

Project		Catalog #		Type	
Prepared by		Notes		Date	



## WaveLinX

### PRO Outdoor Sensor Extender/Multiplier (RSWPD)

Extend WaveLinX PRO signal outdoors or add motion and daylight sensing to luminaires

#### Typical Applications

Outdoor • Parking areas • Pathways

#### Interactive Menu

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- Product Warranty



#### Product Features



\*When wired to specific outdoor luminaires

#### Compatibility



## Overview

The remote sensor housing incorporates a WaveLinX PRO SWPD4 and SWPD5 wireless sensor, and is available in the following two possible configurations.

In the first configuration (**RSWPD-WE**), the RSWPD acts as a Wireless Extender, which can be placed in a location where no WaveLinX PRO enabled luminaire is present, thus providing a way for the WaveLinX PRO wireless system to find a node from which to hop. This is an ideal configuration for when the WaveLinX Area Controller is too far from the first luminaire and needs to hop via an intermediate wireless node to reach it. Another use case for this configuration is to add this device between two nodes that are too far away from one-another – as a mid-point hopper between the two.

Note: It is recommended that the RSWPD-WE use the low mount sensor and be placed at a height no higher than 15ft (4m).

Also, it is recommended that in large systems, two RSWPD-WE be used and that the first one be no more than 125ft (38m) from LOS of the WAC in case the RSWPD-WE is extending the range of the WAC.

In the second configuration (**RSWPD-CM**), the RSWPD acts as a Control Multiplier to distribute the commands from the WaveLinX PRO system solution to multiple luminaires at once that can not be fitted with WaveLinX PRO directly. In this configuration, the RSWPD provides motion input, photo-sensing or remote management to the luminaires that are wired to this device. This RSWPD-CM configuration contains a relay for switching lighting loads ON/OFF.

Note: It is recommended that the RSWPD-CM be used in a system that is managed by a WAC.

## Product Features & Benefits

- WaveLinX PRO mains powered outdoor sensor option external to the luminaire
- Extends WaveLinX Area Controller (WAC) range to outdoor devices
- Externally mounted sensor option to control connected luminaires
- Provides control to multiple luminaires at once (in the Control Multiplier configuration)
- Mounts on round and square poles or a single wall mounted junction box
- Programming follows the same procedure as programming a connected WaveLinX PRO luminaire

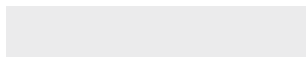
## Order Information

SAMPLE ORDER NUMBER: **RSWPD4-WE-U-WH**

Product Family	Motion Lens	Configuration Type	Voltage	Colors
RSWPD = WaveLinx PRO Remote	4 = Low Mount Sensor, 7 - 15ft (2.1 - 4.5m) 5 = High Mount Sensor, 15 - 40ft (4.5 - 12.2m) (applicable to RSWPD in CM configuration)	WE = Wireless Extender (hopper) * CM = Control Multiplier	Wireless Extender U = 120-277V 9 = 347V 8 = 480V  Control Multiplier 1 = 120V 3 = 240V 4 = 277V	BK = Black BZ = Bronze WH = White
		<b>Note</b> * RSWPD-WE use the low mount sensor and be placed at a height no higher than 15 ft.		

## Required Accessories

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

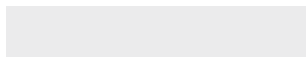


### Catalog Number

Catalog Number	Description
WAC2-POE	WaveLinx Area Controller G2, PoE powered
WAC2-120	WaveLinx Area Controller G2 with 120VAC to PoE Injector

## Optional Accessories

For connection to 120VAC outlets.



