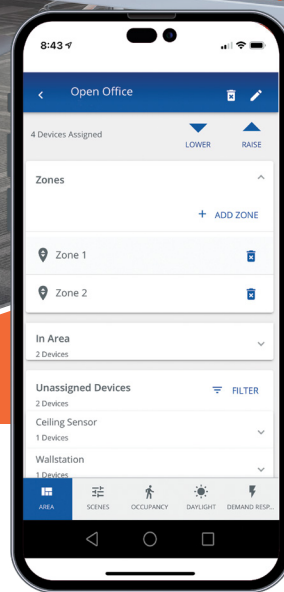# WaveLinx

Digital Lighting Control Solutions
For Indoor & Outdoor Commercial Spaces

## Simple. Scalable. Insightful.

COOPER
Lighting Solutions

a Signify business

cooperlighting.com

# It's time for smarter buildings

The buildings where we work, play, shop, and get services account for 40% of today's global energy consumption and 33% of greenhouse gas emissions. We can help you do better.

Intelligent digital and LED-based lighting systems are an integral part of exciting new strategies developed to reduce energy and operating costs while ensuring occupant comfort.

**WaveLinx**
Digital Lighting
Control
Solutions

# WaveLinx

WaveLinx is a Cooper Lighting Solutions smart lighting system and more. It's an intelligent digital lighting system designed to help organizations drive down energy costs while creating healthier indoor and outdoor spaces.

WaveLinx offers an unparalleled choice of wired and wireless lighting control products, from simple switches to advanced automation, to luminaires with integrated sensors. It's one of the simplest systems to design, install, and commission.

With WaveLinx, you experience the next level of aesthetics and personalized ambiance and comfort, along with our largest offering of WaveLinx-enabled luminaires embedded with sensing and connectivity.
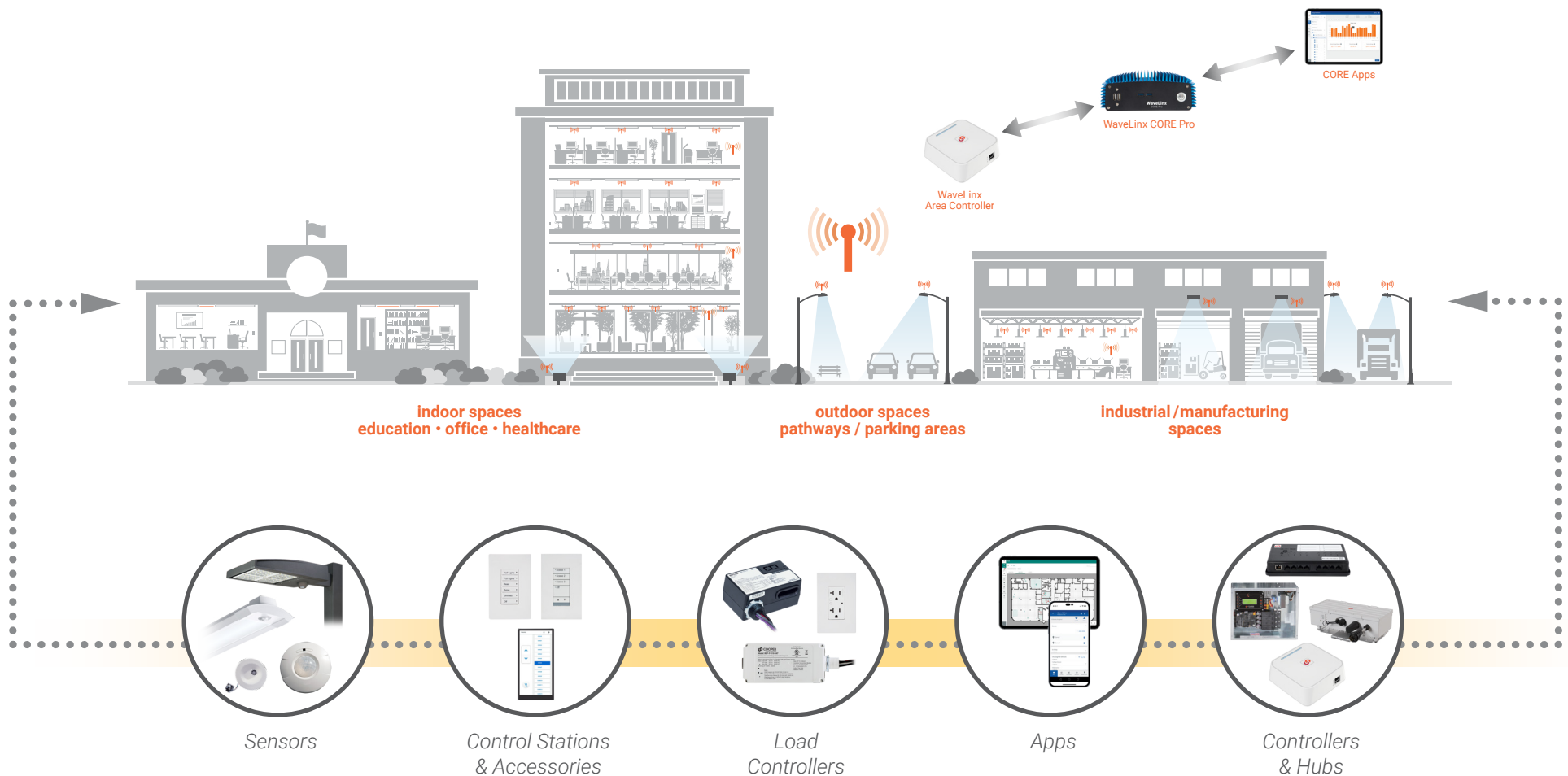
## A smarter way to save energy is here.

# How does WaveLinx work?

**WaveLinx is a system of wired and wireless devices that controls lighting in multiple spaces.**

- For a **single space**, use either wired CAT devices or wireless LITE devices.
- For **connected spaces**, use wired CAT and/or wireless PRO devices, and connect them with the WaveLinx Area Controller to link spaces together.
- For **central management, visual floorplans, dashboards and data exchange**, use a WaveLinx CORE on-prem, that offers standard and proprietary interfaces such as BACnet®/IP, OpenADR, APIs, and visualization applications.



CORE Apps

WaveLinx CORE Pro

WaveLinx
Area Controller

**indoor spaces**
**education • office • healthcare**

**outdoor spaces**
**pathways / parking areas**

**industrial /manufacturing**
**spaces**

*Sensors*

*Control Stations & Accessories*

*Load Controllers*

*Apps*

*Controllers & Hubs*

# Save up to 60% or more in lighting energy with a WaveLinx system.

| STRATEGY | DESCRIPTION | ESTIMATED SAVINGS |
|---|---|---|
| **Manual Dimmer** | **Manual/personal dimming control –** one of five alternative methods that meets multi-level control requirements. | **10-20%** |
| **Occupancy Sensor** | **Occupancy/vacancy sensing –** provides manual on/automatic off or automatic on/automatic off and partial off capabilities. | **20-60%** |
| **Daylighting Control** | **Daylight dimming –** provides multiple daylight dimming zones that automatically adjust the lighting based on daylight available in the space, or fixture-integrated sensors, for completely granular daylighting control. | **20-45%** |
| **Receptacle Control** | **Plug load control –** automatically turns on receptacles upon occupancy regardless of light status. Ensures receptacles are turned off when the space is vacant. | **15-50% controlled loads** |
| **Task Tuning** | **High-end/task tuning –** lowers the maximum light level for automatic energy savings. | **10-30%** |
| **Demand Response** | **Demand response –** automatically reduces light level based on signal from 3rd-party system. | **10-40%** |
| **Remote Signal Control** | **BACnet –** coordinates control through BMS. **Remote signal control –** communicates to 3rd-party systems via API. | **20%** |
| **Outdoor Control** | **Outdoor control –** automatically adjust area, site, and flood lighting via scheduling or astronomic clock. | **25%** |
| **HVAC System** | **HVAC integration –** controls heating, ventilation, and air conditioning systems through contact closure or BACnet protocol. | **10-15%** |

WaveLinx advantages:

# Simple to design

**WaveLinx takes the stress out of specifying an energy code-compliant lighting system.**

**Code compliance –** WaveLinx is designed to meet all North American energy codes with automatic lighting, emergency, and plug load control based on occupancy, time-based events, and demand response signal, including OpenADR.

**Scalability –** WaveLinx makes it simple to specify and design a hybrid digital lighting control system for single rooms or networked spaces. CAT5 wired control devices work out-of-the-box; and wireless control devices are easily configured via mobile app.

**Luminaire level lighting control (LLLC) –** Cooper Lighting Solutions offers a comprehensive portfolio of WaveLinx-enabled luminaires for indoor and outdoor use as well as low-bay and high-bay applications.

**Different technologies, one system –** Want to combine wired and wireless lighting control devices and panels? WaveLinx Area Controller bridges wired and wireless devices to form a single comprehensive digital lighting control system.



