

# **EXTREMELY VERSATILE**



The BRISA luminaire line meets every preference for illuminating the everyday world. With a lumen package of 800-18,000 lumens, the BRISA can be used from residential streets to access roads. Add to this the BRISA WALK, specially for pedestrian crossings, the BRISA BIKE for cycle paths and the BRISA BAT to protect flora and fauna, and you have got a line that will be safer, more mobile and more sustainable for a long time to come.

# COMPLETE AND EASY TO INSTALL



**COMPLETE AND FUNCTIONAL WITHOUT EXTRA CHARGE** 



# FUNCTIONAL AND COMPLETE WITHOUT EXTRA CHARGE

With the BRISA and the BRISA PLUS you have the standard for the total living environment in one luminaire line. Because consider this: the BRISA WALK has been specially configured for pedestrian crossings, the BRISA BIKE has been tailor-made for cycle paths, and the BRISA covers the entire residential area sector. The BRISA PLUS is extremely suited for access and ring roads. So with just one luminaire line, you can illuminate the entire living environment just the way you want. As an extra there is the BRISA BAT, equipped with an amber-coloured LED light source to protect bats.

# **ALWAYS LIGHT TO ORDER**

In developing the BRISA, Lightronics has listened carefully to the market's wishes. Not only does the lighting stand out for its modern design, but it also has a notable plus point in terms of light experience: the luminaire can generate diffused light, which improves social safety and is perceived by residents as being very pleasant. Through its varied light distributions and its adjustable tilt angle, the BRISA delivers light to order under all conditions.

# **SMART SOLUTIONS**



Five standard dimming regimes (1A, 2A, 3A, 4A and 5A) that change power and light intensity according to pre-set time settings and/or CLO (Constant Lumen Output).

## Standard on every luminaire



Lightronics offers the possibility of system integration with Controlled Solutions. Communication modules from CityTouch, Luminext, Remoticom or Tvilight, among others, can be incorporated. Lightronics motion detection with local communication through RF is also possible and can be used for flexible lighting on cycle paths.

#### Price on request

Projects implemented as Controlled Solutions are customised projects. Inventorying, configuration and delivery at extra cost. Please note: not all situations are suitable for Controlled Solutions as these may be influenced by local variables such as adjacent bus lanes, main roads, cycle paths or the positions of the lamp posts in the application. Acceptance of this type of project takes place in consultation and after an approved on-site inventory.

