

RIVARA



Designer : Eclipz

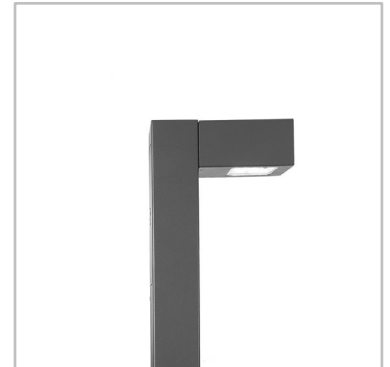


Refined design and LED technology: the ideal combination for lighting urban landscapes

With its simple but very elegant linear design, RIVARA provides a complete range of luminaires to light diverse landscapes.

The RIVARA luminaire is available with a single or double bracket. A wall bracket is also available to maintain aesthetic consistency in areas where poles cannot be installed.

This winning combination of performance, design and flexibility enables the RIVARA range to light streets, residential areas, parks, bicycle and pedestrian paths with a better quality of light. Furthermore, it generates energy savings and reduces the ecological footprint with a perfect aesthetic integration into the environment.



IP 66

IK 08



CE



Concept

Made of painted galvanised steel, the body and the dedicated poles of the RIVARA provide a strong mechanical design while offering elegant and contemporary linear shapes that blend into any urban environment.

The RIVARA luminaire incorporates a glass protector and hosts the second generation LensoFlex®2 photometric engine to provide a wide range of light distributions suited to various typical urban applications such as squares, narrow streets, pedestrian areas and residential districts. The number of LEDs is adapted to meet the photometrical requirements of the specified application.

The photometric engine is IP 66 to prevent the LEDs and the respective lenses coming into contact with the external environment and to maintain performance over time.

The RIVARA has been designed to offer multiple combinations with dedicated poles and single or double brackets. For narrow streets where poles cannot be installed, a wall bracket is proposed to offer a solution that ensures technical and aesthetic consistency. To facilitate installation and maintenance operations, RIVARA integrates patented technologies such as the lzyHub compact connection and connectivity module for quick, tool-free and error-proof wiring.

The pure design of the RIVARA is complemented by the significant advantages of LED technology: low power consumption, a perfect control of the light distribution, a long-lasting performance and a wide range of possibilities in terms of integrated intelligence.

To be as open and interoperable as possible, RIVARA is available with both NEMA and Zhaga sockets and is ZD4i certified.



RIVARA is available with a single or double bracket. A wall bracket is also on offer.



The photometric engine is IP 66 to maintain performance over time.



The RIVARA luminaires can be equipped with standard NEMA 7-pin or Zhaga sockets and are ZD4i certified.



The optical unit can be replaced on-site to take advantage of any future technological developments

TYPES OF APPLICATION

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

KEY ADVANTAGES

- Pure and simple design
- Elegant and comfortable solution for creating ambiance
- LensoFlex®2 photometric engine with photometry adapted to various applications
- FutureProof: easy replacement of photometric engine and power supply on-site
- Energy savings of up to 75% compared with traditional light sources
- Connected-ready for your future Smart city requirements
- Based on open and interoperable standards
- Compatible with the Schröder EXEDRA control platform
- Zhaga-D4i certified

RIVARA | On pole - single bracket



RIVARA | On pole - double bracket



RIVARA | On wall



RIVARA | Bollard





LensoFlex®2

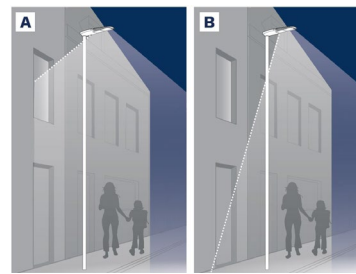
LensoFlex®2 is based upon the addition principle of photometric distribution. Each LED is associated with a specific PMMA lens that generates the complete photometric distribution of the luminaire. The number of LEDs in combination with the driving current determines the intensity level of the light distribution.



Back Light control

As an option, the LensoFlex®2 and LensoFlex®4 modules can be equipped with a Back Light control system.

This additional feature minimises light spill from the back of the luminaire to avoid intrusive light towards buildings.



