VALENTINO GEN2

LENSO FLEX™4

The classic urban lighting lantern with advanced technology

Beneath its classic and timeless design, VALENTINO GEN2 incorporates cutting-edge LED and connection technologies.

It benefits from the energy efficiency of LEDs with the photometric performance of the LensoFlex® concept developed by Schréder. VALENTINO GEN2 is available in numerous configurations to light urban roads, streets, squares, parks and car parks. With its various control options, this stylish luminaire is also connected-ready for your smart city projects.

VALENTINO GEN2 is the ideal tool for providing efficient lighting while creating attractive public spaces imbued with a sense of belonging, well-being and safety.

IP 66   IK 10   ⏚

□   CE   UKCA

🏷   PLUS 02   ✓

ZD⁴   DARKSKY APPROVED — Reduces light pollution — Certified by DarkSky.org

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

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Concept

The VALENTINO GEN2 cover, body and basket are made of strong, recyclable aluminium material. Its robust design has been created to ensure a long life-span and very low maintenance. The VALENTINO GEN2 luminaire has high tightness and impact levels, making it a stylish yet robust urban lighting solution.

VALENTINO GEN2 is available in various versions: with a flat glass protector or with a deep polycarbonate protector (clear or structured). The flat glass version is ULOR 0% to preserve night flora and fauna life while guaranteeing safe lighting for citizens.

Equipped with the powerful LensoFlex® LED engine, the VALENTINO GEN2 luminaire offers high performance with energy savings that can exceed 75% compared to luminaires fitted with traditional light sources.

Moreover, VALENTINO GEN2 is a connected-ready lighting solution, available with various control and sensor options to efficiently and responsibly manage lighting networks and generate even more energy and cost savings. More than an elegant luminaire, VALENTINO GEN2 is a real lighting tool for creating public spaces that are attractive, safe, and sustainable.

VALENTINO GEN 2 is designed for post-top mounting on a Ø60mm or ¾" gas spigot. A suspended version with a ¾" gas fixation is also available. As an option, the luminaire opening can be toolless. A retaining hinge prevents the cover from falling shut during maintenance or connection activities.

VALENTINO GEN2 provides an elegant lighting solution with different types of protectors to create unique atmospheres.

VALENTINO GEN2 offers various control and sensor options, in both post-top and suspended versions.

TYPES OF APPLICATION

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

KEY ADVANTAGES

- Heritage design for maintaining ambiance and identity
- Low energy consumption
- No light pollution (ULOR 0 %)
- Connected-ready for your future Smart city requirements
- Compatible with the Schréder EXEDRA control platform
- Zhaga-D4i certified
- RCM-compliant
- Proven LensoFlex®4 photometrical engines

ULOR 0% for the flat glass version.

A toolless opening version is available as an option.

## VALENTINO GEN2 | Post-top

VALENTINO GEN2 | Suspended

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.

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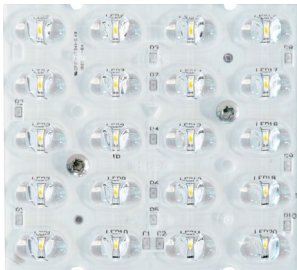
Custom dimming profile

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.
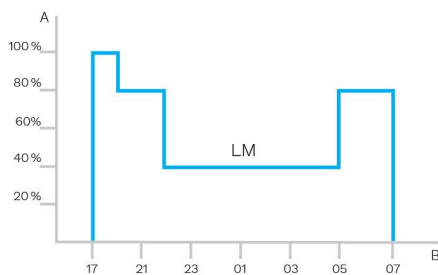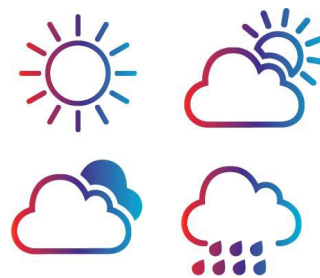

A. Dimming level | B. Time

Daylight sensor / photocell

Photocell or daylight sensors switch the luminaire on as soon natural light falls to a certain level. It can be programmed to switch on during a storm, on a cloudy day (in critical areas) or only at nightfall so as to provide safety and comfort in public spaces.


