





Specification Sheet

LCN4120/05, LCN4120/15, LCN4150/05, LCN4150/15 Outdoor Parking Sensor

The Outdoor Parking Sensor is part of a luminaire-based lighting control system.

LCN41x0/x5

Features

- Interact ready
- PIR motion sensor for occupancy detection
- Light sensor for closed loop daylight regulation
- Infrared receiver module for IR remote control
- Zigbee and Bluetooth Low Energy (BLE) transceiver
- Luminaire integration with Zhaga Book 18 connector

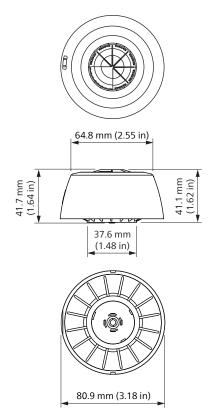
Benefits

- Wireless communication, no extra wiring required
- Easy grouping of luminaires with sensor during setup process
- Supports standalone mode and connection to gateway for energy reporting
- Two lens options for installation heights up to 15 ft (4.6 m) and up to 40 ft (12.2 m)
- Unique 32-bit sensor identifier and encrypted wireless communication prevents interference with other devices

Applications

Typical application areas are outdoor parking lots and covered parking garages. The LCN4120/x5 sensor is suited for mounting heights from 2.1 to 4.6 m (7 to 15 ft), LCN4150/x5 is suited for mounting heights from 4.6 to 12.2 m (15 to 40 ft). Sensitivity patterns change according to the mounting height.

Dimensional drawing



LED indicator

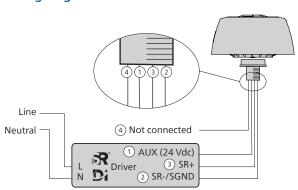
The sensor features two integrated LEDs (red and yellow) to indicate the functioning of the PIR sensor. The LED light guide is integrated in the service button. The LED color definition is at below.

Steady red	presence/movement detected
Steady yellow	Sensor is working but no presence/ movement detected
No color	Malfunction or LED indication is disabled by configuration settings

Connector

The sensor connects to a Zhaga Book 18 4-pin twist and lock socket.

Wiring diagram



PIR occupancy detection area

The images below shows the occupancy coverage for the low-bay sensor and the high-bay senor based on the industry NEMA test.



Note

As PIR based sensing works on the difference between subject's temperature and ambient temperature, the occupancy detection could vary due to clothing and size of the subject. The sensor detection area will decrease when the difference in subject's temperature and ambient temperature is approximately 5 °C or less.

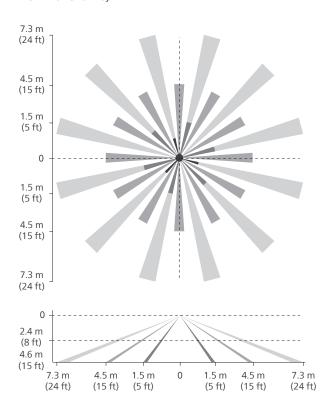


Note

The beam pattern shown is intended solely as a general guide and is not to scale. Sensing capabilities and coverage area depend on many factors including the size, speed and direction of travel of persons and vehicles, sensor mounting height, environmental and site conditions, etc.

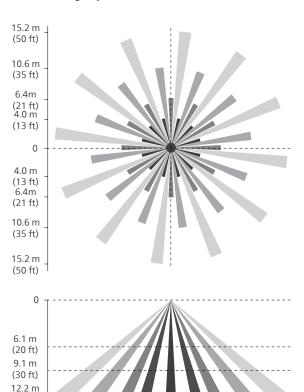


LCN4120/x5 LowBay





LCN4150/x5 HighBay



15.2 m

10.6 m 6.4 m4.0 m (35 ft) (21 ft)(13 ft)

0

(40 ft)

4.0 m 6.4 m 10.6 m 15.2 m

(13 ft)(21 ft) (35 ft) (50 ft)

Specifications

Physical				
Dimensions (h x w)	41.7 x 80.9 mm (1.64 x 3.18 in			
Weight	0.09 kg			
Protection	IP66			
Installation height				
LCN4120/x5	2.1 to 4.6 m (7 to 15 ft)			
LCN4150/x5	4.6 to 12.2 m (15 to 40 ft)			
Environment	•			
Operating Temperature	-40 to 55 °C (-40 to 131 °F)			
Storage Temperature	-40 to 70 °C (-40 to 158 °F)			
Humidity Operating	20 to 85% (non-condensing)			
Humidity Storage	10 to 95% (non-condensing)			
Wireless Communication	on			
BLE	protocol 4.2 (5.1 compliant)			
BLE range smartphone to sensor	15 m (49 ft)			
Zigbee	light link protocol (IEEE 802.15.4)			
Zigbee range sensor to sensor	49 m (160 ft)			
Electrical	į			
Supply Voltage	9 to 24 Vdc			
Power Consumption operational	Typ. 4.5 mA at 24 V (108 mW)			
Classification	Designed to be built into class I or class II luminaire, plenum rated			
Reliability				
Calculated failure rate at nominal supply voltage and 55 °C	300 ppm/1000 h			
Estimated lifetime	100 k hours at 55 °C ambient			

Compliances and approvals			
EMC emission	FCC Part 15 - Subpart B ANSI C63.4-2014		
EMC immunity	FCC Part 15 - Subpart B		
CE standards	Radio equipment directive 2014/53/EU: • EN 61347-1:2015 + A1:2021 • EN 61347-2-11:2001 + A1:2019 • ETSI EN 308328:2019 V2.2.2 • ETSI EN 301489-1:2019 V2.2.3 • ETSI EN 301489-17:2020 V3.2.4 • EN IEC 55015:2019 + A11:2020 • EN 61547:2009 • EN 62311:2020		
	Restriction of the use of certain Hazardous Substances in electrical and electronic equipment Directive (RoHS), 2011/65/EU: • EN IEC 63000:2018		
UKCA standards	Radio Equipment Regulations 2017: • EN 61347-1:2015 + A1:2021 • EN 61347-2-11:2001 + A1:2019 • ETSI EN 308328:2019 V2.2.2 • ETSI EN 301489-1:2019 V2.2.3 • ETSI EN 301489-17:2020 V3.2.4 • EN IEC 55015:2019 + A11:2020 • EN 61547:2009 • EN 62311:2020		
	Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012: • EN IEC 63000:2018		



temperature at full load

Ordering Data

For North America

Туре	MOQ	Ordering number
LCN4120/05 WH IA Outdoor WL Sensor, low install height, white	1	9137 010 63113
LCN4120/15 BL IA Outdoor WL Sensor, low install height, black	1	9137 010 63313
LCN4150/05 WH IA Outdoor WL Sensor, high install height, white	1	9137 010 63213
LCN4150/15 BL IA Outdoor WL Sensor, high install height, black	1	9137 010 63413

For the rest of the world/Europe

Туре	MOQ	Ordering number
LCN4120/05 WH IA Outdoor WL Sensor, low install height, white	1	9137 010 63103
LCN4120/15 BL IA Outdoor WL Sensor, low install height, black	1	9137 010 63303
LCN4150/05 WH IA Outdoor WL Sensor, high install height, white	1	9137 010 63203
LCN4150/15 BL IA Outdoor WL Sensor, high install height, black	1	9137 010 63403

