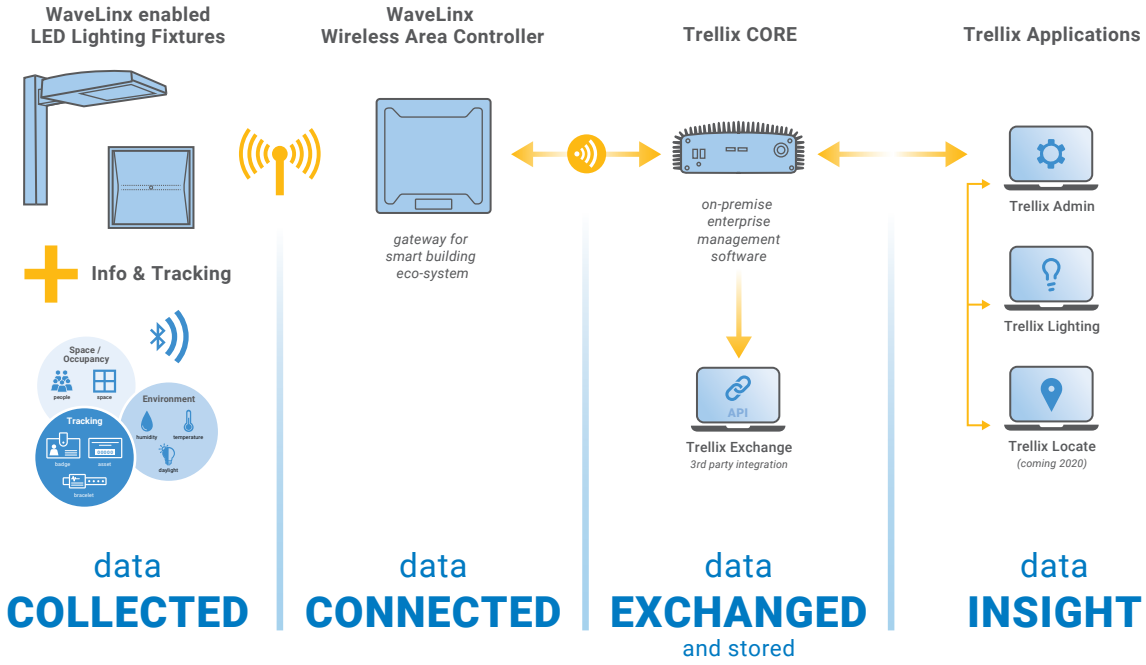
Control Systems

- Trellix

Better Data. Better Decisions.

Trellix combined with our WaveLinx 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.



Cooper Lighting Solutions
1121 Highway 74 South
Peachtree City, GA 30269
P: 770-486-4800
www.cooperlighting.com