



NLC Application Guide



Room



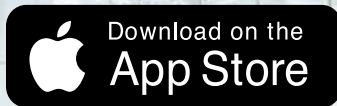
Single Luminaire

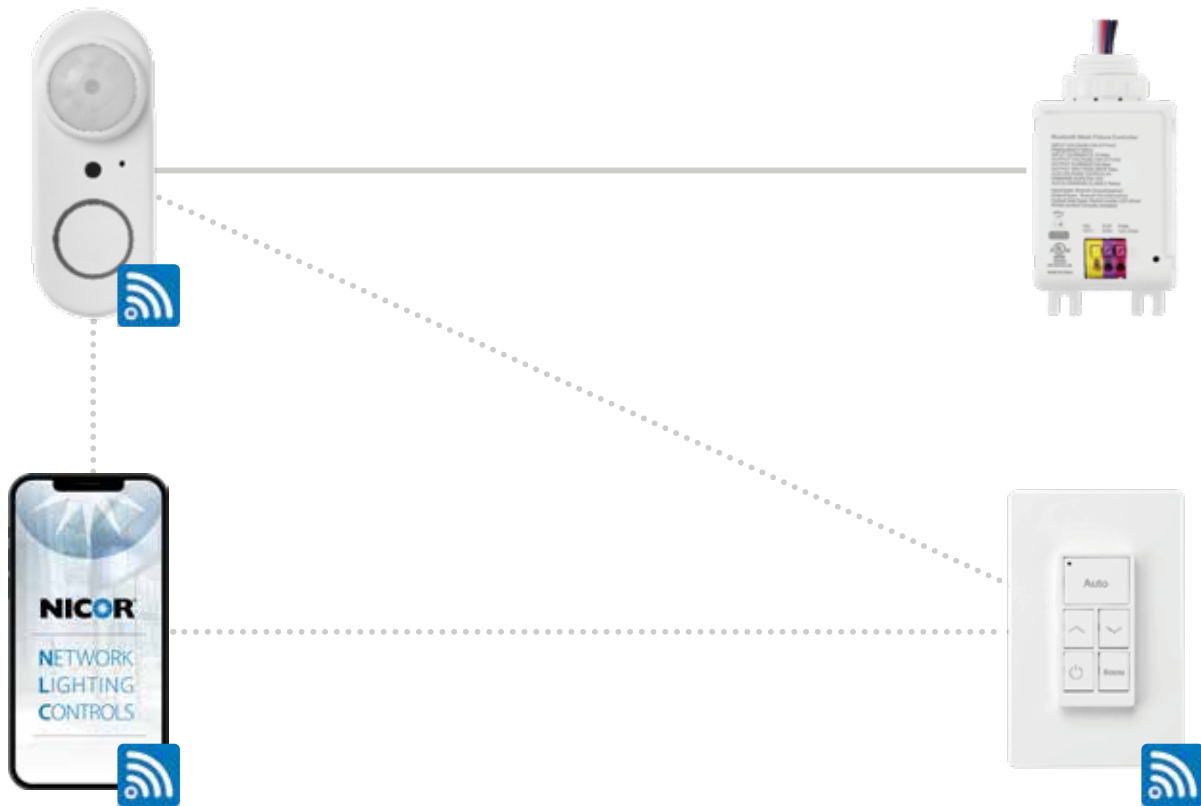


Building

Download

NICOR's New NLC App





Designing a NICOR NLC System

How to put it all together

Simple Application Rules

- Determine whether Room/Zone or individual luminaire Control (LLLC)
- Maximum of 100 network devices per group/zone
- Maximum of 75' distance between devices

1

Identify your Room Requirements

- Sequence of Operation
- Sensor Requirements
- User Interface Requirement
- Load Schedule

2

Select the Appropriate Controller

- Room/Zone Controller
- Additional ceiling sensors can be added for coverage
- LLLC - Select the NLC enabled luminaire for individual control

3

Select your Load Controller for plug loads

4

Select your User Interface(s)

- Use one or more of the following:
 - 3 button wireless, battery wall station - ON/OFF, Raise, Lower
 - 5 button wireless, battery wall station - AUTO, Raise, Lower, On/OFF, Scene

5

For energy monitoring, connect zones with the dongle

6

To connect with third-party controls devices, use the Bridge. Contact factory for more information

NICOR NLC Components & Enabled Fixtures



NLCPS1
NLC In-Line Low-Voltage
Power Pack



NLCW31WH
NLC 3-Button Wireless
Control Switch



NLCPC1
NLC Wireless Zone and
Plug Load Controller



NLCW51WH
NLC 5-Button Wireless
Control Switch



NLCSPW1WH
NLC Wireless End-Mount
PIR/Daylight Sensor



NLCWP1WH
NLC Wall-Mount Switch
Base with Faceplate



NLCLHW1WH
NLC Fresnel Occupancy
Sensor Lens for High-
Mount (Wide Distribu-
tion)