# The 5-year production warranty is retained if Lightronics installs the modules.

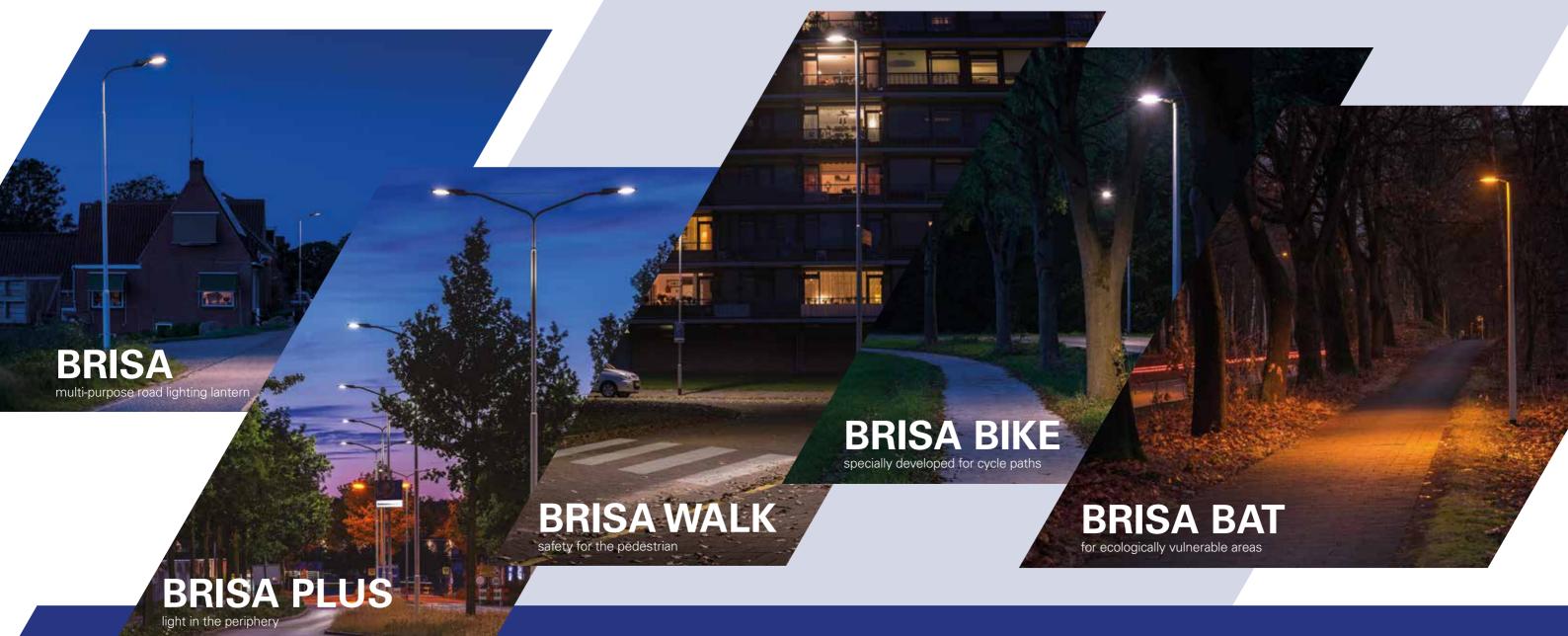




#### Smart City Ready

Luminaire fitted with Zhaga Book 18 connector and screw cap (waterproof IP 66). Ask your account manager for the opportunities.

€ 45 gross, per connector



# THE LUMINAIRE LINE FOR A NICER AND SAFER LIVING ENVIRONMENT

The **BRISA** is rapidly deployable, and has already been equipped fully for its task in the factory. The BRISA is easy to deploy thanks to the availability of different lens optics, a large lumen package (800–8000 lumens), and various standard options such as an adjustable tilt angle and pre-attached cabling. The BRISA can be equipped with a variety of light profiles. Thus there are wide-beam, deep-beam, omnidirectional beam or diffused light profiles. Alongside the five most common dimming regimes, we can program any desired dimming regime. There is also a BRISA with spherical glass, so that the BRISA can also serve as orientation lighting.

The **BRISA PLUS** is an LED-only luminaire. The LEDs are equipped with a lens optic specially designed to illuminate everything on and alongside the road, like traffic signs, road markings and fellow road users. Notable here is the uniform light distribution and the colour recognition,

which enhances traffic safety even further. The BRISA PLUS is particularly suited to providing light for throughroads, district access roads, industrial sites, roundabouts and parking areas.

The optic of the **BRISA WALK** has been specially designed for pedestrian crossings, and promotes traffic safety to a significant degree. The optic increases the contrast with the surroundings, making the pedestrian more visible.