Click on drawing to view finished **room**

**Easy to design**
WaveLinx CAT solution

## Simplified wiring

WaveLinx CAT WST-C-* Wallstation
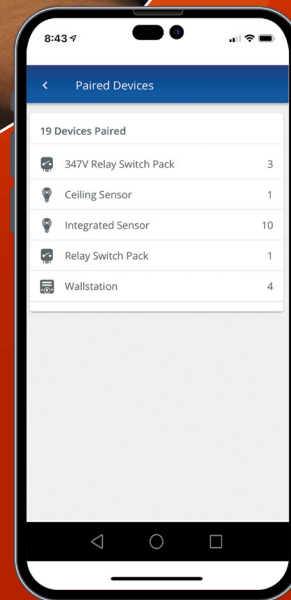
## WaveLinx advantages:

# Simple to install

**Simplified wiring –** Wired devices feature RJ45 connections and CAT5 cables for control and for powering devices. Wireless devices have no communications wiring. Factory-programmed switchpacks self-commission. Keypad and ceiling sensors control a room's lights. Zoning, keypad, or sensor settings can be changed quickly via a mobile device and the WaveLinx app.

**Faster installation –** WaveLinx wireless devices and WaveLinx-enabled luminaires don't need wires to be connected, so installation is faster and costs less in labor hours.

**Less programming –** WaveLinx factory zone-assigned load controllers and luminaires that have WaveLinx integrated sensors with out-of-box mode require no programing to control spaces.

**Easy app-based configuration –** Connecting control devices and customizing a space is easy with WaveLinx apps and any smart device. Code-compliant templates and default settings significantly reduce programming time.

| Paired Devices | |
| --- | --- |
| 19 Devices Paired | |
| 347V Relay Switch Pack | 3 |
| Ceiling Sensor | 1 |
| Integrated Sensor | 10 |
| Relay Switch Pack | 1 |
| Wallstation | 4 |

**Simple yet powerful programming...** with or without an IT network.
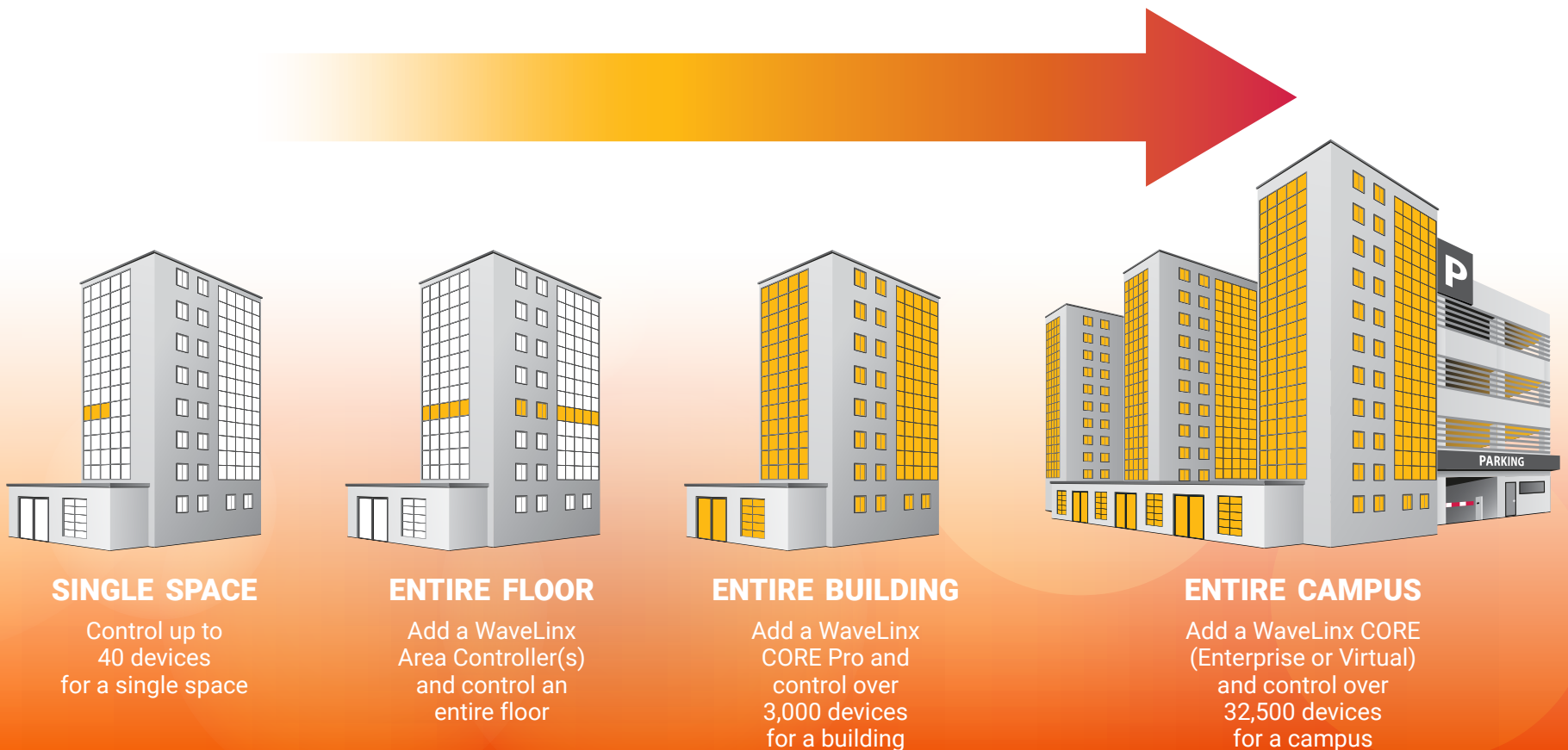
# WaveLinx advantages:
# Scalable

**WaveLinx is future-ready. It scales and adapts to changes in technology and in your building's requirements.**

Flexibility makes WaveLinx the ideal commercial lighting solution for small to large, indoor and outdoor applications.
Use it to control the lights of a single room or add WaveLinx Area Controller to connect your project and control
a suite of rooms, or multiple floors, the exterior, even an entire building.

Choose wired or wireless devices. Need a supervisory management system for the facility management team?
Add a WaveLinx CORE. It historizes the data gathered by the system's devices to provide insights about space and asset usage within your building.



**SINGLE SPACE**

Control up to
40 devices
for a single space

**ENTIRE FLOOR**

Add a WaveLinx
Area Controller(s)
and control an
entire floor

**ENTIRE BUILDING**

Add a WaveLinx
CORE Pro and
control over
3,000 devices
for a building

**ENTIRE CAMPUS**

Add a WaveLinx CORE
(Enterprise or Virtual)
and control over
32,500 devices
for a campus

WaveLinx advantages:

# Insightful

**Digital lighting control is just the beginning. WaveLinx turns your lighting into a connected system that can improve operational efficiency and occupant experience.**

**Improve energy usage –** Empower your sustaining team with our intuitive energy dashboard. Gain real-time insights, track usage patterns, and optimize efficiency to save costs and reduce environmental impact.

**Optimize user experience –** Maximize your space utilization with our comprehensive space usage dashboard. Effortlessly monitor occupancy, optimize layouts, and unlock potential for increased productivity and cost savings.

**Experience real-time visibility of your assets –** Leverage the WaveLinx location-based services feature to seamlessly locate and monitor assets, personnel, and resources, enabling smarter decision-making, improved safety, and enhanced operational performance.

**Smart building readiness –** Leverage the valuable data generated by WaveLinx sensors by sharing them with smart building platforms via BACnet/IP and Public API (REST).

# WaveLinx provides next-level security

**As organizations expand their digital footprint, it becomes imperative to protect the availability, integrity, and confidentiality of their systems.**

Cybersecurity is embedded into all Cooper Lighting Solutions connected products and platforms. Our approach includes everything from threat modeling and requirement analysis to verification and ongoing maintenance.

In addition, all our connected products are certified against the IEC 62443-4-2 standard by an authorized, third-party security lab. So, our customers get the accredited, independent proof they need to trust products installed for their facility.

**IEC
62443-4-1
and
62443-4-2
CERTIFICATION**

**Cooper Lighting Solutions seeks to exceed security regulations and guidelines.**

**We have worked with Dekra, an accredited security lab for IEC 62443-4 cybersecurity standards, to test and certify our products.**
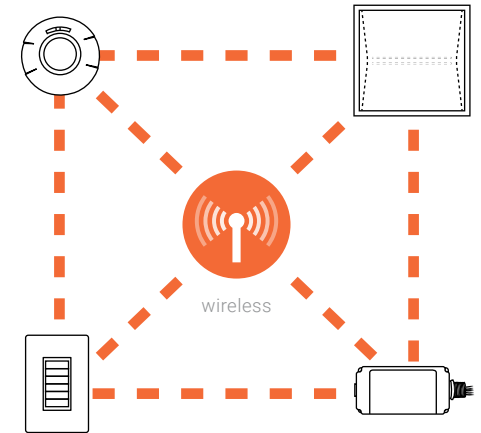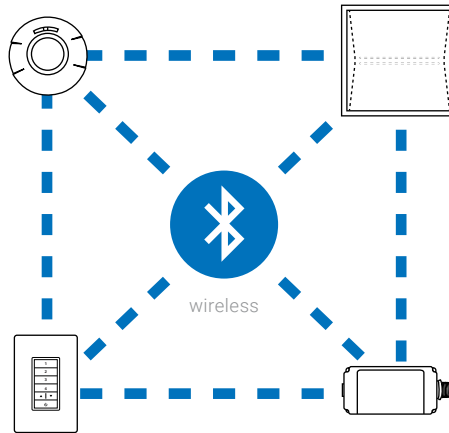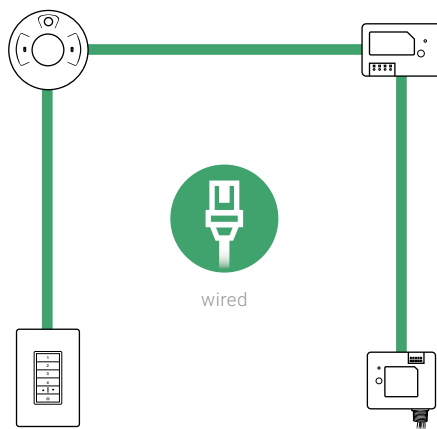
**Our products are IEC 62443-4-2 certified, and our development processes are IEC 62443-4-1 compliant.**

# Reliable communication

**Merge wired stability with wireless flexibility for reliable, seamless data flow and adaptability in any environment.**



wired



wireless



wireless

## WaveLinx CAT

WaveLinx CAT devices communicate through CAT5 cables and are used in single- and networked-space applications.