### Catalog Number

Catalog Number	Description
WPOE2-120	120VAC to PoE Injector

## Product Specifications

### Key Features

#### RSWPD-WE:

- Configuration suitable for installation up to 15ft (4m) high mounting applications

#### RSWPD-CM:

- Out-of-the-box functionality (on at dusk, off at dawn, occupied to 100%)
- Passive Infra-Red (PIR) motion sensor with coverage up to 5000 sq ft
- Integrated photocell for closed loop daylight switching

#### All configurations:

- Software configurable settings with WaveLinx Mobile Application
- Simple tool-less twist lock fixture connection via 4-pin Zhaga Book 18 socket
- IP66 rating and powder coated cast aluminum housing for outdoor applications

### Mechanical

**Size:** 4.378" x 4.63" x 11.5" (112mm x 119mm x 292mm)

**Weight:** 11 lbs (5.0 kg)

#### Environment:

- **Operating temperature:** -40°F to 131°F (-40°C to 55°C)
- Default behavior intended for outdoor use only

**Mounting:** Wall mount, square pole or round pole mount

#### Mounting Height:

- **CM version:** 40ft (12m) and 15ft (5m) options available
- **WE version:** 15ft (5m) only

**Color:** White, Bronze and Black colors available

#### Housing:

- One-piece, die-cast aluminum
- Finished in super durable TGIC polyester powder coat
- IP66 rated

### Electrical

#### Power limitations for the RSWPD-CM configuration:

Voltage	Amperage	Max Wattage
120V	16A	1800W
240V	8A	1800W
277V	8A	2100W

### Software Specifications

- Mobile app configuration for Occupancy/Vacancy
- Remote Hold Time settings fully configurable via mobile app
- Mobile app configuration of Occupied and Unoccupied light levels
- RSWPD can support dimming by connecting 0-10V 2-wire dimming to the module

### Wireless Specifications

**Radio:** 2.4GHz

**Standard:** IEEE 802.15.4

**Transmitter Power:** + 8dBm

#### Range:

- RSWPD sensor to RSWPD sensor; 160ft (49m) LOS (best practice)
- WaveLinx Area Controller to RSWPD sensor; 125ft (38m) LOS (through window)

