

Project		Catalog #		Type	
Prepared by		Notes		Date	



WaveLinx Wired

PPAD-C-HB and SB-C

Multi-Sensor - Highbay (PPAD-C-HB)
Surface Mounting Box (SB-C)

Typical Applications

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

Interactive Menu

- Ordering Information [page 2](#)
- Additional Resources [page 3](#)
- Wiring Diagrams [page 3](#)
- Connected Systems [page 4](#)
- Product Warranty

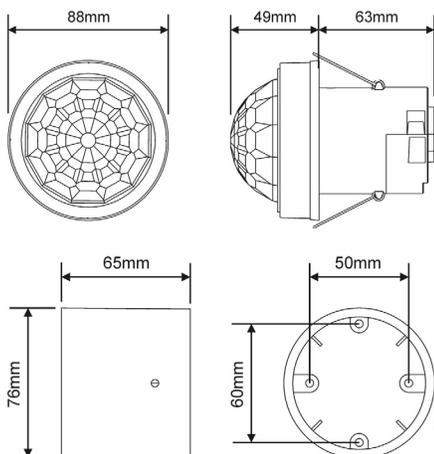
Product Features



Top Product Features

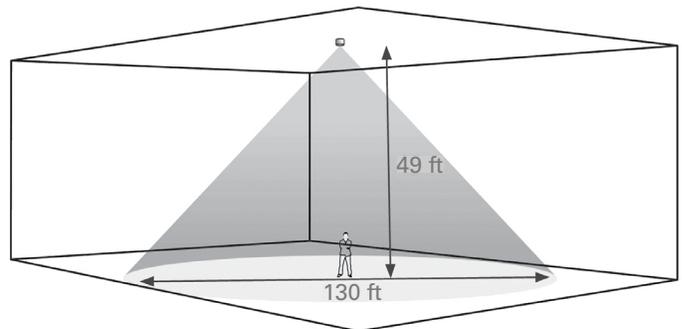
- PIR sensor facilitates lighting load control in response to occupancy
- Integrated daylight sensor measures the overall light level in detection area
- Supports mounting heights up to 49 feet
- Works with all WaveLinx Wired panels using the SCMD4 control module
- Sensor powered by the WaveLinx Wired local bus (via SCMD4)
- IP 65 with gasket (supplied)
- Adjustable masks (supplied) for limiting detection areas

Dimensional Details



SB-C Mounting Box Dimensions

Detection Details



- Ideal for warehouses, atriums and high bay applications where daylight harvesting operation with minimum light levels are required. Maximum recommended mounting height: 49 feet.

[additional product diagrams](#)

Order Information

Catalog Number

Catalog Number	Description
912600000426	PPAD-C-HB Highbay Multi-Sensor - daylighting and occupancy 49' mounting height
912600000436	SB-C Surface mounting box

Product Specifications

Key Features

- PIR Sensor: Detects movement within the unit's detection range, allowing load control in response to changes in occupancy
- Light Level Sensor: Measures the overall light level in the detection area
- Status LEDs
- Connection to the two wire network for power and communication
- Adjustable mask (supplied) for limiting beam direction

Commissioning

This sensor connects via the WaveLinx Wired local bus (SCMD4)

Mechanical

Weight: 0.10kg

Material (casing): Flame retardant ABS and PC/ABS

Environment:

- **Operating temperature:** 14°F to 95°F (-10°C to 35°C)
- **Operating relative humidity:** 5% to 95% non-condensing

Electrical

Supply Voltage: 9.5VDC–22.5VDC via DALI

Supply Current: 8mA

Terminal Capacity: 14AWG (solid or stranded)

IP rating: 40 without gasket. 65 with gasket (supplied)

Compliance: EMC-89/336/EEC, LVD-2006/95/E

Standards/Ratings

- Manufactured in an ISO 9001 certified factory
- Meets ASHRAE Standard 90.1 requirements
- Meets IECC 2015 requirements
- Meets CEC Title 24 requirements

Product Safety:

- EN 60950-1

Environmental Regulations:

- RoHS Directive 2011/65/EU
- WEEE Directive 2012/19/EU

Warranty

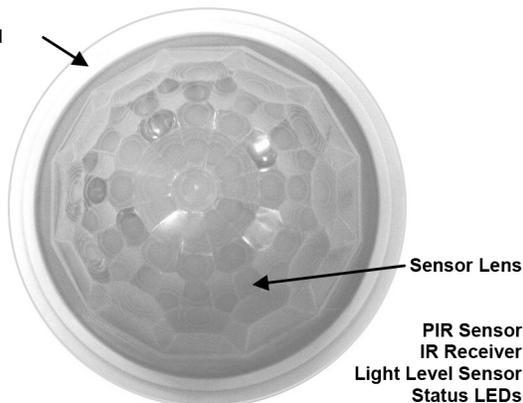
Five year warranty standard

Overview

The PPAD-C-HB is a ceiling mounted, fully addressable passive infrared PIR presence/absence detector designed to be part of the WaveLinx Wired network*. PPAD-C-HB is a high sensitivity PIR detector suitable for high ceiling or bay applications, such as warehouses and factories, and where high detection sensitivity is needed. Functioning as a presence detector, the unit returns occupancy data to the network. The integrated photocell provides a light level measurement value to the network