## WaveLinx LITE

WaveLinx LITE devices communicate wirelessly and are used in single-space applications.
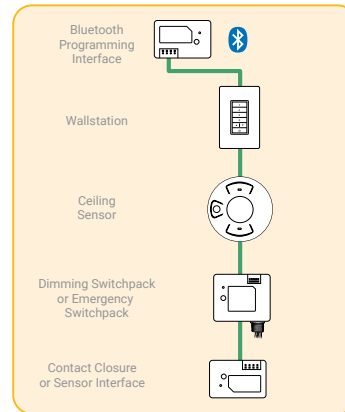
## WaveLinx PRO

WaveLinx PRO devices communicate wirelessly and are used in networked-space applications.
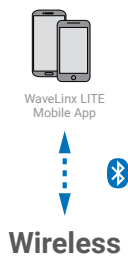
# Standalone spaces

## Single Room/Single Space

Start by implementing controls for a single room. Return at any time to easily upgrade to a connected system.
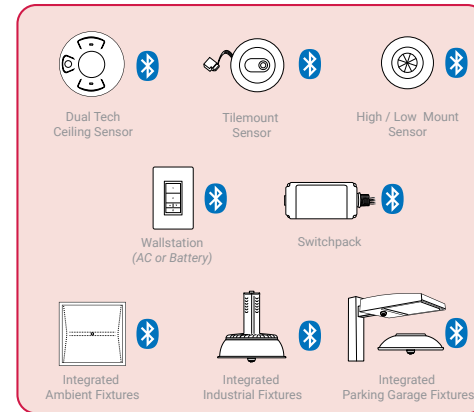
### Wired

WaveLinx CAT Mobile App

WaveLinx CAT

Bluetooth Programming Interface

Wallstation

Ceiling Sensor

Dimming Switchpack or Emergency Switchpack

Contact Closure or Sensor Interface

**Functionality**

1. User registration
2. Configuration
3. Firmware updates
4. Notifications
5. Backup/restore

### Wireless

WaveLinx LITE Mobile App

WaveLinx LITE

Dual Tech Ceiling Sensor

Tilemount Sensor

High / Low Mount Sensor

Wallstation (AC or Battery)

Switchpack

Integrated Ambient Fixtures

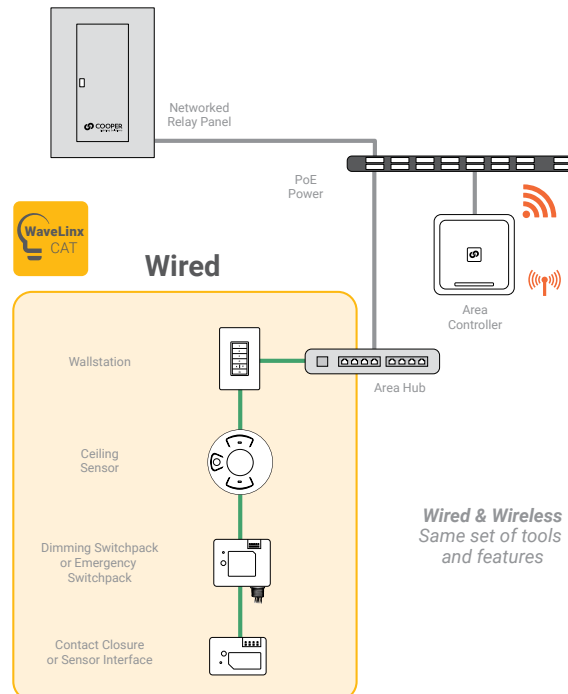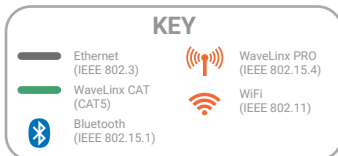Integrated Industrial Fixtures

Integrated Parking Garage Fixtures

**Functionality**

1. User registration
2. Project data
3. Notifications
4. Firmware updates
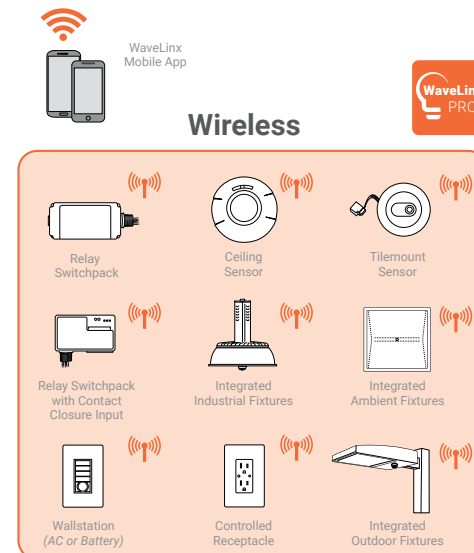5. Project configuration
6. Backup/restore

# Connected spaces

## Multiple Rooms/Entire Floor

Add controls to more rooms or an entire floor without having to reprogram or replace existing equipment.

Networked Relay Panel

COOPER

PoE Power

Area Controller

### Wired

WaveLinx CAT

Wallstation

Area Hub

Ceiling Sensor

Dimming Switchpack or Emergency Switchpack

Contact Closure or Sensor Interface

*Wired & Wireless Same set of tools and features*

WaveLinx Mobile App

### Wireless

WaveLinx PRO

Relay Switchpack

Ceiling Sensor

Tilemount Sensor

Relay Switchpack with Contact Closure Input

Integrated Industrial Fixtures

Integrated Ambient Fixtures

Wallstation (AC or Battery)

Controlled Receptacle

Integrated Outdoor Fixtures

### KEY

| | |
|---|---|
| Ethernet (IEEE 802.3) | WaveLinx PRO (IEEE 802.15.4) |
| WaveLinx CAT (CAT5) | WiFi (IEEE 802.11) |
| Bluetooth (IEEE 802.15.1) | |

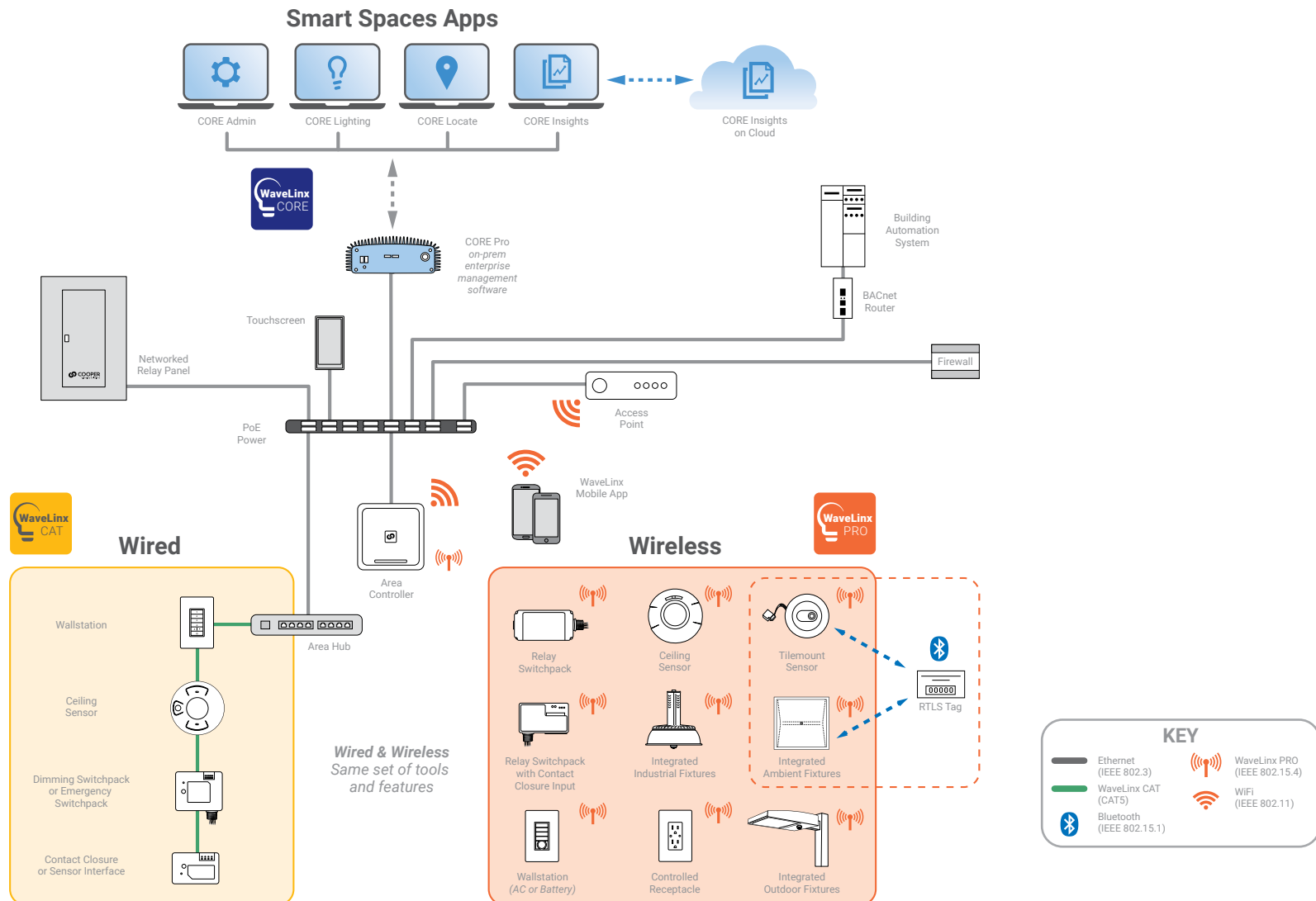# **Enterprise** solutions

## Multiple Floors/Entire Building

Using WaveLinx Area Controller and CORE, controls can be scaled to multiple floors or an entire building on just one system, with independent control for each floor or network.

