# **CASCAIS GEN2**



























# Combining the elegance of the past with modern, circular lighting innovations

Inspired by the historic gas lamps of the 19th century, the CASCAIS GEN2 6-face urban lantern seamlessly blends tradition with modern innovations. Inspired by the past but reinvented to meet the challenges of modern cities, CASCAIS GEN2 places circularity at the core of its design. It incorporates the latest innovations developed by Schréder, featuring an all-in-one LED module that combines the photometric engines and gear components into a single, removable and interchangeable unit. Durable, circular and highly efficient, CASCAIS GEN2 revitalises your historic urban spaces while delivering the benefits of cutting-edge LED lighting technologies.







RAILWAY STATIONS &





#### Concept

CASCAIS GEN2's historic design has been reimagined using robust, recyclable materials such as aluminium and glass, combined with an innovative circular LED module. At the heart of its classic design lie sustainable principles. CASCAIS GEN2 integrates a unique module that incorporates the photometric engines and electronic components (drivers, fuses and surge protection) into a single, easily removable and interchangeable unit. This innovation makes CASCAIS GEN2 a sustainable and circular urban lantern.

Powered by the latest LensoFlex® LED concept developed by Schréder, this modernised lantern delivers highly efficient, energy-saving lighting. Its wide range of light distributions ensures precise illumination for various urban environments.

To seamlessly blend into a variety of urban settings, CASCAIS GEN2 offers multiple mounting options: post-top and suspended. It can be suspended using a suspension bracket or a hook. Alternatively, it can be mounted post-top with a 3/4" threaded rod, ensuring flexibility and adaptability for diverse urban lighting needs.

Access to the internal components is toolless, using a handscrew, considerably facilitating access to internal components, and maintenance.

Whether you want to highlight your historical heritage or add a touch of charm to your cityscapes, CASCAIS GEN2 provides an aesthetic, circular and energy-efficient lighting solution.



A classic 6-face design refreshed with modern technology



Circular and future-proof

#### TYPES OF APPLICATION

- URBAN & RESIDENTIAL STREETS
- BRIDGES
- BIKE & PEDESTRIAN PATHS
- RAILWAY STATIONS & METROS
- CAR PARKS
- SQUARES & PEDESTRIAN AREAS

#### KEY ADVANTAGES

- FutureProof: follows the principles of circular economy
- LensoFlex®4 versatile solutions for highend photometries maximising comfort and safety
- Durable and recyclable materials
- Energy savings by dimming
- Classic design with the advantages of LED technology



Easy access to internal components



Diverse mounting options to suit any type of urban setting

CASCAIS GEN2 | Equipped with a clear protector



CASCAIS GEN2 | Equipped with a frosted protector





LensoFlex®4

LensoFlex®4 maximises the heritage of the LensoFlex® concept with a very compact yet powerful photometric engine based upon the addition principle of photometric distribution. The number of LEDs in combination with the driving current determines the intensity level of the light distribution. With optimised light distributions and very high efficiency, this fourth generation enables the products to be downsized to meet application requirements with an optimised solution in terms of investment.

LensoFlex®4 optics can feature backlight control to prevent intrusive lighting, or a glare limiter for high visual comfort.

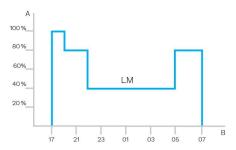




#### Custom dimming profile

Intelligent luminaire drivers can be programmed with complex dimming profiles. Up to five combinations of time intervals and light levels are possible. This feature does not require any extra wiring.

The period between switching on and switching off is used to activate the preset dimming profile. The customised dimming system generates maximum energy savings while respecting the required lighting levels and uniformity throughout the night.



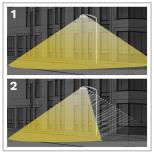
A. Dimming level | B. Time



With the PureNight concept, Schréder offers the ultimate solution for restoring the night sky without switching off cities, while maintaining safety and well-being for people and preserving wildlife. The PureNight concept guarantees that your Schréder lighting solution satisfies environmental laws and requirements. Well-designed LED lighting has the potential to improve the environment in all respects.



# Direct the light only where it is wanted and needed



- 1. Without backlight
  2. With backlight
- Schréder is renowned for its expertise in photometry. Our optics direct light only where it is wanted and needed.

  However, light trespass behind the luminaire might be a key concern when it comes to protecting a sensitive wildlife habitat or avoiding intrusive lighting towards buildings. Our fully integrated backlight solutions easily address this potential risk.

# Offer maximum visual comfort to



Because of the lower installation height compared to road lighting, visual comfort is an essential aspect of urban lighting. Schréder designs lenses and accessories to minimise any type of glare (distracting, discomforting, disabling glare and blinding glare). Our design offices harness a range of possibilities to find the best solutions for each project and ensure that we provide a gentle light that delivers the best night-time experience.