### System Performance

**Maximum number of nodes supported:** 200 per WaveLinx Area Controller (best practice 150 devices)

### Standards/Ratings\*

- UL Certified

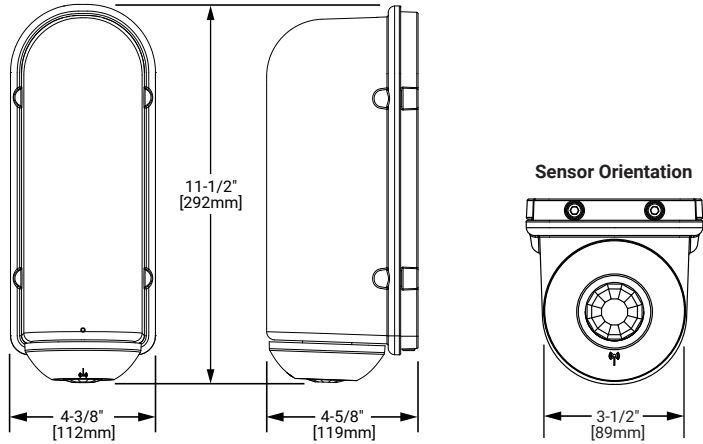
### Warranty

Five year warranty standard

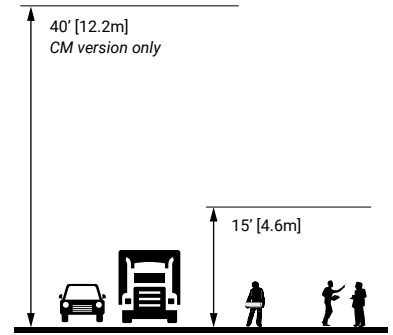