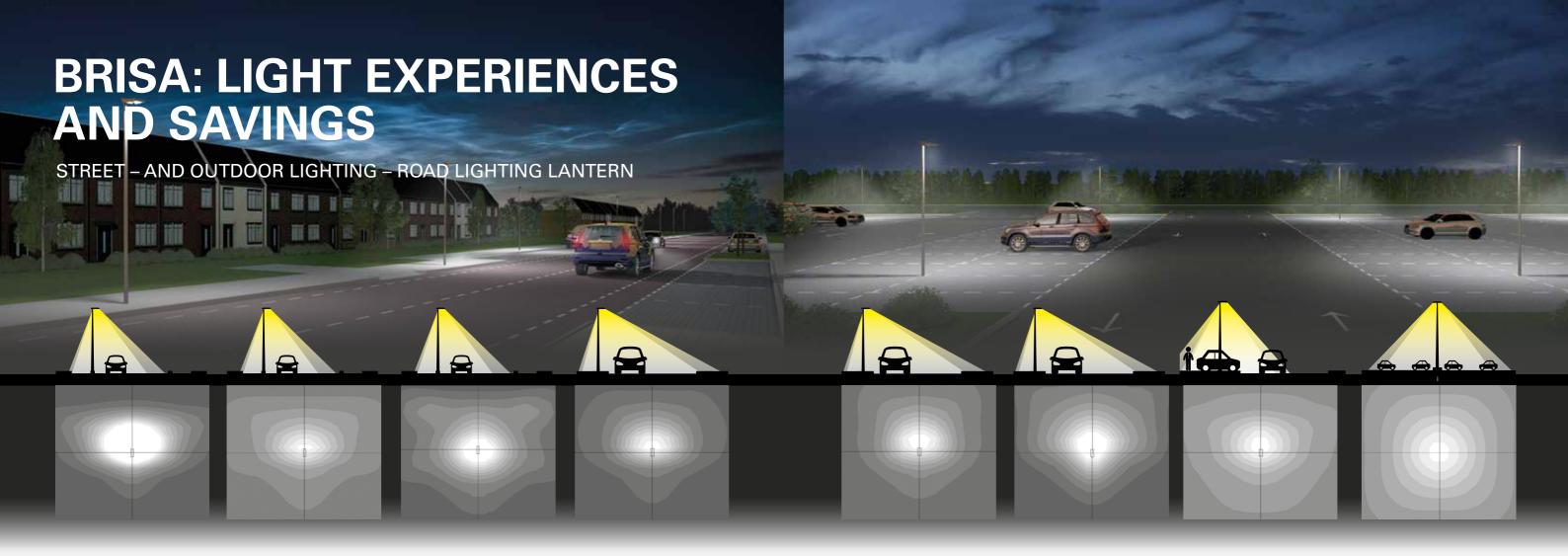
It is recommended to set the lumen output of a BRISA WALK higher than that of the standard BRISA lighting for the access road. The special lenses cause the lighting to concentrate just next to the centre of the crossing. An extra accent can be applied using a different colour temperature. Positioning the luminaire depends on the type of road. A crossing on a road with two lanes in the same direction can be illuminated with one luminaire.

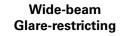
With three lanes or 2x2 lanes (two directions), two luminaires should be positioned – one on each side of the road. In most cases, the lamp-post should be positioned around a metre from the crossing.

The **BRISA BIKE** is a luminaire with a modified lens code for narrow light profiles. This means that the distances between lamp posts can be extended to 30 metres, at a lamp post height of four metres. Due to the lenses used, the BRISA BIKE is extremely suitable for cycle paths, but also for back paths, footpaths or narrow road profiles. The lumen package comprises the versions 800 - 1050 - 1200 - 1500 - 1600 and 1700 lumens. Calculations show that using the set profile with 1050 lumens Egem. 3.01 lux – Uh 0.22 can be achieved, and with 1700 lumen Egem. 5.17 lux – Uh 0.22. These values are from the P5 and P4 class of the ROVL2011, respectively. The effects of lighting on bats have been researched, and it can indirectly affect

the essential flight and migration routes, as well as the essential foraging area, for instance. Lightronics now has a solution that is ideal for bats: the **BRISA BAT**, which is equipped with an amber-coloured LED light source. The functional light distribution is retained.

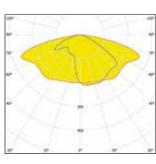
The **BRISA EXL** is an ideal lighting solution for cycle lanes in rural areas and housing estates. In a standard setup (30m), these luminaires disperse light 48% more evenly. The BRISA EXL offers a single type of light distribution specifically for cycle lanes and allows for pole distances of up to 34 metres when using four-metre poles. EXL stands for external lenses. The lenses are placed on the outside of the luminaire, which means that in addition to efficient lighting, these luminaires also provide orientation lighting.





