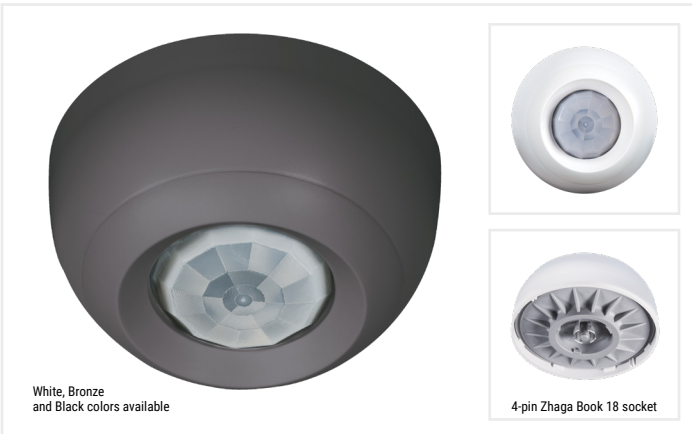


Project		Catalog #		Type	
Prepared by		Notes		Date	



WaveLinx Wireless

Outdoor Fixture Mount Sensor

Motion and closed loop daylighting including field installed shield

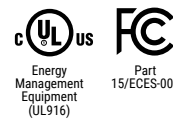
Typical Applications

Outdoor • Parking areas • Pathways

Interactive Menu

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

Product Certification



- Meets latest ASHRAE Standard 90.1 requirements
- Meets latest IECC requirements
- Meets latest CEC Title 24 requirements

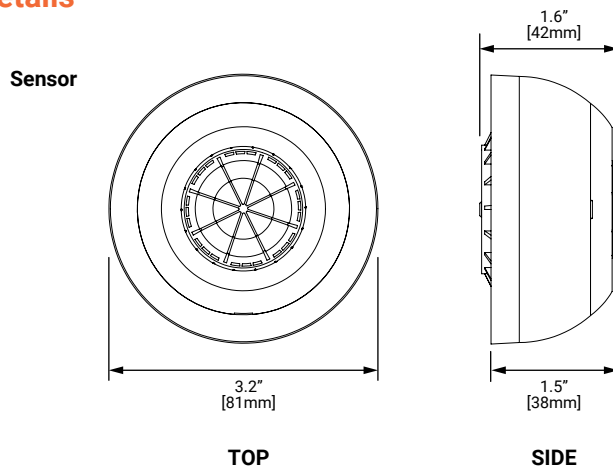
Product Features



Top Product Features

- Models suitable for applications up to 40ft
- Out of the box functionality (on at dusk, off at dawn, occupied to 100%, unoccupied to 50%)
- Passive Infra-Red (PIR) motion sensor with coverage up to 5000 square feet
- Integrated photocell for closed loop daylight harvesting
- Software configurable settings with WaveLinx Mobile Application
- Simple tool-less twist lock fixture connection via 4-pin Zhaga Book 18 socket
- IP66 rating for outdoor site and indoor environments
- Energy calculations available through Trellix

Dimensional Details



[additional product diagrams](#)

Order Information

WaveLinx Outdoor Fixture Mount Sensors are accessories to the WaveLinx Connected Lighting (WCL) system and requires a Wireless Area Controller (WAC) for full functionality.

WaveLinx Outdoor Fixture Mount Sensors are used to provide occupancy and daylight dimming to spaces from the outdoor light fixture. For energy code compliance, additional sensors may not be required.

Catalog Number

Catalog #	Description
OEM-SWPD5-WH	WaveLinx Outdoor Fixture - Fixture Mount Sensor, White, 15 - 40ft (4.5 - 12.2m)
OEM-SWPD5-BZ	WaveLinx Outdoor Fixture - Fixture Mount Sensor, Bronze, 15 - 40ft (4.5 - 12.2m)
OEM-SWPD5-BK	WaveLinx Outdoor Fixture - Fixture Mount Sensor, Black, 15 - 40ft (4.5 - 12.2m)
Notes For use with outdoor light fixtures equipped with the WaveLinx Zhaga compliant 4-pin socket only.	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.

