NAS Nordic Automation Systems

UL2033

LoRaWAN® Zhaga® 18 Luminaire Controller
3rd GENERATION

The Zhaga® 18 Luminaire Controller is a wireless remote control device designed for LED luminaires equipped with the Zhaga book 18 compliant connector. The device is easily installed through plug-and-play, making it an excellent fit for various street lighting modules. It can be used for outdoor installations and is suitable for use with existing lighting infrastructure and third-party solutions. The controller communicates control commands to and from a dedicated application through a LoRaWAN® network, as well as NB-IoT and LTE-M networks*. The controller uses the DALI or DALI-2 interface to control the luminaire. Its modern and compact design is ideal for slim LED fixtures.

*different product series

LoRaWAN® is a trademark of Semtech Corporation
DALI, the DALI Logo, DALI-2, the DALI-2 Logo, DiiA, the DiiA Logo, D4i, the D4i Logo, DALI+ and the DALI+ Logo are trademarks in various countries in the exclusive use of the Digital Illumination Interface Alliance

Product Features

- Control up to 8 DALI drivers independently

- D4i Energy registers reported for each driver

- External D4i Control devices*

- Astronomical calendar based profiles

- Time based profiles

- Real time clock to keep time after power loss

- Automatic device time synchronisation

- Light intensity sensor

- LSI input for e.g. motion 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*

- Control gear temperature

- Energy consumption

- Lamp* / controller operating hours
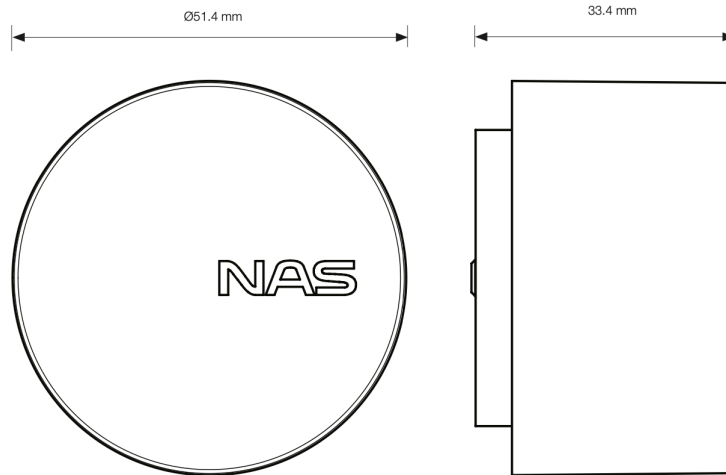
*For each driver separately, as reported via D4i

Monitored parameters
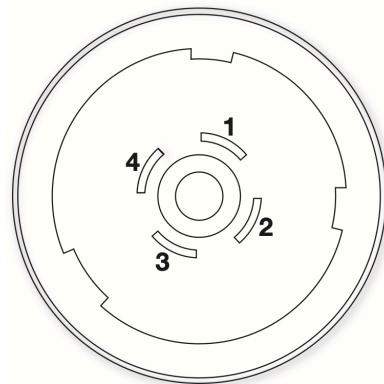
- Lamp fault

- Control gear faults

Technical Data

Supply	
Power supply	24 VDC (min 21.6 VDC- max 26 VDC)
Peak power consumption	1W @ 24V
Surge protection	provided by DALI 2 control gear
Communication	
Network interface	LoRaWAN 1.1 Class C
RF Frequency	868MHz / 915MHz / 923MHz
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
Logical Signal Input (LSI)	Configurable alert, dim levels
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
Metering	
D4i reported parameters	V, W, Wh, and PF, lamp-on time
Measurement accuracy	Depending on DALI control gear specifications
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	40g
Dimensions	51.4 mm x 33.4 mm
Body material	ABS
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

Ø51.4 mm   33.4 mm

Wiring Guide

1	+24V Auxiliary power supply
2	DALI - / Ground for +24V
3	DALI +
4	LSI

Ordering Info

Order code **UL2033 A # Xv # 0036 EU**

LoRaWAN Region / SKU region				EU
EU	**A**			**EU**
AU	**B**			**AU**
US	**C**			**US**
AS	**D**			**AS**
IN	**I**			**IN**
Options				
Legacy FW 1.0.x		**Xv**		
Packing Quantity				
Sample			**SS01**	
Single packaging			**0001**	
Multipack 36pcs			**0036**	
Multipack 60pcs			**0060**	