

CNODE

Nema RF

The CNODE NEMA RF is a powerful and versatile solution for managing outdoor lighting. Based on the ANSI C136.41 standard, it is compatible with multiple luminaire vendors and is easy to mount. A built-in energy measurement chip and support for DALI2 and 0-10V interfaces.

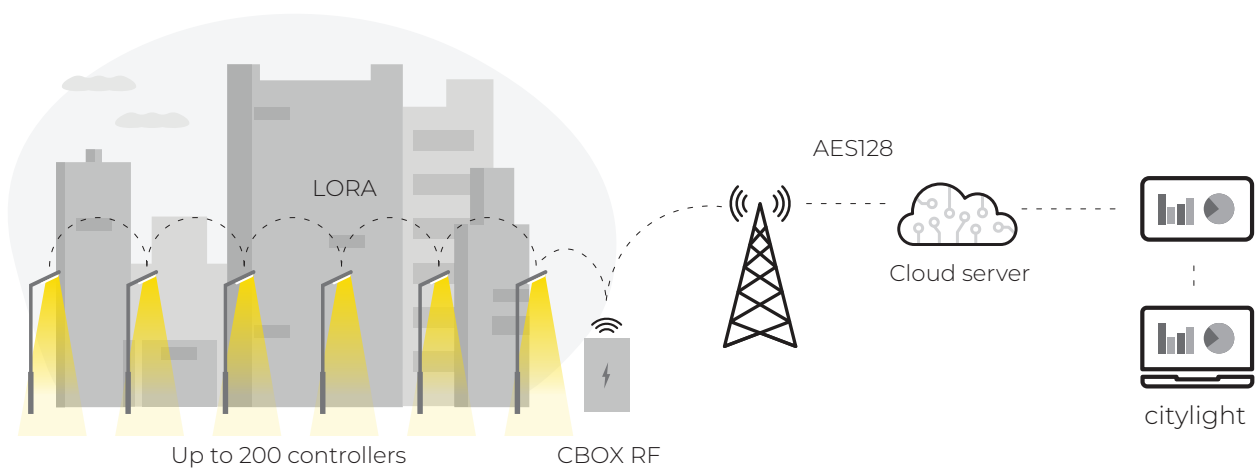


- ✓ **COMPACT DESIGN**
- ✓ **DUAL RADIO COMMUNICATION**
- ✓ **INCLINATION SENSOR**
- ✓ **IP66**
- ✓ **RF LORA MODULATION**
- ✓ **NEMA STANDARD SOCKET**



HOW IT WORKS

Long-range Lora modulation communication ensures reliable and secure communication even in dense urban conditions through CBOX RF



SPECIFICATION

PRODUCT CODE

HLCCNRF
HLCCNRF - I

I - Inclination sensor

DIMENSIONS AND WEIGHT

Diameter: 88 mm
Height: 71 mm
Weight: 220g

ENCLOSURE

IP class: IP66
Impact resistance: IK09
UV resistant
Material: polycarbonate
Rubber Isolation class: Class II

MOUNTING

3-PIN NEMA standard receptacle (ANSI 136.10)
5-PIN NEMA standard receptacle (ANSI 136.41)
7-PIN NEMA standard receptacle (ANSI 136.41) -
Optional

COMMUNICATION

LoRa modulation
High Sensitivity: -148 dBm
High Efficiency PA: +14 dBm
Frequency: 868 or 915 MHz
Data update: 300s. - 3600s.

Short range RF
Frequency : 2.4 GHz ISM band operation

POWER SUPPLY

Input voltage: 230 VAC -15% ...+15%
Frequency: 50/60 Hz
Power consumption: <2W
Electrical safety: Galvanic isolation
Surge protection: 6kV

ENVIRONMENTAL REQUIREMENTS

Operating temperature: from -40 to +75 C
Storage temperature: from -40 to +75 C
Relative humidity: <95% non-condensing

INTERFACES

DALI/0-10V

DALI Interface
Version: 2
Type: Master, Slave
Multi DALI: Up to 4 DALI devices
0-10V (Switchable)
Thyristor

INCLINATION SENSOR (OPTIONAL)

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

DIGITAL INPUT (OPTIONAL)

Type: Dry contact
Voltage: 5V

FEATURES

Real time clock with backup power supply
Real time clock NTP/WebRTC update
Built-in memory
Astronomical clock for dimming profiles
FOTA (Firmware-Over-The-Air) upgrade

MAX LOAD

Max load: 500W

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 62368-3:2020
HD 60364-4-443:2016
EN 61984:2009
EN 60529
EN 62262

Directive 2014/30/EU Electromagnetic compatibility (EMC)

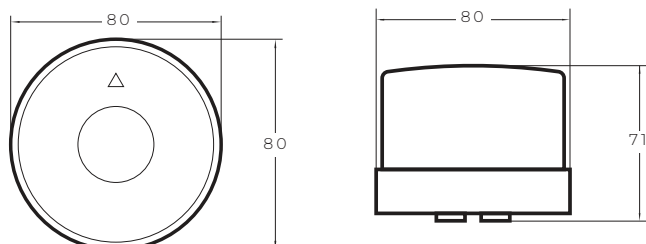
EN 301 489-1 V2.1.1
EN 61000-3-2:2014
EN 61000-3-3:2013
EN 301 489-3 V2.1.1
EN 301-489-52 V1.1.0
EN 55015:2013+A1:2015
EN 61547:2009

