



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

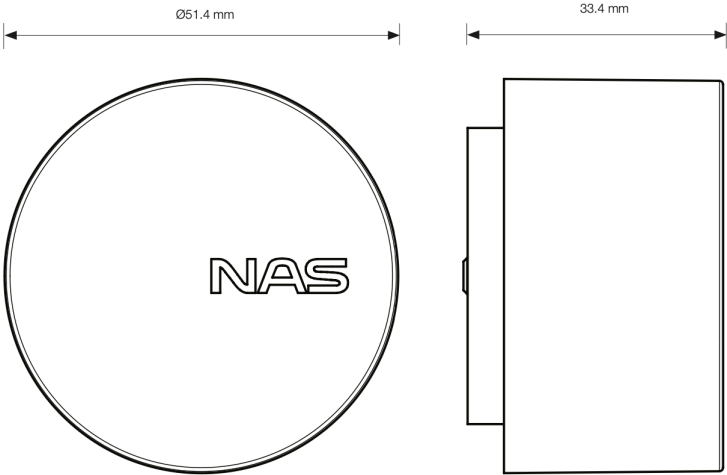
Monitored parameters

- Lamp fault
- Control gear faults

Technical Data

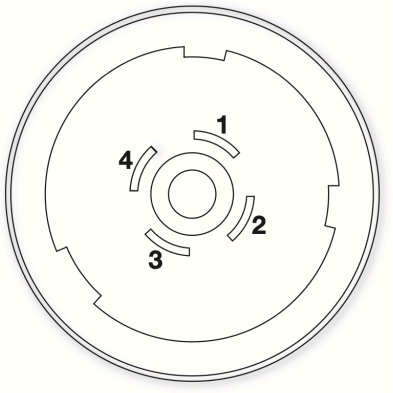
Supply	
Power supply	24 VDC (min 21.6 VDC- max 26 VDC)
Peak power consumption	1W @ 24V
Surge protection	provided by DALI 2 control gear
Communication	
Network interface	LoRaWAN 1.1 Class C
RF Frequency	868MHz / 915MHz / 923MHz
Rx Sensitivity	-137 dBm @ 125kHz BW SF12
Tx power	up to +22 dBm (depending 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 10 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
Timing	
Measurement accuracy	Depending on control gear specifications
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



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	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	