# Smart lighting luminaire Anne

Product information
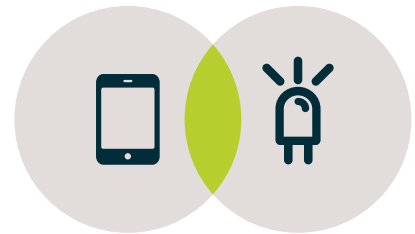
Sustainder

# Sustainder
# An innovative new lighting company

Sustainder is an innovative Dutch company that develops, manufactures and supplies intelligent public lighting and smart-city solutions to local authorities, businesses and other clients across Europe. Our company combines the production expertise of a former Philips luminaire factory, with intelligent public lighting systems from Dazzletek.

Sustainder LED luminaires are designed with the future in mind. We understand what you need to create a smart city, and we offer solutions that will last for years. Treating each lamppost as a central hub, and the area around it as the defining criteria, we can help you to create a sustainable, safe and healthy society.

## A new generation of LED luminaires

Sustainder is introducing a new generation of advanced LED lighting and luminaires. Developed from our vision of the future, their modular concept and open architecture make them ready now for whatever developments tomorrow will bring.

## The Anne luminaire

Anne by Sustainder is an all-round, future-proof luminaire. Choosing this luminaire gives you all the current smart-lighting possibilities – and ensures you are prepared for future developments and opportunities. Via an API, this energy-saving LED luminaire can be connected online to any back-office or other system for remote control and monitoring. The luminaire comes equipped with various sensors that make installation simpler, reduce maintenance costs and extend service life. And thanks to a unique cassette system, it's easy to extend Anne's capabilities in the future, too. Just add new sensors to the cassette and turn Anne into an advanced, smart-city hub.

# Ready for the future, today

## Standard functionality

| GPS | AMB Light | Mesh RF | Temp IN | Power Meter | Accelerometer |

## Optional functionality *

| Humidity | Camera | Counter | Sound | Gas | Movement | Temp OUT |

| $CO_2$ | Wifi | Ethernet | 2G/3G/4G | NB-IoT | Fiber |

*Optional functionalities are custom developed with our clients

# Back-office connectivity

The Anne luminaire is exceptionally easy to control and manage via any back-office system for public lighting. Use an API to hook it up to your platform for immediate and optimum control.

# Anne features

- Energy-saving LED technology reduces $CO_2$ emissions.
- Dimmable – including independent dimming of each LED unit (4 in total).
- Constant light output (CLO) throughout full life of the LEDs (100,000 hours).
- Cassette system supports addition of further sensors in the future.

# Anne management and maintenance

Thanks to its open architecture, the Anne luminaire can be connected to all back-office systems, using an API. This in turn supports remote monitoring and control that lets you:
- Configure each luminaire remotely after installation.
- Change configurations remotely.
- Map and monitor your installed base using GPS positioning.
- Monitor the performance of each luminaire remotely.
- Measure the actual energy use of each luminaire.

# Applications

- Urban areas: city centres, squares, parks and car parks.
- Roads: through roads, roundabouts and cycle paths.
- Residential areas: streets, shopping centres, cycle paths, footpaths, playgrounds and car parks.
- Large sites: industrial parks, ports, airports and stations.

# Quality marks

The Anne luminaire is CE, ENEC and RoHS certified.