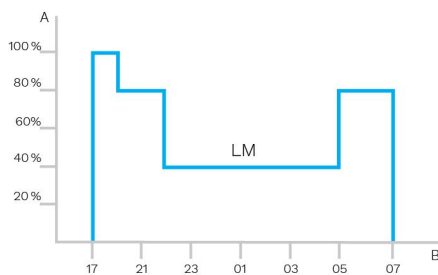
A. Without Back Light control | B. With Back Light control



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.

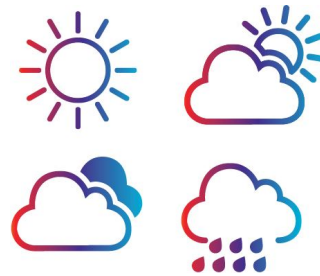


A. Dimming level | B. Time



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.

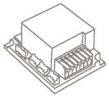


PIR sensor: motion detection

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 parameters 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.

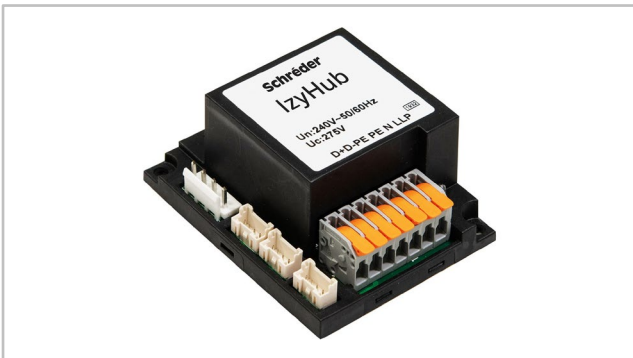




IzyHub

IzyHub is an innovative device that aims to keep luminaire installation and maintenance hassle-free. This single central connection hub distributes electricity and control information to all parts of the luminaire, ensuring that all components work together and offering reliable, long-term performance.

Its compact size and error-proof connections enable smaller and lighter luminaires that are easier to maintain and upgrade.



Surge Protection

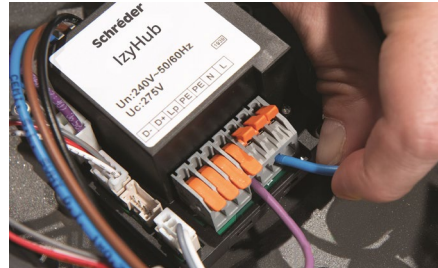
IzyHub features a built-in surge protection device. This prevents electrical surges resulting from lightning strikes and other transient voltages that originate from the mains network from damaging the luminaire, even in the most demanding conditions. The protective device also includes an end-of-life LED warning light, indicating that the luminaire is protected correctly.

User-friendly

Installing a luminaire has never been easier. IzyHub features tool-free connector as the main connection terminal. It enables 30% shorter installation times compared with standard solutions. Lever actuated spring-loaded electrical connectors provide optimal contact throughout the entire life of the product.

Easy maintenance

On the rare occasion that a component needs to be replaced in the luminaire, IzyHub makes sure that operations are carried out quickly and easily. Luminaire component connections are keyed so that mixing up electrical connections is physically impossible. Installers do not need to trace wires individually: plug it in, and it works straight away.



Versions and upgrades

IzyHub has several versions featuring different connectivity options. IzyHub can include an SPD, can work with external dimming and operate with all type of control sockets. It is also able to provide bi-power control and to include fuse options.

These options provide flexibility for future upgrades by only having to replace the IzyHub to connect the new equipment. No complicated re-wiring needed.





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, Schröder 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

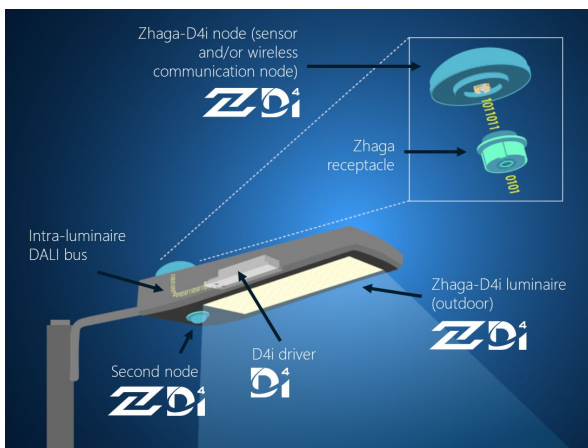
The Zhaga-D4i certification covers all the critical features including mechanical fit, digital communication, data reporting and power requirements within a single luminaire, ensuring plug-and-play interoperability of luminaires (drivers) and peripherals such as connectivity nodes.

