UL2023

LoRaWAN® NEMA Luminaire Controller
3rd GENERATION

The NEMA Luminaire Controller is a wireless remote control device designed for HID and LED luminaires equipped with the ANSI C136.41 NEMA compliant connector. It utilizes the DALI (D4i) or 0..10V analog interface to provide control and monitoring of the luminaire. The NEMA Luminaire Controller communicates through LoRaWAN®, NB-IoT or LTE-M network*. Open communication protocol and open source javascript decoder help to reduce system integration time.

The device offers easy plug-and-play installation, making it a convenient choice for various street lighting modules. This controller is designed for outdoor installations and is compatible with existing lighting infrastructure as well as new installations.

*different product series

Product Features

- Control up to 8 DALI drivers independently

- D4i Energy registers reported for each driver

- Versatile astronomical calendar

- Time based profiles

- Real time clock to keep time after power loss

- Automatic device time synchronisation

- Light intensity sensor

- Remote control and configuration

- Multicast control and configuration

- Configuration app LumaLink™ (iOS & Android)

Measured parameters

- Lamp / controller power

- Lamp / controller energy

- Line voltage

- Power factor

- Controller temperature

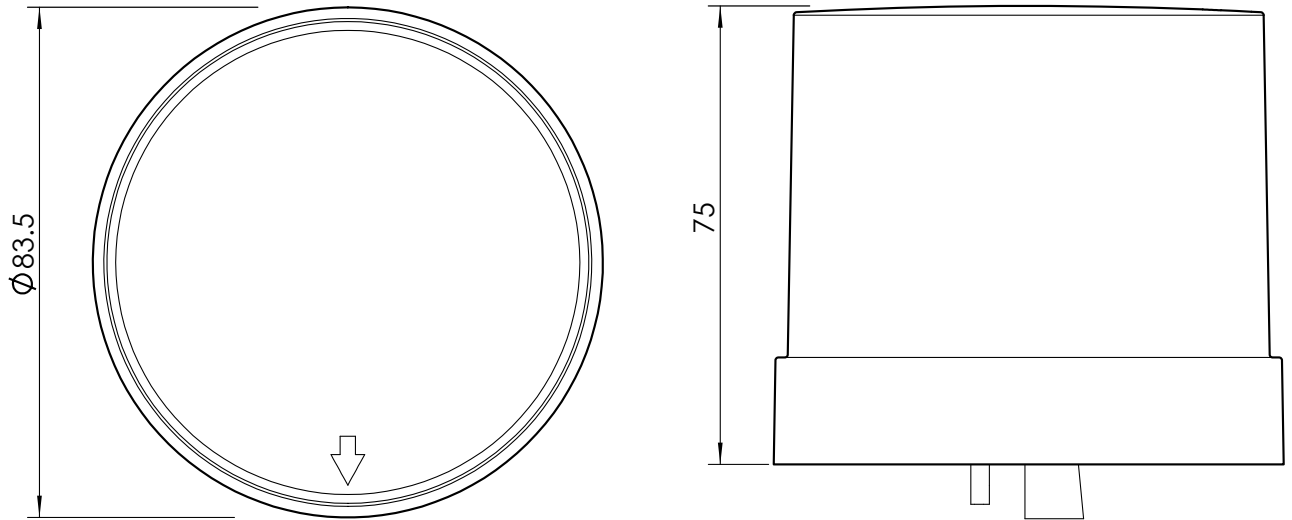- Energy consumption

- Lamp operating hours

Monitored parameters
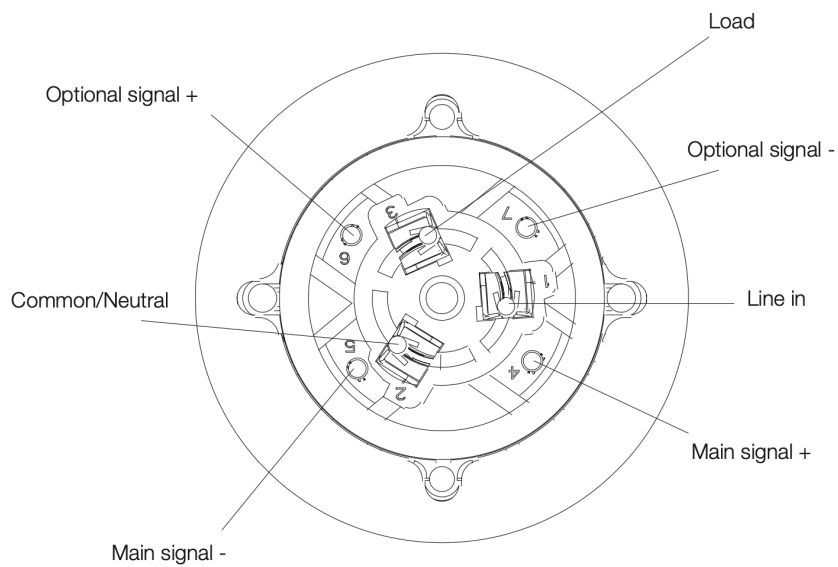
- Lamp fault

- Control gear faults

Technical Data

Supply	
Power supply	230 VAC (min 96 VAC- max 285 VAC)
Power consumption	2 W
Surge protection	4500 V
Communication	
Network interface	LoRaWAN 1.1 Class C
RF Frequency	868 MHz / 915 MHz / 923 MHz
Rx Sensitivity	-137 dBm @ 125kHz BW SF12
Tx power	up to +22 dBm (depending on region)
Network security	Encrypted communication based on security keys (AES128-bit)
Firmware update	OTA (2.4 GHz)
Interfaces	
DALI Control Device	Controls up to 8 DALI ballasts.
DALI PSU	Internal, auto-detects external supply
Analog interface	0 .. 10 V
Light sensor	Integrated. Configurable threshold.
Lamp Control	
Dimming range	0%-100% (linear or logarithmic depending on control gear settings)
Control interface	DALI-2 / DiiA (IEC 62386) / D4i / Philips SR / 0 .. 10 V
Metering	
D4i reported parameters	V, W, Wh, and PF, lamp-on time
Internal measured parameters	V, W, Wh, and PF, lamp-on time
Internal measurement accuracy	3%
Timing	
Real Time Clock (RTC)	Yes, supercap backup
Environmental	
Ingress protection	IP66 (IEC 60529)
Impact protection	IK09 (IEC 62262)
Operating temperature	-20°C ... +60°C
Mechanical	
Weight	149 g
Dimensions	83.5 mm x 75 mm
Body material	ABS
Connector	ANSI C136.41
Compliance	
Standards	EN 61347-1 EN 61347-2-11 EN 300220 EN 62368 EN 301489 EN 62479 EN 50581
Certifications	CE, SR Signify

Mechanical Dimensions

Wiring Guide

Ordering Info

Order code	UL2023	A	#	D	#	0006	EU
LoRaWAN Region / SKU region							
EU868		**A**					**EU**
AU915		**B**					**AU**
US915		**C**					**US**
AS923-1		**D**					**AS**
AS923-2		**P**					**AS**
AS923-3		**Q**					**AS**
AS923-4		**R**					**AS**
IN865		**I**					**IN**
Options							
DALI control interface				**D**			
Analog control interface				**A**			
Packing Quantity							
Sample						**SS01**	
Single packaging						**0001**	
Multipack 6pcs						**0006**	

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