Required Integration Components

Catalog Number

Catalog Number	Description
OEM-BK18-SOCKET	Zhaga compliant 4-pin book-18 socket
OEM-OUT-IND-CM	WaveLinx outdoor - Industrial 0-10V control module

Product Specifications

Key Features

- Models suitable for High (up to 40ft) and Low (up to 15ft) mounting applications
- Out of the box functionality (on at dusk, off at dawn, occupied to 100%, unoccupied to 50%)
- Passive Infra-Red (PIR) motion sensor with coverage up to 5000 square feet
- Integrated photocell for closed loop daylight harvesting
- Software configurable settings with WaveLinx Mobile Application
- Simple tool-less twist lock fixture connection via 4-pin Zhaga Book 18 socket
- IP66 rating for outdoor site and indoor environments
- Control modules suitable for 120-277VAC with 6 amp zero cross relay and 0-10V continuous dimming

Sensor Mechanical

Size: Base Diameter 3.2" (82mm) Height: 1.6" (41mm)

Weight: 0.20 lbs (0.10 kg)

Environment:

- **Operating temperature:** -40°F to 131°F (-40°C to 55°C)
Note: Wireless Area Controller should be installed in an indoor conditioned environment, preferably with line of sight through a window to one or more WaveLinx wireless devices
- **Note:** Sensor passive infrared (PIR) performance may become exceedingly sensitive below -4°F (-20°C)
- **Storage temperature:** -40°F to 158°F (-40°C to 70°C)
- **Relative humidity operating:** 0% to 95% non-condensing
 - For outdoor use only

Mounting: Fixture mount

Mounting Height: High bay up to 40ft (12m) and Low bay up to 15ft (5m)

Color: White, Bronze and Black colors available

Housing: UV stabilized plastic

Ingress protection: IP66

Light Sensor Detector Shields: Field configured shield included

Daylighting Installation:

- Ensure that sensor is not looking directly at artificial light
- Ensure that sensor is not obstructed

Socket Mechanical

Socket Color: Gray

Socket Housing: PBT

Socket Nut Color: Black

Socket Nut Housing: Nylon

Socket Contacts: Copper Alloy, Sn over Ni finish

Star Washer: Stainless Steel

Lock Washer: (Ref P/N: 2213817-1) and **Nut:** (Ref P/N: 2213791-1) not assembled, shipped bulk pack

Electrical Control Module

Input Voltage: 120-277VAC, 50/60Hz

Input Current: 6mA @ 120VAC, 4.5mA @ 277VAC

Output Voltage: 120-277VAC, 50/60Hz (Relay)

Output Current: 6A MAX

Load Types: Electronic Ballast, LED, Magnetic Ballast

Output Control: 0-10VDC, Class 2

Software Specifications

- Any number of sensors can be mapped to any number of zones
- Mobile app configuration for Occupancy/Vacancy
- Remote Hold Time settings fully configurable via mobile app
- Mobile app configuration of Occupied and Unoccupied light levels
- Energy calculations available through Trellix

Wireless Specifications

Radio: 2.4GHz

Standard: IEEE 802.15.4

Transmitter Power: + 8dBm

Range: Sensor to sensor, 160ft (49m) LOS (best practice)

