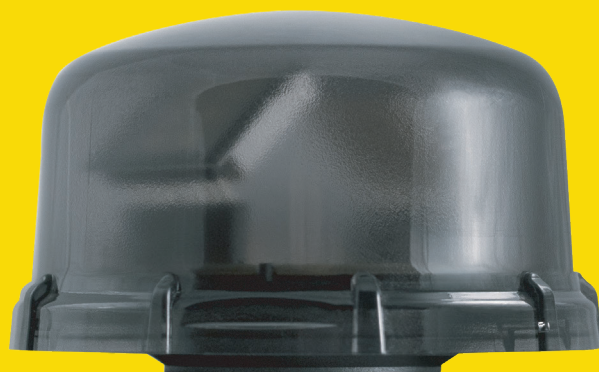


CNODE Zhaga IoT

CNODE Zhaga IoT is the Worlds smartest wireless street light controller equipped with the latest industry standards and provides LTE Cat- 1, and GSM worldwide support. With open payload data and IOT industry-standard MQTT, it ensures easy integration into a wide range of smart city platforms.

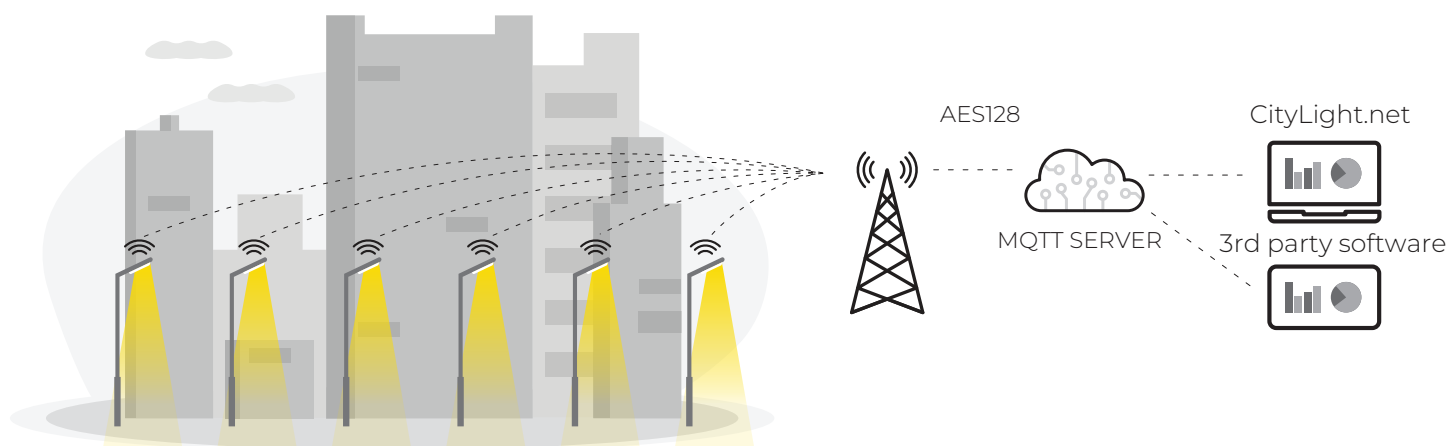


- ✓ NO GATEWAYS
- ✓ ZHAGA BOOK 18
- ✓ METERING & DIAGNOSTIC
- ✓ FLAT RATE DATA PLAN UP TO 10 YEARS
- ✓ SENSOR DATA
- ✓ WORLD WIDE COVERAGE
- ✓ ADAPTIVE LIGHTING
- ✓ MQTT



HOW IT WORKS

Works with standard 3GPP 2G/LTE cellular networks.
No gateways required – automatic fallback to 2G when needed.



SPECIFICATION

PRODUCT CODE

HLCCZIOT
HLCCZIOT-I
HLCCZIOT-I-G
HLCCZIOT-I-R-G
HLCCZIOT-R
HLCCZIOT-R-G
HLCCZIOT-G

I- Inclination sensor
R- Radar/Motion sensor
G- GPS

DIMENSIONS AND WEIGHT

Diameter: 80 mm
Height: 50 mm
Weight: 88 g

ENCLOSURE

IP class: IP66
Impact resistance: IK08
UV resistant
Material: polycarbonate
Rubber Isolation class: Class II
Colour: Black (RAL9004)

MOUNTING

Lamp: ZHAGA Book-18 standard receptacle

COMMUNICATION

4G/LTE Cat-1
Frequency Bands:
LTE-FDD: B1/B3/B7/B8/B20/B28
GSM: B3/B8
Frequency(Secondary): 2.4 GHz ISM band operation

POWER SUPPLY

Voltage: 12-24 VDC
Backup power supply: 0,5F (Super capacitor)
Power consumption: <1,5W

ENVIRONMENTAL REQUIREMENTS

Operating temperature: from -25 to +65 C
Storage temperature: from -25 to +65 C
Relative humidity: <95% non-condensing

INTERFACES

DALI Interface
Version: 2/ D4i/ SR
Max current: 50 mA
Supports up to 4 D4i or 4 Philips SR drivers.
DALI BUS Power/ Master / Main voltage shall not exceed 1 driver.
Additionally supports 4 DALI 1.0 devices
Fade time: 0-90sec.