# Street 1



*stan 1*

# Street 2



*stan 2*

# Area



*stan 3*

# Street 3



*stan 4*

# Bike path



*stan 5*

# Technical data Sustainder Anne

**Lumen/power with standard sensoric and RF-modules [1]**

| Optics | Driver | Power range | Typical luminaire output flux (lm) - Excl. CLO | | |
| | | | 3000K | 4000K | 5700K |
| --- | --- | --- | --- | --- | --- |
| STAN1 | 25W | 7 - 23 W | 800 - 2,500 | 800 - 2,500 | 800 - 2,600 |
| | 60W | 24 - 47 W | 2,600 - 5,200 | 2,600 - 5,200 | 2,800 - 5,400 |
| STAN2 | 25W | 7 - 16 W | 800 - 1,800 | 800 - 1,800 | 800 - 1,800 |
| | 60W | 17 - 33 W | 1,900 - 3,600 | 1,900 - 3,600 | 2,000 - 3,800 |
| STAN3 | 25W | 7 - 23 W | 800 - 2,500 | 800 - 2,500 | 800 - 2,600 |
| | 60W | 24 - 47 W | 2,600 - 5,200 | 2,600 - 5,200 | 2,800 - 5,400 |
| STAN4 | 25W | 7 - 16 W | 800 - 1,800 | 800 - 1,800 | 800 - 1,800 |
| | 60W | 17 - 33 W | 1,900 - 3,600 | 1,900 - 3,600 | 2,000 - 3,800 |
| STAN5 | 25W | 7 - 12 W | 800 - 1,300 | 800 - 1,300 | 800 - 1,400 |
| | 60W | 13 - 25 W | 1,400 - 2,800 | 1,400 - 2,800 | 1,500 - 2,900 |

| Parameter | Typical | Min | Max |
| --- | --- | --- | --- |
| **Maintenance** | | | |
| LED | L80 F10 up to 100,000 hours at 25°C | | |
| Driver | up to 100,000 hours at 70°C | | |
| **Lighting Classes Optic  Acc. EN 13201-2:2016** | | | |
| Conflict areas | C0 – C5 | | |
| Pedestrians/pedal cyclists | P1 – P7 | | |
| | HS1 – HS4 | | |
| | SC1 – SC9 | | |
| | EV1 – EV6 | | |
| **Colour Rendering Index** | | | |
| | | >70 | |
| **Mains Voltage** | | | |
| | AC | 90 V AC | 240 V AC |
| | Net Frequency | 47 Hz. | 63 Hz. |
| **Surge Protection** | | | |
| | | 10 kV | |
| **LED Driver** | | | |
| 4 Segments independent dimmable | | 30% | 100% |
| **Wireless Communication Mesh STD 869.525MHz:** | | | |
| Carrier frequency | 869.525 MHz | -30ppm | +30ppm |
| Output power | 16dBm | | |
| Sensitivity | -105dBm | | |
| Baudrate | 130kb/sec. | | |
| **Material** | | | |
| Housing | Die-cast aluminum | | |
| | LM6-quality | | |
| | non corrosive | | |
| Bowl | PC | | |
| Lens | PC | | |

| Parameter | Typical | Min | Max |
|---|---|---|---|
| **Environmental** | | | |
| Operating temperature | | -20°C | +35°C |
| IP rating | IP66 | | |
| IK rating Housing | IK10 | | |
| IK rating Glass | IK08 | | |
| **Colour** | | | |
| Standard | Noir : RAL 2100 | | |
| Optional | RAL colours | | |
| **Installation** | | | |
| Top mounting diameter | 60 or 76 mm | | |
| **Installation** | | | |
| Height | | 4 m | 6 m |
| **Cable Entry** | | | |
| Cable Gland | M20 | | |
| Cable Clamping Range | | 7 mm | 12 mm |
| **Dimensions** | | | |
| Length | 590 mm | | |
| Width | 590 mm | | |
| Height | 200 mm | | |
| Weight | 11 kg | | |

# Sensor type

| | Typical | Min | Max |
|---|---|---|---|
| **Power meter** | | | |
| Resolution | 0.5W | | |
| Accuracy 1..5W | 0.5W | | |
| Accuracy 5..40W | ±5.0% | | |
| **Temperature (for inner temperature)** | | | |
| Measurement range | | -25°C | 100°C |
| Accuracy | ±1.0°C | | |
| **Accelerometer (movement)** | | | |
| Axis | X, Y, Z | | |
| Measurement range | ±2.0g | | |
| Threshold | Configurable | | |
| **Ambient Light** | | | |
| Measurement range | | 1 lux | 100k lux |
| **GPS receiver** | | | |
| Signals | GPS, Beidou | | |
| Update Rate | QZSS, SBAS | 2.5 sec | configurable |
| Position Accuracy | 1 m | | |

*1. Communicated values are subject to tolerances in technology. For example, the initial flux and power consumption of the luminaire are indicative values and valid for 25°C ambient temperature. The real flux output depends on environmental conditions (such as temperature) and may vary with specific configurations. For more information please check www.sustainder.com*

*Specifications may change and should be treated as an indication only. You are welcome to contact us about your needs.*

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