Front features

Mounting Bezel

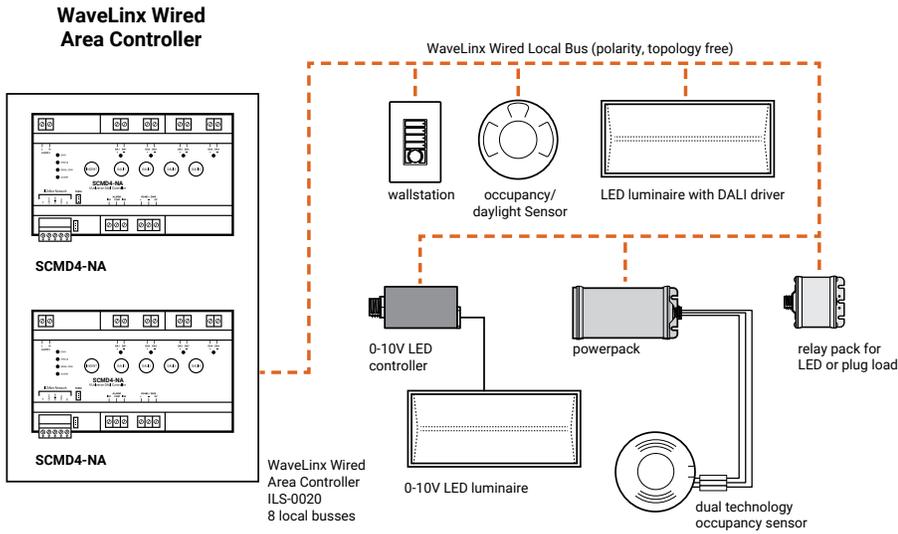


Back features

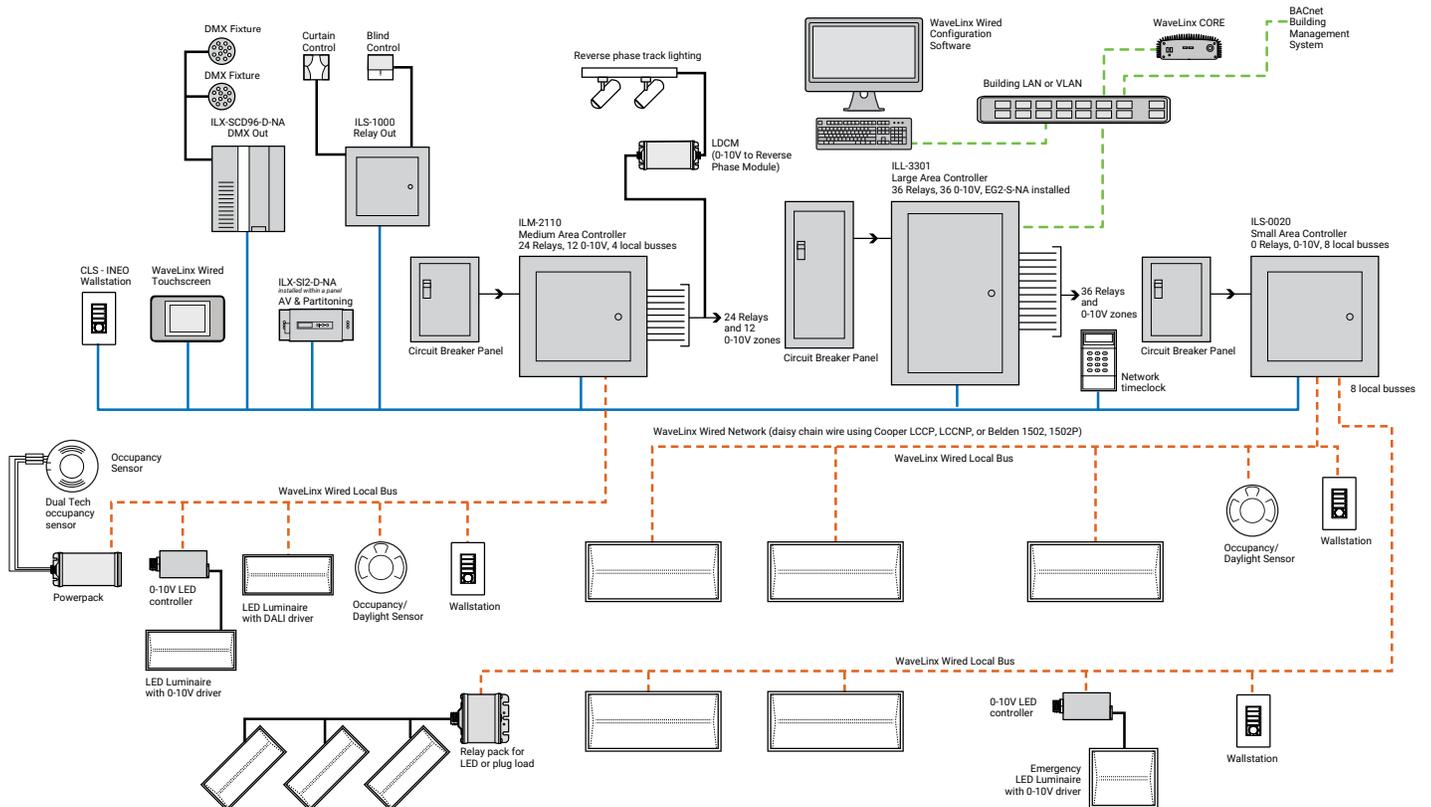


System architecture

Simple WaveLinx Wired system



Complete WaveLinx Wired system

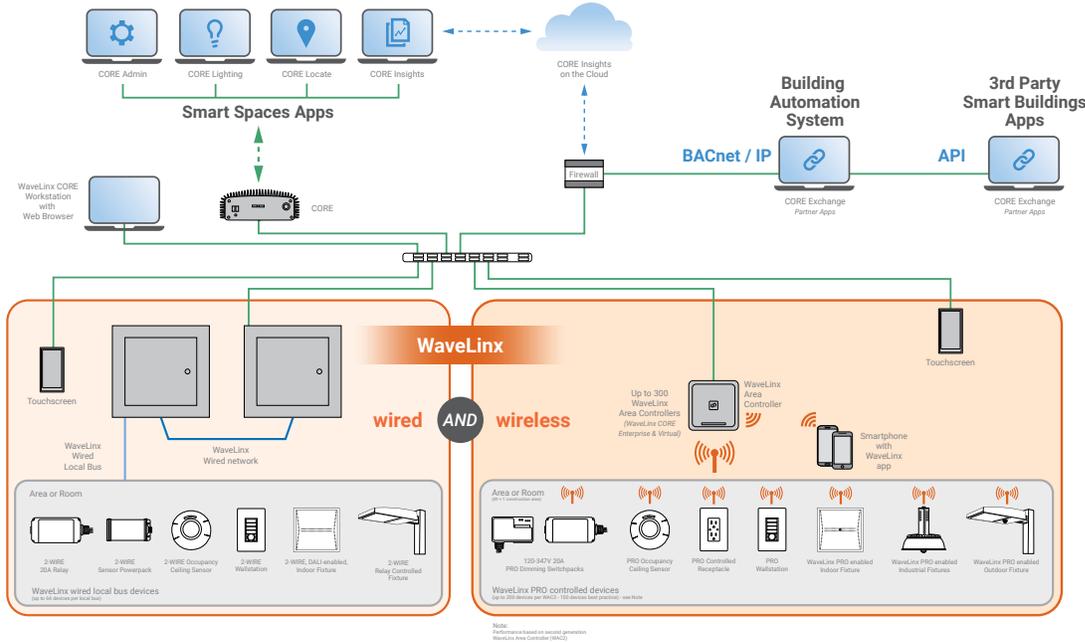


Sample System Topology:

This diagram shows the main components of the WaveLinX wired and PRO wireless connected lighting system.

The **WaveLinX PRO wireless system** communicates 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 **WaveLinX wired system** controls the devices using relay, 0-10V, DMX and the WaveLinX wired digital local bus. The WaveLinX wired system connects to the building LAN using the EG2 module. Each WaveLinX wired area controller communicates on the WaveLinX wired network.

WaveLinX Area Controllers (WAC) and WaveLinX Ethernet Gateways (EG2) communicate with WaveLinX CORE over the Ethernet network. Please refer to the WaveLinX PRO Wireless Network and IT Guidance Technical Guide and WaveLinX Wired Network and IT Guidance Technical Guide for more information.



[View WaveLinX Network and IT Guidance Technical Guide](#)

	WaveLinX wired	WaveLinX PRO/CAT/Panel
WaveLinX CORE		
Connects to WaveLinX CORE (Pro, Enterprise, Virtual)	●	●