NLCLHN1WH
NLC Fresnel Occupancy
Sensor Lens for High-
Mount (Narrow Distribu-
tion)



NLCSPJ1WH
NLC Wireless Exter-
nal-Mount PIR/Daylight
Sensor



NLCLMW1WH
NLC Fresnel Occupancy
Sensor Lens for Mid-
Mount (Wide Distribu-
tion)



NLCSPCW1WH
NLC Wireless Low-Voltage
PIR/Daylight Sensor



H12VADJARM1WH
H12 Socket Mount
Adjustable Arm



NLCSPCMOUNT1
NLC Spring-Loaded
Recessed Ceiling Mount



H12VSOCKET
H12V Socket Mount Base



NLCSPIHW1WH
NLC Wireless Integrated
Low-Voltage PIR/Daylight
Sensor



NLCSPFW1WH
NLC Wireless Integrated
Low-Voltage PIR/Daylight
Sensor

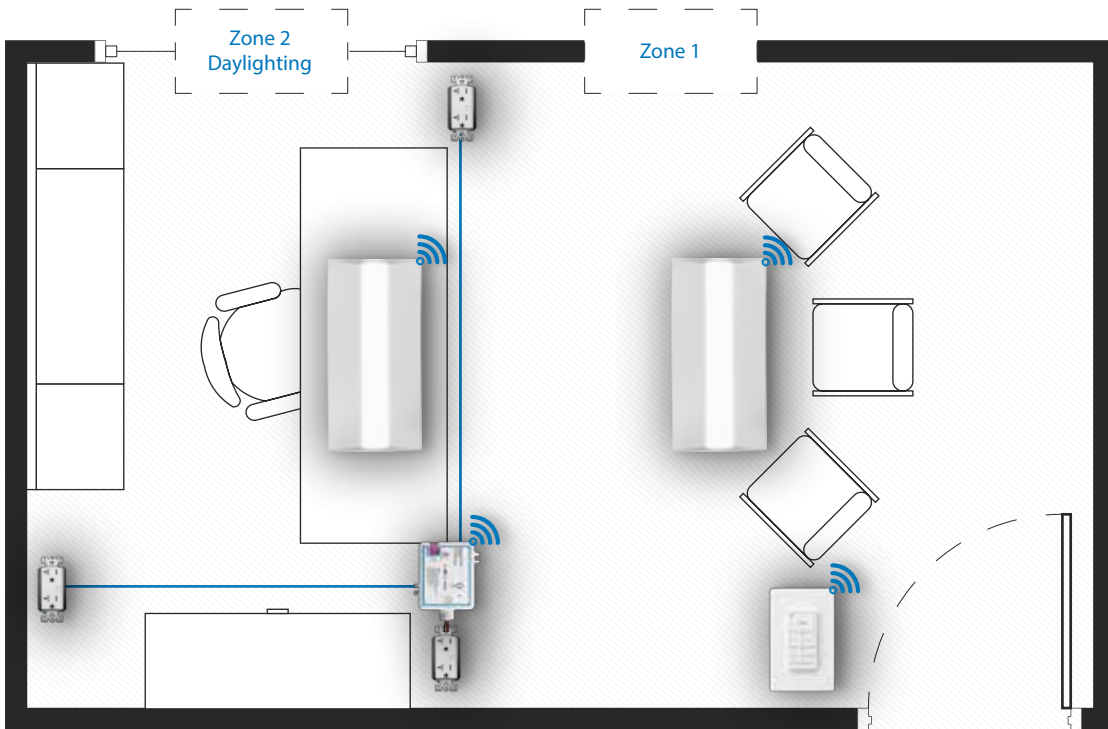


NLCSPCWNBWH
NLC Non-Bluetooth
Low-Voltage PIR/Daylight
Sensor



NLCPC2
NLC Wireless Zone
Controller

Product Series		NLC Solution	Assortment Code
CLR			NLCDOWN1
CDA			ND
TACsv2			NI
TGL			N1
TGLS			N1
T7C			N1
LSCS			N2
HBGv1			NLCIND
HBLv4			NLCIND3.5A
HMLv1			NLCIND3.5
HMLv1 Twin			NLCIND3.5



APPLICATIONS Private Office - LLLC

NICOR NLC enabled Bluetooth mesh wireless luminaires for occupancy/vacancy control, plus daylight harvesting, plug load control, typical


Application Notes

- Bluetooth wireless interface for configuration, control and status monitoring.
- Room contains LLLC Lighting, all configured through the NICOR NLC App.
- Individual luminaires respond to ambient light within the space.
- Occupant can access scenes and dimming/switching controls via their smart device, or by utilizing the manual keypad control.
- Emergency lighting capable.