Download the WaveLinx Mobile App from either the Google Play or Apple Store®

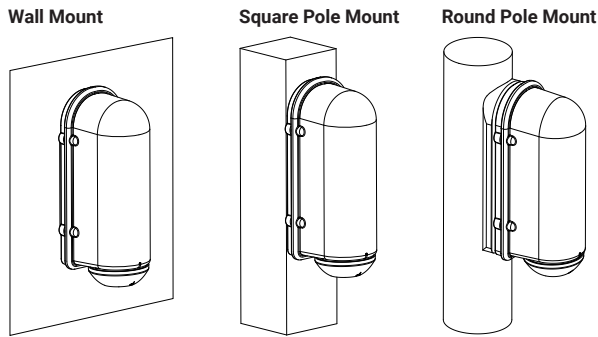
## Dimensional and Mounting Details



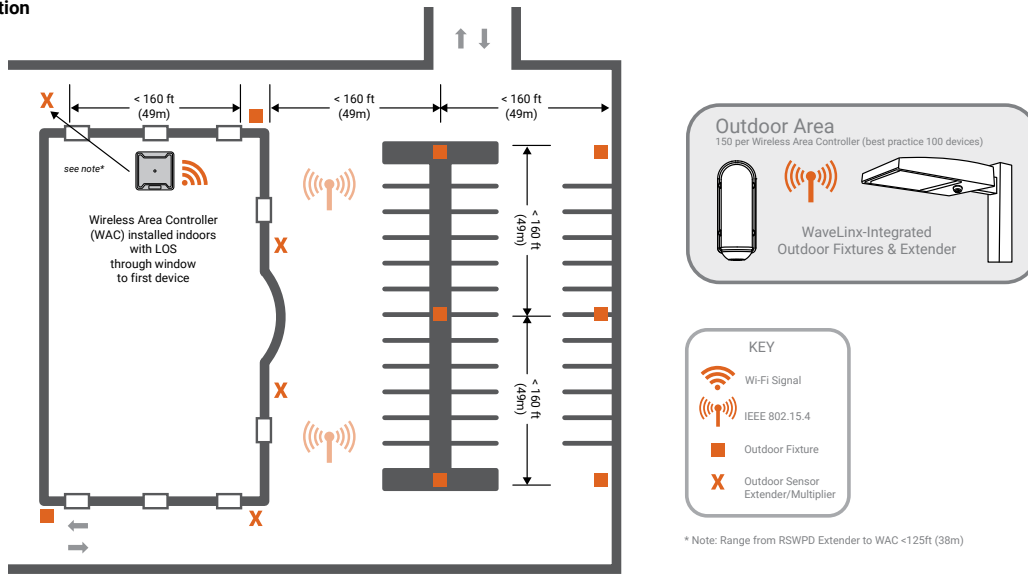
## Mounting Height



## Mounting Option

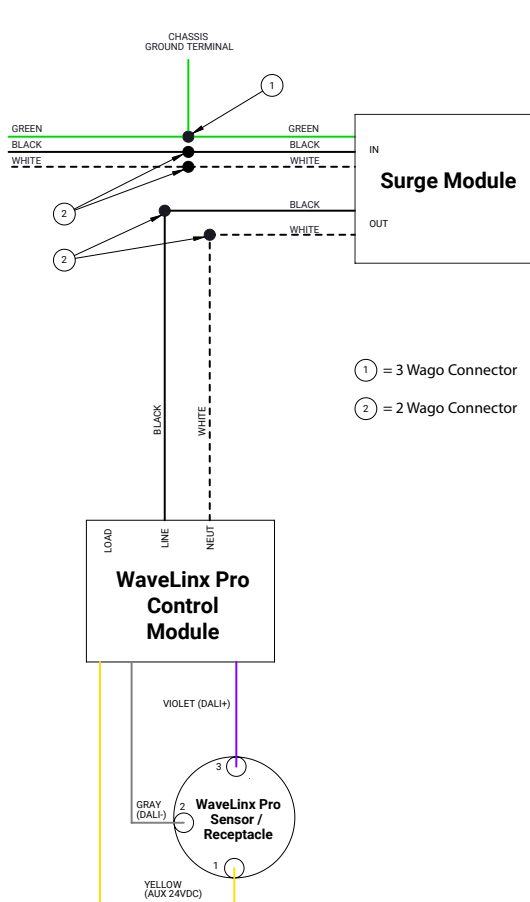


## RSWPD-WE Configuration

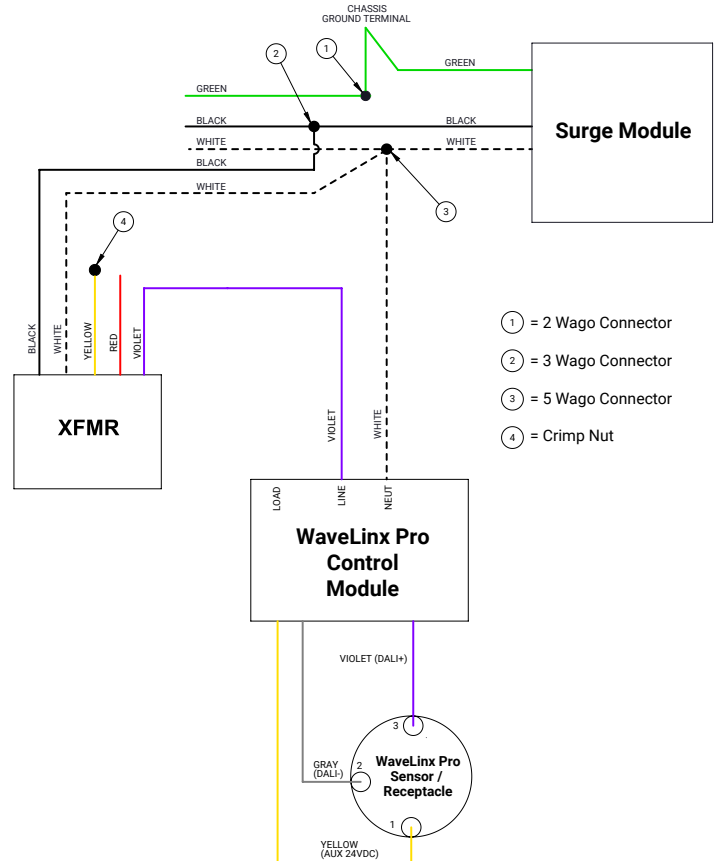