PIR sensor: motion detection

In places with little nocturnal activity, lighting can be dimmed to a minimum most of the time. By using passive infrared (PIR) sensors, the level of light can be raised as soon as a pedestrian or a slow vehicle is detected in the area.

Each luminaire level can be configured individually with several parametres such as minimum and maximum light output, delay period and ON/OFF duration time. PIR sensors can be used in an autonomous or interoperable network.

The Zhaga consortium joined forces with the DiiA and produced a single Zhaga-D4i certification that combines the Zhaga Book 18 version 2 outdoor connectivity specifications with the DiiA's D4i specifications for intra-luminaire DALI.
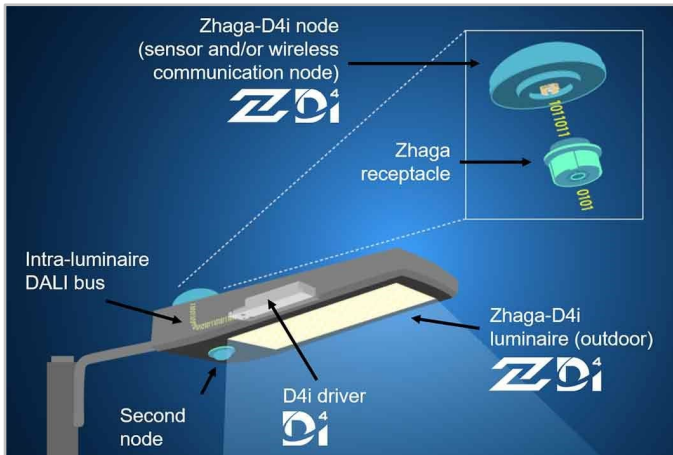
Standardisation for interoperable ecosystems

As a founding member of the Zhaga consortium, Schréder has participated in the creation of, and therefore supports, the Zhaga-D4i certification program and the initiative of this group to standardise an interoperable ecosystem. The D4i specifications take the best of the standard DALI2 protocol and adapt it to an intra-luminaire environment but it has certain limitations. Only luminaire mounted control devices can be combined with a Zhaga-D4i luminaire.

According to the specification, control devices are limited respectively to 2W and 1W average power consumption.

Certification program

The Zhaga-D4i certification covers all the critical features including mechanical fit, digital communication, data reporting and power requirements within a single luminaire, ensuring plug-and-play interoperability of luminaires (drivers) and peripherals such as connectivity nodes.

Cost-effective solution

A Zhaga-D4i certified luminaire includes drivers offering features that had previously been in the control node, like energy metering, which has in turn simplified the control device therefore reducing the price of the control system.

Schréder EXEDRA is the most advanced lighting management system on the market for controlling, monitoring and analysing streetlights in a user-friendly way.

Standardisation for interoperable ecosystems

Schréder plays a key role in driving standardisation with alliances and partners such as uCIFI, TALQ or Zhaga. Our joint commitment is to provide solutions designed for vertical and horizontal IoT integration. From the body (hardware) to the language (data model) and the intelligence (algorithms), the complete Schréder EXEDRA system relies on shared and open technologies. Schréder EXEDRA also relies on Microsoft   Azure for cloud services, provided with the highest levels of trust, transparency, standards conformance and regulatory compliance.