Sequence of Operation

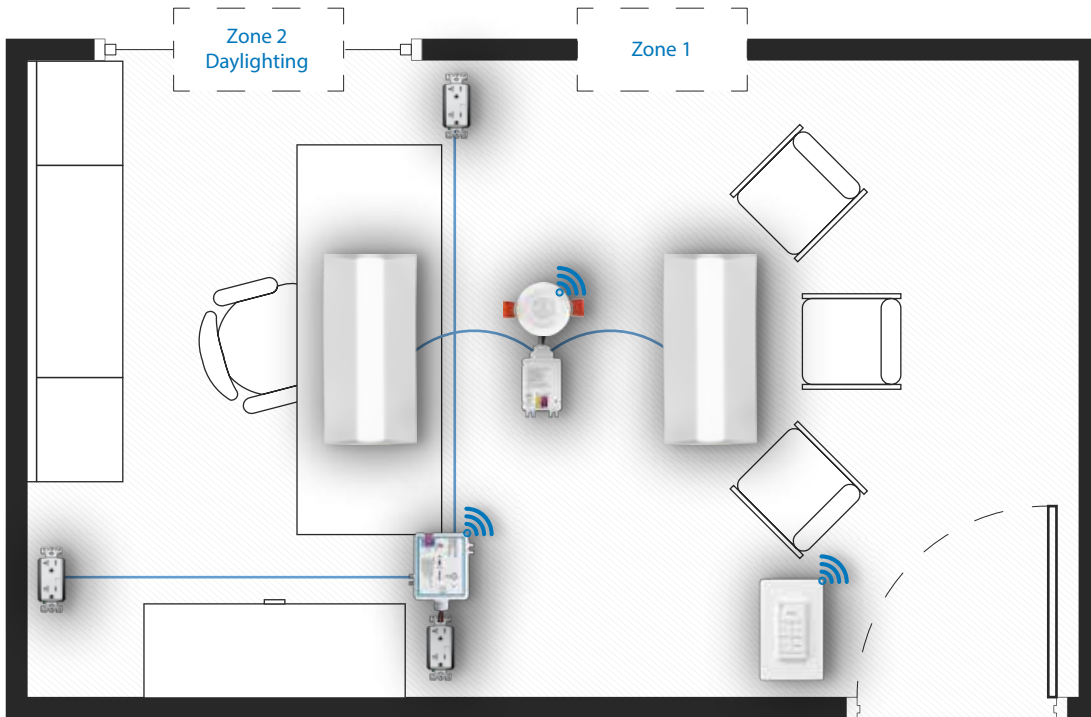
- Bluetooth wireless interface for configuration, control and status monitoring.
- All lighting auto-on to 50% and controlled receptacles on when occupancy is detected. Can be configured for Manual-ON/Auto-OFF.
- Local control and scene control of general lighting from keypad.
- Luminaires to dim based on photocell input when there is sufficient daylight available.
- All lighting to dim automatically when the space is unoccupied after second time out.

What You Will Need

 **NICOR NLC
5-Button Wireless Keypad Room Controller**
NLCW51WH 1

 **NICOR NLC Enabled Fixture**
TACS-NI 2

 **Plug Load Controller**
NLCPC1 1



APPLICATIONS Private Office - Room Control

NICOR NLC Bluetooth mesh wireless field installed with 0-10V dimming and occupancy/vacancy sensing control, plus daylight harvesting plug load control, typical.