## Wiring Diagrams

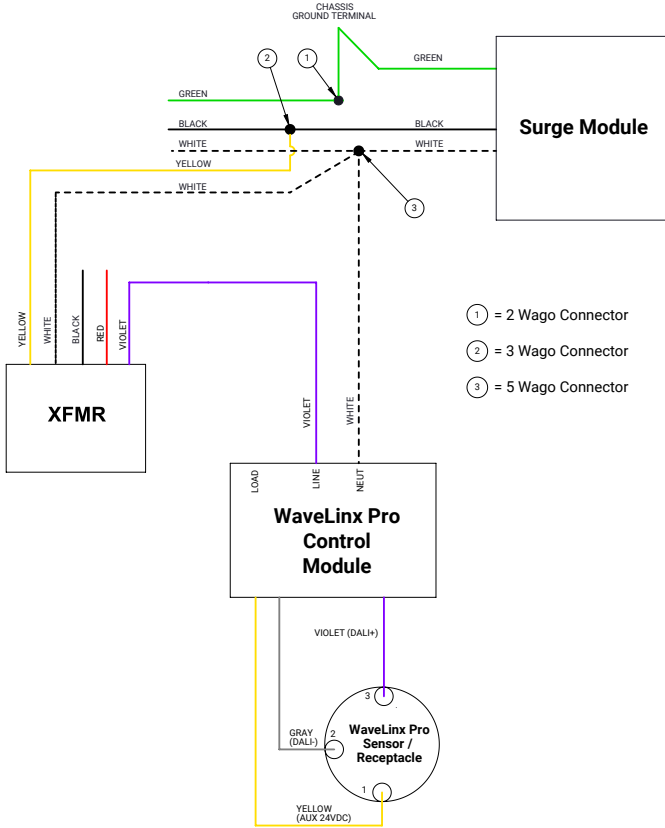
### Wireless Extender 120-277V



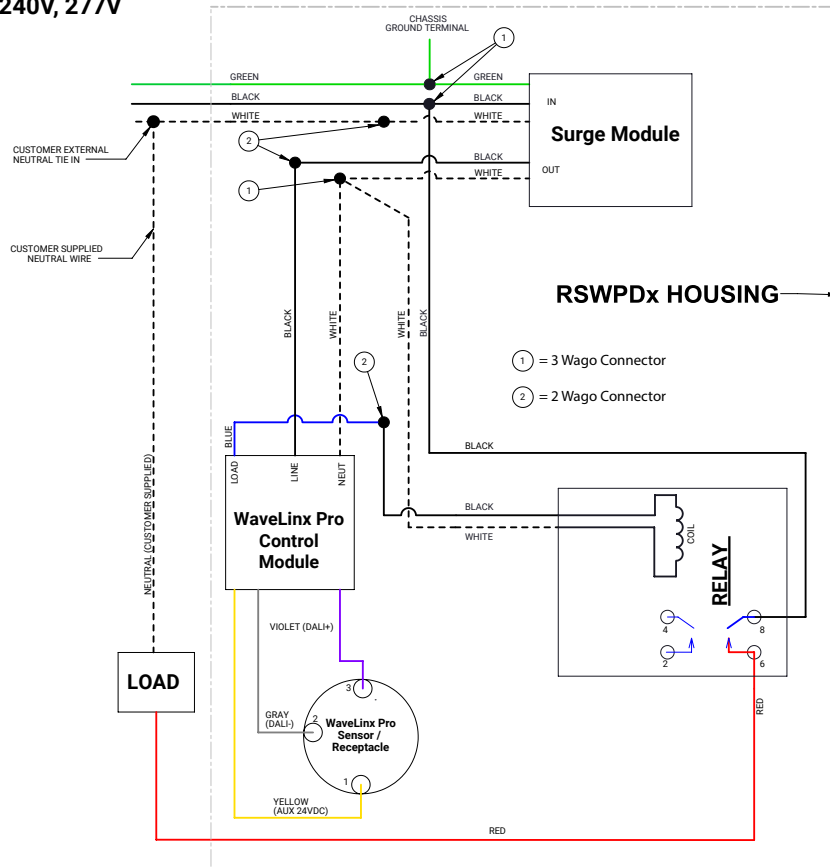
### Wireless Extender 347V



## Wireless Extender 480V

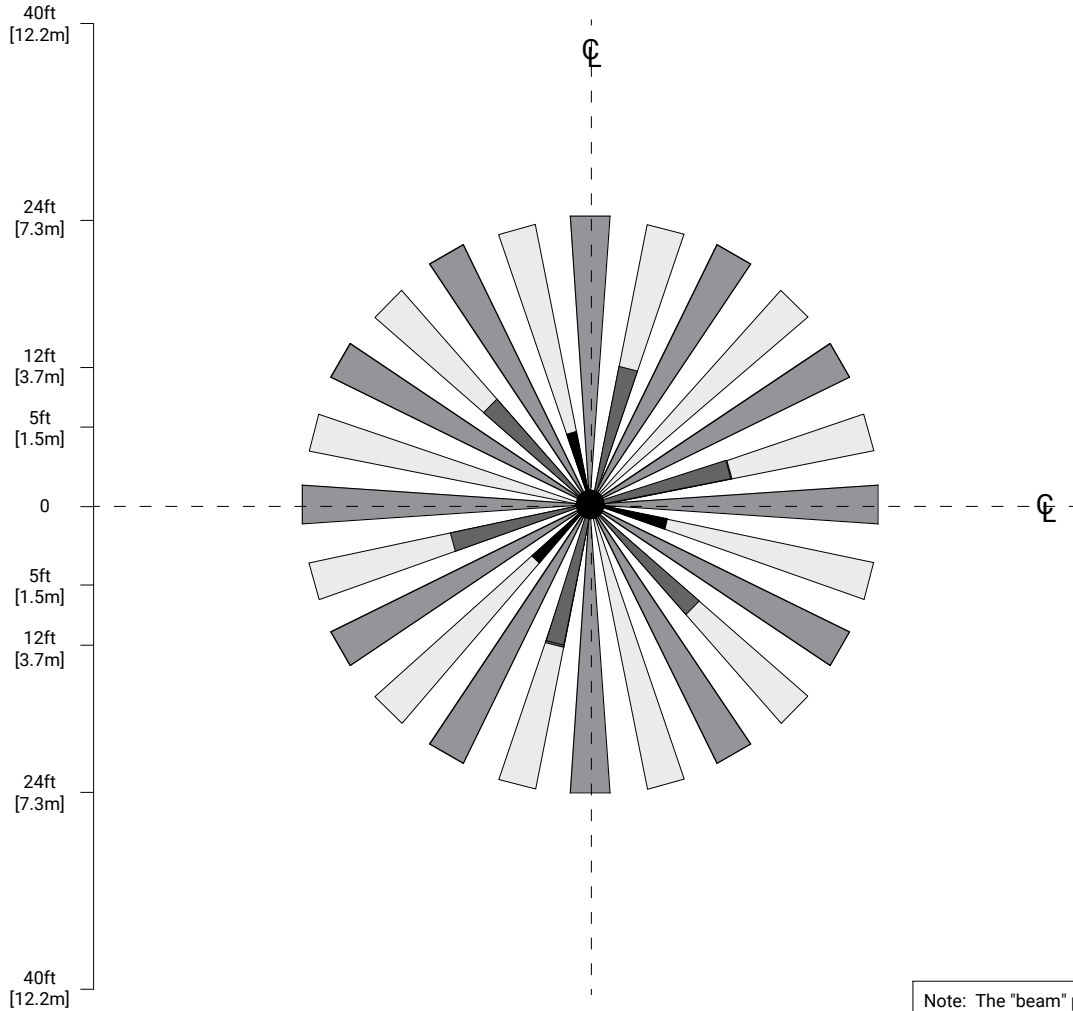


## Control Multiplier 120V, 240V, 277V



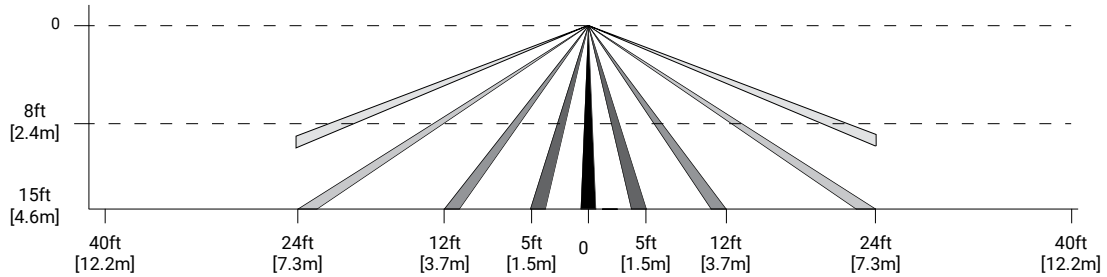
