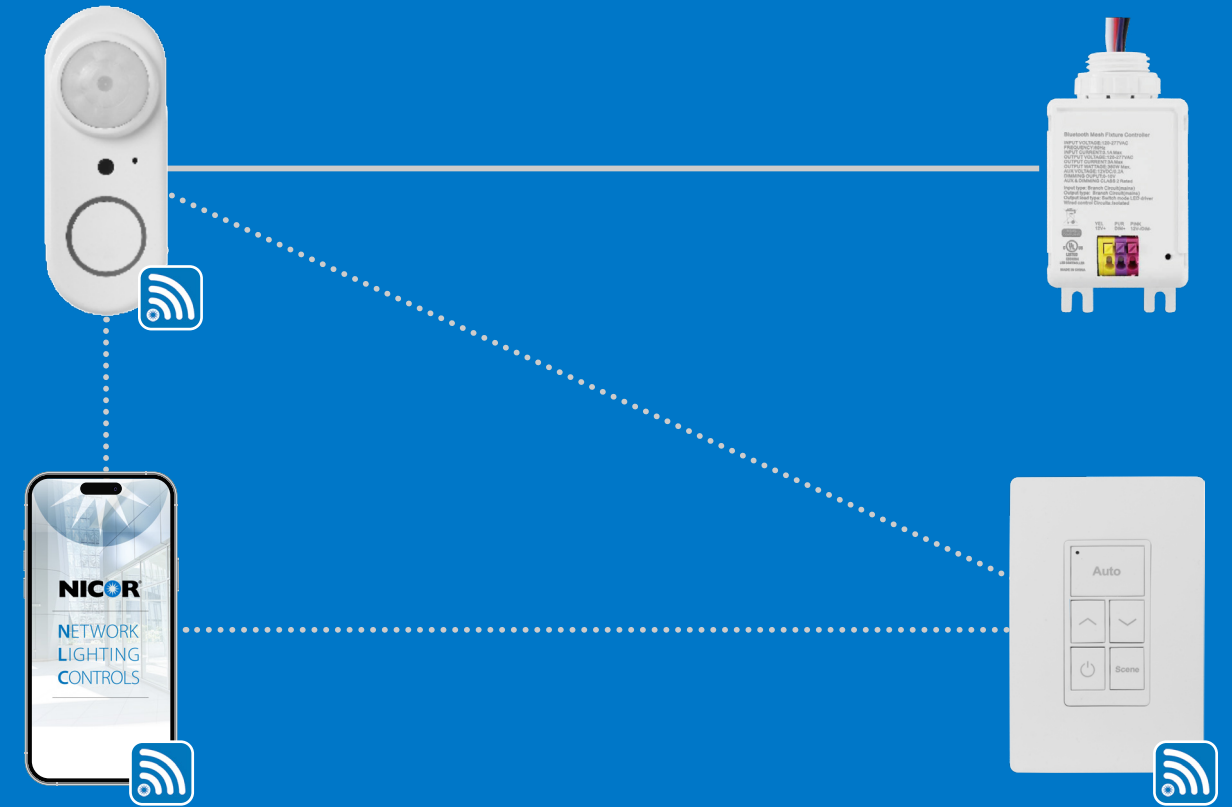




Simplify your life with NICOR Network Lighting Controls



NICOR Network Lighting Controls (NLC) use Bluetooth® Low Energy Mesh 4.2 protocols to provide either group or individual luminaire control. Together with sensors, wall switches, battery packs, and controller nodes, this wireless control system operates via the NICOR NLC App. Commissioning can be completed quickly and easily without a gateway using the NICOR NLC App on any smart mobile devices. The mesh network allows wireless communication between devices up to a distance of 100 feet or more and eliminates the need for Internet access. The NICOR NLC App uses data encryption for network security, storing configuration settings for each device in encrypted QR codes. Access to each network device is restricted without the QR code. NICOR is proud to uphold the gold standard for cybersecurity, compliant with UL 1376. Additionally, NICOR was among the first platforms listed to DLC's Networked Lighting Controls (NLC5).

Device Security
Uses **128-bit encryption** for its secure mesh network.