Application Notes

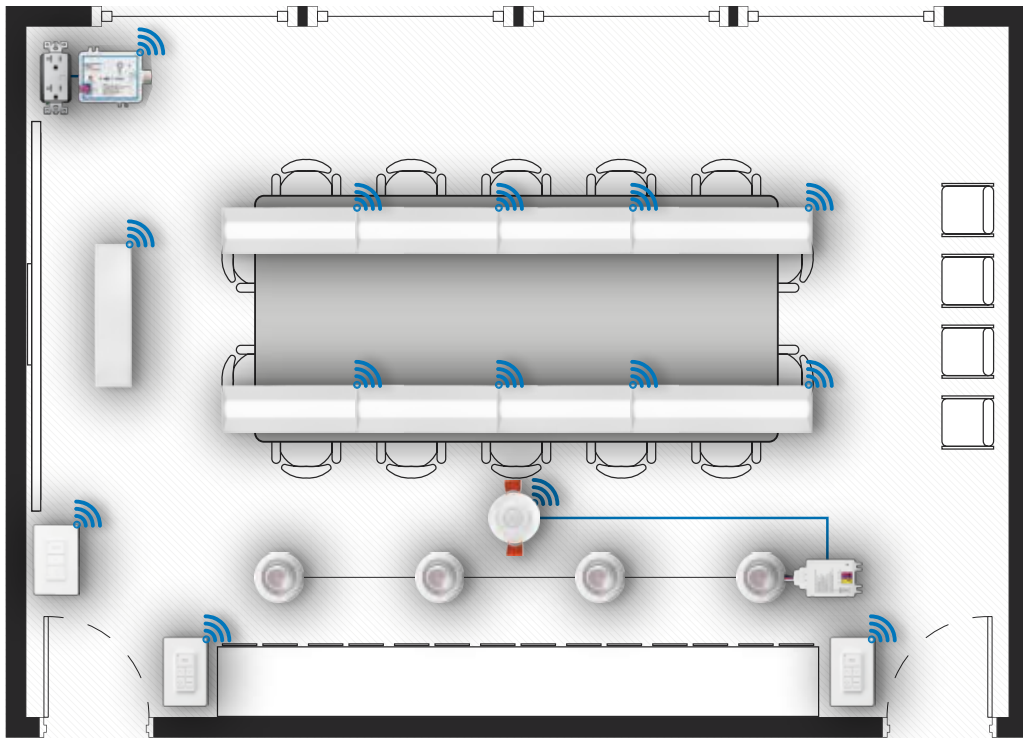
- Bluetooth wireless interface for configuration, control and status monitoring for any LED luminaire with 0-10v dimming.
- Single zone application.
- All configured through the NICOR NLC App.
- Luminaires respond to ambient light within the space.
- Occupant can access scenes and dimming/switching controls via their smart device, or by utilizing the manual keypad control.

Sequence of Operation

- Bluetooth wireless interface for configuration, control and status monitoring.
- Lighting auto-on to 50% or manual ON local control of general lighting from keypad.
- Luminaires to dim based on photocell input when sufficient daylight is available. Both luminaires are controlled together as one zone.
- All lighting to turn off automatically when the space is unoccupied after 20 minutes.
- Controlled receptacles on when occupancy is detected.

What You Will Need

	NICOR NLC 5-Button Wireless Keypad Room Controller NLCW51WH	1		10A, 0-10V Dimming Zone Control NLCPS1	1
	Plug Load Controller NLCPC1	1		Wireless PIR Occupancy Sensor NLCSPCW1WH/NLCSPCMOUNT1	1



APPLICATIONS Conference Room - LLLC

NICOR NLC enabled Bluetooth mesh wireless luminaires for scene control, daylight harvesting, plug load control, typical

Application Notes

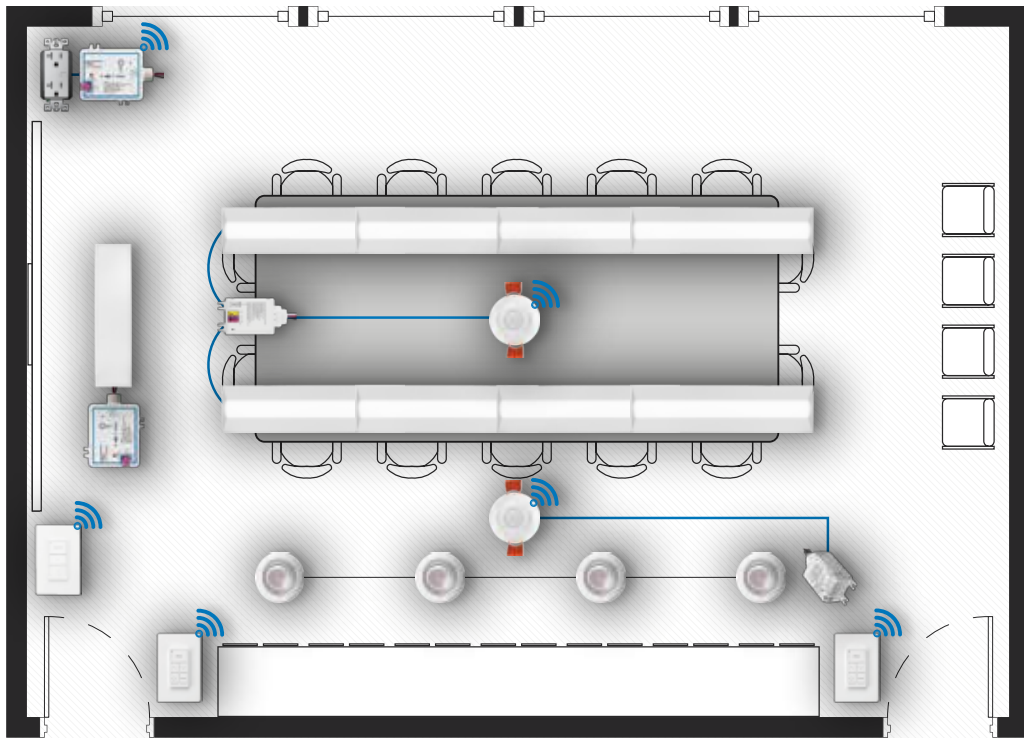
- Bluetooth wireless interface for configuration, control and status monitoring.
- Room contains LLLC lighting, all configured through the NICOR NLC App.
- Emergency lighting capable.