### Smart Spaces Apps

CORE Admin

CORE Lighting

CORE Locate

CORE Insights

CORE Insights on Cloud

WaveLinx CORE

CORE Pro *on-prem enterprise management software*

Building Automation System

Touchscreen

BACnet Router

Networked Relay Panel

Firewall

COOPER

PoE Power

Access Point

WaveLinx Mobile App

WaveLinx CAT

### Wired

Wallstation

Ceiling Sensor

Dimming Switchpack or Emergency Switchpack

Contact Closure or Sensor Interface

Area Hub

Area Controller

*Wired & Wireless Same set of tools and features*

### Wireless

WaveLinx PRO

Relay Switchpack

Ceiling Sensor

Tilemount Sensor

Relay Switchpack with Contact Closure Input

Integrated Industrial Fixtures

Integrated Ambient Fixtures

RTLS Tag

Wallstation (AC or Battery)

Controlled Receptacle

Integrated Outdoor Fixtures

#### KEY

| | | |
|---|---|---|
| Ethernet (IEEE 802.3) | | WaveLinx PRO (IEEE 802.15.4) |
| WaveLinx CAT (CAT5) | | WiFi (IEEE 802.11) |
| Bluetooth (IEEE 802.15.1) | | |

# Wired and Wireless Solutions

**WaveLinx is designed to satisfy the requirements of single- and multiple-space projects.**

*This is a representation of how WaveLinx devices can be used in building spaces, and not a system design recommendation.*



**Outdoor**
*PRO & LITE solutions*

PRO  LITE

**Open office**
*PRO & CAT Hybrid solutions*

PRO  CAT

**Conference room**
*CAT solution*

CAT

**Private office**
*LITE solution*

LITE

# Wired Solution for a single space

## The Basics.

WaveLinx offers wired control devices that communicate with each other over a category cable using WaveLinx CAT, a proprietary digital communication.

WaveLinx reduces installation time with its simple click-and-go, auto-discovery, and self-commissioning features.

For a single room/space wired solution, simply connect the wired devices using CAT5 cable. The devices automatically discover each other and self-commission.

CAT

**SCAN** for WaveLinx CAT
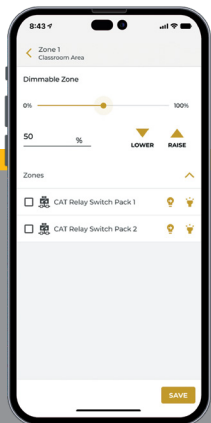
CAT
**Mobile App**
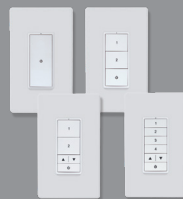
**WaveLinx CAT Wallstation**

CAT5 Bus-powered wallstation, providing wired control of the lighting in an area.

**WaveLinx CAT Dimming Switchpack**

Device provides control of 0-10V dimming loads and up to 20A switched loads within a zone.

**WaveLinx CAT Emergency Switchpack**

Device powered by emergency power to control emergency lighting within the area.

**WaveLinx CAT BPI - Bluetooth Interface Module**

Uses a Bluetooth Low Energy (BLE) Radio Module to allow wireless communication between the local CAT area and WaveLinx CAT mobile app.

# **Wireless Solution** for a single space

## The Basics.

WaveLinx offers wireless control devices that communicate with each other over Bluetooth (802.15.1) radio using the WaveLinx LITE protocol.

Once installed and powered, the installer uses the WaveLinx LITE app to discover the devices and group them together.

WaveLinx reduces installation time with its code-compliant templates, devices listing based on signal strength, and multi-commissioning specialists features.



**SCAN** for
WaveLinx LITE
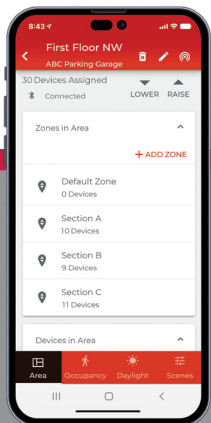
**LITE**
**Mobile App**

### WaveLinx LITE
### Wallstations

Line voltage or battery-powered wallstations provide wireless control of the lighting in an area.
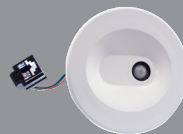
### WaveLinx LITE
### Tilemount Kits

Wireless tilemount sensor provides remote occupancy sensing and daylight dimming for luminaries.

### WaveLinx LITE
### Industrial Sensors

Industrial high (40') and low (15') bay sensors offer toolless integration with WaveLinx industrial light fixtures equipped with a 4-pin Zhaga Book 18-compliant socket.

### WaveLinx LITE
### Switchpack

Relay switchpack provides wireless control with 0-10v dimming capabilities for the lighting in an area.

# Wired and Wireless Solution for connected spaces

## The Basics.

For large spaces or spaces for which wired and wireless need to come together as a hybrid system, WaveLinx offers the WaveLinx Area Controller which communicates with both PRO and CAT devices.

WaveLinx Area Controllers communicate with wireless devices using PRO protocols over 802.15.4 radio and with wired devices via a WaveLinx Area Hub.

WaveLinx Area Controller allows you to scale to multiple rooms on an entire floor. WaveLinx CAT devices connect via CAT5 cable or WaveLinx PRO devices via 802.15.4 radio.



**SCAN** for
WaveLinx PRO

**SCAN** for
WaveLinx CAT
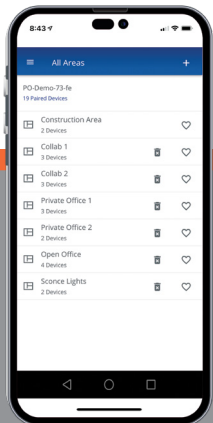
**WaveLinx
Mobile App**

**WaveLinx PRO
Battery Wallstation**

Battery-powered wallstation provides wireless control of the lighting in an area.

**WaveLinx CAT
Occupancy Ceiling Sensor**

Ceiling mount occupancy and daylight sensor automatically controls lights via CAT communication bus to compatible dimming and switching devices.

**WaveLinx CAT
Area Hub**

A bridge device to aggregates network traffic from connected areas and connects with the WaveLinx Area Controller.

**WaveLinx
Area Controller**

Device coordinates between mobile app, WaveLinx devices, and CORE platform. Powered via PoE injector or network switch.
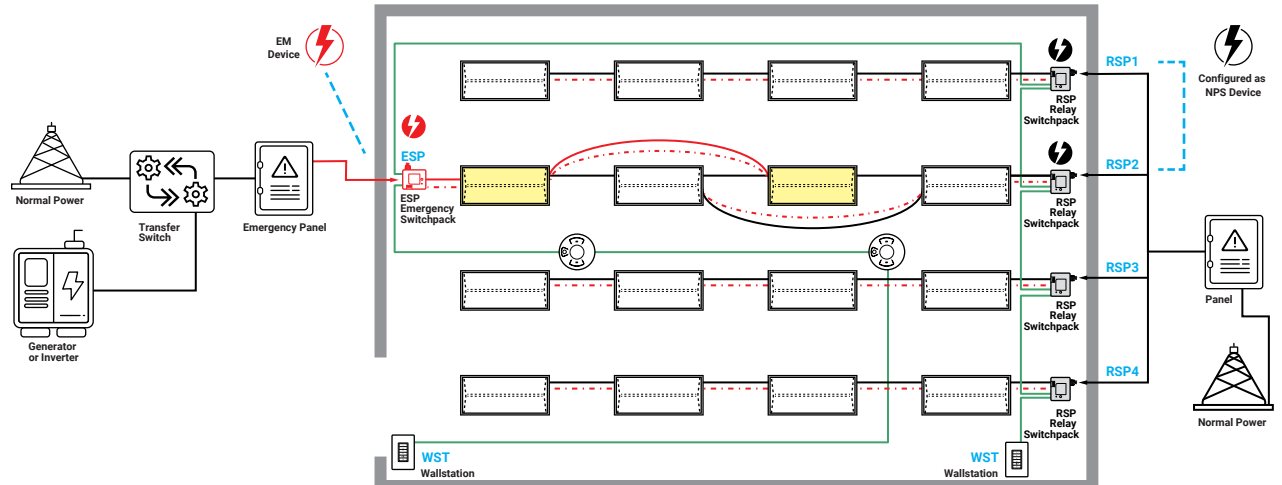
# WaveLinx EM

Emergency lighting is a critical element of any building design. It ensures occupant safety during power outages or emergencies. Centralized Emergency Power Solutions (generators and inverters) are excellent sources for backup power, however the drawback for them has always been additional wiring requirements for integrated controls. Now with the ability for an integrated wireless emergency (WEM) solution, there is no need for additional cable runs, resulting in the best of both worlds. Backup power without a battery life and no additional wiring, resulting in significant savings.