Easy Updates
Wireless technology allows you to **securely update your system**.

Stay Secure
All NLC components meet UL's Gold level cybersecurity standards.

3 Levels of Lighting Control



Single Luminaire



Room



Building



The NLC system meets UL's Gold (1376) level IoT security rating to protect each connected device on the network. The Bluetooth Low Energy (BLE) Mesh acts as a localized network for superior protection from outside sources. Each device on the Mesh network acts as a node on the system acting independently from one another for added security. Data transmission between devices is secured with 128-bit data encryption protocols, eliminating the need for a hub, gateway, or internet connection. Every NLC component is inherently secured right out of the box; no work or setup required. Whether you're in the design or remodel phase, NICOR's Network Lighting Controls system is designed to fit any new or existing framework with added security measures.

Commercial Grade Lighting Controls Systems for Everyone

Networked lighting control systems consist of a smart network comprising of luminaries and control devices, each with its own address and sensors that enables them to send and receive data. The demand for these systems is fueled by three main benefits.



Take Control

NICOR's NLC app provides an intuitive, easy-to-use interface to control the full assortment of NLC components. Available on Android and iOS.



System Ready

NICOR's Network Lighting Controls system is designed with simple scaling solutions in mind. All devices are compatible with new and existing framework.



Benefits

Get control of your energy usage! Create comfortable, well-lit spaces with significant energy savings.



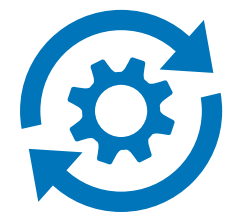
Stay Protected

The NLC system achieves UL Gold (1376) level protection and operates on a localized data-encrypted mesh network for added security.



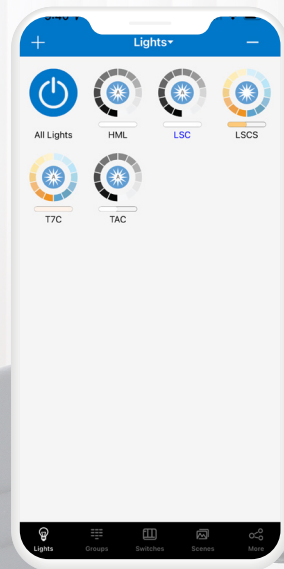
Features

With daylight harvesting, occupancy settings and scheduling built in, energy savings come standard.

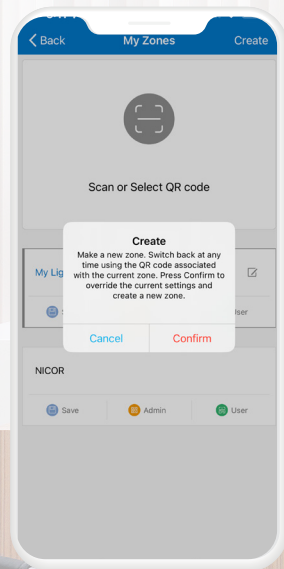


Flexible Solutions

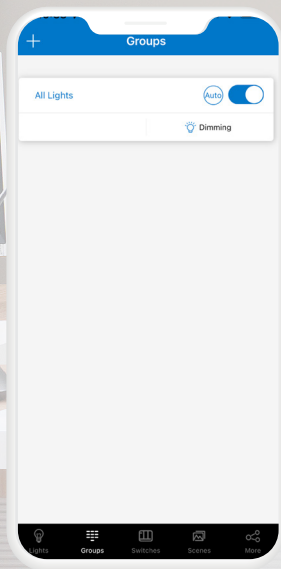
The NLC system features simple scaling solutions to easily add controls to new or existing networks with downward compatible software updates while maintaining seamless, uninterrupted operation.