Sequence of Operation

- Bluetooth wireless interface for configuration.
- Luminaires and controlled receptacles auto-on when occupancy is detected.
- Main luminaires controlled by 5-button switch. White board luminaire controlled by 3-button switch. Downlights controlled as one zone.
- Local control and scene control of general lighting from keypads.
- Daylight zone dim based on photocell input when sufficient daylight is available.
- All lighting and controlled receptacles to turn off automatically when the space is unoccupied after 20 minutes.

What You Will Need

	NICOR NLC 5-Button Wireless Keypad Room Controller <i>NLCW51WH</i>	2		NICOR NLC 3-Button Wireless Keypad <i>NLCW31WH</i>	1
	10A, 0-10V Dimming Zone Control <i>NLCPS1</i>	1		NICOR NLC Enabled Fixture <i>TACS-NI</i>	8
	Plug Load Controller <i>NLCPC1</i>	1		NICOR NLC Enabled Fixture <i>T7C-NI</i>	1
	Wireless PIR Occupancy Sensor <i>NLCSPCW1WH/NLCSPCMOUNT1</i>	1		NICOR NLC Enabled Fixture <i>CDA-ND</i>	4



APPLICATIONS Conference Room - Room Control

NICOR NLC Bluetooth mesh wireless field installed with 0-10V dimming and occupancy/vacancy sensing control, plus daylighting, plug load control, typical






Application Notes

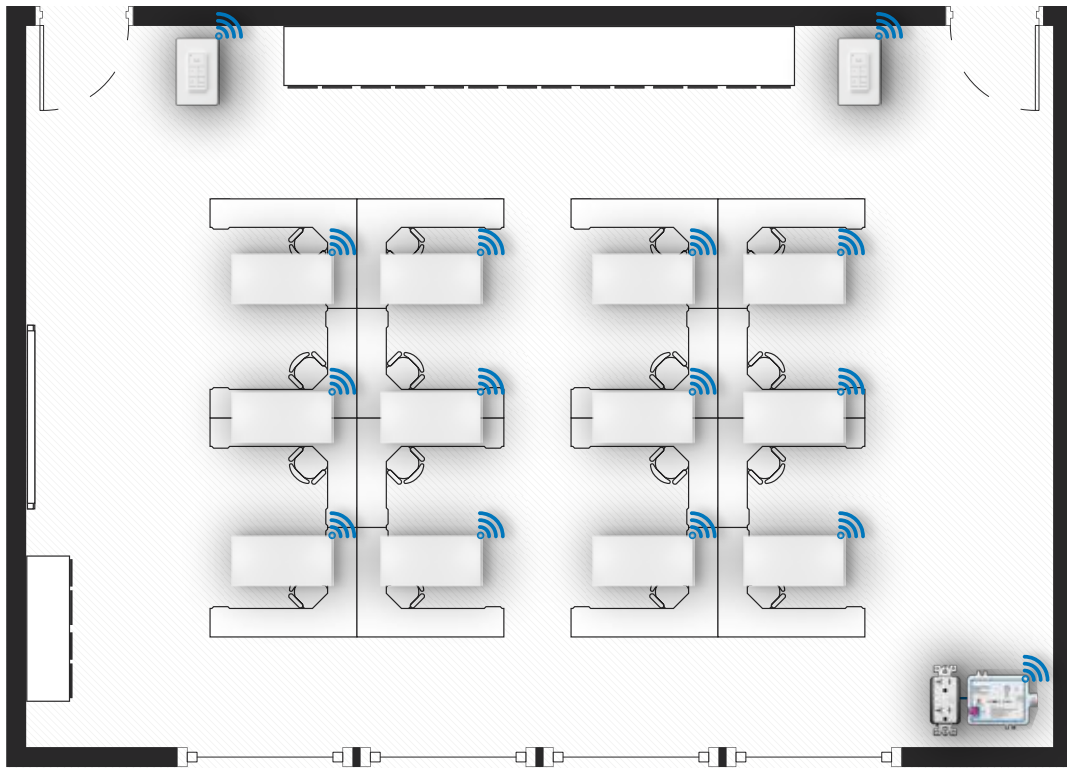
- Bluetooth wireless interface for configuration, control and status monitoring for any LED luminaire with 0-10V dimming.
- Space contains three separate zones of lighting, all configured through the NICOR NLC App.
- Occupancy sensors continually monitor the area and switch all lighting, regardless of zone, off when the area is vacant, and are sensitive enough to detect minor movements, to prevent false-offs.
- Emergency lighting capable.