The **WaveLinx CAT** emergency solution is provided through an emergency dimming switchpack (ESP-C). It offers 120/277VAC Single Phase) 20A relay control and continuous 0-10V dimming control of LED and non-LED loads. The ESP-C Switchpack is ideally suited for use in conjunction with a standard RSP-C Relay Switchpack that controls a zone's normal powered lighting.

- Automatic Override – Automatically overrides emergency lights on to full brightness upon normal power loss
- UL924-Compliant – Meets UL924 emergency power supply and NEMA410 ratings for LED/electronic ballast inrush
- Digital communication over CAT - Enables remote configuration of the device settings such as zone assignment via WaveLinx apps (mobile or web-based apps)



normal power     emergency power

# Emergency power control
## for integrated fixtures

### Wireless Emergency

The **WaveLinx PRO** (ESP-P-010-347) and **Wavelinx LITE** (ESP-L-010-347) emergency switchpack detects and responds to an emergency condition even during loss of power to normal devices – without the need for additional feeds. Once normal devices are provisioned, they'll communicate with the emergency device confirming the presence of normal power. Both the PRO and LITE mobile apps test mode lets you simulate an emergency event without having to transfer power. This functionality allows for regular testing of installed devices without accessing upstream breakers.

- Consists of a 120-347VAC 20A relay with continuous 0-10V dimming control

- The PRO emergency device integrates and communicates with other PRO devices whereas the LITE switchpack communicates and integrates in the LITE system

- The device works in tandem with normal power sense devices in an emergency set to provide an emergency solution
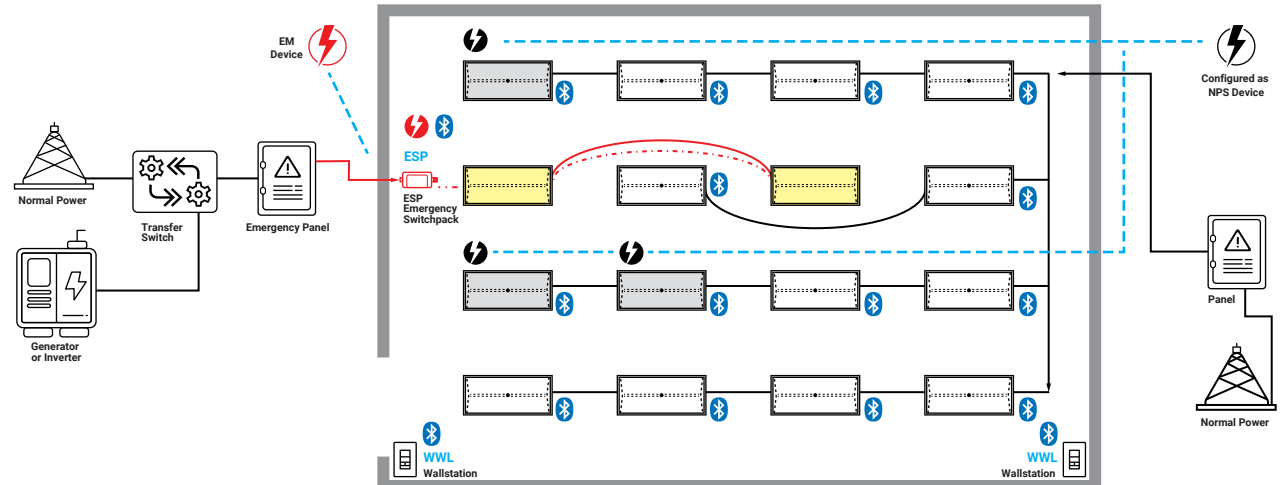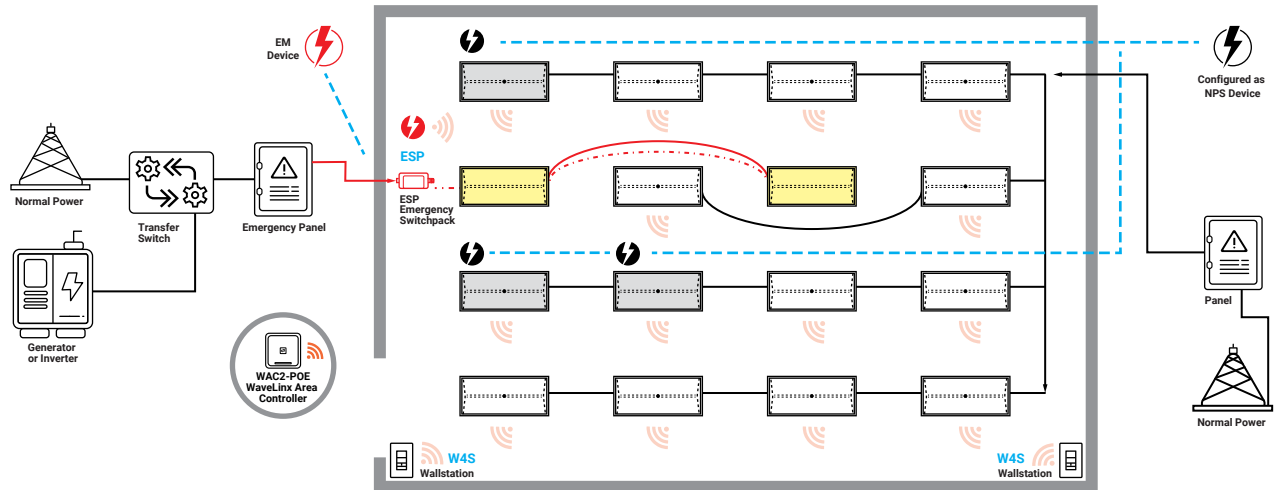
# WaveLinx Control Devices

**Precise control. Flexible options.**

## Controllers and Smart Platform

### WaveLinx Area Controller

Used for networked rooms/spaces, the WAC2 coordinates with WaveLinx mobile app and various WaveLinx devices to create a smart building ecosystem. It provides out-of-the-box functionality and leverages our patent-pending automatic code-commissioning features.

catalog number:
**WAC2-POE** - WaveLinx Area Controller G2 (PoE powered)
**WPOE2-120** - 120VAC to PoE Injector
**WAC2-120** - WaveLinx Area Controller G2 with 120VAC to PoE Injector

Designers, electrical contractors, and building owners/operators use WaveLinx to comply with the latest energy codes, maximize energy savings, and improve occupant experiences.

**WaveLinx**
Digital Lighting
Control
Solutions

# Controllers and Smart Platform



## WaveLinx Outdoor Area Controller

An IP-66 rated UV- resistant enclosure suitable for parking lots and garages, which can be mounted on poles or a wall and helps manage your outdoor lighting.

catalog number:
**WAC-MV-OD**   WaveLinx Outdoor Area Controller



## WaveLinx CORE Pro, Enterprise, and Virtual CORE Enterprise

Enterprise | BACnet | API Integration

The WaveLinx CORE is an on-prem hardware platform hosting WaveLinx Lighting, Locate, and Insights applications as well as interfaces used to communicate with third-party systems (BACnet, API, OpenADR, and applications). They network with WaveLinx Area Controllers, collecting data that can be shared with third-party systems via BACnet and Public API (REST).

catalog number:
**TRX-TCPR02** - WaveLinx CORE Pro (supports 20 WACs, up to 3000 devices)
        Includes: 250 devices
**TRX-TCENT2** - WaveLinx CORE Enterprise (supports 300 WACs, up to 32,500 devices)
        Includes: 250 devices (Lighting base license)
**TRX-TCVRT2** - WaveLinx CORE Virtual Enterprise (supports 300 WACs, up to 32,500 devices)
        Includes: 250 devices (Lighting base license)

# Panels
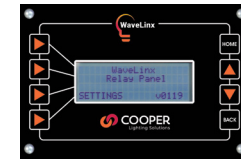




## Networked Relay Panel

The WaveLinx Networked Relay Panel consist of Relays and 0-10V dimming modules that is connected to the WaveLinx Area Controller through an Ethernet switch. The WaveLinx Networked Relay Panels are available in various enclosure sizes including emergency options, with capacity up to 64 latching relays and 64 dimming 0-10V channels.

catalog number:
**PLE-\*** - WaveLinx Panel Enclosure with up to 64 relay capacity
**PLE-\*E** - WaveLinx Panel Enclosure with emergency options

# Hub



## WaveLinx Area Hub

Aggregates network traffic from connected downstream areas and connects it to the WaveLinx Area Controller. Allows up to 8 individual wired areas to communicate with the Area Controller.

catalog number:
**WAH-C-POE** - WaveLinx Area Hub (PoE powered)