## Field of View - Low Mount (Control Multiplier configuration)

### TOP VIEW:



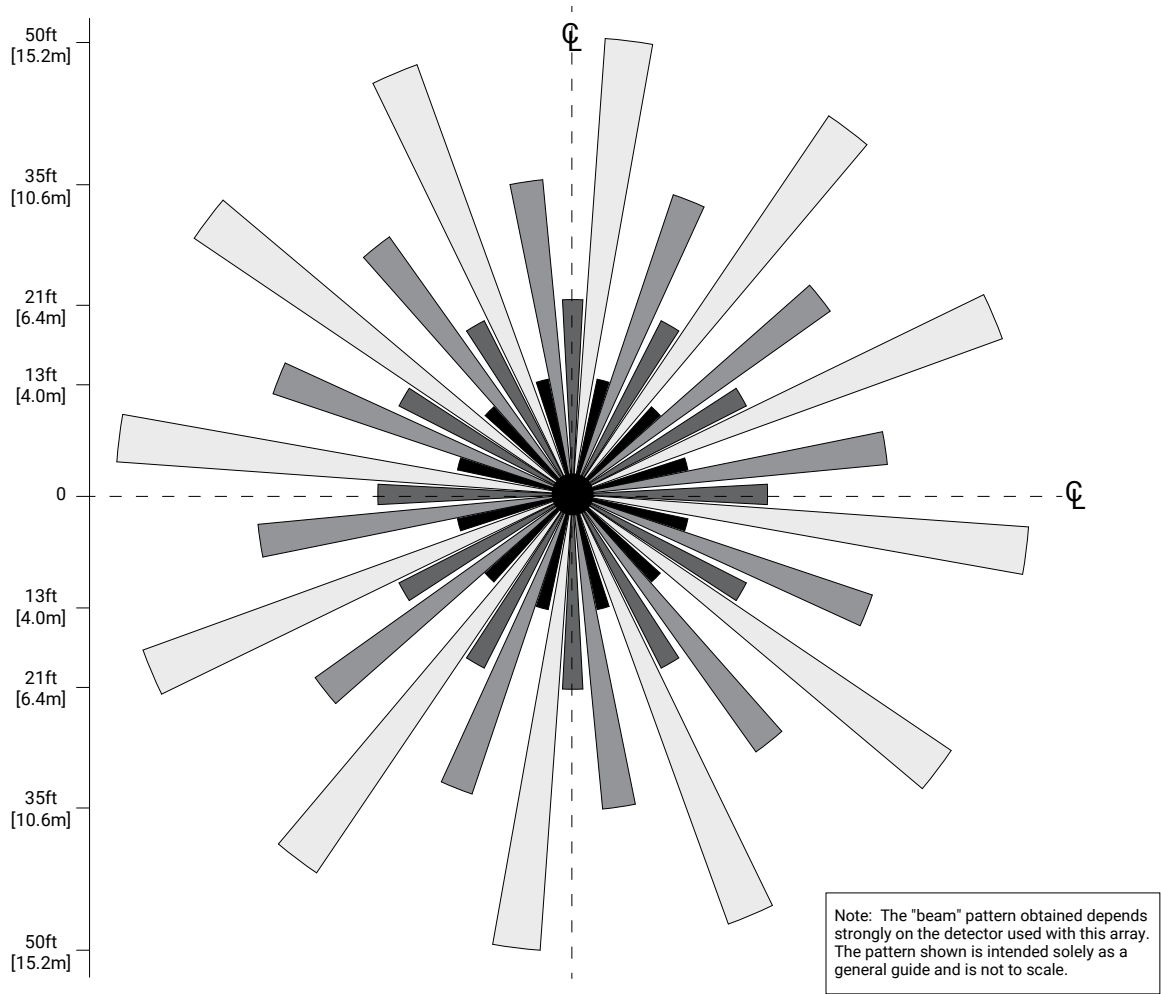
Note: The "beam" pattern obtained depends strongly on the detector used with this array. The pattern shown is intended solely as a general guide and is not to scale.