#### Protect wildlife



If not well designed, artificial lighting can badly affect wildlife. Blue light and excessive intensity can have a damaging effect on all types of life. Blue light radiation has the ability to suppress the production of melatonin, the hormone that contributes to the regulation of the circadian rhythm. It can also alter the behavioural patterns of animals including bats and moths, as it can change their movements towards or away from light sources. Schréder

favours warm white LEDs with minimal blue light, combined with advanced control systems including sensors. This enables permanent adaptation of the lighting to the real needs of the moment, minimising disturbance to the fauna and flora.

#### Get the starry sky back



The Upward Light Ratio (ULR) and Upward Light Output Ratio (ULOR), the latter taking the flux from the luminaire into account, provide information on the percentage of light emitted towards the sky. This Schréder range of luminaires minimises or eliminates (depending on the options) upward-directed light flux. It complies with strict international and local requirements.

## CASCAIS GEN2 | CHARACTERISTICS

# Schréder

/ EN 61000-3-3

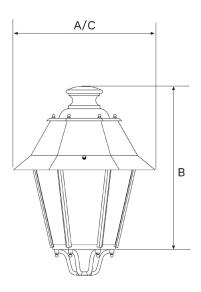
GENERAL INFORMATION	ON	ELECTRICAL INFORMATION						
Recommended	· ·		Class I EU, Class II EU					
installation height		Nominal voltage	220-240V – 50-60Hz					
FutureProof	Easy replacement of the photometric engine and electronic assembly	Surge protection options (kV)	10					
Circle Light label	Score between 60 and 90 - The product meets most of circular economy requirements	Electromagnetic compatibility (EMC)	EN 55015 / EN 61000-3-2 / EN 61000-3 / EN 61547					
Driver included	Yes	Control protocol(s)	1-10V, DALI					
CE mark	Yes	Control options	AmpDim, Custom dimming profile					
ENEC certified	Yes							
ENEC+ certified	Yes	OPTICAL INFORMATIO						
ROHS compliant	Yes	LED colour temperature	2200K (Warm White WW 722) 2700K (Warm White WW 727)					
Testing standard	EN 60598-1 EN 60598-2-1 EN 62262 IEC 62722-2-1 IEC 62493		2700K (Warm White WW 827) 3000K (Warm White WW 730) 3000K (Warm White WW 830) 4000K (Neutral White NW 740) 5700K (Cool White CW 757)					
HOUSING AND FINISH	IEC 62471	Colour rendering index (CRI)	>70 (Warm White WW 722) >70 (Warm White WW 727) >80 (Warm White WW 827)					
Housing	Aluminium Galvanised steel		>70 (Warm White WW 730) >80 (Warm White WW 830) >70 (Neutral White NW 740)					
Optic	РММА		>70 (Neutral Write NW 740) >70 (Cool White CW 757)					
Protector	Polycarbonate							
Housing finish	Polyester powder coating	LIFETIME OF THE LEDS	5 @ TQ 25°C					
Tightness level	IP 66	All configurations	100,000h - L92					
Impact resistance	IK 08	<ul> <li>Lifetime may be differe consult us.</li> </ul>	nt according to the size/configurations. Please					
Vibration test	Compliant with modified IEC 68-2-6 (0.5G)							
Access for maintenance	Tool-less access to gear compartment							
OPERATING CONDITIO	NS							
Operating temperature range	-30°C up to +55°C / -22°F up to 131°F with wind effect							

<sup>·</sup> Depending on the luminaire configuration. For more details, please contact us.

(Ta)

DIMENSIONS AND MOUNTING	
AxBxC (mm   inch)	530x735x530   20.9x28.9x20.9
Weight (kg   lbs)	13.0   28.6
Aerodynamic resistance (CxS)	0.38
Mounting possibilities	Post-top ¾" gas male Suspended mounting

<sup>·</sup> For more information about mounting possibilities, please consult the installation sheet.



CASCAIS GEN2 | Post-top mounting on ¾" male threaded spigots



CASCAIS GEN2 | Bracket (arch type)



CASCAIS GEN2 | Suspension hook





	Luminaire output flux (lm)										Power		Luminaire efficacy				
		White 722		White 727		White 827		White 730		White 830		l White 740		hite CW 57	consumption (W)		(lm/W)
Number of LEDs	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Up to
20	1100	4400	1200	5000	1100	4500	1300	5300	1200	5000	1400	5800	1400	5500	13	58	124
40	2300	7400	2500	8300	2300	7600	2700	8900	2500	8300	2900	9600	2800	9200	24	89	136

Tolerance on LED flux is  $\pm$  7% and on total luminaire power  $\pm$  5 %