Dali DT8:
Colour temperature (CW/WW)
RGB / RGBWAF
X/Y

INCLINATION SENSOR (OPTIONAL)

Axis Count: 3-Axis (X,Y,Z)
Resolution: 8 bit

MICROWAVE RADAR (OPTIONAL)

Frequency: 24 GHz
Detection distance: 15m (human) / 30m (cars)
Beam aperture: 80° / 34°

FEATURES

Real time clock with backup power supply
Built-in memory
Astronomical clock for dimming profiles
Stand alone operation

GPS (Optional)

167 Channel GNSS C/A Code
GPS / QZSS / SBAS / BDS
Accuracy 2.5m CEP
Tracking sensitivity

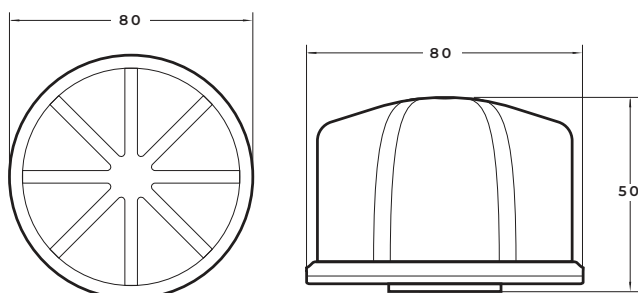
STANDARDS

Directive 2014/35/EU Low Voltage Directive (LVD)
EN 62311: 2008
EN 61347-1:2015 (IEC 61347-1)
EN 61347-2-11
EN 62368-1:2014/AC:2015
EN 61984:2009
EN 60529
EN 62262

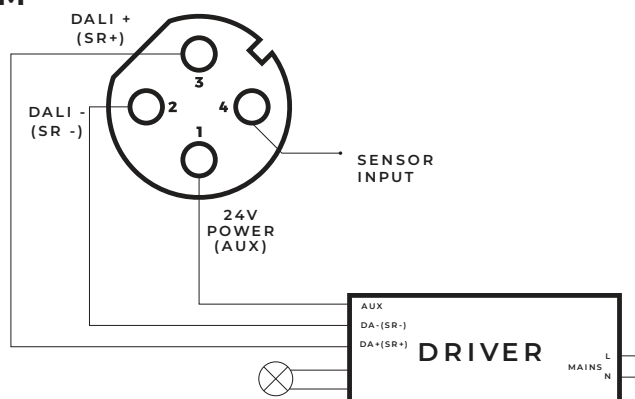
Directive 2014/30/EU Electromagnetic compatibility (EMC)
EN 301 489-1 V2.1.1
EN 61000-3-2:2014
EN 61000-3-3:2013
EN 301 489-3 V2.1.1
EN 301-489-52 V1.1.0
EN 55015:2013+A1:2015
EN 61547:2009

Directive 2014/53/EU Radio Equipment (RED)
EN 300 440 V2.1.1
EN 301 511 V12.5.1
EN 300 328 V2.1.1
EN 300 220-2 V3.1.1
Directive 2011/65/EU RoHS directive
Directive 2012/19/EU WEEE directive

