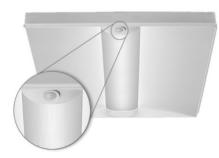






nLight® AIR rES7: Fixture embedded nLight® AIR smart sensor





Note: nLight® AIR devices are only compatible with other nLight AIR

nLight® AIR Platform

enabled devices; and is not cross compatible with other nLight product lines at this time.

# ORDERING INFORMATION

# nLight AIR occupancy and daylight sensor; connects with RPODB to control up to 128 fixtures in a network

RES7 1 of 3

# **OVERVIEW**

The nLight® AIR rES7 sensor is a in-fixture, low voltage, digital sensor providing embedded wireless lighting control, digital dimming, occupancy detection and daylight harvesting capabilities. The rES7 is designed for mounting heights of up to 20 ft in indoor luminaries. The rES7 sensor provides Passive Infrared (PIR) occupancy detection over a 15-20 ft (4.57-6.10 m) radial coverage pattern and photocell light level detection in one compact low profile design. The rES7 sensor is ideal for occupancy and daylighting control in suspended or recessed luminaries and comes factory integrated into Lithonia Lighting BLT, VTL, WL, and Peerless Bruno Fixtures.

# **FEATURES**

- 100% Digital PIR detection
- Occupancy and photocell all in one, integrated from the factory... No onsite wiring required.
- Standards-based 900Mhz and Bluetooth® radios with advanced security
- 900MHz used for lighting control functions, and Bluetooth for configuration and calibration via CLAIRITY Mobile App
- No external antenna required

#### Warranty

Series RES7N

RES7Z

Five-year limited warranty. Complete warranty terms located at: <a href="https://www.acuitybrands.com/CustomerResources/Terms">www.acuitybrands.com/CustomerResources/Terms</a> and conditions.aspx

**Note**: Actual performance may differ as a result of end-user environment and application. Specifications subject to change without notice.

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nLight AIR occupancy and daylight sensor; connects with RPODBZ to control up to 50 fixtures in a standalone zone

Limoneros # 1, desp. 1, Col. Valle de San Mateo, Naucalpan, EdoMex. Tel's: 52+55+5363-4861 / 8381 <a href="mailto:www.lyailuminacion.com.mx">www.lyailuminacion.com.mx</a> Email: <a href="mailto:lya@lyailuminacion.com.mx">lya@lyailuminacion.com.mx</a>





#### **SPECIFICATIONS**

Dimensions 1.180" h x 2.617" w x 1.335" d

Weight 1.25 oz Trim Color White

Enclosure Material Poly-Carbonate/ABS

Max Humidity 0-95% non-condensing

Operating Temperature -40°C to 60°C

IP Rating IP50 - Dust protected Mounting Fixture-Mounted

Radio Frequency Dual Radio: 900MHz & 2.4GHz
RF Transmit Power 900Mhz: +20dBm; 2.4GHz: Variable
Wireless Standard 900MHz: IEEE 802.15.4-based

2.4GHz: Version 4.0+ of the Bluetooth specification

Wireless Range 900MHz: Up to 1000 ft. (~304m) in free space/ line of sight

600 ft to 800 ft through obstruction depending on building construction

2.4Ghz: up to 60 ft. (~18m) in free space/ line of sight

Security Application Data Encryption: AES-128 bit

Mutual Entity Authentication Message Confidentiality

Message Authentication and Replay Prevention

Limited Anonymity

Regulatory Compliance Wireless: FCC, IC,

Safety: UL Listed; RoHS Compliant

Compatible Acuity Fixtures Lithonia Lighting VTL, BLT, WL, Peerless Bruno

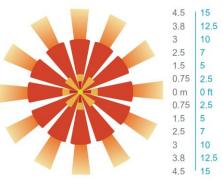
Programming Tool CLAIRITY Mobile App

#### **COVERAGE PATTERN**

#### Micro 360° Lens

- At the 7.5 ft (2.29 m) hanging height of a typical pendant mount fixture the sensor provides 10 ft (3.05 m) radial detection of small motion. At a 9 ft (2.74 m) hanging height the radius is 12 ft (3.66 m) for small motion.
- Adequate for walking motion detection from mounting heights between 7.5 ft (2.29 m) and 20 ft (6.10 m).
- Initial detection will occur earlier when walking across sensor's field of view than when walking directly at sensor
- Initial detection of walking motion into long coverage segment will occur at distances of 2x the mounting height up to 15 ft (4.57 m) and 1.75x up to 20 ft (6.10 m). Lens assembly rotates 15° to enable adjustment in order to line up long segments.

# 7.5 FT Mounting Height



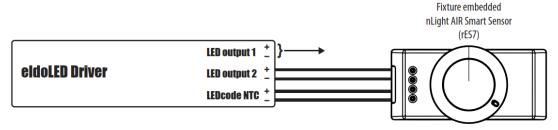
lens rotates 15 deg to enable adjustment.

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# **WIRING DIAGRAM**



Note:

On-site wiring NOT required

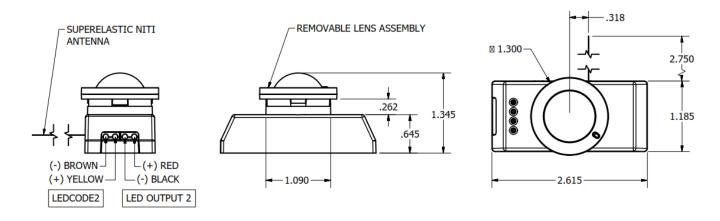
Programmable Output Channel required

# **COMPATIBLE FIXTURES**

# Factory integrated rES7 Occupancy and Daylight Sensor



# **DIMENSIONS**





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