Breaking the silos

With EXEDRA, Schréder has taken a technology-agnostic approach: we rely on open standards and protocols to design an architecture able to interact seamlessly with third-party software and hardware solutions. Schréder EXEDRA is designed to unlock complete interoperability, as it offers the ability to:
• control devices (luminaires) from other brands
• manage controllers and to integrate sensors from other brands
• connect with third-party devices and platforms

A plug-and-play solution

As a gateway-less system using the cellular network, an intelligent automated commissioning process recognises, verifies and retrieves luminaire data into the user interface. The self-healing mesh between luminaire controllers enables real-time adaptive lighting to be configured directly via the user interface. OWLET IV luminaire controllers, optimised for Schréder EXEDRA, operate Schréder's luminaires and luminaires from third parties. They use both cellular and mesh radio networks, optimising geographical coverage and redundancy for continuous operation.

Tailored experience
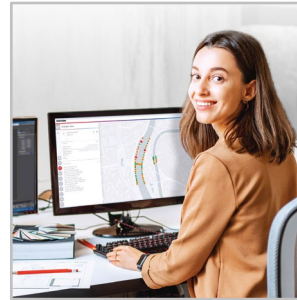
Schréder EXEDRA includes all advanced features needed for smart device management, real-time and scheduled control, dynamic and automated lighting scenarios, maintenance and field operation planning, energy consumption management and third-party connected hardware integration. It is fully configurable and includes tools for user management and multi-tenant policy that enables contractors, utilities or big cities to segregate projects.

## A powerful tool for efficiency, rationalisation and decision making

Data is gold. Schréder EXEDRA brings it with all the clarity managers need to drive decisions. The platform collects massive amounts of data from end devices and, aggregates, analyses and intuitively displays them to help end-users take the right actions.
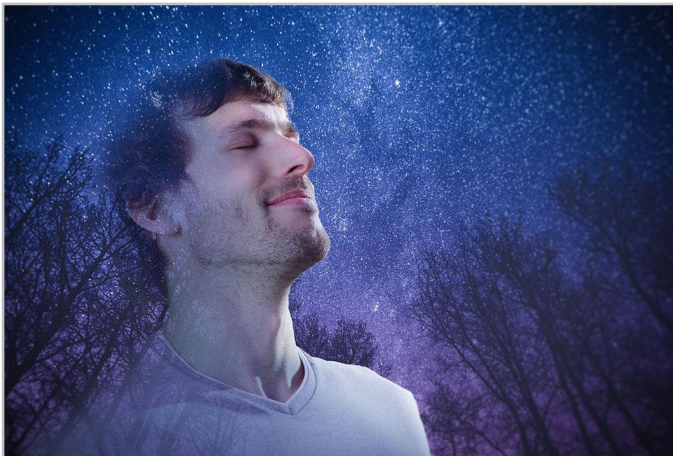
Protected on every side

Schréder EXEDRA provides state-of-the-art data security with encryption, hashing, tokenisation, and key management practices that protect data across the whole system and its associated services. The whole platform is ISO 27001 certified. It demonstrates that Schréder EXEDRA meets the requirements for establishing, implementing, maintaining and continually improving security management.

Mobile App: any time, any place, connect to your street lighting
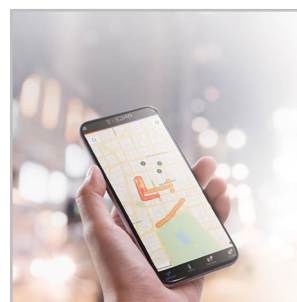
The Schréder EXEDRA mobile application offers the essential functionalities of the desktop platform, to accompany all types of operator on site in their daily effort to maximise the potential of connected lighting. It enables real-time control and settings, and contributes to effective maintenance.

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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

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.

1. Without backlight
2. With backlight

Offer maximum visual comfort to people

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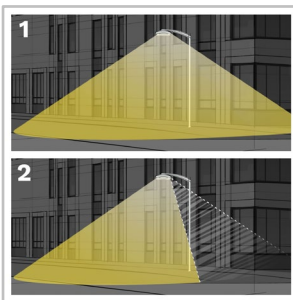wards or away from light sources. Schréder favours warm white LEDs with minimal blue light, combined with advanced control systems including sensors. This enables permanent adaptation of the lighting to the real needs of the moment, minimising disturbance to the fauna and flora.

