

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.

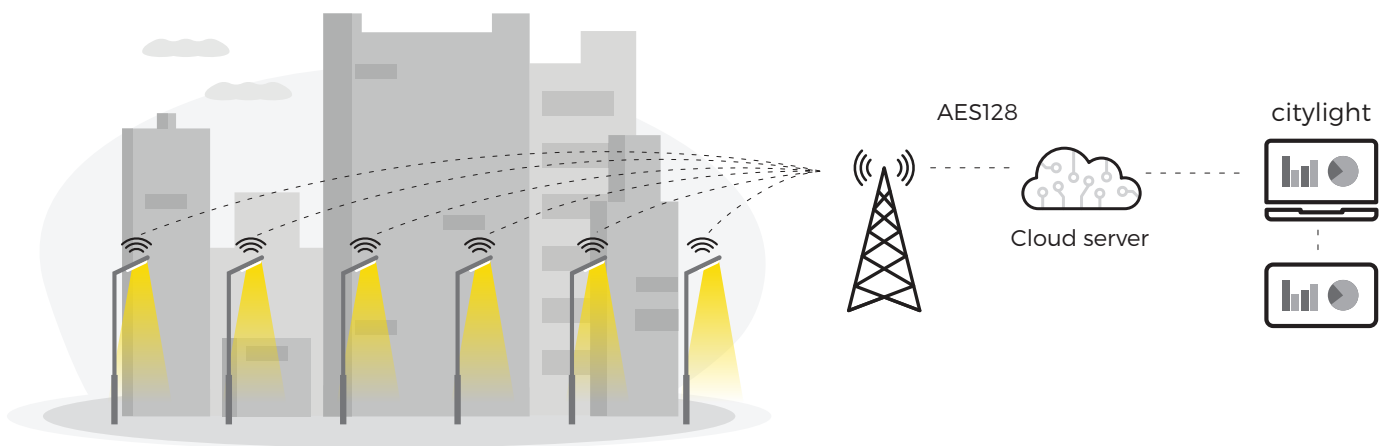


- ✓ NO GATEWAYS
- ✓ ZHAGA BOOK 18
- ✓ METERING & DIAGNOSTIC
- ✓ FLAT RATE DATA PLAN UP TO 10 YEARS
- ✓ SENSOR DATA
- ✓ WORLD WIDE COVERAGE
- ✓ ADAPTIVE LIGHTING



HOW IT WORKS

Works with standard 3 GPP cellular network 2G/LTE, no gateways, fallback to 2G/LTE suitable.



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: IK09
 UV resistant
 Material: polycarbonate
 Rubber Isolation class: Class II

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 -40 to +75 C
 Storage temperature: from -40 to +75 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

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

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 Direc -
 tive (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

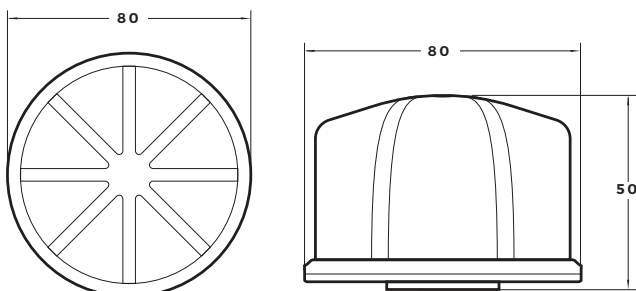
Directive 2014/30/EU Electromagnetic
 compatibility (EMC)

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

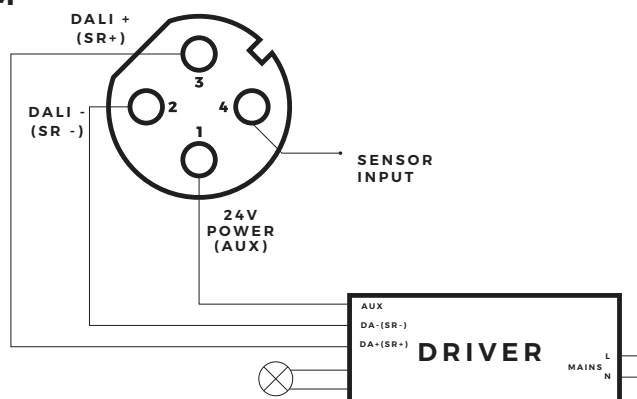
Directive 2014/53/EU Radio Equipment
 (RED)

