

Lighting Tools

for the future



Siteco LED Town and Park Luminaires

LED technology for energy-efficient lighting with Siteco LED Module 520

office

industry

traffic

retail

public

sports

siteco
AN OSRAM BUSINESS

Save energy – design the future With LED technology from Siteco



The future of outdoor lighting lies with LED technology. The most popular, tried-and-true town and park luminaires from Siteco, the MUSHROOM LUMINAIRE, LANTERN, LANTERN CLASSIC, LANTERN DELUXE, CITY-LIGHT PLUS, CITY-LIGHT ELEGANCE as well as the CITY-LIGHT Bollard and CITY-LIGHT Pillar, are now available as LED variants.

LEDs win over with unbeaten energy efficiency, electronic control adapted to needs and service lives that conventional lamps cannot match in practice. In real terms these factors mean a service life up to four times greater, and up to 65% less electricity consumption compared to conventional light sources. This in turn saves four times the amount of maintenance, and with significant energy savings the CO₂ balance is distinctly improved.

In this way our LED luminaires contribute actively to the major task of saving CO₂ and protecting resources.

The key to such sustainability is found in Siteco LED gear tray technology. All components required for operation of the luminaires with LEDs are accommodated on a central module. The modular construction ensures that forthcoming, more modern LED generations with higher performance levels can be upgraded and installed with ease. This also saves on stocking and logistics requirements for all specified luminaires.

The modular design of the LED Module 520 also enables you to immediately refurbish existing systems with state-of-the-art LED lighting technology. This guarantees that the uniform appearance of the streetscape is preserved and that no LED luminaires with other designs need to be installed.

Proven housing technology + classic design + professional LED lighting technology = Siteco LED luminaires

The Siteco LED Module 520 is the central component of all new LED versions for the town and park luminaires from Siteco.



Did you know ...

Astounding savings potential for streetlighting

If all road luminaires in Germany were operated with modern lighting technology and energy-efficient light sources, the following could be saved:

- 2,700,000,000 kWh of energy
- 1,600,000,000 kg of CO₂
- 400,000,000 EUR

Source: ZVEI (Zentralverband Elektrotechnik- und Elektronikindustrie e.V.)





MUSHROOM LUMINAIRE LED



LANTERN LED



LANTERN CLASSIC LED



LANTERN DELUXE LED



CITY-LIGHT PLUS LED



CITY-LIGHT ELEGANCE LED



CITY-LIGHT bollard 120/120 E LED



CITY-LIGHT pillar 260/260 E/260 D LED

Designing with light distribution and colour

The ideal solution for any lighting task

The new Siteco LED town and park luminaires rely on outstanding quality, classic design, professional LED technology and the tried-and-true modular system consisting of housing and transparent luminaire enclosure. Two light distribution patterns and two different light colours are available. In this way the perfect solution for any lighting task can be found thanks to Siteco LED town and park luminaires.

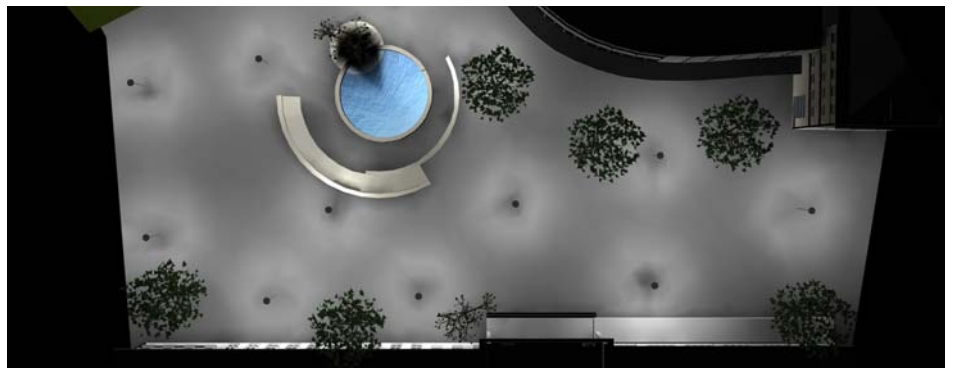
Siteco town and park luminaires with the LED Module 520 are available with symmetric or asymmetric light distribution and with either 3000° or 4000° Kelvin light colours. These features allow them to be successfully integrated into the complete spectrum of town and park luminaires fitted with conventional lamps. With modernisation using individual LED luminaire heads, this guarantees a uniform appearance of the complete system, and with the installation of new systems it presents an optimal solution for any optical task.