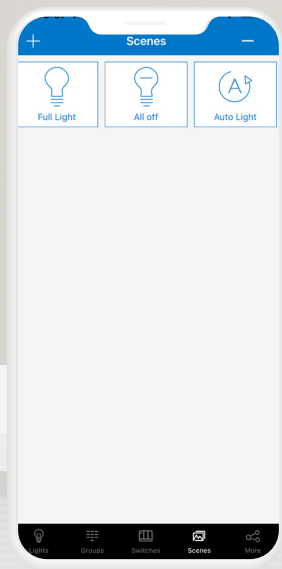
Limitless Configurations



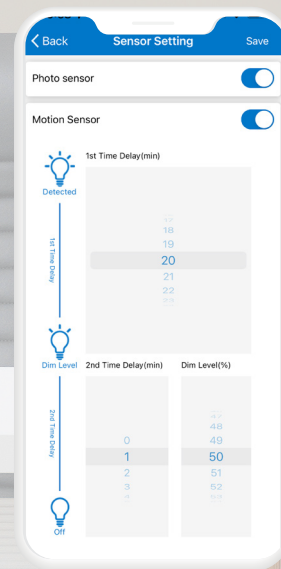
Zones



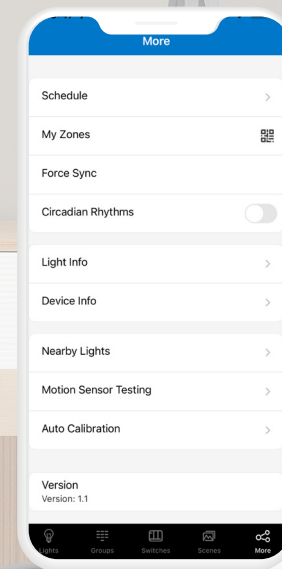
Groups



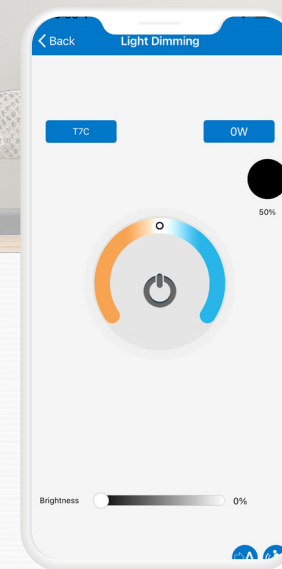
Scenes



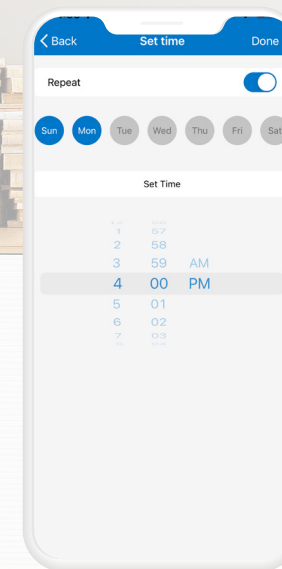
Occupancy/Vacancy



Daylight Harvesting



Task/Trim Tuning



Set Schedules

Limitless Configurations

Each individual NLC luminaire or device acts independently from the next. This allows for a limitless combination of settings and features to meet any application requirement.

Zones

NLC Luminaires can be grouped together in unlimited configurations within zones. The NLC Network can accommodate unlimited zones with the ability to scale up to provide coverage for entire sites. Each zone can control up to 100 devices.

Groups

Create groups of luminaires or devices that share similar settings to quickly configure rooms or spaces. Integrate groups within zones for easy scaling with no limit to the number of groups that can exist.

Scenes

Create preset lighting scenes within the NLC app to apply specific brightness and color temperatures stored in the NLC network. Scenes can be controlled with the app or NLC connected wall switches.

Occupancy/Vacancy

Completely adjustable, dual-time delays with light level reduction can help save energy in unoccupied rooms/zones. Settings can easily be adjusted using the NLC App.

Daylight Harvesting

Continuous dimming technology automatically adjusts light levels while factoring in the natural lighting in the space. This helps provide energy savings while reducing the need for artificial lighting during daylight hours.

Task/Trim Tuning

Light levels can be adjusted to match predetermined visual requirements of a given space. Each NLC enabled luminaire can be adjusted to limit its maximum lumen output to save on energy costs.

Set Schedules

Set-up your lighting system according to your schedule. Create simple on/off automations at certain times of the day or week to eliminate unnecessary energy consumption.