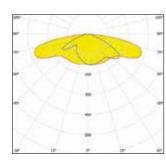
BRISA LC-N

Wide-beam Diffused light



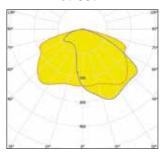
BRISA LC-R

Wide-beam High uniformity



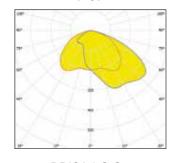
BRISA LC-A3

Asymmetric
Deep-beam residential
street



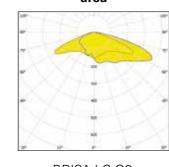
BRISA LC-O

Asymmetric Deep-beam outdoor area



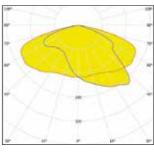
BRISA LC-O2

Asymmetric
Deep-beam large outdoor
area



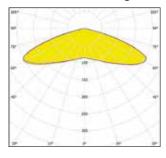
BRISA LC-03

Diffused light Wide-beam High uniformity



BRISA LC-M

Omnidirectional High uniformity Glare-restricting



BRISA LC-S



63% reduction\*



56% reduction\*



52% reduction\*



54% reduction\*



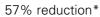
54% reduction\*



60% reduction\*



CO<sub>2</sub> footprint





50% reduction\*

<sup>\*</sup>Saving compared to conventional lighting with the same profile



# PRODUCT COMPARISON LUMENS PER WATT

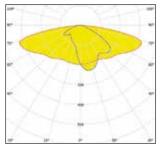
There is a difference between LED power and system power, raising the question of what the efficiency of an LED system actually is. If an assumption is made of the lumen output and a specific number of lumens per watt, to achieve a good comparison between products, one must decide whether to opt for the LED power or the system power. It is clear in the table for the BRISA LC-N 1800LM that the LED delivers 171 lumens per watt, while if the total system is considered, 108 lumens per watt is delivered. This can rise to 124 lumens per watt for higher light currents. Also important is what lifespan is guaranteed for the lumen output. The Lightronics light sources have a lifespan of 100,000 operational hours (L80/F10) at an ambient temperature of 25 degrees Celsius.

## **EXAMPLE**

|        | LC-N 1800LM |              |
|--------|-------------|--------------|
| System | 152 lm/W    | 108 lm/W     |
| LED    | 171 lm/W    | 124 lm/W     |
|        | LED power   | System power |

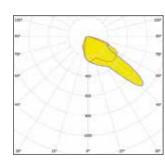
By opting for lumens/watt per LED on the one hand, or the lumens/watt system power on the other, you can enter the correct data into your management system.

# Wide-beam Cycle paths

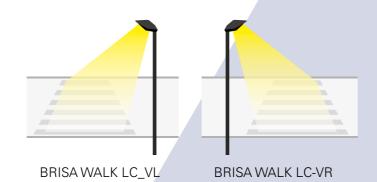




Direct beam Pedestrian crossings



BRISA WALK LC-VL/VR





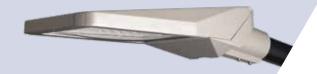


60% reduction\*

### **OPTIONS**

#### **ORIENTATION LIGHTING**

Application of a spherical glass lets the BRISA function more as orientation lighting. This is particularly relevant for access and provincial roads.

