



Smart lighting

Anne

Product sheet



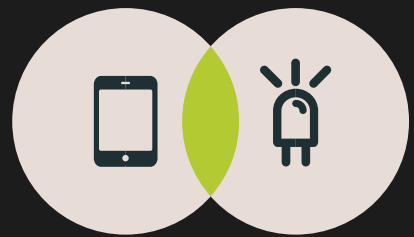
Sustainer 

Sustainer

An innovative company with experience

Sustainer 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.

Sustainer 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

Sustainer 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. By using LED-technology, sensors and smart software, the energy consumption of Sustainer luminaires is minimized, whilst CO₂ emissions are also reduced.

Luminaire description

Anne by Sustainer 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 which make installation easier, reduce maintenance costs and extend service life. And thanks to a unique cassette system, it is also possible to easily extend the luminaire's capabilities in the future. Just add new sensors to the cassette and turn the luminaire into an advanced smart city hub.

Advantages

- Energy efficient LED.
- Standard remote control and monitoring through built-in connectivity.
- Easy to expand with sensors and smart applications by simply replacing the cassette.
- No tooling required for cassette replacement, minimizing replacement times and traffic hindrance.
- Smart applications are inconspicuous by design, preventing any unrest from the public.



The Sustainer **concept**

Our mission is to transform the public lighting network into a sustainable, future-proof and smart infrastructure.



Our **modular cassette** system makes it possible to use the public lighting infrastructure as locations for **sensors** and communication.


We believe in fully **open** technology to enable the city of the future:

- Open hardware (24V / 230V)
- Open API
- Open standards



The cassette, including electronics, makes **maintenance** and **installation** very easy:

- No tooling required
- Quick cassette replacements
- Automatic error reporting and configuration



Ready for the future, today

Standard functionality



GPS



Mesh RF



Temp IN



Power Meter



Accelerometer



AMB Light

Optional functionality*



Humidity



Camera



Counter



Sound



Gas



Movement



Temp OUT



CO₂



Wifi



Ethernet



2G/3G/4G



NB-IoT



Fiber

**Optional functionalities are custom developed with our clients.*

Back-office connectivity

The 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.

Luminaire features

- Energy-saving LED technology reduces CO₂ 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.

Luminaire management and maintenance

Thanks to its open architecture, the luminaire can be connected to all back-office systems, using an API. This in turn supports remote monitoring and control that enables you to:

- 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.
- Receive errors and defects on luminaire level.

Applications

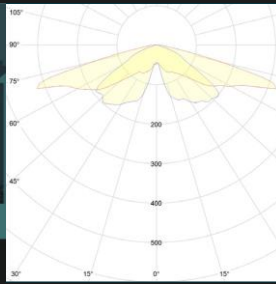
- Urban areas: city centres, squares, parks and car parks.
- Roads: through roads, roundabouts and cycle paths.
- Residential areas: streets, shopping centres, cycle paths, footpaths, playgrounds and car parks.
- Large sites: industrial parks, ports, airports and stations.

Quality marks

The luminaire is CE, ENEC, RoHS and DEKRA LED Performance certified.

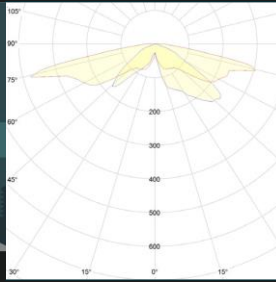


Street symmetrical



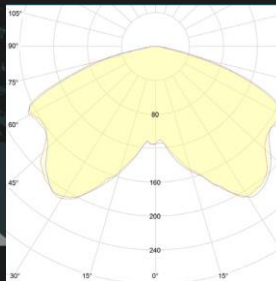
stan 1

Street asymmetrical



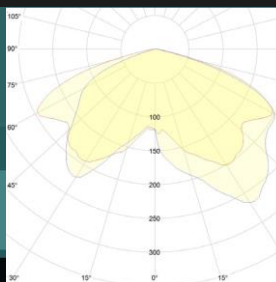
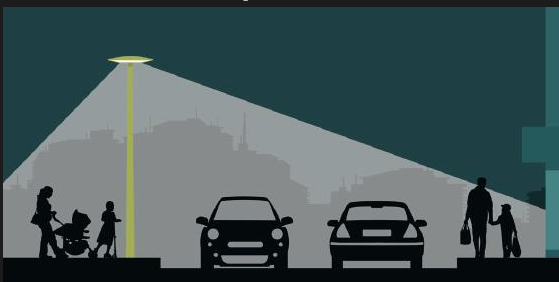
stan 2