Power Supply & Load Controllers
Inline and wireless Bluetooth power supply and controllers that install directly to any 1/2-inch knockout



Integrated & Field-Installable Sensors
Energy saving sensors offer daylight harvesting, occupancy settings, and scheduling



External Sensors & Optics
Each Fresnel lens provides 360° of high-density coverage at various heights



Switches & Other Accessories
Switches, energy monitoring device, and other accessories to enhance control experience



Power Supply

Emergency

Load Controllers



NLCPS1



NLCMUL924



NLCPC1



NLCPC2

POWER SUPPLY

An inline power pack designed to provide low-voltage (12V) supply and receive dimming signal from NLC Wireless Bluetooth sensors.

- Operates at 3A (max) load at 120/277V
- Provides 0-10V dimming capability to luminaires
- Can be secured directly to any 1/2 inch knockout



EMERGENCY CONTROLLER

An emergency lighting controller that sends a wireless signal to controlled luminaires when normal building power has been interrupted to override control inputs.

- Meets UL924 requirements
- Works seamlessly with NLCPC1 and NLCPC2
- Compatible with any NLC Bluetooth LED drivers
- Can be secured directly to any 1/2 inch knockout



ZONE & PLUG LOAD CONTROLLER

A Bluetooth wireless zone and plug load controller that is designed to efficiently manage higher capacity loads.

- Operates at 20A (max) load at 120/277V
- Features a 0-10V dimming capability up to 48.5mA
- Can be secured directly to any 1/2 inch knockout



FIXTURE CONTROLLER

A Bluetooth wireless fixture controller that seamlessly converts any standard 0-10V luminaires into a wireless controlled fixture.

- Operates at 3A (max) load at 120/277V
- Provides a 0-10V dimming capability to luminaires
- Compatible with NLCSPCWNBWH
- Can be secured directly to any 1/2 inch knockout

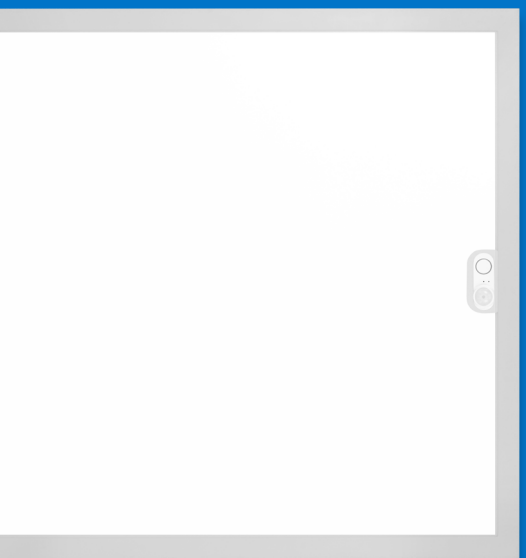




Ordering code: **NLCSPSS1WH**



Ordering code: **NP**



Ordering code: **NLCSPSS1WH**

Integrated Sensors

Integrated sensors, incorporated during manufacturing, are seamlessly integrated into LED lighting systems. These sensors are meticulously designed to operate in harmony with the lighting setup, ensuring optimal performance and reliability. Their compact design makes them ideal for space-constrained environments, commonly found in residential, commercial, and industrial settings. Integrated sensors offer benefits like ease of use, reduced installation and maintenance costs, and enhanced reliability due to their tailored fit within the lighting system.

Built-In Design

Integrated sensors are incorporated into the LED lighting fixture during the manufacturing process. These sensors are designed to work as a cohesive part of the lighting system, ensuring optimized performance and reliability.

Enhanced Reliability

As part of the original design, integrated sensors are less prone to installation errors and compatibility issues. More reliable as they are designed and tested to work seamlessly with the LED fixture.

Space Saving

By being part of the fixture, integrated sensors can help save space and maintain a sleek, compact design that can be crucial in applications with limited space.