# Sensors

# Load Controllers

## Occupancy Ceiling Sensor

Sensing | Daylight | Wireless | Battery

The occupancy ceiling mount sensor (OSC) offers motion detection (PIR sensor) and daylight sensing (photocell sensor). Wired and wireless versions of the OSC are available. Also available in Dual technology (PIR and Acoustic) versions for LITE and CAT.

catalog number:
**CWPD-1500** - PRO Occupancy Ceiling Sensor
**OCS-C** - CAT Occupancy Ceiling Sensor
**OCS-L-D- \*** - LITE Occupancy Ceiling Sensor

## Relay Switchpack

Plug Load | 0-10V | Wireless

The wireless dimming switchpack with 0-10V (WSP-UV-010) offers 120-347VAC 20 amp zero crossing relay control and continuous 0-10V dimming control of LED and non LED loads. The wireless relay switchpack with 0-10V control also supports 20 amp plug load control.

catalog number:
**RSP-P-010-347** - PRO Relay Dimming Switchpack
**RSP-C-010-Z** - CAT Relay Dimming Switchpack
**RSP-L-010-347** - LITE Relay Dimming Switchpack

Octagonal junction box installation

## Wireless Tilemount Sensor Kit

Sensing | Daylight | Downlights | Wireless

Provides PIR occupancy and daylight dimming with control for connected downlights and other luminaires that don't support the WaveLinx Integrated Sensor. The Tilemount Sensor Kit provides 0-10V dimming control of LED and non LED loads up to 3amps 120-277V luminaires.

catalog number:
**WTA** - PRO Tilemount Kit *
**WTK** - LITE Tilemount Kit *
**WPST** - Fixture Mounted PRO Tilemount Kit
**WLST** - Fixture Mounted LITE Tilemount Kit
*\* - accessory catalog number*

## Receptacle Control

Plug Load | Wireless

Provides simplified wireless plug load control – now required by many building codes as part of an energy-saving control strategy. The wireless receptacle is automatically paired with all WaveLinx PRO occupancy sensors when it's assigned to an area using the WaveLinx mobile app.

catalog number:
**WR20** - PRO Receptacle

# Wallstations
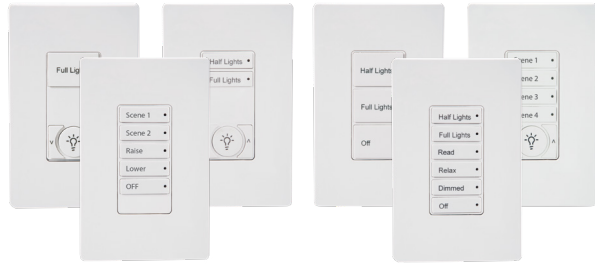
## Wallstation

Manual | Scenes | Zones | Wireless

These wallstations are line-voltage powered and provide wireless control of the lighting in each area. They mount in a standard wallbox and include a decorator style color matching wallplate. Each wallstation is fully configurable to provide local and multi-level control in each area. Available in several small and large button configurations as well as various colors.

Line voltage powered (120-277VAC)
catalog number:

| | | | |
|---|---|---|---|
| **W1L - *** | PRO - 1 Large button | **W3L - *** | PRO - 3 Large button |
| **W1L-RL - *** | PRO - 1 Large button with raise/lower | **W4S - *** | PRO - 4 Small button |
| **W2L - *** | PRO - 2 Large button | **W4S-RL - *** | PRO - 4 Small button with raise/lower |
| **W2L-RL - *** | PRO - 2 Large button with raise/lower | **W5S - *** | PRO - 5 Small button |
| **W2S - *** | PRO - 2 Small button | **W6S - *** | PRO - 6 Small button |
| **W2S-RL - *** | PRO - 2 Small button with raise/lower | | |

*\* - available in white (W), ivory (V), gray (G), and black (B)*
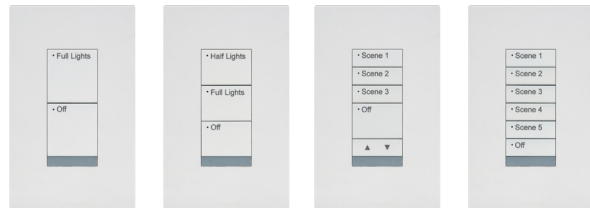


## Battery-powered On-wall Wallstation

Battery | Manual | Scenes | Zones | Wireless

These battery-powered wallstations provide wireless lighting control in each area. For new and retrofit installations. The wallstations surface mount to a wall and include a decorator style matching wallplate. They're fully configurable to provide local and multi-level control in each area. Battery life expectancy is up to five years. Available in several small and large button configurations.

Battery powered
catalog number:

| | | | |
|---|---|---|---|
| **WB2L-S1 - *** | PRO Battery - 2 Large button, S1 | **WB5-S3 - *** | PRO Battery - 5 Button, S3 |
| **WB2L-S2 - *** | PRO Battery - 2 Large button, S2 | **WB6S-S3 - *** | PRO Battery - 6 Small button, S2 |
| **WB2L - *** | PRO Battery - 2 Large button | **WB6S-S3D - *** | PRO Battery - 6 Small button, S3D |
| **WB3L-S2 - *** | PRO Battery - 3 Large button, S2 | **WB6S-S5 - *** | PRO Battery - 6 Small button, S5 |
| **WB3L-D - *** | PRO Battery - 3 Large button, D | | |
| **WB3L - *** | PRO Battery - 3 Large button | | |

*\* - available in white (W)*

## Wallstation Line-voltage and Battery-powered with In-wall Mounting *(wall plate not included)*

Battery | Manual | Scenes | Zones | Wireless

These line-voltage and battery-powered wallstations are for new or retrofit installations and provide wireless control of the lighting in each area. The wireless wallstation mounts in a standard wallbox. Each wallstation is configurable via software – no physical adjustments are necessary. Battery life expectancy is up to five years. Available in several <u>button configurations and colors.</u>

Line voltage powered (120-277VAC)
catalog number:

| | |
|---|---|
| **WW1-W** | PRO - 1 button, white |
| **WW3-W** | PRO - 3 button, white |
| **WW3-RL-W** | PRO - 3 button raise/lower, white |
| **WW5-RL-W** | PRO - 5 button raise/lower, white |
| | |
| **WWL3-W** | LITE - 3 button, white |
| **WWL3-RL-W** | LITE - 3 button raise/lower, white |
| **WWL5-RL-W** | LITE - 5 button raise/lower, white |
| | |
| **WST-C-1** | CAT - 1 button |
| **WST-C-3** | CAT - 3 button |
| **WST-C-3D** | CAT - 3 button, dimming |
| **WST-C-5D** | CAT - 5 button, dimming |

Battery powered
catalog number:

| | |
|---|---|
| **WWB1-W** | PRO Battery - 1 button, white |
| **WWB3-W** | PRO Battery - 3 button, white |
| **WWB3-RL-W** | PRO Battery - 3 button raise/lower, white |
| **WWB5-RL-W** | PRO Battery - 5 button raise/lower, white |
| | |
| **WWBL3-W** | LITE - Battery, 3 button, white |
| **WWBL3-RL-W** | LITE - Battery, 3 button raise/lower, white |
| **WWBL5-RL-W** | LITE - Battery, 5 button raise/lower, white |
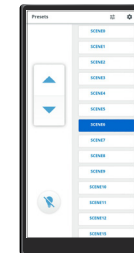


## Touchscreen

PoE Powered | Light Control | Architectural Design

An elegant, discreet light control for any WaveLinx PRO area. The portrait-oriented 5.7" (14.5cm) touchscreen features a low-profile design, with edge-to-edge glass, and extremely responsive display. It makes an attractive architectural addition to conference rooms, executive offices, and open spaces.

catalog number:
**TSE57-WLX-B** - 5.7" Touchscreen

## Contact Closure Input Module

Connectivity for Non-WaveLinx Devices  |  Dry Contact Inputs
Momentary and Maintained Inputs

The Contact Closure Input module is a low-voltage device that interfaces and provides network addressability for a variety of devices outside the WaveLinx network. The CCI module behaves as an input device that detects a maintained or momentary dry contact closure switch.

catalog number:
**CCI-C-V** - CAT Contact Closure Input Module
**CCI-P-V** - PRO Contact Closure Input Module



## Sensor Interface Module

Connectivity  |  Network Addressability

Offers connectivity and network addressability to various Greengate dual-tech sensors. Sensors are powered by the SIM module and offer limited configurability for sensor parameters through the WaveLinx CAT mobile app.

catalog number:
**SIM-C-V** - CAT Sensor Interface Module



## Bluetooth Programming Interface Module

Secure Pairing  | Device Configuration

The Bluetooth Programming Interface module allows users to program a space by enabling data exchange between the CAT devices and the WaveLinx CAT mobile app. The BPI communicates with other CAT devices, via CAT5 cable, through its two RJ-45 connectors. It has a Bluetooth Low Energy (BLE) Radio Module that securely pairs with a mobile device when within range. Once connected, users can use the WaveLinx CAT application to identify themselves and configure devices within that area.

catalog number:
**BPI-C-L** - CAT Bluetooth Program Interface



## Unmanaged Networked Switch

PoE Power Supply  |  Data Communication

Unmanaged network switch provides power and data from a single CAT5 or 6 cable to devices such as WaveLinx Area Hub, WaveLinx Area Controller, and WaveLinx Touchscreen.

catalog number:
**GS308PP** - Unmanaged Network Switch

Connected luminaires simplify the design and installation of a digital lighting system by eliminating the need for individual dimming switchpacks and sensors and the extensive wiring typically required to power and connect these devices.