LED Module 520, symmetrical

The glare-free, standardised, symmetric light distribution of the Siteco LED Module 520 is achieved via a precisely matched combination of high performance LEDs, optical lens systems, highly specular reflectors and transparent luminaire enclosures.

Siteco LED luminaires with symmetrical light distribution are outstandingly suited to the lighting of town squares.



LED Module 520, asymmetrical

The standardised, asymmetric light distribution of the LED Module 520 is achieved via a precisely matched combination of high performance LEDs, optical lens systems, highly specular reflectors and transparent luminaire enclosures.

Siteco LED luminaires with asymmetric distribution are outstandingly suited to the lighting of residential and service roads, as all light is directed onto the road. This means that no disturbing light falls into the rear area of the luminaire and to facades and house walls.





Warm white light for ambience and orientation

LED Module 520, 3000° Kelvin

The town and park luminaires with LED Module 520, 3000° Kelvin are especially suited to the illumination of housing areas and residential streets. An emphasis is placed here upon achieving lighting atmosphere and ambience lighting within the framework of applicable lighting standards, instead of purely functional lighting.

The warm white light aids the feeling of comfort and well-being, and also renders colours well.



Neutral white light for functionality and safety

LED Module 520, 4000° Kelvin

The town and park luminaires with LED Module 520, 4000° Kelvin are especially suited to the illumination of roads and paths in residential districts. The functional illumination supports visual tasks required by road traffic and is designed according to applicable standards.

The neutral white light renders colours well and communicates a feeling of safety and orientation.



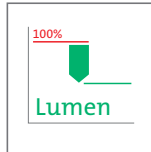
Did you know ...

Neutral white light is pleasant and efficient

The cooler the light colour of an LED, the more efficiently it operates. Light colours from 4000° Kelvin are especially efficient. Light from this temperature upwards has a slight blue colouration. A field survey in cooperation with Darmstadt Technical University concerning the perception of LED lighting found that light from a Siteco LED luminaire with 4000° Kelvin is judged to be especially pleasant.

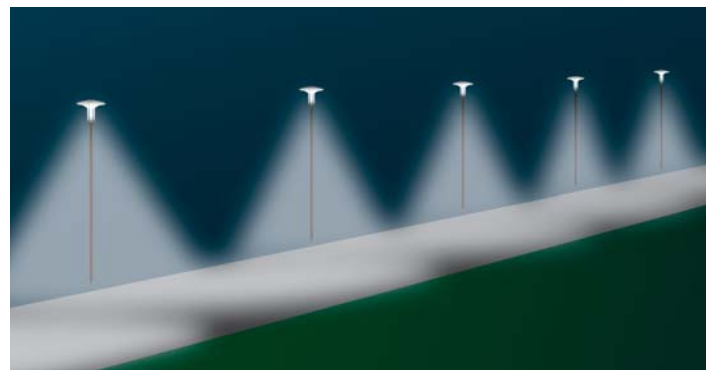
Dimming instead of switching off

Power reduction as a standard of efficiency

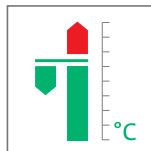


Town and park luminaires featuring the LED Module 520 set new efficiency standards in every way: the energy consumption of the lighting system can be efficiently and dependably reduced via an electronic control component without having to compromise in terms of light quality.