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

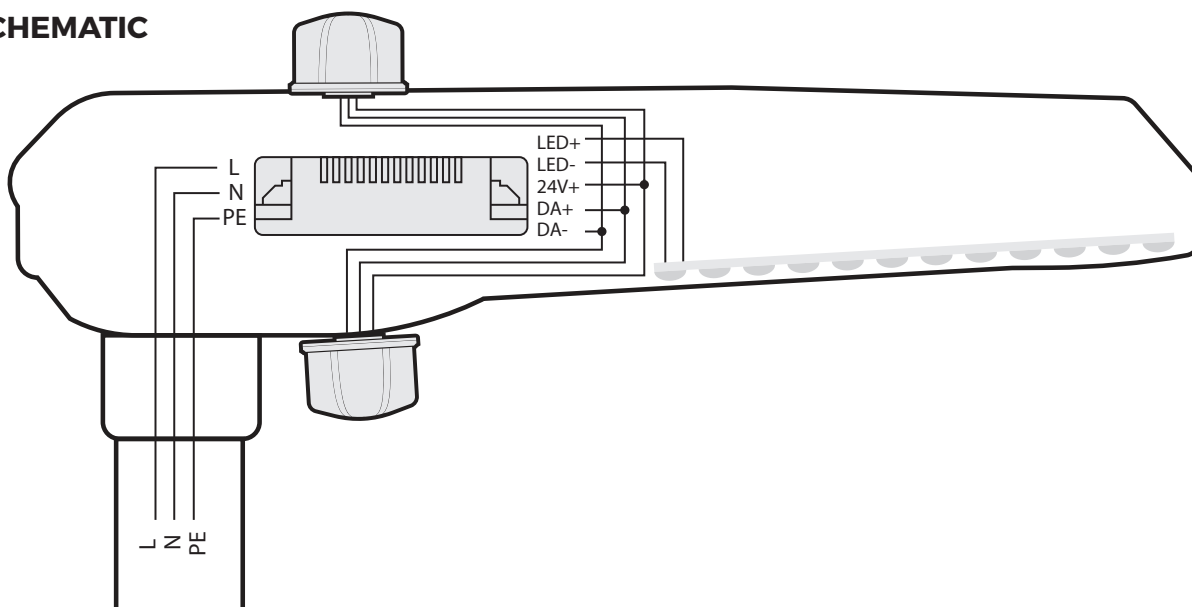
DIMENTIONS



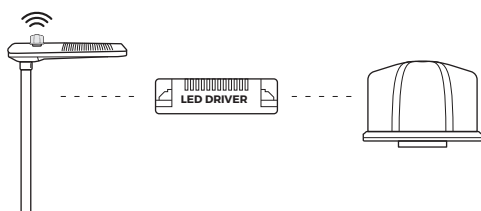
WIRING DIAGRAM



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)
- Inclination X/Y angle (°)

ALERTS:

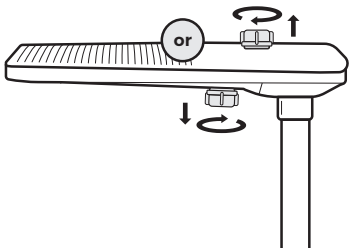
- Power failure
- Power level below set threshold
- Luminaire Inclined failure
- Luminaire working hours overreached
- Dimming profile difference between node and driver.

INSTALLATION INSTRUCTIONS

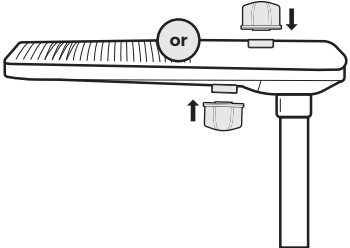
LORA MODULATION

FIELD INSTALLATION

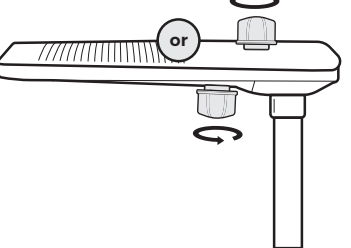
1 Remove protective cover




2



3



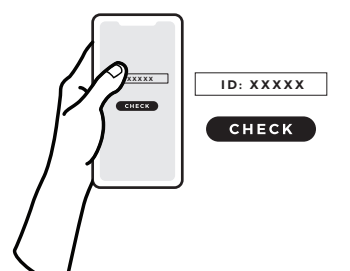
4 Download APP



Available on the **Google Play**

Download on the **App Store**

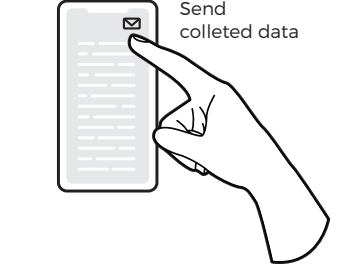
5



ID: XXXXX


CHECK

6



Send collected data

7




Enter e-mail and click send.

email@email.com

SEND

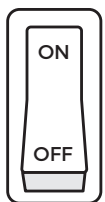
8



citylight.net

Upload device ID numbers from file

9

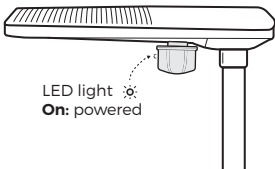


ON

OFF

Power ON

10



LED light On: powered