Area



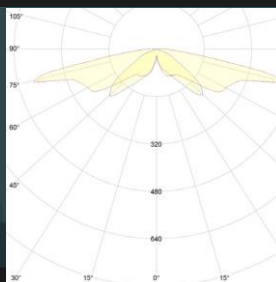
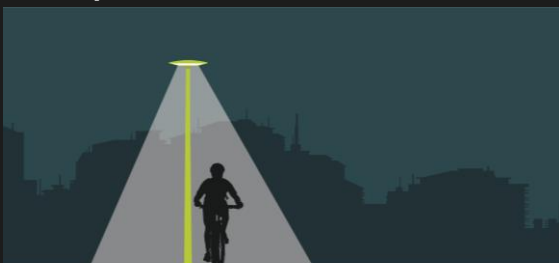
stan 3

Wide street asymmetrical / Area



stan 4

Bike path



stan 5

Sustainer Anne

Technical specifications

Lumen/power with 20 LEDs, standard sensors and RF-module						
Optic	Driver	Power	Typical luminaire output (lm) – Excl. CLO ¹			
			2200K	3000K	4000K	5700K
STAN 1	25W	7 – 23W	800 – 2.700	900 – 2.900	900 – 2.900	900 – 3.000
	60W	24 – 47W	2.800 – 5.500	3.000 – 6.000	3.000 – 6.000	3.100 – 6.100
STAN 2	25W	7 – 16W	800 – 1.900	900 – 2.000	900 – 2.000	900 – 2.100
	60W	17 – 33W	2.000 – 3.800	2.100 – 4.200	2.100 – 4.200	2.200 – 4.300
STAN 3	25W	7 – 23W	800 – 2.700	900 – 2.900	900 – 2.900	900 – 3.000
	60W	24 – 47W	2.800 – 5.500	3.000 – 6.000	3.000 – 6.000	3.100 – 6.100
STAN 4	25W	7 – 16W	800 – 1.900	900 – 2.000	900 – 2.000	900 – 2.100
	60W	17 – 33W	2.000 – 3.800	2.100 – 4.200	2.100 – 4.200	2.200 – 4.300
STAN 5	25W	7 – 12W	800 – 1.400	900 – 1.500	900 – 1.500	900 – 1.600
	60W	13 – 25W	1.500 – 2.900	1.600 – 3.200	1.600 – 3.200	1.700 – 3.300
Maintenance						
LED	L90 B10 up to 100.000 hrs @ Ta = 25°C					
Driver	up to 100.000 hrs @ Tc = 70°C					
Lighting Classes (EN 13201)						
Residential areas	P1 – P7					
Color Rendering Index						
CRI	>70					
Mains Voltage						
AC	90 .. 305 V ac					
Net Frequency	47 .. 63 Hz					
Safety Class	I or II					
Surge Protection						
	10 kV					
LED Driver						
Dimmable	30 .. 100%					
Wireless Mesh Communication						
Frequency	869.525 MHz +/-30 ppm					
Output power	16 dBm					
Sensitivity	-105 dBm					
Baudrate	130 kb/s					
RF Range	121 dB					
Material						
Housing	Die-cast aluminum LM6-quality non-corrosive					
Guard + Cassette	PC					
Color	Standard: NOIR2100 or GRIS2150 / Optional: any RAL color					

¹Communicated 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.sustainer.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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Technical specifications

Environmental	
Operating temperature	-40 .. +50°C
IP rating	IP66
IK rating Housing / Guard	IK10 / IK08

Installation	
Spigot diameter	60 or 76 mm
Height	4 .. 6 m

Cable	
Cable gland	M20
Cable Clamping Range	6 .. 11 mm

Dimensions	
Length (excl. Spigot)	590 mm
Width	590 mm
Height	200 mm
Weight	11 kg

Sensors

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	
Optional integrated in spigot	

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