With power reduction, the energy requirements of a system can be reduced by approximately 65% according to needs, with a reduction of only about 50% in terms of light. **And with uniform, continuous light distribution over the complete working plane!**

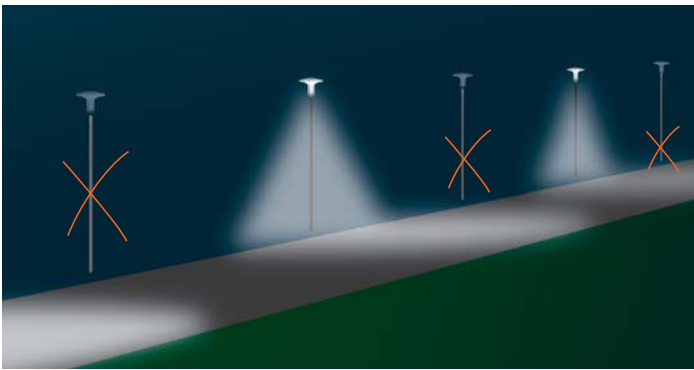


System without control function: 100% light, 100% performance, 100% costs. Complete visual comfort, complete safety, but little flexibility!
The road is uniformly lit according to standards, brightness levels are harmonious, and perception and therefore safety in road traffic is optimally supported.



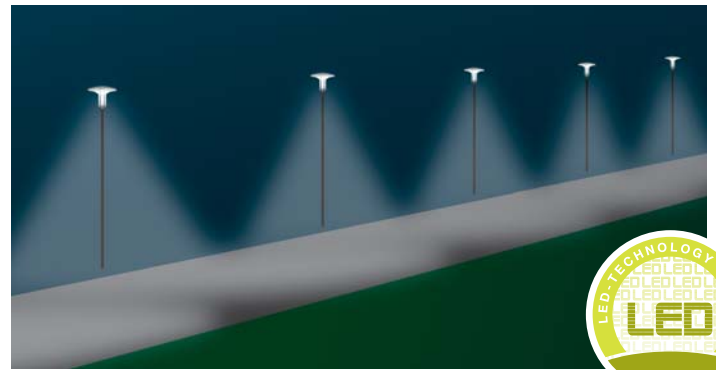
System safety via overheat protection

Town and park luminaires featuring the LED Module 520 are efficiently protected against excessive temperature: if the luminaire attains a set upper limit, electronics regulate and lower power consumption dependably and automatically. If the lower temperature limit is gained, power consumption of the luminaire is increased again to the set switch-on value.



**Each second light point has: 50% light, 50% performance, 50% costs.
A danger to safety!**

The road is unevenly illuminated, distinct bright/dark zones occur and some areas are completely dark. Eyes have to continuously compensate for the light/dark contrasts and are therefore under additional stress. This solution saves energy, but hinders visual perception and puts safety in danger with road traffic.



Siteco power reduction: 50% light, 50% performance, 35% costs.

Good visual comfort, high flexibility, complete safety in road traffic!

Lumen output is reduced throughout to approximately 50%, the road is uniformly illuminated according to standards. Brightness levels are harmonious, and the eye can adjust well to the lighting conditions. Visual perception and therefore safety in road traffic is optimally supported.

Illuminate efficiently: more light for less energy

Via targeted modernisation with Siteco LED luminaires

The LED Module 520 is the most efficient solution for lighting according to standards for typical S5 residential streets. The asymmetric beam module variant complies to all stipulations for this standard. The prerequisite is the use of a transparent enclosure with all Siteco town and park luminaires.

Although Siteco luminaires with the LED Module 520 emit around 25% more light to the road with standard-relevant mean illuminance levels, in terms of energy efficiency and cost efficiency they take pole position: even in comparison to a luminaire optimally configured with regard to energy and with identical housing, but equipped with a high pressure sodium vapour lamp, the module has a lower energy consumption and an unbeatable CO₂ balance. As such the MUSHROOM LUMINAIRE with LED Module 520 consumes only 156 kilowatts of electricity yearly compared to 332 kilowatts for the same luminaire fitted with HSE lamps. In terms of climate balance that means savings with 100 light points of approximately ten tons of the damaging gas every year.

i

Did you know ...

Mercury vapour lamps banned from 2015

As a consequence of the 2005/32/EG directives, mercury vapour lamps will not receive CE designation any more from 2015. As such, these lamps will no longer be permitted to be sold in the European sector.