Directive 2014/53/EU Radio Equipment (RED)

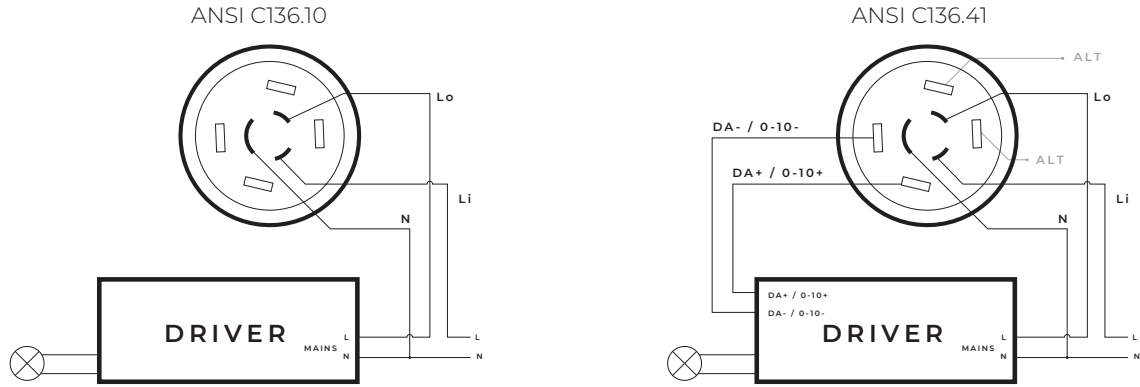
EN 300 440 V2.1.1
EN 301 511 V12.5.1
EN 300 328 V2.1.1
EN 300 220-2 V3.1.1

Directive 2011/65/EU RoHS directive
Directive 2012/19/EU WEEE directive

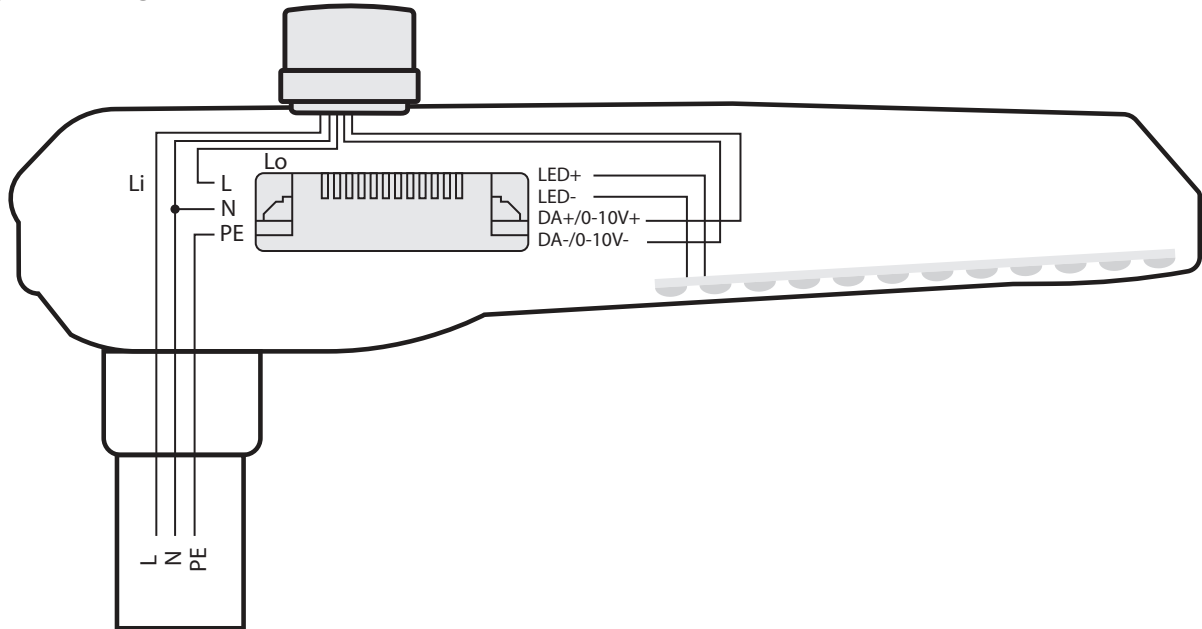
DIMENSIONS



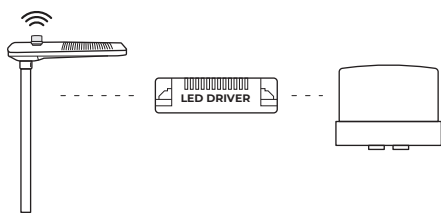
WIRING DIAGRAM



SCHEMATIC



LUMINAIRE DATA



DATA:

- Dimming level/status (%)
- Mains Voltage (V)
- Mains Current (mA)
- Power (W)
- Day Energy Consumption - Active (Wh)
- Total consumption (kWh)
- Inclination X/Y angle (°)

CONTROL:

- DALI2
- Dimming level 0-100%
- Dimming step: 1%
- 0-10V
- Dimming level 0-100%
- Dimming step: 10%

ALERTS:

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

INSTALLATION INSTRUCTIONS

FIELD INSTALLATION