System Performance

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

Standards/Ratings

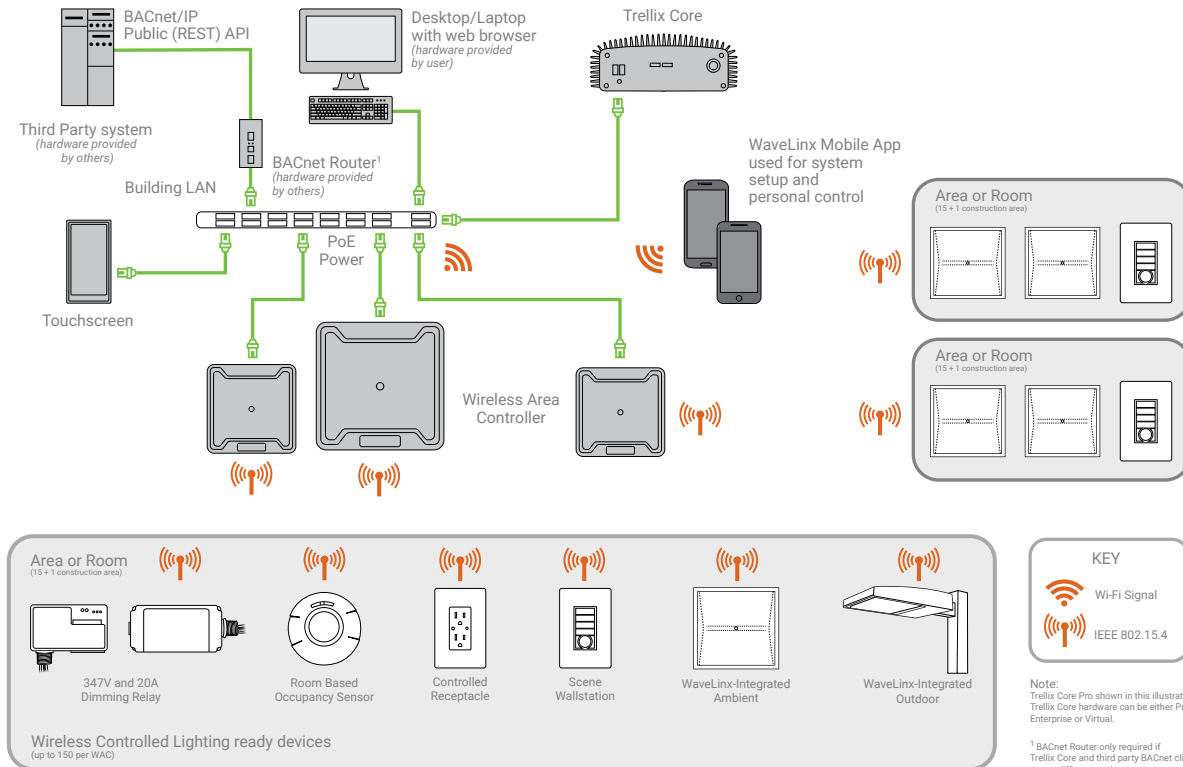
- cULus Listed - Energy Management Equipment (UL916)
- FCC Part 15/ECES-003
- Meets latest ASHRAE Standard 90.1 requirements
- Meets latest IECC requirements
- Meets latest CEC Title 24 requirements
- Socket must comply with Directive 2002 / 95 / EC (ROHS)

Warranty

Five year warranty standard

System Architecture

This diagram shows the main components of the WaveLinX Wireless 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.



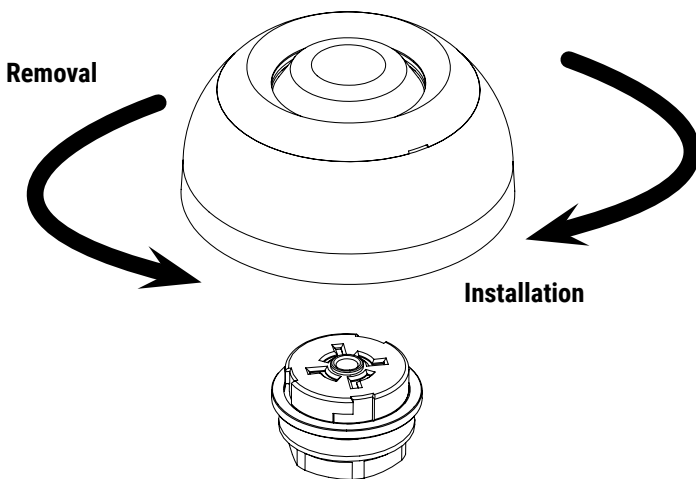
Overview

The Outdoor sensors are an integral part of the WaveLinX Connected Lighting System and offer passive infrared (PIR) occupancy and a photocell for closed loop daylighting. WaveLinX Outdoor sensors offer installation heights up to 40 feet and have coverage patterns up to 5000 square feet (see sensor specifications - field of view). When part of WaveLinX, the sensor operates on a wireless mesh network based on IEEE 802.15.4 standards.