### SIDE VIEW:

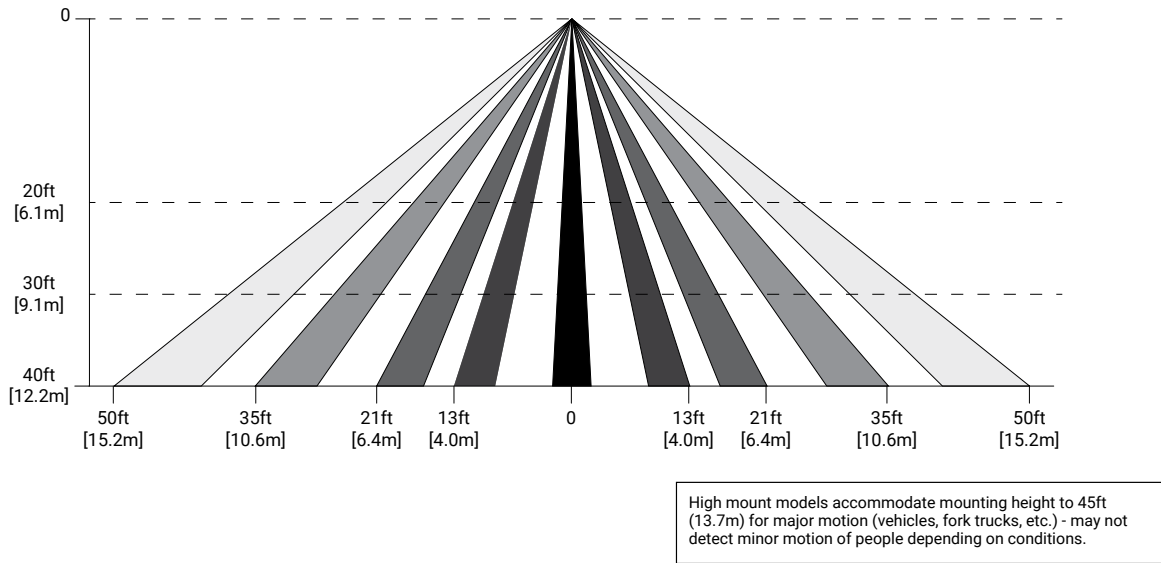


Field of View - High Mount (Control Multiplier configuration only)