Field-Installable

Field-installable sensors, conversely, are added to LED lighting systems after manufacturing, providing flexibility for customization and upgrades. These sensors are installed on-site to meet specific lighting requirements, offering adaptability to various environments and needs. Commonly used in retrofitting projects or environments demanding customized lighting solutions, field-installable sensors are ideal for applications that demand specific adjustments and ongoing adaptability in LED lighting systems.

Flexible Integration

Field-Installable sensors can be tailored to the specific needs of the application, allowing for more on-site adjustments and customization. They can be installed, configured, and calibrated to fit the environment.

Easy Upgradability

Field-installable sensors can be easily replaced or upgraded without changing the entire lighting fixture to accommodate technological advancements, specific field requirements, or changing conditions.

Customizable Control

These sensors can be tailored to specific operational conditions, such as varying occupancy patterns or specific lighting needs.



NLCSPCWNBWH
Non-Bluetooth Sensor
(only works with NLCPC2)



NLCSPCW1WH
Ceiling Mount Sensor



NLCSPSS1WH
Bluetooth PIR Sensor

External Sensors



NLC **SPEW1WH-LHW**

LINE VOLTAGE SENSOR - 90° Beam Angle

For Retrofit Applications

A line-voltage Bluetooth wireless PIR/Daylight sensor designed exclusively for the NICOR NLC System making it perfect for your Luminaire Level Lighting Controls (LLCs) needs.

- Constructed from the highest-rated fire retardant material
- Easy installation and operation, ideal for retrofit applications
- For optimal performance, ensure retrofit fixtures are 0-10V
- Offers 360° coverage at heights from 20ft to 40ft



External Sensors

BLUETOOTH SNAP-IN PIR SENSOR -

For Sensor-Ready Fixtures

A low-voltage Bluetooth wireless PIR/Daylight sensor designed exclusively for the NICOR NLC System making it perfect for your Luminaire Level Lighting Controls (LLCs) needs.

- Constructed from the highest-rated fire retardant material
- Easy installation and operation, ideal for retrofit applications
- For optimal performance, ensure retrofit fixtures are 0-10V
- Offers 360° coverage at heights of 18ft



NLC **SPSS1WH**

PLUG-N-PLAY SENSOR - 90° Beam Angle

With 3.5mm Jack Connector

A low-voltage Bluetooth wireless PIR/Daylight sensor with a 3.5mm Jack/AUX connector, designed for the NICOR NLC System, perfect for Luminaire Level Lighting Controls (LLCs).

- Constructed from high-rated fire retardant material
- Easy installation with a plug-n-play system
- Compatible with fixtures with a 12V 3.5mm jack sensor socket
- Provides 360° coverage at heights from 20ft to 40ft



TWIST-N-LOCK SENSOR OPTICS

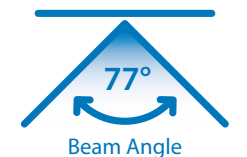
Compatible with NLC SPEW1WH and NLC SPEJ1WH

The NLC PIR Lenses are specifically crafted to seamlessly integrate with NLC sensors. Each Fresnel lenses offering 360° high-density coverage at different heights.

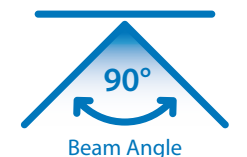
- Twist-n-lock mechanism to facilitate easy lens swapping
- IP65 Rated for a complete resistance to water and against solid particles
- Suitable for extreme environments and applications
- Offers 360° coverage at different heights



