Alexia

Alexia is not just beautiful. She's also smart.

Smart. Modular. Future-proof.

Smart Luminaire

Sustainable

Open Platform

A new generation of public lighting

Meet Alexia.

The Alexia luminaire is a broadly applicable, future-proof, energy efficient side-entry luminaire. Characteristic of the design of the Alexia are the curves, the smooth lines, the friendly appearance and slim design. She has won a prestigious award: the German Design Award.

GERMAN DESIGN AWARD WINNER

Core Features

Built-in connectivity
Modular cassette system
Future proof platform
Designed and manufactured in Holland
Hosted in Europe

Modular Design

At the heart of Alexia is our patented modular cassette system.

Our patented cassette system houses all the essential hardware that makes our luminaires smart. Upgrading or maintaining existing luminaires requires nothing more than a simple tool-free cassette swap while over-the-air updates (OTA) helps you to upgrade software. This is how we keep your infrastructure future proof and relevant for decades.

Future proof

The modular cassette system makes it easy to integrate new sensors and future smart-city applications over time.

Various applications

Alexia is delivered with a standard cassette that can be interchanged for various other cassettes like our Observer, Listener and Sniffer.

Pick your cassette. Expand existing functionality.

Our **Listener cassette** measures environmental noise levels, monitoring livability and sound patterns

Our **Sniffer cassette** collects localized environmental data, monitoring pollution and climate conditions

Our **Observer cassette** enables visual monitoring and smart video applications directly from the luminaire

Applications

Designed for diverse public environments

Alexia is suitable for urban roads, residential streets, parking areas, industrial environments and public spaces. Its optical design supports safe and comfortable lighting conditions for both traffic participants and pedestrians.

Standard features

GPS

Mesh RF

Temp IN

Power Meter

AMB Light

Accelerometer

Optional features

Humidity

Camera

Movement

Temp Out

CO2

WIFI

Optics

Bicycle lane - STAL 1

Street symmetrical - STAL 2

Street assymetrical - STAL 3

Wide street symmetrical - STAL 4

Wide street asymmetrical - STAL 5

Technical specifications

Lumen/power

#LEDs	Driver	Vermogen	2200K	2700K	3000K	4000K	5700K
24 LED	25W	7 – 23W	800 – 2.700	900 – 3.100	1.000 – 3.300	1.000 – 3.400	1.000 – 3.400
24 LED	40W	24 – 37W	2.800 – 4.300	3.200 – 5.000	3.400 – 5.300	3.500 – 5.500	3.500 – 5.500
24 LED	60W	38 – 54W	4.400 – 6.200	5.100 – 7.400	5.400 – 7.700	5.600 – 8.000	5.600 – 8.000
32 LED	90W	55 – 92W	6.300 – 10.600	7.500 – 12.500	7.800– 13.000	8.100 – 13.600	8.100 – 13.600

Maintenance

LED	100.000 uur L95 @ Ta = 25°C
Driver	100.000 uur

Lighting classes (EN 13201)

Conflict areas	C0 – C5
Motorway	M3 – M6
Residential areas	P1 – P7

Mains voltage

AC	90 - 305 V ac
Net frequency	47 - 63 Hz
Isolation class	I or II

Surge Protection

10 kV

Color rendering index

CRI	>70, >80on request

LED Driver

Dimmable	5% - 100% of maximum

Environment

Operating temperature	-40 .. +55°C
IP rating	IP66
IK rating Housing	IK10

Material

Casing	Cast aluminum ADC12 grade non-corrosive
Shielding	Tempered glass
Cassette	PC
Color	Standard: NOIR2100/ GRIS2150 optionally any RAL color

Installation

Spigot diameter	60 or 76 mm
Heigth	4 .. 12 m
Side entry	-20° .. +10° (in steps of 5°)
Post top	0° .. +30° (in steps of 5°)

Cable

Cable glant	M20
Cable clamping range	6 .. 11 mm

Dimensions

Length (excl. Spigot)	605 mm
Width	300 mm
Heigth (excl. Spigot)	134 mm
Weight	7.5 kg

Wireless Mesh Communication

Frequency	869.525 MHz +/-30 ppm
Output power	16 dBm
Sensitivity	-105 dBm
Baudrate	130 kb/s
RF Range	121 dB

Power meter

Resolution	0.5 W
Accuracy 1 .. 5 W	0.5W
Accuracy 5 .. 90W	±5.0%

Temperature (for internal temperature)

Measurement range	-25 .. 100°C
Accuracy	±1.0°C

Accelerometer (tilt detection)

Resolution	0.22 degrees
Accuracy	±0.5 degrees

Ambient Light	
Measurement range	1 .. 100k lux
GNSS (Location – Position on map)	
Signals	GPS, Beidou
Accuracy	CEP50 ⍰ 2.5m
Motion sensor	
Optionally integrated	

Regulatory Compliance

The luminaire complies with CE, ENEC, ENEC+, RoHS.
With full support for TALQ, NEMA (ANSI c136.41), and Zhaga-D4i Open Standards.
Please reference our website for full documentation.

The fine print

The communicated values are subject to tolerances in the technology. The initial flux and power of the luminaire are indicative values valid at an ambient temperature of 25°C. The actual flux depends on environmental conditions (such as temperature) and may vary for specific configurations. Please consult our experts for more information.

Specifications are subject to change and should be considered indicative. Please contact Sustainder with your (additional) wishes / questions.

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