

Comlight Eagle Eye Zhaga datasheet

Comlight Eagle Eye Zhaga is a motion detection light controller for luminaires complying with Zhaga Book 18 specification and SR (System Ready) concept. The sensor is designed according to Dali-2 (IEC62386), part 303 Occupancy sensor as a D4i Type B device, in addition to taking role as a Type A controller device if no other controller is present.

The sensor detects pedestrians, cyclists and vehicles using an advanced doppler radar motion detector. Commissioned in a network of several sensor, the system provides light-ahead functionality, lighting up the path, street or road ahead. The product has an adjustable sensor housing, making it possible to fine-tune the detection area for every use-case.

Technical data

Electrical

- Supply voltage: 24 VDC from LED driver
- Electrical class III (SELV)
- Power consumption standard version: < 1 W

RF Communication

- Frequency: 868.35 MHz
- Output Power: ≤16 dBm (39.81 mW)

K-Band Doppler Radar (movement detector)

- Frequency: 24.050-24.250 GHz
- Output Power: ≤12 dBm (15.85 mW)

Mechanical

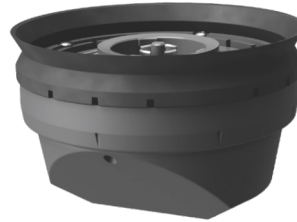
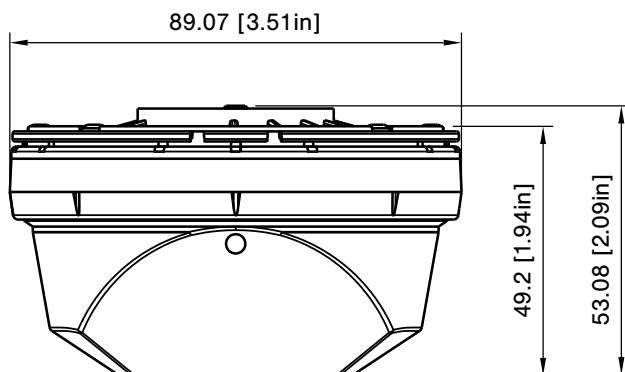
- Temperature range: -30 to +60°C
- Protection Type: IP66
- Housing Material: Luran (PC and ASA blend)
- Color: RAL7016 Anthracite grey
- Dimensions: 89 x 89 x 53 (plus rubber skirt)
- Weight: 125 g

Gateway Options

- A: (LTE Cat-1, UMTS/HSPA, GSM / GPRS / EDGE)
- B: (LTE Cat-M1, NB-IoT, GSM / GPRS / EDGE)

System Requirements

- Luminaire must support instant dimming and light level commands must be able to overrule any pre-programmed scheduled dimming profiles.
- Comlight Zhaga can only be mounted on luminaires with downward Zhaga connector, and where connector is mounted on the luminaire according to Zhaga Book 18 recommendations.



Standards

Product is labelled with CE mark and has been tested according to the following standards:

RoHS & WEEE

Directive 2011/65/EU
Directive 2012/19/EU
Directive 2009/125/EC

Safety

IEC 61347-2-11 (First Edition):2001 Used in conjunction with IEC 61347-1:2015 (Third Edition) Luminaires - Part 1: General requirements and tests

EMC

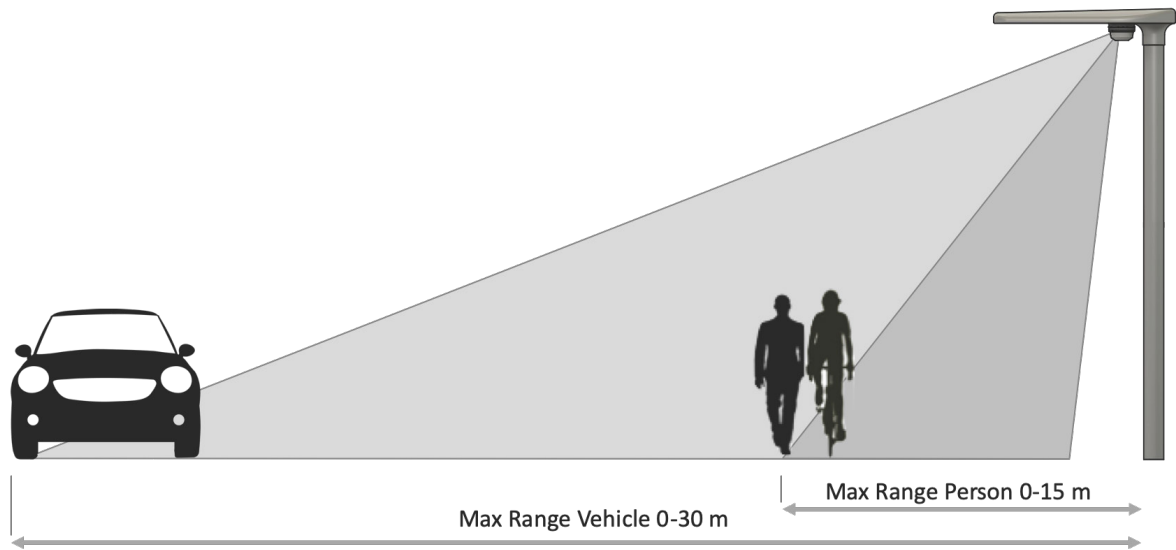
Final draft ETSI EN 301 489-01:V2.2.2
ETSI EN 301 489-03:V2.1.1
ETSI EN 301 489-51:V2.1.1
ETSI EN 301 489-52:V1.1.0
ETSI EN 300 220-1:V3.1.1
ETSI EN 300 220-2:V3.2.1 (Transmitter Spurious Emissions)
ETSI EN 301 908-01:V11.1.1 (Transmitter Spurious Emissions)
ETSI EN 301 908-13:V11.1.2 (Transmitter Spurious Emissions)
ETSI EN 300 440:V2.1.1 (Output power and Spurious Emissions)

Radio

ETSI EN 300 220-1 V3.1.1 (2017-02)
ETSI EN 300 220-2 V3.1.1 (2017-02)

Comlight radar detectors are defined as Short Range Devices according to CEPT/ECC ERC recommendation 70-03, edition of February 2014.

Detection capabilities



Horizontal range in meters at 45° radar angle						
Mounting height	High sensitivity (default)		Medium sensitivity		Low sensitivity	
	Range Person	Range Vehicle	Range Person	Range Vehicle	Range Person	Range Vehicle
4 m	6 m	8 m	6 m	8 m	6 m	7 m
6 m	7 m	12 m	6 m	10 m	6 m	9 m
8 m	4 m	16 m	4 m	13 m	2 m	12 m
10 m		20 m		14 m		13 m

Vegetation in front of the sensor should be avoided to minimize risk of false detections.