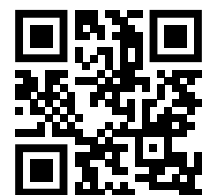
The sensors offer simple tool-less integration into WaveLinX Outdoor light fixtures equipped with the 4-pin Zhaga Book 18 compliant socket. Once installed, sensors receive power from their co-located light fixture with no batteries to replace. The sensor in combination with the WaveLinX Mobile application allows you to gain considerable energy savings from occupancy and daylight sensing lighting control. The WaveLinX Mobile application allows you to map the sensor to any area or control zone, select occupancy or vacancy, occupied and unoccupied light levels and set the hold time.

Installation

The SWPD5 easily installs into WaveLinX-ready LED fixtures equipped with Zhaga Book 18 4-pin sockets. Sensor connection is enabled via the simply twist-lock connection and provides immediate out-of-the-box functionality.

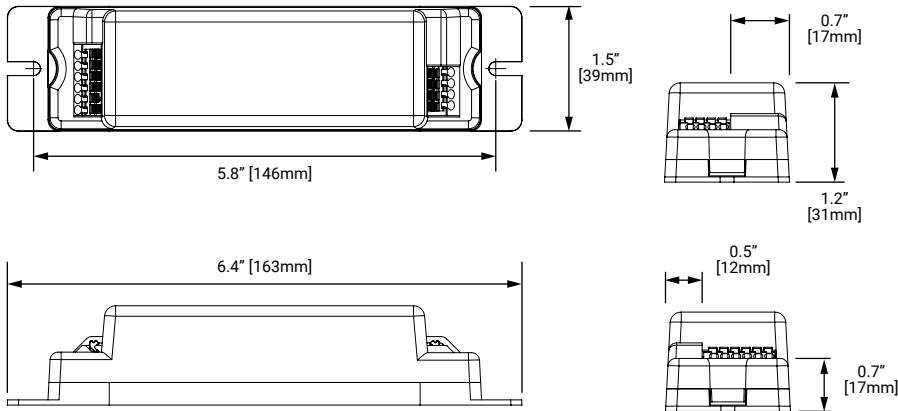


For wiring / installation details:

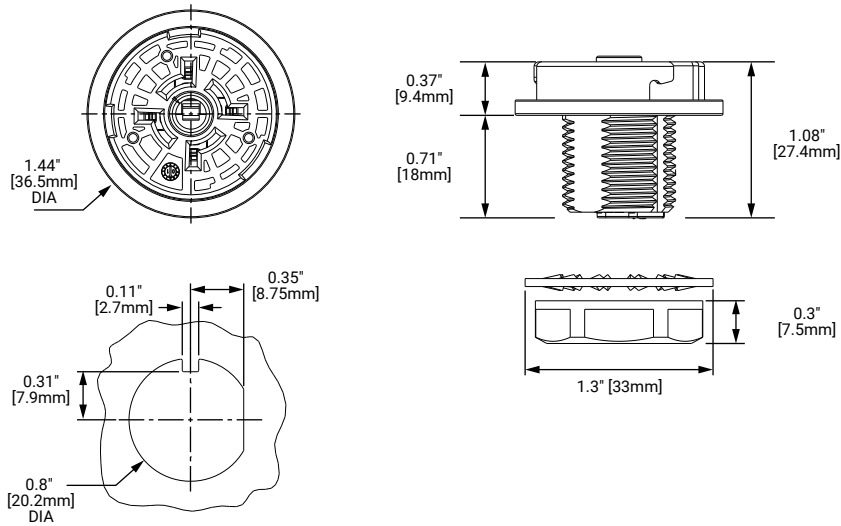


Additional Dimensional Details

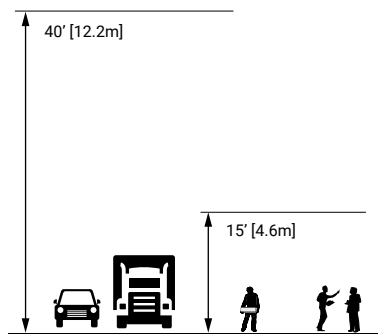
Control Module



Socket

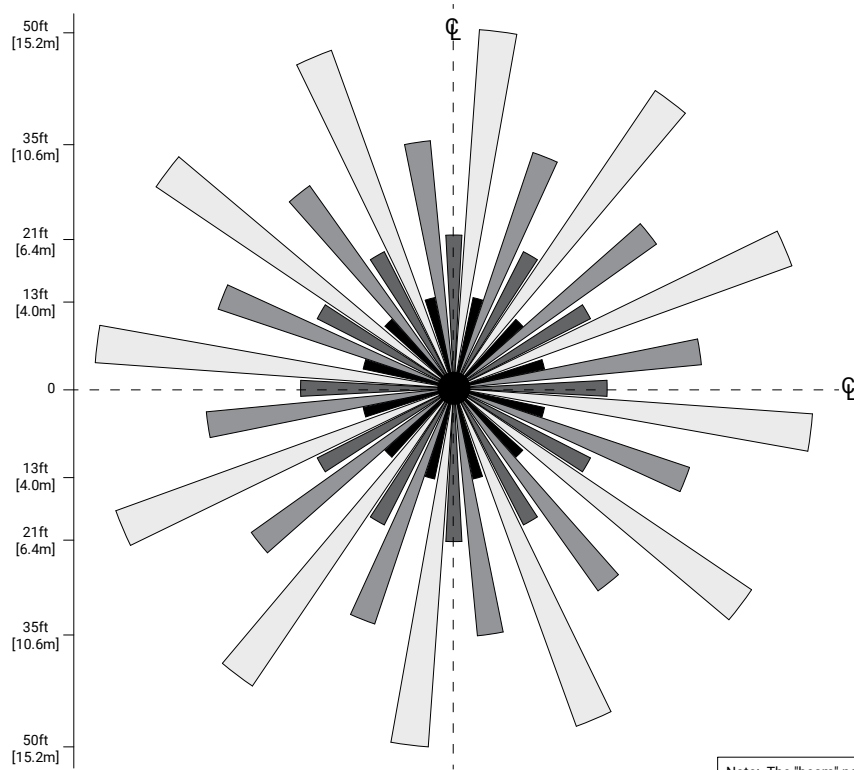


Mounting Height



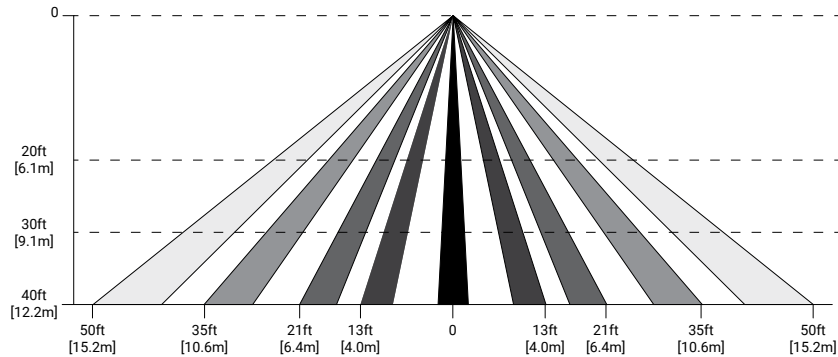
Field of View

TOP VIEW:



Note: The "beam" pattern obtained depends strongly on the detector used with this array. The pattern shown is intended solely as a general guide and is not to scale.

SIDE VIEW:



Note: False motion detection can occur when objects of contrasting temperature with the surrounding environment move within the sensor field of view. Wind blowing leaves, branches, or other objects can trigger the motion sensor. It is recommended that the sensor be mounted away from these objects.

Note: Air movement at temperature contrasting with the environment may cause false motion detection. For that reason, it is recommended that the sensor be mounted 3-4ft away from air vents, when possible.

Connected 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.

