

Comlight Eagle Eye 3.0 datasheet

Eagle Eye is an intelligent Motion Sensing Street Lighting control system based on radar detection. The system automatically activates the lights as soon as there is movement in the area, providing full light ahead and dims down for energy saving when no-one is around.

The Comlight system use radio communication to link light controllers together in an intelligent and autonomous system that provide pedestrians, cyclists and vehicles full light when and where needed. The system saves energy, saves the environment while providing safe roads and outdoor areas.

Technical data

Electrical

- Supply Voltage 100-240 VAC, 47-63Hz
- Power Consumption 1.5W (peak 4W with Gateway unit)
- Maximum Load 16A

Dimming Control Output

- Digital DALI
- Analog 1-10V
- Step DIM Relay Control
- Insulation Classification Basic

RF Communication

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

Motion Detection using K-Band Radar

- Frequency 24.050 - 24.250GHz
- Output Power ≤12 dBm (15.85 mW)
- Sensor Doppler Radar (movement detector)

Mechanical

- Operating temp. range -30 to +55 °C
- Protection Type IP66 electronics chamber,
- Insulation Material IP44 outer connector
- Housing Material PVC, UV Resistant
- Colour Luran S KR 2867 C WU (PC and ASA) - blend
- Dimensions RAL7001 Silver Gray
- Weight Height 291mm, Width 100mm, Depth 120mm
680g

System Options

- A: Gateway alt. 1 (LTE Cat-1, UMTS/HSPA, GSM/GPRS/EDGE)
- B: Gateway alt. 2 (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.



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 EC 61347-1:2015 (Third Edition)

EMC

ETSI EN 301 489-01:V2.1.1, Final draft ETSI EN 301 489-03:V2.1.1 Draft ETSI EN 301 489-51:V2.1.0 ETSI EN 301 908-01:V11.1.1, ETSI EN 301 908-13:V11.1.2 ETSI EN 300 440:V2.1.1

Radio

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

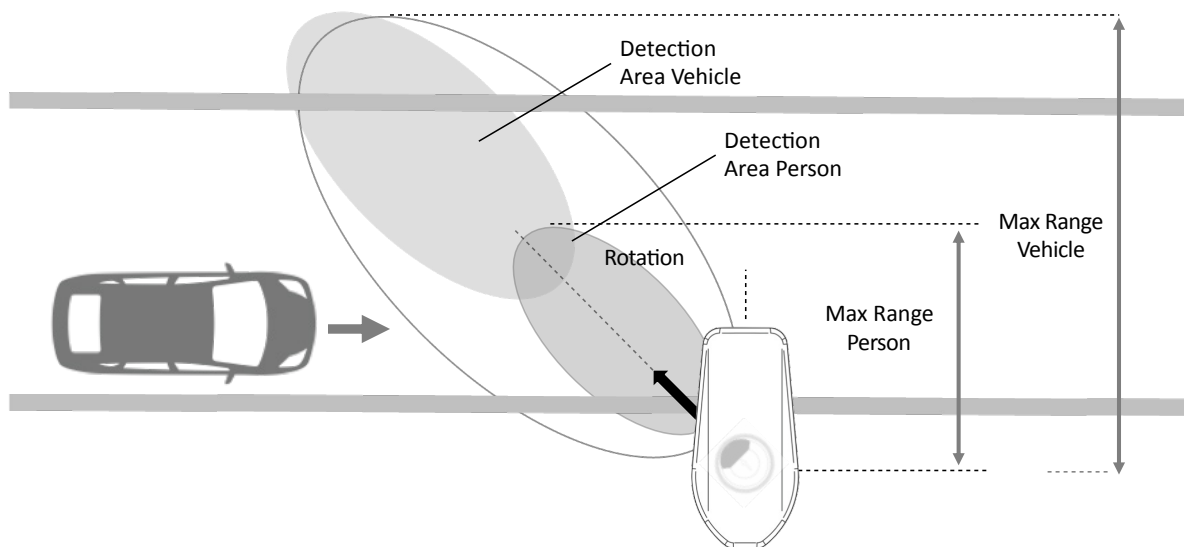
Comlight radar detectors are defined as Short Range Devices according to CEPT/ECC ERC recommendation 70-03, edition of February 2014.

Cable Connection

Cable Connection: < 4-wire, Ø6 - 12mm, 1.0 - 2.5 mm² wire

Wire numbering / color								
Controls		Step	AC-EM	AC-L1	AC-N	-DALI -(1-10V)	+DALI	+(1-10V)
4-wire cable	Step	3/BK		1/BN	2/BU			
	DALI			1/BN	2/BU	3/GY	4/BK	
	1-10V			1/BN	2/BU	3/GY		4/BK

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
4m	6m	8m	6m	8m	6m	7m
6m	7m	12 m	6m	10 m	6m	9m
8m	4m	16 m	4m	13 m	2m	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.