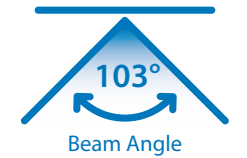
NLC **LHN1WH**



NLC **LHW1WH**

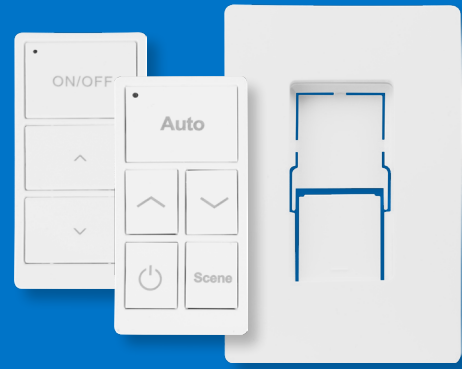


NLC **LMW1WH**



NLC **SPEJ1WH-LHW**

NLC Accessories



Wall Switches

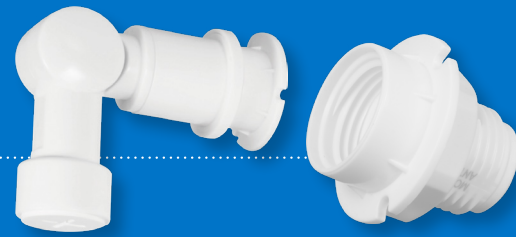
NLCW31WH | NLCW51WH | NLCWP1WH

Wireless wall switches that are battery powered by a standard CR32 style batteries.

- Offers both 3-button and 5-button switch configurations
- Provides wireless remote control of NLC enabled luminaries
- Can be a handheld remote device or wall-mounted

Mounting Accessories

H12VADJARM1WH | H12VSOCKET



Optional low-voltage, in-line socket mounts that provides mounting capability for compatible sensors.

- Requires a 3.5mm jack to operate
- Can be secured to any 1/2 inch knockout
- Adjustable mounting arm can be adjusted up to 90°



Socket Adaptor

HBCSOCKETADAPT1

Socket adaptor to convert a 3-pin connector into a 3.5mm jack connector.

- Enables high bays with a 3-pin connector to utilize NLC controls
- Simple plug-and-play design for quick and easy installation
- Manufactured with high-quality materials to ensure better performance and durability

Energy Monitoring Dongle

NLCE1



Energy monitoring dongle designed to collect energy consumption data and provide Real Time Clock (RTC) function.

- Useful for time syncing devices within a zone
- Works up to 15-minute intervals
- Only one (1) NLCE1 needed per zone



Sensor Cables

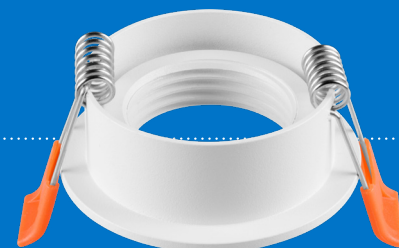
NLCSC1 | NLCSC2

Plenum-Rated sensor cables that meets NLC sensor needs.

- NEC code compliant plenum-rated sensor cables
- Available in both standard and connector-equipped type for non-bluetooth sensor
- Designed with special insulation to resist fire spread

Ceiling Mount

NLCSPCMOUNT1



Ceiling mount accessory that allows for a more flexible on-site installation for sensors

- Recessed ceiling mount designed to work with the SPC sensors
- Adjustable spring-loaded retention tabs for a secure fit
- Die cast material with a ceiling cut diameter of 1.60in (41mm)

Enabled Fixtures



CLR (v3)

Ordering Code: **NLCDOWN1**



NLCSPCW1WH

NLCSPCMOUNT1

NLCPS1



HBG (v1)

Ordering Code: **NLCSPW1WH, NLCLHW1WH**



NLCSPW1WH

NLCLHW1WH



CDG

Ordering Code: **NLCSPCW1WH, NLCSPCMOUNT1**



NLCSPCW1WH

NLCSPCMOUNT1



HBC (v4, v5, v6)

Ordering Code: **NLCspej1WH-LHW, HBCSOCKETADAPT1**



NLCspej1WH-LHW

HBCSOCKETADAPT1

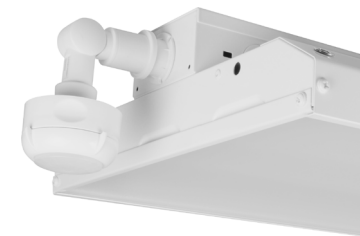


LSL-NP

Ordering Code: **NP**



NLCSPSS1WH



HBL (v4)