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.

2 sockets: top and bottom

The Zhaga socket is small and suited to applications where aesthetics is essential. The architecture of Zhaga-D4i also foresees the possibility of putting two sockets on one luminaire, allowing for instance, the combination of a detection sensor and a control node. This also has the added value of standardising certain detection sensor communications with the D4i protocol.





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



Tailored experience

Schröder 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. Schröder 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

Schröder 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.

Standardisation for interoperable ecosystems

Schröder 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 Schröder EXEDRA system relies on shared and open technologies.

Schröder 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, Schröder 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. Schröder 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.

GENERAL INFORMATION

Recommended installation height	4m to 6m 13' to 20'
FutureProof	Easy replacement of the photometric engine and electronic assembly on-site
Driver included	Yes
CE mark	Yes
ENEC certified	Yes
ROHS compliant	Yes
Zhaga-D4i certified	Yes
French law of December 27th 2018 - Compliant with application type(s)	a, b, c, d, e, f, g
Testing standard	LM 79-08 (all measurements in ISO17025 accredited laboratory)

HOUSING AND FINISH

Housing	Galvanised steel
Optic	PMMA
Protector	Tempered glass
Housing finish	Polyester powder coating
Standard colour(s)	RAL 7040 window grey
Tightness level	IP 66
Impact resistance	IK 08

OPERATING CONDITIONS

Operating temperature range (Ta)	-30°C up to +55°C / -22°F up to 131°F with wind effect
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· 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 61000-4-5
Control protocol(s)	1-10V, DALI
Control options	AmpDim, Bi-power, Custom dimming profile, Photocell, Remote management
Socket	Zhaga (optional) NEMA 7-pin (optional)
Associated control system(s)	Schröder EXEDRA
Sensor	PIR (optional)

OPTICAL INFORMATION

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

· 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 - L90
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· Lifetime may be different according to the size/configurations. Please consult us.