Sequence of Operation

- Bluetooth wireless interface for configuration, control and status with keypads, and controlled receptacles auto-on when occupancy is detected.
- Local control and scene control of general lighting from keypads.
- Daylight zone dim based on photocell input sufficient daylight is available.
- All lighting and controlled receptacles to turn off automatically when the space is unoccupied after 20 minutes.

What You Will Need

	NICOR NLC 5-Button Wireless Keypad Room Controller NLCW51WH	2		Wireless PIR Occupancy Sensor NLCSPCW1WH/NLCSPCMOUNT1	1
	10A, 0-10V Dimming Zone Control NLCPS1	2		NICOR NLC 3-Button Wireless Keypad NLCW31WH	1
	Plug Load Controller NLCPC1	1		Wireless Zone Controller NLCPS2	1



APPLICATIONS Open Office - LLLC

NICOR NLC Enabled Bluetooth mesh wireless fixtures plus daylighting, plus plug load control typical

Application Notes

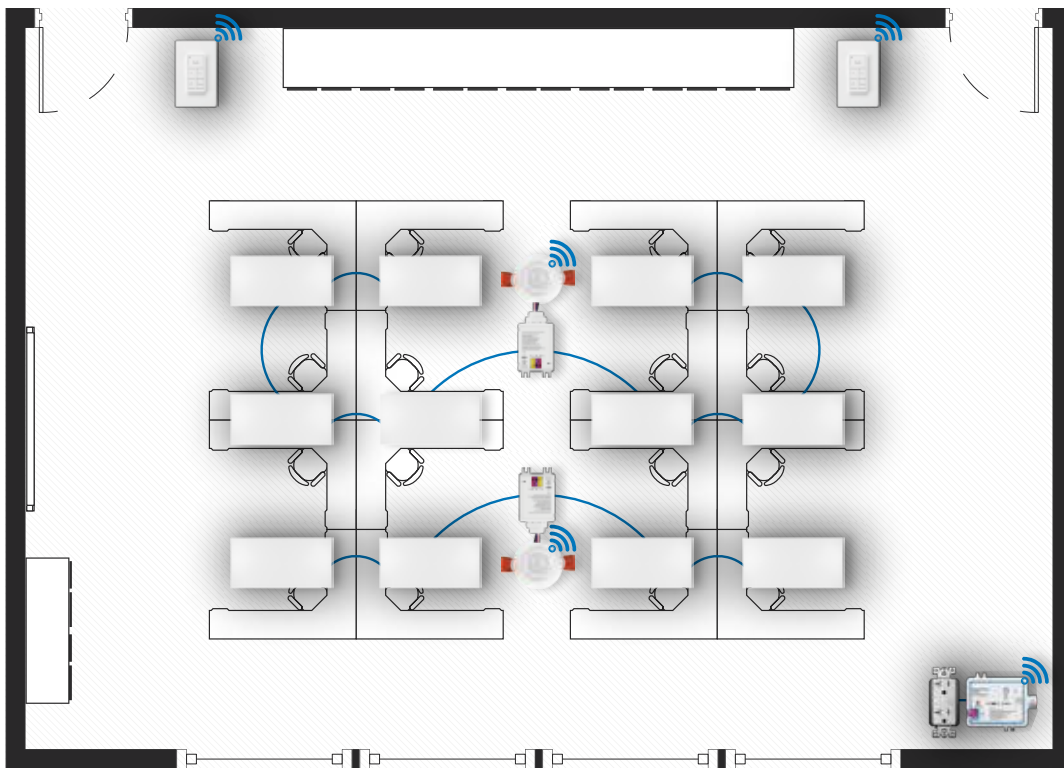
- Bluetooth wireless interface for configuration, control and status monitoring.
- Room contains LLLC lighting, all configured through the NICOR NLC App.
- Emergency lighting capable.

Sequence of Operation

- All lighting and controlled receptacles in zones automatically turned on upon occupancy. Can be configured for manual-ON/Auto-OFF.
- Luminaire level lighting control dimmed via photocell when sufficient daylight is available.
- When any occupancy area is empty, lighting power in that area to be reduced by at least 80%, and daylight zone becomes inactive within 20 minutes of occupant leaving the space.
- Lighting in that area to return to 100% and daylight controls to be restored upon the area being reoccupied.