Choose a Dark Sky certified luminaire

The International Dark-Sky Association (IDA) is the recognised authority on light pollution. It provides leadership, tools and resources to industries and companies willing to reduce light pollution. The IDA's Fixture Seal of Approval programme certifies outdoor lighting fixtures as being Dark Sky Friendly. All products approved by this programme must comply with the following criteria:

- The light sources shall have a maximum correlated colour temperature of 3000K;
 - Uplight allowance limited to 0.5% of total output, or 50 lumens, with no more than
   10 lumens in the 90-100 degree UL zone;
 - The luminaires must have a dimming capability to 10% of full rating;
 - The luminaires must be equipped with a fixed mounting option;
 - The luminaires must have Safety Certification by an independent laboratory.

This approved Schréder range of luminaires complies with these requirements.

GENERAL INFORMATION

Recommended installation height	4m to 10m | 13' to 33'
Circle Light label	Score ≥90 - The product fully meets circular economy requirements
CE mark	Yes
ENEC certified	Yes
ENEC+ certified	Yes
Dark Sky friendly lighting (IDA certification)	Yes
Zhaga-D4i certified	Yes
RCM mark	Yes
UKCA marking	Yes

· *Meets IDA Dark Sky requirements when fitted with a clear protector*

HOUSING AND FINISH

Housing	Aluminium
Optic	PMMA
Protector	Tempered glass Polycarbonate
Housing finish	Polyester powder coating
Standard colour(s)	AKZO grey 900 sanded
Tightness level	IP 66
Impact resistance	IK 10
Vibration test	Compliant with modified IEC 68-2-6 (0.5G)
Access for maintenance	By loosening screws on the top cover Tool-less access to gear compartment (option)

OPERATING CONDITIONS

Operating temperature range (Ta)	-30°C up to +40°C / -22°F up to 104°F

· *Depending on the luminaire configuration. For more details, please contact us.*

ELECTRICAL INFORMATION

Electrical class	Class I EU, Class II EU
Nominal voltage	220-240V – 50-60Hz
Surge protection options (kV)	10
Electromagnetic compatibility (EMC)	EN 55015 / EN 61000-3-2 / EN 61000-3-3 / EN 61547
Control protocol(s)	1-10V, DALI
Control options	AmpDim, Bi-power, Custom dimming profile, Remote management
Socket	Zhaga (optional) NEMA 7-pin (optional)
Associated control system(s)	Schréder EXEDRA
Sensor	PIR (optional)

OPTICAL INFORMATION

LED colour temperature	2200K (Warm White WW 722) 2700K (Warm White WW 727) 3000K (Warm White WW 730) 3000K (Warm White WW 830) 4000K (Neutral White NW 740)
Colour rendering index (CRI)	>70 (Warm White WW 722) >70 (Warm White WW 727) >70 (Warm White WW 730) >80 (Warm White WW 830) >70 (Neutral White NW 740)
ULOR	0%
ULR	0%

· *ULOR 0% only for flat glass version.*
· *Meets IDA Dark Sky requirements when fitted with LEDs of 3000K or less.*
· *ULOR may be different according to the configuration. Please consult us.*
· *ULR may be different according to the configuration. Please consult us.*

LIFETIME OF THE LEDS @ TQ 25°C

All configurations	100,000h - L95

· *Lifetime may be different according to the size/configurations. Please consult us.*

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DIMENSIONS AND MOUNTING

AxBxC (mm | inch)	400x667x400 | 15.7x26.3x15.7
Weight (kg | lbs)	8.7-11.4 | 19.1-25.1
Aerodynamic resistance (CxS)	0.19
Mounting possibilities	Post-top slip-over – Ø60mm Post-top ¾" gas male Suspended ¾" gas male

· *For more information about mounting possibilities, please consult the installation sheet.*

VALENTINO GEN2 | MOUNTING OPTION(S)