DIMENSIONS AND MOUNTING

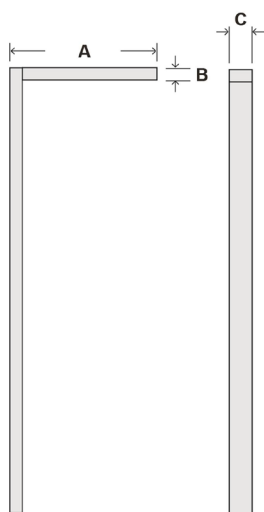
AxBxC (mm inch)	RIVARA BOLLARD - 350x100x180 13.8x3.9x7.1 RIVARA - 1100x100x180 43.3x3.9x7.1
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Weight (kg lbs)	RIVARA BOLLARD - 23.5 51.7 RIVARA - 16 35.2
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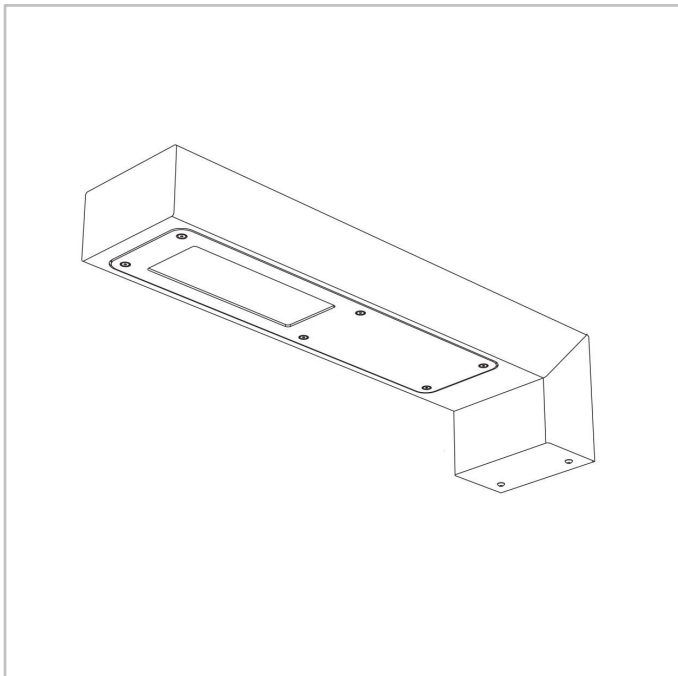
Aerodynamic resistance (CxS)	RIVARA BOLLARD - 0.00 RIVARA - 0.22
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Mounting possibilities	On a dedicated range of poles/brackets
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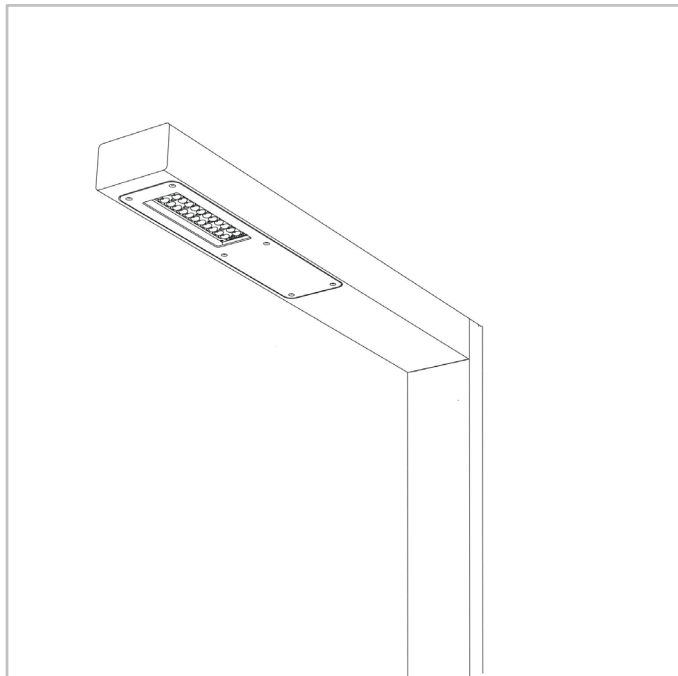
· For more information about mounting possibilities, please consult the installation sheet.



RIVARA | Wall mounting



RIVARA | Pole mounting (single or double bracket available)





Luminaire	Number of LEDs	Current (mA)	Luminaire output flux (lm) Warm White 727		Luminaire output flux (lm) Warm White 730		Luminaire output flux (lm) Warm White 830		Luminaire output flux (lm) Neutral White 740		Power consumption (W)	Luminaire efficacy (lm/W)	Photometry
			Min	Max	Min	Max	Min	Max	Min	Max			
RIVARA BOLLARD	8	350	800	1000	900	1000	900	1000	1000	1100	9.7	113	
	8	500	1200	1300	1200	1400	1200	1400	1300	1500	13.6	110	
	8	700	1500	1800	1600	1900	1600	1900	1800	2000	19.1	105	
	8	1000	2000	2300	2100	2400	2100	2400	2200	2600	28	93	
RIVARA	16	350	2000	2200	2100	2300	2100	2300	2200	2500	18.1	138	
	16	380	2100	2300	2200	2500	2200	2500	2400	2600	19.6	133	
	16	400	2200	2400	2300	2600	2300	2600	2500	2800	20.6	136	
	16	500	2700	2900	2800	3100	2800	3100	3000	3300	25.8	128	
	16	600	3100	3300	3200	3500	3200	3500	3500	3800	31	123	
	16	700	3400	3700	3600	4000	3600	4000	3900	4300	36.5	118	
	24	350	3000	3300	3200	3400	3200	3400	3400	3700	26.5	140	
	24	400	3300	3600	3500	3900	3500	3900	3800	4200	30.2	139	
	24	500	4000	4400	4300	4600	4300	4600	4600	5000	37.7	133	
	24	590	4600	5000	4800	5300	4800	5300	5200	5700	44.5	128	
	24	600	4600	5000	4900	5300	4900	5300	5300	5700	45	127	
	24	700	5200	5600	5500	6000	5500	6000	5900	6400	53	121	

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

