LIGHTING CONTROLS™

DATE: | LOCATION:

TYPE: | PROJECT:

CATALOG #:

NX Connect Wireless Controls

NXC-WIZ20 INTEGRATED SENSOR

DESCRIPTION

Introducing Current's new integral lighting control sensor to the NX Wireless Controls platform. These sensors come factory installed in many of Current's LED fixtures. These new occupancy and photocell sensors simplify the installation process, improve ceiling scape aesthetics by eliminatingthe need to install additional devices in the ceiling and economically deliver lighting control to any environment.

The NX Wireless Integrated Sensor (NXC-WIZ20) is a small-size, luminaire-integrated sensor with wireless communication based on the 802.15.4 standard which provides secure and reliable communication between the luminaires in the room. Using the NXC-WIZ20 sensor in each luminaire provides state-of-the-art code compliant distributed lighting control based on the built-in motion sensing and continuous dimming for daylight harvesting function.

PRODUCT OVERVIEW

The sensor is shipped pre-installed in Current LED fixtures in NX ONE standalone mode. The standalone mode works with pre-programmed settings to maximize energy efficiency using occupancy sensing and daylighting in individual fixtures.

The sensor can be personalized to NX Connect zonal based control. The NX Connect commissioning app is available as a free download on the Apple® App Store. The sensor can be zoned with up to 50 wireless devices. Once the sensors and lighting are commissioned with the app, the sensed information is then shared between all the luminaires mapped in the zone.

The control of the luminaire is carried out through the digital bus between the output of the sensor and the control input of the luminaire's LED driver. The digital bus also provides the necessary supply power for the sensor. No additional wiring or auxiliary power supply are required which helps to minimize installation costs. When commissioned in a zone it is also possible to adjust preferred dimming levels manually through self-powered wireless switches (NXC-ZBT-S1AWH) or battery-operated dimmers and scene switches (NXC-WWD2).

Additionally, the NXC-WIZ20 sensor can provide NX Connect functionality to any 0-10V fixture by connecting the two devices together with an LCA accessory kit.

KEY FEATURES AND BENEFITS

- When configured in NX Connect mode, the NXC-WIZ20 sensor is designed with persistent lighting control capability, to operate as stand-alone in case of network communication failure.
- Provides occupancy sensing and daylight harvesting in one sensor
- Device performance can be customized with the NX Connect app available for download on the Apple® App Store
- Sensors are integrated into many Current LED luminaires or can be installed in any 0-10V lighting fixture with NXC-LCA kit

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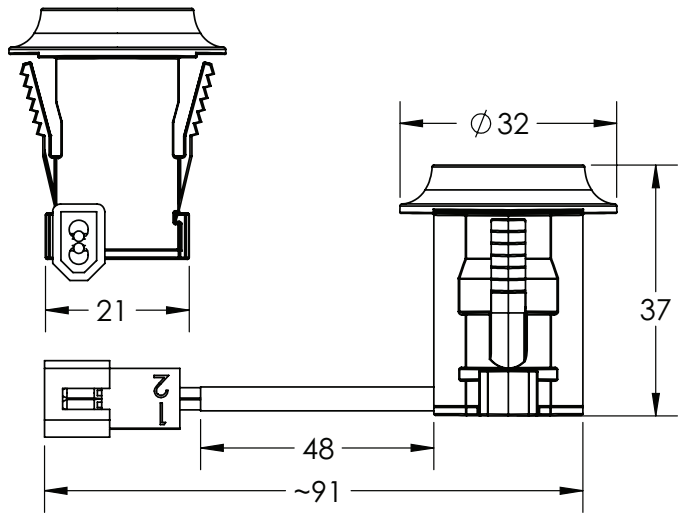
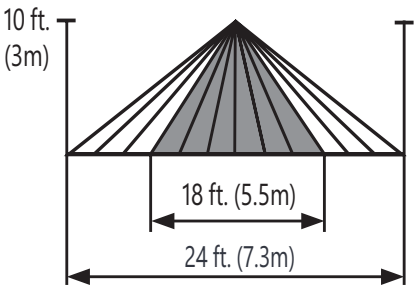
PRODUCT DIMENSIONS

DIMENSIONS SHOWN IN MM



SPECIFICATIONS

Sensor Type	Occupancy, photosensor
Dimensions	1.25 x 1.25 x 1.45 in. (32 mm x 32 mm x 37 mm)
Weight	14.5 grams
Voltage	9.5-22.5VDC, Class 2 supply source capable of no greater than 15VA power
Current Consumption	30mA
Operating Ambient Temperature Range	0-60°C (indoor)
Plenum Rating	Suitable for plenum use
Status Indicator	LED pattern indicates network join status
Connections	See connection diagram on the next page
Mounting Hole	Installs within a 22mm (0.87") hole
Recommended Mounting Height	9-11 ft
Coverage Pattern Ratio	1:1.20 at 10 ft. mounting height: coverage radius
Warranty	5 year limited warranty



Coverage Pattern

Dark: Minor motion

White: Major motion

PIR senosr coverage tested as defined in NEMA WD7-2011

ADDITIONAL INFORMATION

Purpose of the Control	Operating Control
Construction of Control	Independently Mounted
Type of Action	Type 1
Pollution Degree	PD2
Function/Software Class and Structure	Class A
Rated Impulse Voltage	330V

Note: Any external cables connected to devices not to exceed 3 meters length. Product is not to be installed in any enclosure, cavity, junction box, etc. which also houses line voltage or non-SELV wiring.