What You Will Need

	NICOR NLC 5-Button Wireless Keypad Room Controller NLCW51WH	2		Plug Load Controller NLCPC1	1
	NICOR NLC Enabled Fixture T7C-NI	12			



APPLICATIONS Open Office - Room Control

NICOR NLC wireless field installed zone control with 0-10V dimming and occupancy/vacancy sensing control, plus daylighting, plug load control, typical





Application Notes

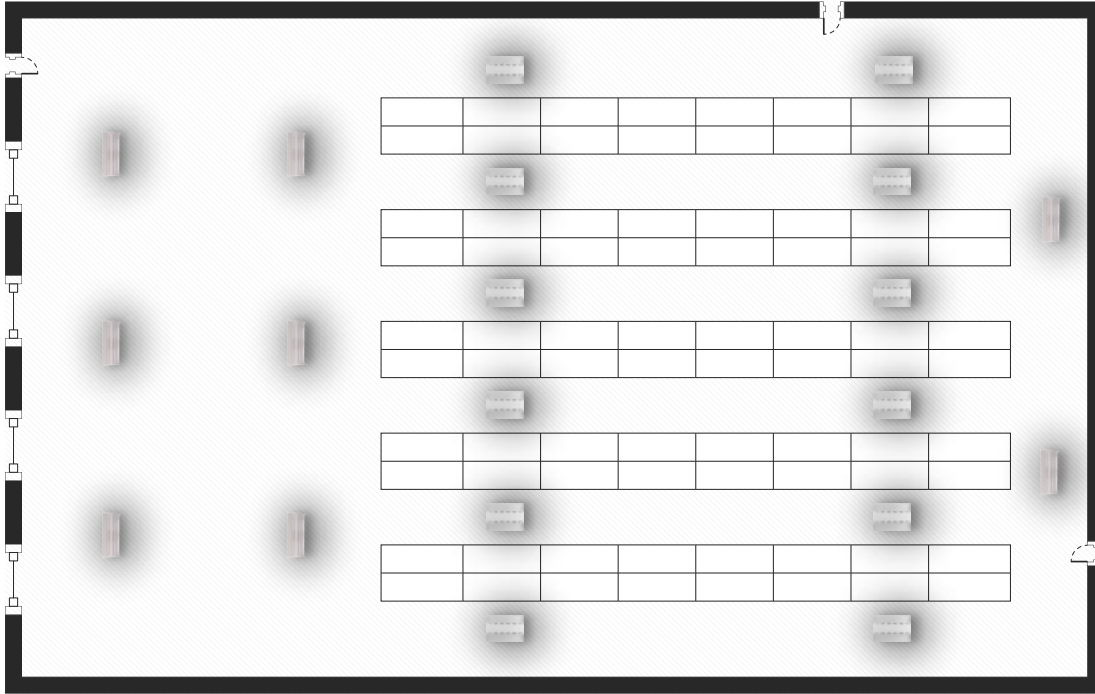
- Wireless interface for configuration, control and status monitoring for any LED luminaire with 0-10V dimming.
- Room has two zone configuration.
- Emergency lighting capable.

Sequence of Operation

- All lighting and controlled receptacles automatically turned on upon occupancy. Can be configured for Manual-ON/Auto-OFF. Zones to be dimmed via photocell when sufficient daylight is available.
- When occupancy area is empty, lighting power in that area to be reduced by at least 80%, and daylight zones become inactive within 20 minutes of occupant leaving the space. Lighting in that area to return to 100% and daylight controls to be restored upon the area being reoccupied.
- All light to be turned off via occupancy sensor when zones are unoccupied for 20 minutes.
- Local control and any required scene control of general lighting from keypads

What You Will Need

	NICOR NLC 5-Button Wireless Keypad Room Controller NLCW51WH	2		Plug Load Controller NLCPC1	1
	10A, 0-10V Dimming Zone Control NLCPS1	2		Wireless PIR Occupancy Sensor NLCSPCW1WH/NLCSPCMOUNT1	2



APPLICATIONS Warehouse - LLLC

NICOR NLC Enabled Bluetooth mesh wireless fixtures plus daylighting

Application Notes

- Bluetooth wireless interface for configuration, control and status monitoring.
- Room contains LLLC, each luminaire can be configured individually or as zones.
- Zones can be rearranged, combined, or deleted with any changes to the usage or setup of the area.
- Passive infrared sensors continually monitor the area and switch all lighting, regardless of zone, off when the area is vacant, and are sensitive enough to detect minor movements to prevent false-offs.
- Emergency lighting capable.

Sequence of Operation

- Bluetooth wireless interface for configuration, control, and status monitoring.
- All lighting automatically turned on upon occupancy.
- Daylight zones to be dimmed via photocell when sufficient daylight is available.
- When any occupancy area is empty, lighting power in that area to be reduced by at least 80% and daylight zones become inactive within 20 minutes of occupant leaving the space.
- Lighting in that area to return to 100% and daylight controls to be restored upon the area being reoccupied.
- Each fixture to be turned off via occupancy sensor when they are unoccupied for 20 minutes.