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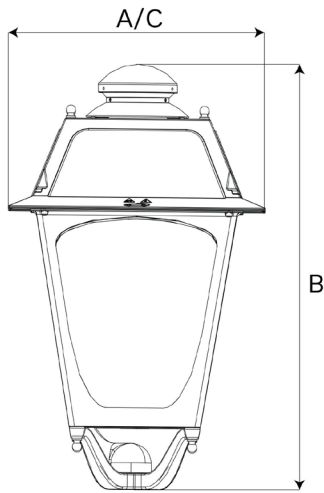
VALENTINO GEN2 | Post-top mounting on a Ø60mm or ¾" gas spigot
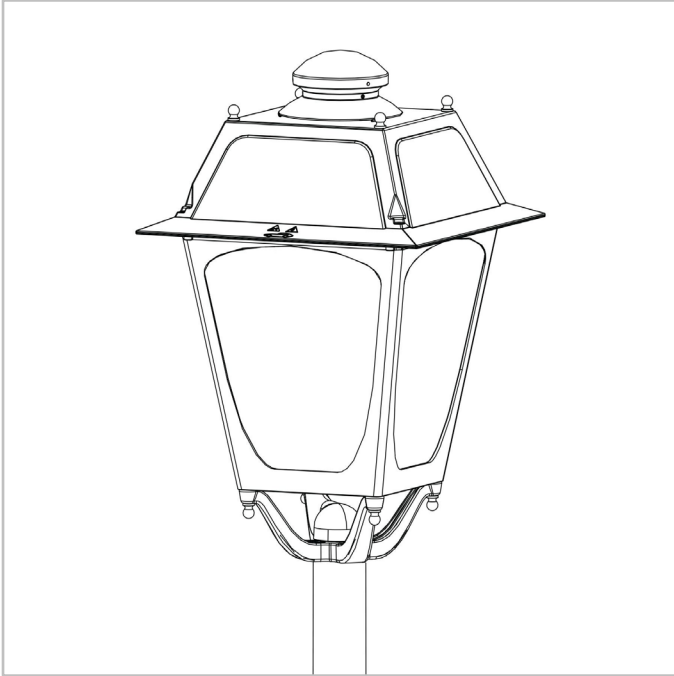
VALENTINO GEN2 | Suspended mounting with a ¾" gas fixation

VALENTINO GEN2	Photometry	LENSO FLEX™ 4

Luminaire output flux (lm)										Power consumption (W)		Luminaire efficacy (lm/W)
Warm White WW 722		Warm White WW 727		Warm White WW 730		Warm White WW 830		Neutral White NW 740				
Number of LEDs	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Up to
10	500	2200	600	2500	600	2700	600	2500	700	2900	7	22	144
20	1100	5700	1200	6400	1300	6900	1200	6400	1400	7400	13	66	157
30	1600	8600	1800	9600	2000	10300	1800	9600	2100	11200	19	87	162
40	2200	11500	2400	12800	2600	13800	2400	12800	2800	14900	25	114	165

Tolerance on LED flux is ± 7% and on total luminaire power ± 5 %

Schréder

LensoFlex4

LENSO FLEX™4

5300	Ultra-Narrow

5390	Ultra-Narrow

5301	Narrow

5303	Medium

5304	Medium

5305	Medium

5306 — Medium
LENSO FLEX 4

5392 — Medium
LENSO FLEX 4

5399 — Medium
LENSO FLEX 4

50006 — Medium Symmetrical
LENSO FLEX 4

5307 — Wide
LENSO FLEX 4

5308 — Wide
LENSO FLEX 4

5366 — Extra-Wide (LENSOFLEX 4)

50004 — Extra-Wide Symmetrical (LENSOFLEX 4)

5393 — Ultra-Wide (LENSOFLEX 4)

50008 — Ultra-Wide Symmetrical (LENSOFLEX 4)

5370 — Zebra Left (LENSOFLEX 4)

5369 — Zebra Right (LENSOFLEX 4)