The reason: when compared to modern light sources, these lamps have a poor ratio of light yield to energy consumption (lumens/watt), and when compared to LED sources their efficiency factor is simply inadequate. The EU ban will result in approximately one third of all street luminaires in Germany having to be modernised or replaced from 2015.



Comparison of light sources and their energy efficiency: LED Module 520 achieves peak values

548,000 kWh*



with HME 125W
opal enclosure

HME 125 W		
	Energy consumption	CO ₂ emission
Light points	(kWh/a)	(kg/a)
50	27,400	16,440
100	54,800	32,880
200	109,600	65,760
500	274,000	164,400
1,000	548,000	328,800

332,000 kWh*



with HSE 70W
fan-shaped reflector

HSE 70 W		
	Energy consumption	CO ₂ emission
Light points	(kWh/a)	(kg/a)
50	16,600	9,960
100	33,200	19,920
200	66,400	39,840
500	166,000	99,600
1,000	332,000	199,200

156,000 kWh*



with LED MODULE 520/39W
asymmetrical distribution

LED 39 W		
	Energy consumption	CO ₂ emission
Light points	(kWh/a)	(kg/a)
50	7,800	4,680
100	15,600	9,360
200	31,200	18,720
500	78,000	46,800
1,000	156,000	93,600



Basis for calculation:

MUSHROOM LUMINAIRE | 4,000 operating hours/year (without reducing circuit) | CO₂ factor 0.6 | lighting class: S5 | luminaire spacing: 30 m

System according to DIN 13201 | E_{mean} 3.0 lx | E_{min} 0.6 lx

*corresponds to the energy consumption of 1,000 light points per year

Order Data



Complete LED luminaires

MUSHROOM
LUMINAIRE LED

LANTERN LED

LANTERN DELUXE
LED

LANTERN CLASSIC
LED

CITY-LIGHT PLUS
LED

symmetrical distribution



Insulation class II

Eco

3000°K warm white	5XA52317WS28	5XA52517WS28	5XA52717WS38	5XA52717WS48	5XA52717WS18
4000°K neutral white	5XA52317NS28	5XA52517NS28	5XA52717NS38	5XA52717NS48	5XA52717NS18

asymmetrical distribution



Insulation class II

Eco

3000°K warm white	5XA52317WA28	5XA52517WA28	5XA52717WA38	5XA52717WA48	5XA52717WA18
4000°K neutral white	5XA52317NA28	5XA52517NA28	5XA52717NA38	5XA52717NA48	5XA52717NA18

Replacement-LED Module 520

LED Module 520, symmetrical distribution



Insulation class II



Eco

3000°K warm white	5XA52007WS
4000°K neutral white	5XA52007NS

LED Module 520, asymmetrical distribution



Insulation class II



Eco

3000°K warm white	5XA52007WA
4000°K neutral white	5XA52007NA

LED modules offer maximum efficiency and precise light distribution with the use of transparent enclosures



CITY-LIGHT ELEGANCE LED CITY-LIGHT bollard 120 LED CITY-LIGHT bollard 120 E LED CITY-LIGHT pillar 260 LED CITY-LIGHT pillar 260 E LED CITY-LIGHT pillar 260 D LED

5XA52717WS28	5XA52817WS28	5XA52817WS58	5XA52917WS28	5XA52917WS58	5XA52917WS58D
5XA52717NS28	5XA52817NS28	5XA52817NS58	5XA52917NS28	5XA52917NS58	5XA52917NS58D

5XA52717WA28	5XA52817WA28	5XA52817WA58	5XA52917WA28	5XA52917WA58	5XA52917WA58D
5XA52717NA28	5XA52817NA28	5XA52817NA58	5XA52917NA28	5XA52917NA58	5XA52917NA58D

Mounting Accessories



Mast mounting element for MUSHROOM LUMINAIRE
Aluminium, RAL 7035 coated

Type	Order No.
Mast mounting element (RAL 7035)	5LA52201XH05



Mast mounting element for LANTERN/LANTERN CLASSIC/LANTERN DELUXE
Aluminium, RAL 9005 coated (black)