TOP VIEW:



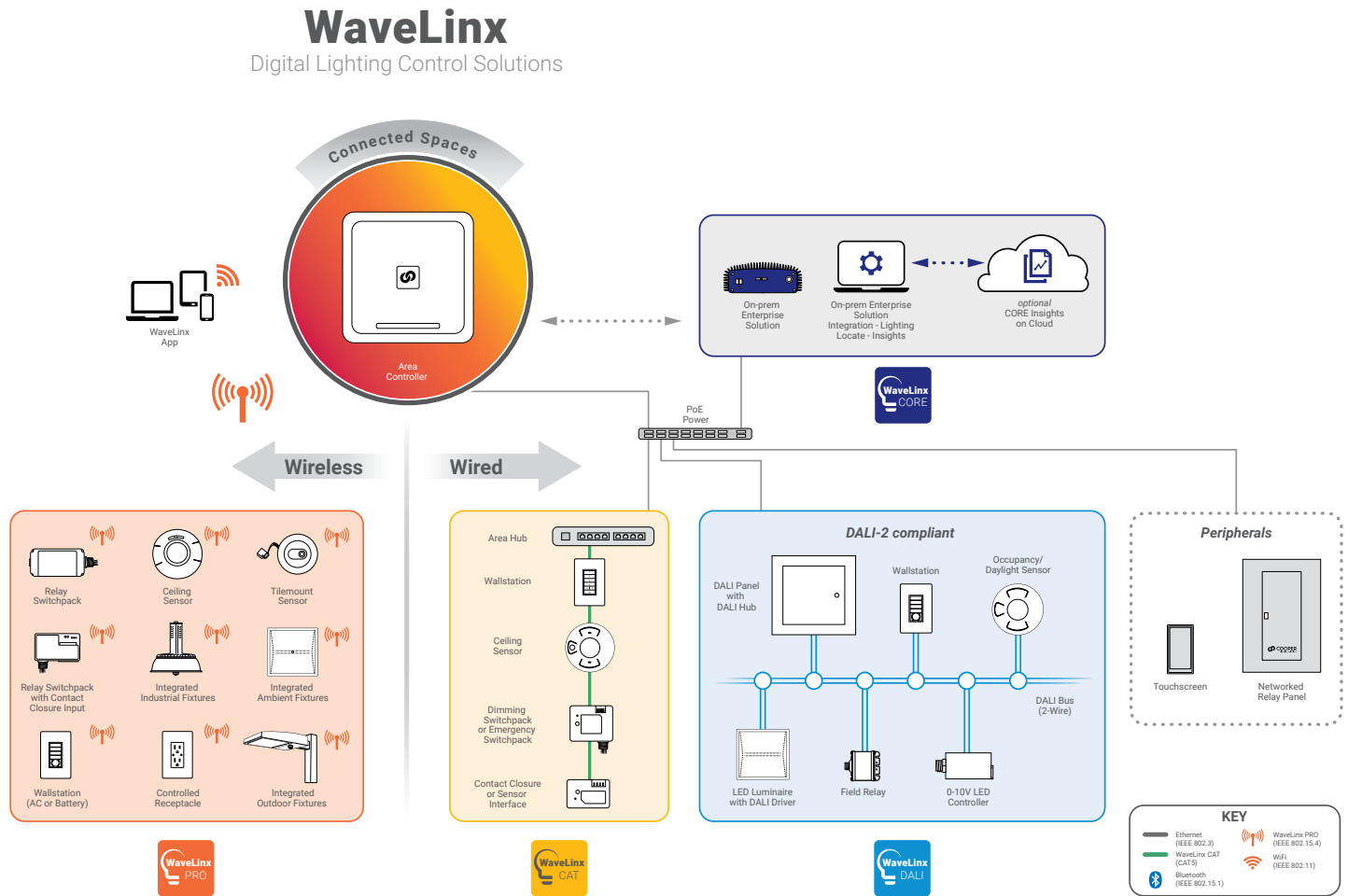
SIDE VIEW:



## 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 Network and IT Guidance Technical Guide](#)



**Control Systems**  
• WaveLinx