What You Will Need



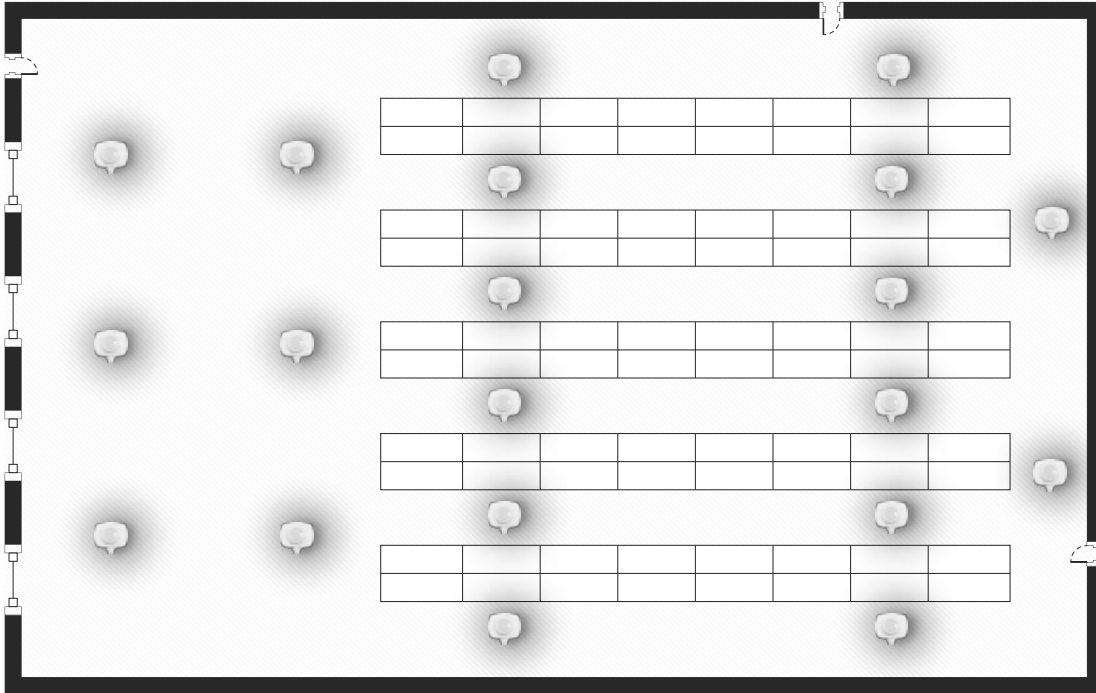
NICOR NLC Enabled Fixture
HML-NLCIND3.5

12



NICOR NLC Enabled Fixture
HBG-NLCIND

8



APPLICATIONS Warehouse - Room Control

NICOR NLC wireless field installed luminaire control with 0-10V dimming and occupancy/vacancy sensing control, plus daylighting, typical

Application Notes

- Bluetooth wireless interface for configuration, control and status monitoring for any LED luminaire with 0-10V dimming..
- Room contains daylighting zones all configured by NICOR NLC App.
- Zones can be rearranged, combined, or deleted with any changes to the usage or setup of the area.
- Passive infrared sensors continually monitor the area and switch all lighting, regardless of zone, off when the area is vacant, and are sensitive enough to detect minor movements to prevent false-offs.
- Emergency lighting capable.

Sequence of Operation

- Bluetooth wireless interface for configuration, control and status monitoring.
- All lighting zones automatically turned on upon occupancy.
- Daylight zones to be dimmed via photocell when sufficient daylight is available.
- When any occupancy area is empty, lighting power in that area to be reduced by at least 80%, and daylight zones become inactive within 20 minutes of occupant leaving the space.
- Lighting in that area to return to 100% and daylight controls to be restored upon the area being reoccupied.
- Each fixture to be turned off via occupancy for 20 minutes.

What You Will Need



NICOR NLC Line Voltage Sensor
NLCSPW1WH

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 d.weigand@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
- Turnaround in 1–2 days



Email or Call Today

nlc@nicorlighting.com
800.821.6283

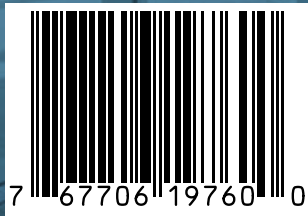
Simple Layout?

Visit our website:
<https://nicorlighting.com/network-lighting-controls>

Download

NICOR's New NLC App





LIT-NLC-APP-GD-10PK 20221129

Warehouse Locations:

Albuquerque, NM	Houston, TX
Atlanta, GA	Roseville, CA
Buford, GA	Syracuse, NY
Detroit, MI	Van Nuys, CA
Folcroft, PA	

Contact NICOR Lighting:

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