Type	Order No.
Mast mounting element (RAL 9005)	5LA52201XH01

Please note: a new mast mounting element must be ordered with old systems having mast mounting elements with plastic caps

Spare Parts

Enclosures for complete luminaires specified above
transparent PMMA

Type	Order No.
Enclosure, transparent PMMA for MUSHROOM LUMINAIRE LED	5LA53220XG
LANTERN LED, LANTERN DELUXE LED, LANTERN CLASSIC LED	5NC54700XG
CITYLIGHT PLUS LED, CITYLIGHT ELEGANCE LED, CITYLIGHT BOLLARDS AND PILLARS	5NA54900XG

Siteco Sales

Headquarters Germany

Siteco
Beleuchtungstechnik GmbH
Georg-Simon-Ohm-Straße 50
83301 Traunreut | Germany
phone: +49 8669 33-0
fax: +49 8669 33-397
e-mail: info@siteco.de

Siteco Worldwide

Austria (Central Office)
Siteco Österreich GmbH
Leonard-Bernstein-Straße 10
1220 Vienna
Austria
phone: +43 1 250 24 0
fax: +43 1 250 24 255
e-mail: info@siteco.at

Czech Republic
Siteco Lighting, spol s.r.o.
U Nikolajky 1085/15
15000 Praha 5-Smichov
Czech Republic
phone: +420 251 013 800
fax: +420 251 560 772
e-mail: info@siteco.cz

Italy
Siteco Lighting Systems s.r.l.
Via dell'Innovazione 3
20126 Milano
Italy
phone: +39 02 4249 1
fax: +39 02 4229 380
e-mail: info@sitecoitalia.it

Norway
Siteco Belysning AS
Tevlingveien 23
1081 Oslo | Norway
Tel.: +47 23 37 32 50
Fax: +47 23 37 32 60
E-Mail: siteco@siteco.no

Poland
Siteco Lighting Poland
Sp. z o.o.
Migdalowa 4
02-796 Warszawa
Poland
phone: +48 22 645 11 83
fax: +48 22 645 11 84
e-mail: siteco@siteco.pl

Slovenia
Siteco Sistemi d.o.o
Trzaska c.23
2000 Maribor
Slovenia
phone: +386 23 00 42 77
fax: +386 23 32 52 02
e-mail: slovenia@siteco.com

Switzerland
Siteco Schweiz AG
Airport Business Center 62
3123 Belp-Bern
Switzerland
phone: +41 31 818 28 28
fax: +41 31 818 28 20
e-mail: info@siteco.ch

Turkey
Siteco Aydinlatma Teknigi
Tic. ve San. Ltd. Sti.
Fahrettin Kerim Gökay Cad.
No:31
Altunizade - Üsküdar
Turkey
phone: +90 216 327 45 45
fax: +90 216 545 51 51
e-mail: info@siteco.com.tr

United Kingdom
Siteco Limited
3-4 Grosvenor Business Park
Horsfield Way
Stockport SK6 2SU
United Kingdom
phone: +44 1 61 40 60 800
fax: +44 1 61 49 46 756
e-mail: info@siteco.co.uk

**Light for people.
Worldwide.**

Find your current
contact person
anywhere in the world

www.osram.com/contact

Siteco Customer Service

Product technology:
Tel.: +49 8669 33-844
Fax: +49 8669 86532-944
E-Mail: technicalsupport@siteco.de

Delivery and ordering:
Tel.: +49 8669 33-822
Fax: +49 8669 33-397

The complete range of innovative Siteco Lighting Tools for the realisation of your projects can be found in our current product catalogues:

- Siteco Lighting Tools Interior
- Siteco Lighting Tools Exterior

or at www.siteco.com

Order No. 1591
2nd Edition, 3000 FW
Subject to alteration
©Siteco Marketing 03/2012

siteco
AN OSRAM BUSINESS

Siteco Beleuchtungstechnik GmbH
Georg-Simon-Ohm-Straße 50
83301 Traunreut | Germany
Tel.: +49 8669 33-0
Fax: +49 8669 33-397
E-Mail: info@siteco.de
Web: www.siteco.com