# of WAC or EG2-S-NA / # of devices per WaveLinX CORE Pro	2 / 3000	20 / 3000
# of WAC or EG2-S-NA / # of devices per WaveLinX CORE Enterprise	10 / 32,500*	300 / 32,500*
# of WAC or EG2-S-NA / # of devices per WaveLinX CORE Virtual Enterprise	10 / 32,500*	300 / 32,500*
Connecting device	EG2-S-NA	WAC2-POE
CORE Lighting		
Alarms	○	●
Events	●	●
Operate (floorplan control)	●	●
Operate - area control	●	●
Operate - zone control	●	●
Operate - device control	●	●
Scheduling	○	●
Energy Dashboard		●
Occupancy Dashboard		●
CORE Exchange		
BACnet/IP	○	10,000 objects with WaveLinX CORE Pro up to 30,000 with Enterprise/Virtual
Public (REST) API	○	●
OpenADR		●
Demand Response		●
CORE Admin		
Manage Users	●	●
Manage roles	●	●
Manage clients	●	●
Manage licenses	●	●
System settings (backup/restore_network etc)	●	●
CORE Insights		
Occupancy Trends and Comparison		●
Average Occupancy		●
Occupancy on Floor Plan		●
Generate and Export Reports to pdf		●
Hierarchical Navigation		●
Quick Search		●
Department Filter		●
Historical View		●
Popular Spaces		●

* For larger number of gateways and devices, please contact Cooper Lighting Solutions Sales representatives. Recommend designing the system at 70-80% of maximum capacity. Specifications based on WAC2-POE. The number of gateways and devices mentioned above are the total for a single system or the combination (Wired + Wireless) that can be used with a server.

● = All features ○ = Subset of features

Control Systems

- WaveLinX