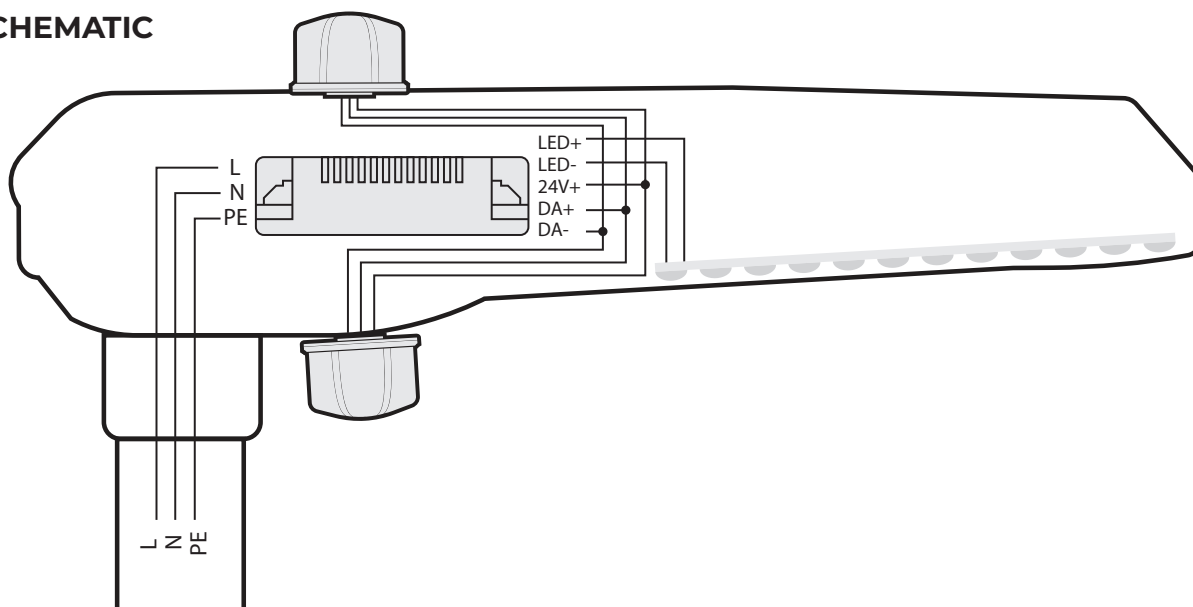
DIMENSIONS



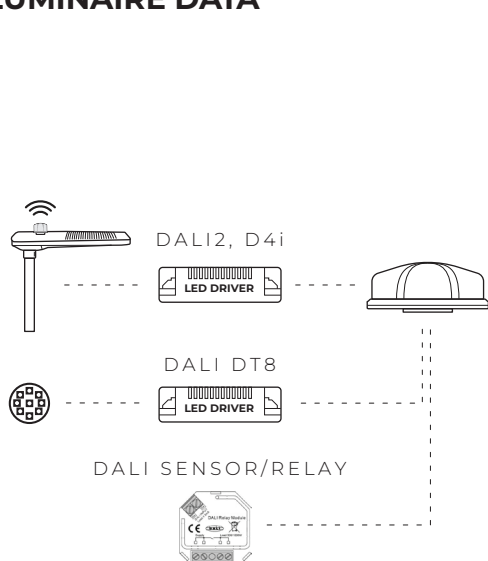
WIRING DIAGRAM



SCHEMATIC



LUMINAIRE DATA



DATA:

- Dimming level/status (%)
- Mains Voltage (V)
- Mains Current (mA)
- Power (W)
- LED voltage (V)
- LED current (mA)
- Driver working hours (h)
- Day Energy Consumption
- Active (Wh)
- Total consumption (kWh)
- Digital count (No.)
- Day Sensor worktime (min)
- Day Sensor worktime (min)
- Fade time

ALERTS:

- Power failure
- Power level below set threshold
- Luminaire Inclined failure
- Luminaire working hours overreached
- Dimming profile difference between node and driver.

CONTROL:

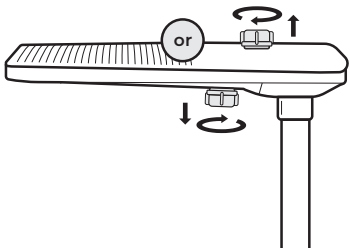
- DALI2
- Dimming level 0-100%
- Dimming step: 1%

- Dali DT8:
- Colour
- temperature(CW/WW)
- RGB / RGBWAF
- X/Y

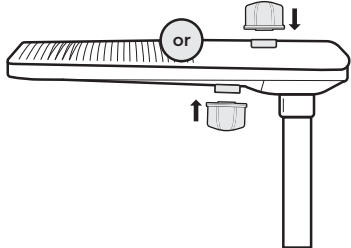
INSTALLATION INSTRUCTIONS

FIELD INSTALLATION

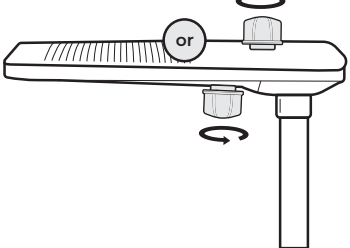
1 Remove protective cover



2



3



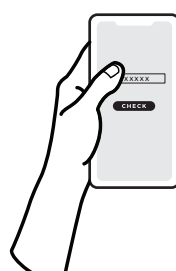
4 Download APP




Available on the
Google Play

Download on the
App Store

5



ID: XXXXX

CHECK

6



Send collected data

7



Enter e-mail and click send.

email@email.com

SEND

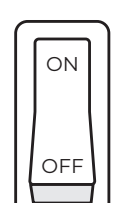
8



citylight.net

Upload device ID numbers from file

9

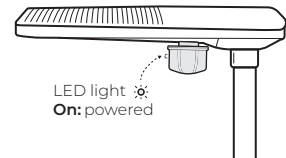


ON

OFF

Power ON

10



LED light On: powered