# Largest portfolio of
# **WaveLinx-enabled Luminaires**

Cooper Lighting Solutions offers the largest portfolio of WaveLinx-enabled luminaires with embedded control devices (wireless sensor and wireless node). These factory-tested luminaire-level lighting control (LLLC) fixtures reduce the need to install additional sensors on the ceiling and switchpacks above the ceiling. These WaveLinx-enabled fixtures also:

- Eliminate the need to do sensor or switchpack layouts.
- Simplify installation by removing the need to run 0-10v dimming wires between fixtures.

Click to view complete **luminaire**

### Wireless Sensor

WaveLinx PRO and LITE sensors fit discretely in a luminaire for luminaire-level lighting control (LLLC). Fixtures can be connected without the need for dimming or control wires to run between fixtures.

### Wireless Node

The WaveLinx PRO and LITE wireless node offers individual wireless fixture control without compromising the aesthetics of their preferred Cooper Lighting Solutions fixture.

Stand-alone occupancy and daylighting sensors are available to support each respective functionalities in combination of the luminaire wireless node.

## Integrated Sensor

Sensing | Daylight | Wireless

Contains a wireless radio, 0-10V communication interface, motion detector (PIR), daylight sensor (photocell), and an AUX input to be powered by driver auxiliary power outlet. It delivers luminaire-level lighting control (LLLC).

catalog number:
**WPS/WAA** - PRO Sensor for connected rooms/spaces
**WLS/WAB** - LITE Sensor for single rooms/spaces

## Wireless Node

Fixture Control | In-fixture Installation | Wireless

An ideal solution for designers who want to offer individual wireless fixture control without compromising the aesthetics of their preferred Cooper Lighting Solutions fixture. Available for both LITE and PRO solutions, the node enables luminaire-level lighting control (LLLC) where there is limited room for integrated sensors – with downlights or linear fixtures, for example. When utilized in the WaveLinx PRO configuration, the node has two 0-10v output channels to provide standard static white and VividTune® tunable white fixtures; one output channel controls a fixture's intensity while the other controls the color temperature. The WaveLinx node provides flexibility in scene and zone configuration and can be used in conjunction with other WaveLinx devices such as PRO ceiling sensors, WaveLinx enabled luminaires with integrated sensors, and WaveLinx wallstations.

catalog number:
**WPN** - PRO Wireless Node without sensor
**WLN** - LITE Wireless Node without sensor

# Lighting products

## Architectural | Ambient | Recessed

WaveLinx-enabled luminaires offer an intelligent, simple way to meet application requirements. You can be confident they will:

- Support integrated or tile mount connected sensors for occupancy tracking and daylighting.
- Provide service that's designed and tested to provide guaranteed compatibility.
- Eliminate the worry of controls and luminaire integration.

For a complete list of compatible products, see:

**cooperlighting.com**

## Industrial High/Low Bay Sensor

Integrated Sensors  |  Sensing  |  Daylighting  |  Individual  |  Grouping  |  Motion

Offers passive infrared (PIR) occupancy with a photocell for closed-loop daylight sensing. The sensors are IP66-rated for warehouse, manufacturing, and industrial spaces, with installation high bay heights up to 40 ft. (45 ft. major motion), low bay up to 15 ft. and coverage up to 5000 sq. ft. Easy toolless fixture connection (Zhaga Book 18 socket) offers out-of-the-box controls functionality. Factory or field install, with 4-pin connector standard.

catalog number:
**WPS2** - PRO Industrial Fixture Mount Low Bay Sensor, white, 7 - 15ft (2.1 - 4.5m)
**WPS4** - PRO Industrial Fixture Mount High Bay Sensor, white, 15 - 40ft (4.5 - 12.2m)
**WLS2** - LITE Industrial Fixture Mount Low Bay Sensor, white, 7 - 15ft (2.1 - 4.5m)
**WLS4** - LITE Industrial Fixture Mount High Bay Sensor, white, 15 - 40ft (4.5 - 12.2m)





For a complete list of compatible products, see:

**cooperlighting.com**

## Outdoor Fixture Mount Sensor

Sensing  |  Daylighting  |  Individual  |  Grouping  |  Motion  |  Astronomic

High- and low-mounted outdoor sensors offer passive infrared (PIR) occupancy, with a photocell for closed-loop daylight sensing. IP66-rated for outdoor site and indoor environments. Installation heights up to 40 ft. and coverage up to 5000 sq. ft. Easy toolless fixture connection (Zhaga Book 18 socket) has out-of-the-box functionality. Color options: white, black, or bronze. Factory or field install, with 4-pin connector standard.

catalog number:
**WPS2xx** - PRO Outdoor Fixture Low Mount Sensor, 7 - 15ft (2.1 - 4.5m)
**WPS4xx** - PRO Outdoor Fixture High Mount Sensor, 15 - 40ft (4.5 - 12.2m)
**WLS2xx** - LITE Outdoor Fixture Low Mount Sensor, 7 - 15ft (2.1 - 4.5m)
**WLS4xx** - LITE Outdoor Fixture High Mount Sensor, 15 - 40ft (4.5 - 12.2m)
*xx - available in white (WH), bronze (BZ), and black (BK)*



## Wireless Outdoor Lighting Control Module

Dimming  |  Scheduling  |  Photo sensing

This 7-pin outdoor lighting control module provides ON, OFF, and dimming controls based on astronomic or time schedules based on a 7-day week. Allows you to create multiple control zones.

catalog number:
**WOLC-7P-10A** - Outdoor lighting control module

# Control at your fingertips

**WaveLinx lighting control systems combine functionality and simplicity.**

- Intuitive user interface groups devices, creates custom scenes, adjusts occupancy and daylight operations, defines time-based events, and more.
- Consistent workflow and user interface across all apps.
- Secure cloud portal prevents unauthorized access to the system.
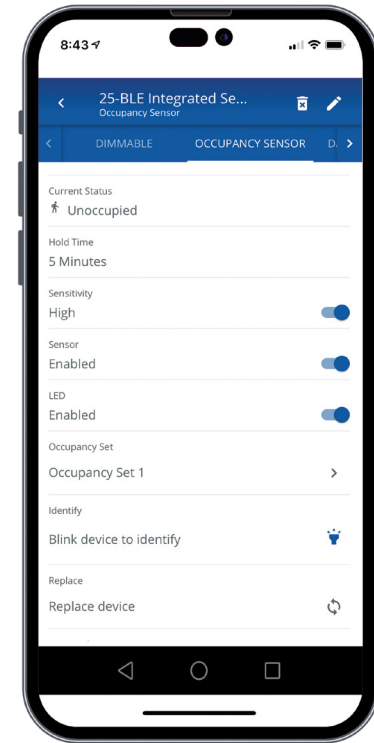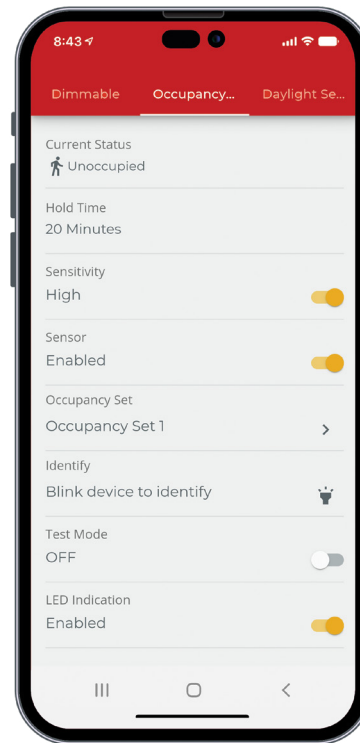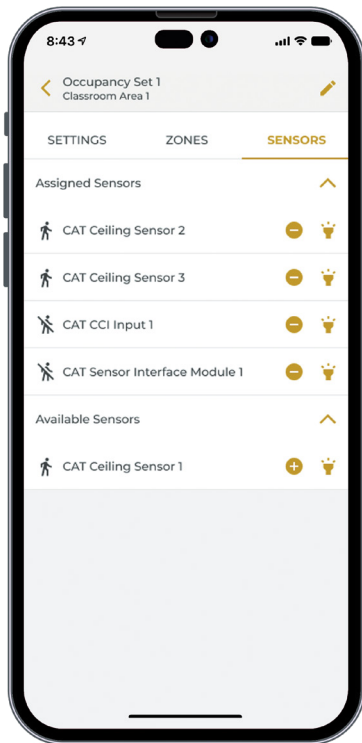
## WaveLinx CAT app

for standalone spaces
with wired devices



Communicates with CAT devices via
mobile device Bluetooth radio and a
Bluetooth-to-CAT adapter connected
to the communication bus.

## WaveLinx LITE app

for standalone spaces
with wireless devices



Communicates with the LITE devices
directly using the mobile device
Bluetooth radio.

## WaveLinx app

for connected spaces with a
WaveLinx Area Controller



Communicates with the
WaveLinx Area Controller using the
mobile device WiFi radio.