POWER SUPPLY COMPATIBILITY LIST

Manufacturer	Manufacturer P/N	Input Voltage (VAC)	Output Voltage (VDC)	NXC-WIZ20
Current	GED22MCRP500	120 – 277 VAC	DA OUTPUT/16 VDC	Compatible
Current	GED90MCRP1750	120 – 277 VAC	DA OUTPUT/16 VDC	Compatible
Current	GEMOD/DB010	120 – 277 VAC	DA OUTPUT/16 VDC	Compatible

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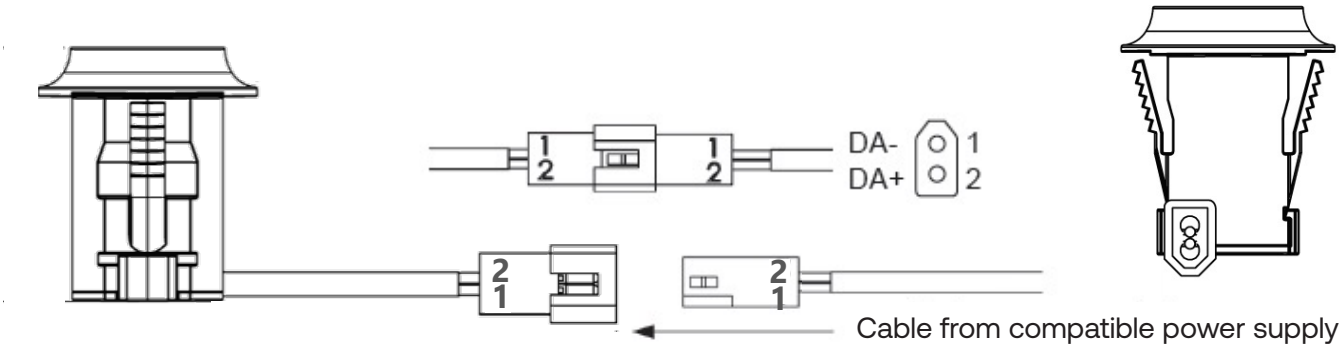
WIRING DIAGRAM

Connect the NXC-WIZ20 Sensor to a compatible power supply using the provided connector. While the sensor is designed to withstand Electrostatic Discharge (ESD), it is always advisable to touch a grounded metal object before handling the sensor, particularly in an operating fixture.



Color	Style	Description
Green	Single Flash	Occupancy Detected. This feature can be optionally disabled if not desired.
Green/Red	Solid On	Device is initializing. Occurs for a short period after power has been applied during boot up.
Green/Red	Flashing	Device is “identifying” itself in response to a network command to do so.
Red	Rapid Flashing	Searching for a network. Also used when receiving firmware updates from the NX Connect app.
Red	Slow Flashing	Has joined a network but was not commissioned. Add the device to a zone to resolve.
Red	Solid On	An error condition was detected. Power cycling or resetting the device is recommended.

ORDERING INFORMATION

NXC-WIZ20 Integrated in-fixture sensor provides occupancy sensing and daylighting. Current fixtures can be ordered with “NXC” catalog logic for NX Connect.

Product Description	Model Number
NX Wireless Integrated Sensor	NXC-WIZ20

PRODUCT CERTIFICATIONS

c UL us
LISTED
Sensing Control
E486320

Contains
FCC ID: 2AS3F-A1028250
IC: 25008-A1028250

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WARRANTY

Current offers a 5 year limited Warranty across the NX Connect Lighting Controls Hardware Portfolio.

NX Connect wireless lighting controls sensors are available integrated and preinstalled in many Current lighting fixtures. Any 0-10V lighting fixture can be enabled with NX Connect controls with a NX Connect LCA kit or a NXC-WA200 Series room controller.

For a complete list of integrated sensors, visit **currentlighting.com.**

Name	Description	Minimum Value	Maximum Value	Default Profile Value
Dimming				
Task Level	The output power level in Task state – in percentage of the full power.	0%	100%	100%
Background Level	The output power level in Background state – in percentage of the full power.	0%	100%	50%
Partial Off/Stand-by	The output power level in Standby state – in percentage of the full power.	0%	100%	0%
Occupancy				
Hold Time	The time (measured in minutes) that occupancy must NOT be detected for a fixture to transition from Task state back to Background state.	0 min	60 min	10 min
Group Hold Time	The time (measured in minutes) that any fixture in a room or zone of fixtures must NOT detect occupancy for the entire of fixtures to transition from Background state to Standby state.	0 min	60 min	10 min
Strategy	This parameter switches between Occupancy and Vacancy modes	Auto ON/OFF	Man On/Auto OFF	Auto ON/OFF
Dwell Time	The time (measured in sec) that occupancy must be detected for a fixture to transition from Background state to Task state.	0 sec	300 sec	5 sec
Occupancy Sensitivity	The sensitivity of the motion sensor.	1	5	5
Occupancy Indicator	This parameter switches between Indicator OFF Indicator ON mode.	OFF	ON	ON
Daylight Harvesting				
Low Ambient Threshold	The light level above which the daylight harvesting dimming will start, given as a percentage of the fixture's own light output.	10%	800%	250%
High Ambient Output	Indicates whether the light should be turned off or remain on at its min dim output when the high ambient threshold is exceeded.	OFF	ON	OFF