Ordering Code: **NLCIND3.5A**



NLCspej1WH-LHW

H12VADJARM1WH



HBN

Ordering Code: **NLCIND3.5**



NLCspej1WH-LHW



HML

Ordering Code: **NLCIND3.5**



NLCspej1WH-LHW

Enabled Fixtures

Integrated Sensors

SENSOR-READY CENTER BASKET LED TROFFER

TAC3S



Series	Version	Size	Wattage	Voltage	CCT	CRI	Sensor	Emergency (Optional)
TAC	3	22 (2' x 2')	25S (15/20/25W) ¹	U (120-277V)	S (35/40/50)	8 (80+)	S (Sensor Socket) ³	<BLANK>
		24 (2' x 4')	50S (30/40/50W) ²					E1 (EMB045) E2 (EMB080)

Specifications and dimensions subject to change without notice.
¹2x2 model only ²2x4 model only ³Ordering code NLCSPSS1WH for field installable NLC sensor

TGL4S



Series	Version	Size	Wattage	Voltage	CCT	CRI	Sensor	Emergency (Optional)
TGL	4	14 (1' x 4')	30S (20/25/30)	U (120-277V)	S (35/40/50)	8 (80+)	S (Sensor Socket) ¹	<BLANK>
		22 (2' x 2')	30S (20/25/30)					E1 (EMB045)
		24 (2' x 4')	50S (30/40/50)					E2 (EMB080)

Specifications and dimensions subject to change without notice.
¹Ordering code NLCSPSS1WH for field installable NLC sensor

WRAPS

WPC4



Series	Version	Length	Wattage Selectable	Voltage	CCT	CRI	Finish	Sensor	Emergency (Optional)
WPC	4	2 (2 ft)	25WS(12/16/20/25W)	U (120-277V)	S (35-50/65K)	8 (80 CRI)	WH (White)	S (SensorSocket) ¹	<BLANK>
		4 (4 ft)	46WS(24/31/38/46W)						EM4 (4W) ¹

Specifications and dimensions subject to change without notice.
¹4W battery for 4 ft model only. ² Ordering code NLCSPSS1WH for field installable NLC sensor

Next Steps

1

Preparation Work

- Define Control Narrative and SOO
- Install lights and test power

2

Set Lights, Groups and Scenes

- Connect lights to app
- Create Groups/Generate QR Code
- Group lights together
- Create Scene Settings
- Add a switch control
- Set switches and timers

3

Set Sensor Lights

- Fix sensor parameters
- Configure light linkage levels
- Set Auto Light levels

4

Project Delivery

- Share QR Code

Download

NICOR's New NLC App



Need assistance in determining the best solution or need a layout of the lighting controls on your plans?

If your project requires a lighting controls layout, our application engineers can provide recommended solutions and floor plans showing what NLC enabled luminaires and control components to use for your project. To request assistance visit www.NICORLighting.com/Network-Lighting-Controls and submit a Lighting Controls Layout Request with either .PDF or .DWG drawings of the space. For questions contact nlc@nicorlighting.com

The Making of a Layout

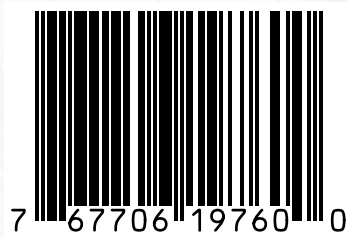
Our application engineers will help you satisfy your customer's requirements; from specific lighting control solutions to working space requirements and more. Your customized report provides an in-depth look at how NICOR's NLC solutions are the perfect fit for any project.

- Exporting layout drawings as .DWG or .PDF
- Layouts showing placement on drawings, descriptions of products used with quantities
- Solution system specifications provided

Please note that NLC Layout can vary depending on the complexity of the project. Standard turnaround times:

<i>Small Scale (less than 5,000sq ft)</i>	<i>: 2 business days</i>
<i>Medium Scale (5,001 to 50,000sq ft)</i>	<i>: 3-4 business days</i>
<i>Large Scale (above 50,001sq ft)</i>	<i>: 4-5 business days</i>

Requests with any non-NICOR fixtures are subject to longer turnaround times to ensure compatibility with the NLC control system.



Warehouse Locations:

Albuquerque, NM
Buford, GA
Roseville, CA

Contact NICOR Lighting:

800.821.6283
www.nicorlighting.com
2200 Midtown Pl. NE
Albuquerque, NM 87107 USA



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