WaveLinx Apps can be downloaded via the Apple Store® or
Google Play and are an accessory to the WaveLinx system

# WaveLinx CORE apps

WaveLinx CORE is an on-prem, open integration, smart spaces platform that moves monitoring and processing data to the edge. The result? You gain faster insights into a building's operations, drive more effective efficiencies, and make more informed decisions.
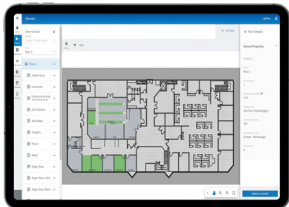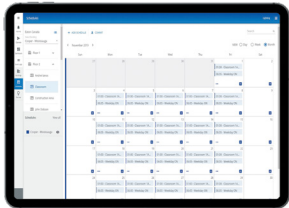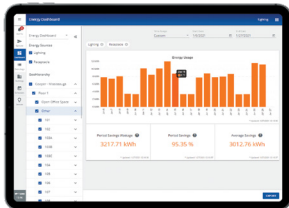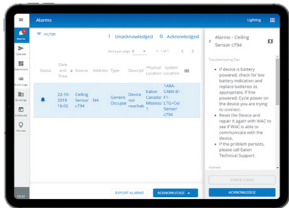
## Alarms and Events with Smart Tips

Get alerts for outages and other system health issues so you can address them with minimal disruption. Smart Tips also provides time-saving suggestions for resolving issues.

## Energy Dashboard

Analyze historical usage data across multiple areas, floors, buildings, and sites to visualize where you're using the most energy and identify areas for improvement.

## Schedules

Use the CORE intuitive scheduling interface to manage lighting and controlled receptacle schedules for one or more buildings – all from a central location.
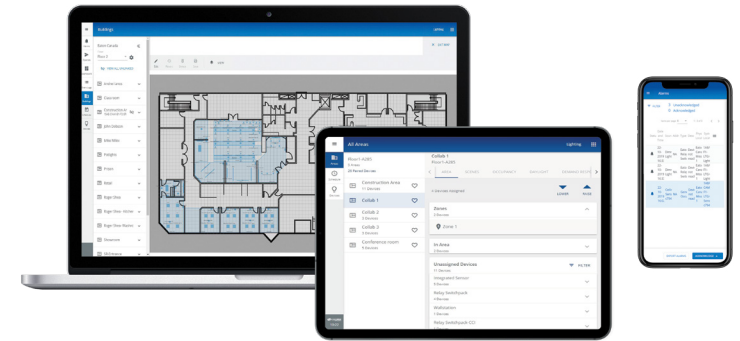
## Operate

Lighting control is at your fingertips. Monitor devices, update dimming schedules, send light control commands, and much more – across buildings, floors, and areas.

## Smart Spaces Platform Applications

Lighting | Asset Tracking | API | BACnet

The CORE Lighting Application helps facility/property managers maximize the benefits of IoT by connecting WaveLinx PRO with other building systems using BACnet and Public API (REST). WaveLinx solutions include alarms with Smart Tips, system events, demand response, platform flexibility, and future readiness.

**No building infrastructure is better positioned to collect valuable data than your lighting system.**

**IEC**
**62443-4-1**
and
**62443-4-2**
CERTIFICATION

*WaveLInx CORE Pro, Enterprise, and Virtual are IEC 62443-4-1 and IEC 62443-4-2 certified.*

*Certifications have been independently performed by Dekra, an IEC accredited cybersecurity lab.*
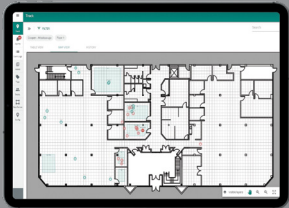
# CORE Locate
## Real-Time Location System

**WaveLinx PRO Integrated Sensor and WaveLinx Locate Application. Together, they monitor and manage critical assets equipped with BLE tags.**
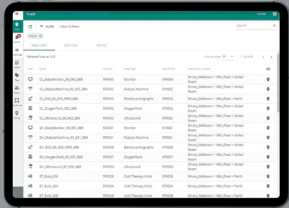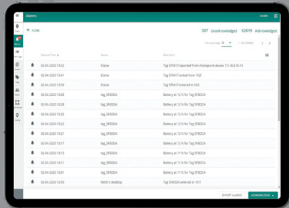
### Asset Tracking

Know where your assets are by quickly locating them on map or tabular view. Reduce your search time for critical equipment by more than 90%.

### Geofencing

Get real-time notifications when a location-based condition associated with a geo-fence is met. Easily create and manage geo-fence.

### Alarms

Get instant notifications when something needs your attention—like an asset exiting or a fridge exceeding the upper-temperature limit—based on business rules you create. Quickly see where the situation is located within your floorplan and respond immediately.

### Asset Tags

CORE Locate offers a range of tag options, from personal and asset tags to using your mobile device as a virtual tag, all configurable by mobile app.

For a complete list of CORE Locate Asset Tags, see:

**cooperlighting.com**

# CORE Insights
## Occupancy Dashboard

**Preconfigured dashboards make it easy to analyze the data from occupancy sensors and optimize building space utilization.**

### Out-of-the-box dashboard and reports

Ready-to-use, scalable, multi-site dashboards are available on-prem and on the cloud – giving you aggregated and detailed occupancy metrics at enterprise, site, building, area, and room level.

### Floorplan visualization

Access enterprise hierarchy, charts, and other representation to quickly view average area occupancy, compare trends, and real-time occupancy at site, building, and floor level.

### Quickly navigate

Go from enterprise level to site, area, and room level instantly to monitor key performance indicators for real-time occupancy utilization and occupancy trends. Desktop-, mobile-, and kiosk-compatible. Includes intuitive bar/line chart views.

### Identify your most and least used spaces

View area occupancy across your real-estate portfolio, from most used (>70%) to least used (< 30%), by department, space type, building, and floor.

**WaveLinx**
Digital Lighting
Control
Solutions
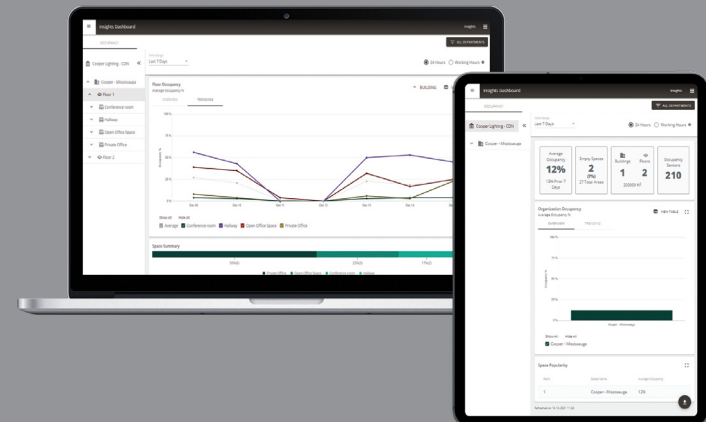


We offer:

**Field Project
Design Services**

**Pre-commissioning Support**

**Field Project Startup**

**Verification Walkthrough**

**Optimization
Services**

# Service and Support

**A WaveLinx system creates incredible value, from the cost savings of occupancy detection to the flexibility and power of scheduled lighting control.**

To maximize the return on your lighting system investment, your WaveLinx system must perform at its peak.

We can help. With a network of experienced and skilled control specialists and a national presence, we can help with everything from system design, quote, implementation, and on-going maintenance.

## Service Plans

Service Plans offer proactive, onsite, and remote diagnostics, configuration changes, training, and software/firmware updates typical of maintaining lighting control systems. Service Plans help facility managers and owners maintain their investment for optimal performance and maximum value.

- Prepaid, budgeted services, with coverage options for planned and unplanned visits.
- Fully customizable to meet your unique requirements
- Optimize your system as your building needs evolve
- Our Service Plans are available in single or multi-year arrangements and are customized to fit your exact needs. Cooper Lighting Solutions has two Service Plans designed to fit your service requirements and budget.

# Why Cooper Lighting Solutions?

At Cooper Lighting Solutions, we build forward-thinking lighting solutions that make people's lives safer, while making buildings, homes, and cities smarter and more sustainable. We deliver an industry-leading portfolio of residential, sports, infrastructure, industrial, and commercial LED lighting; plus lighting controls and smart lighting systems.

We question, we seek, and we solve. Because building a better world means asking tough questions and pushing harder for answers. Together with our customers, we create solutions that build a better world. At Cooper Lighting Solutions, we push past the ordinary to build brighter.

Cooper Lighting Solutions is a business unit of Signify, the world leader in lighting. Together we have a shared purpose to unlock the extraordinary potential of light for brighter lives and a better world.

## Support

The services and support team simplifies design and specification. We're committed to supporting your project needs from design to occupancy and beyond.

**Technical Support:**

Phone: **+1 (800) 553-3879 (24/7 Support)**

Email (US)**: controltechsupport@cooperlighting.com**

**Lighting Brands**

Ametrix
AtLite
Corelite
Ephesus
Fail-Safe
HALO
HALO Commercial
Invue
iO
Iris
Lumark
LumarkAP
Lumière
McGraw-Edison
Metalux
MWS
NeoRay
Portfolio
PrentaLux - 3D Printed Lighting
RSA
Shaper
Streetworks
Sure-Lites

**Controls Brands**

Greengate
Fifth Light
Intelligent Lighting Controls

**Connected Lighting Systems
and Smart Spaces Platform**

WaveLinx
Trellix Infrastructure

**SCAN**
for more
WaveLinx
information

**COOPER**
Lighting Solutions

a **Signify** business