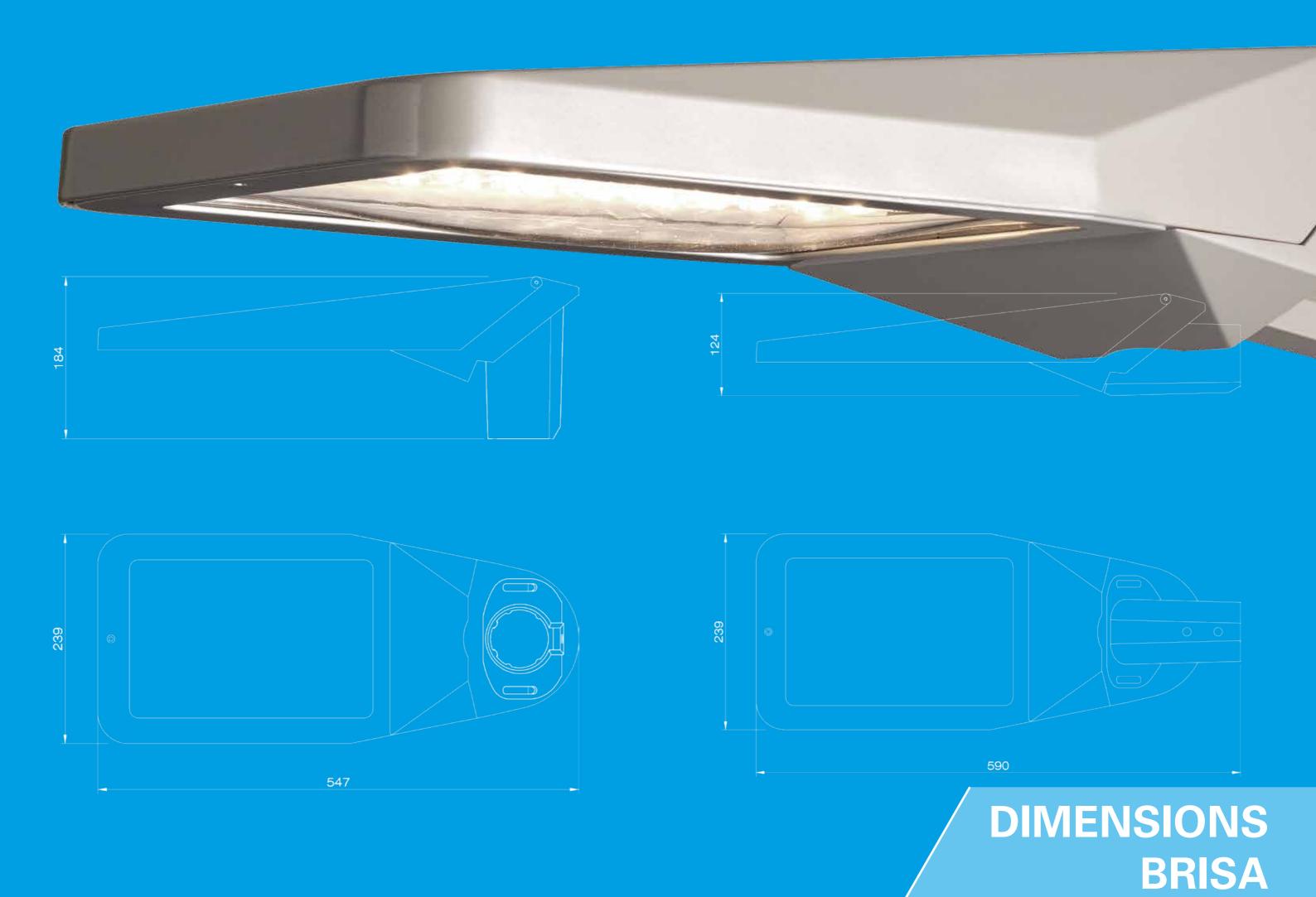


# PREVENTING LIGHT NUISANCE

The protective lens covers play a role in preventing light nuisance. This also depends on the position of the lamp post. By applying the covers, light can be directed where needed.



<sup>\*</sup>Saving compared to conventional lighting with the same profile





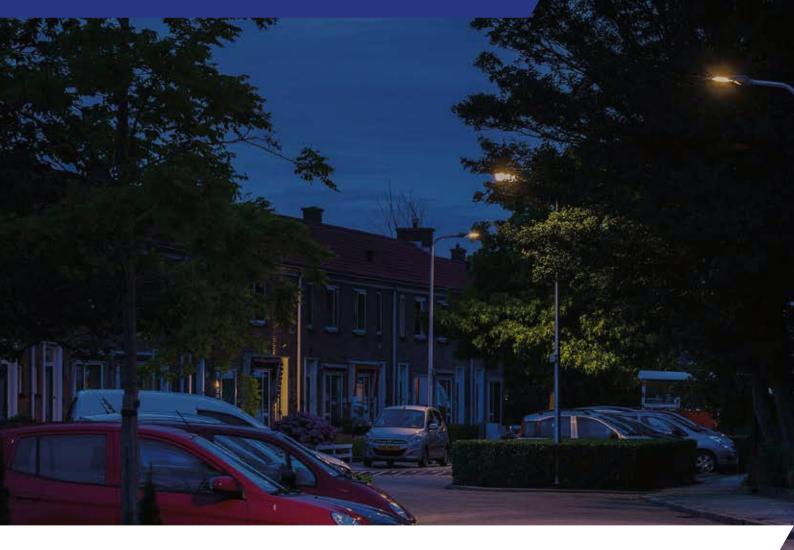




# **SAVING ENERGY**



Major changes are required to be able to achieve this. Public lighting plays a key role in this respect. Lightronics supplies with the BRISA, a multi-applicable luminaire for public spaces, an important contribution. The luminaire has a high standard equipment level, which can be used directly for energy saving without additional costs.



Printing and typing errors and model changes reserved.

Revision date: 27-02-2020



