

# ISLA LED



## Elegant and economical solution with LED technology

The ISLA LED luminaire is an economical lighting solution based on LED technology. It is available with numerous light distributions, all characterised by low energy consumption and high-quality photometric performance.

Designed by Michel Tortel, the ISLA LED luminaire presents an elegant design that perfectly integrates into many urban and residential environments.

The ISLA LED luminaire is composed of aluminium and glass.



## Concept

ISLA LED is a luminaire composed of three main parts made of die-cast aluminium: a canopy hosting the gear compartment and the LED engine, three arms and a fixation part.

The optical compartment of the ISLA LED luminaire is sealed by flat glass, which prevents any intrusive light to satisfy the most demanding criteria for light pollution (no upwards light output), thereby ensuring a high-quality urban lighting.

ISLA LED is available with 16, 24 or 32 LEDs, with a low energy consumption and superior photometric performance that meets the lighting requirements of the space to be lit.

This LED-equipped luminaire, installed on a cylindrical conical, galvanised steel column, is a perfect example of lightness and elegance in design. It is particularly suited to lighting environments such as city centres, public squares, parks, residential areas and car parks.

More than a sophisticated luminaire, ISLA LED can be equipped with the latest remote technologies such as the 7-pin NEMA socket or Zhaga socket. This connected ready luminaire is also Zhaga-D4i certified for more connectivity services.

Isla LED is designed for installation at a height of 3.5 to 6m and offers slip-over mounting onto a Ø60mm or Ø76mm pole by tightening 2 M8 screws.



Isla LED is equipped with LensoFlex®2 photometric engines.



The optical compartment sealed by flat glass ensures a ULOR of 0%.



The Isla LED luminaires can integrate the Owllet range of control solutions.



Isla LED is designed for slip-over mounting onto a Ø60 or Ø76mm spigot.

## TYPES OF APPLICATION

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

## KEY ADVANTAGES

- Perfect control of light distributions
- Low energy consumption
- LensoFlex®2 : high-performance photometry adapted to various applications
- Elegant design for low height installation
- No light pollution (ULOR 0 %)
- Smart-city ready (NEMA) and ZD4i compliant (Zhaga)



## LensoFlex®2

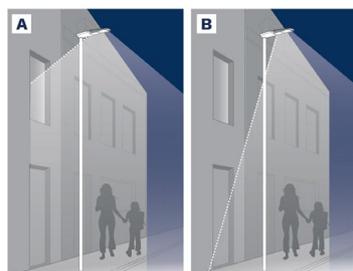
LensoFlex®2 is based upon the addition principle of photometric distribution. Each LED is associated with a specific PMMA lens that generates the complete photometric distribution of the luminaire. The number of LEDs in combination with the driving current determines the intensity level of the light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



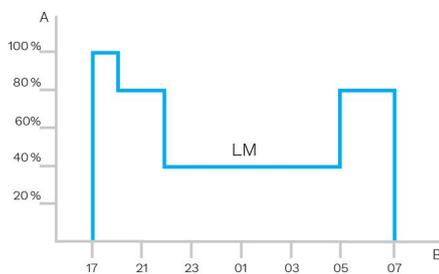
A. Without Back Light control | B. With Back Light control



## 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.

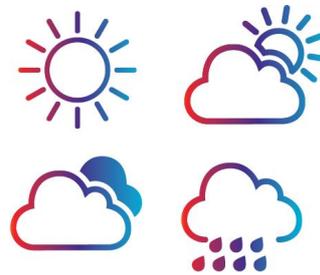


A. Dimming level | B. Time



## 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.

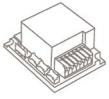


## PIR sensor: motion detection

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.

### Cost-effective solution

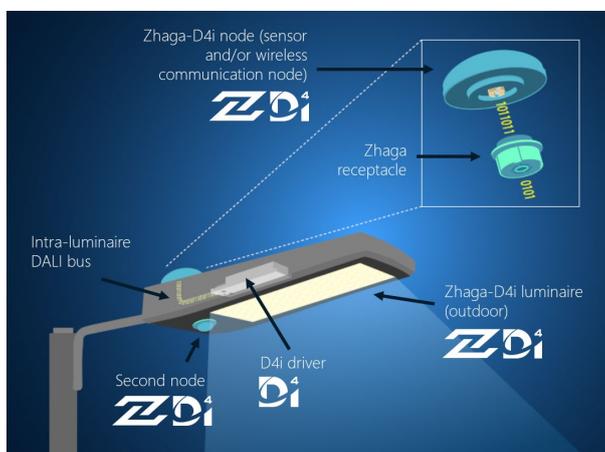
A Zhaga-D4i certified luminaire includes drivers offering features that had previously been in the control node, like energy metering, which has in turn simplified the control device therefore reducing the price of the control system.

### 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.





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	No
ENEC certified	Yes
ROHS compliant	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	Aluminium
Optic	PMMA
Protector	Tempered glass
Housing finish	Polyester powder coating
Standard colour(s)	AKZO grey 900 sanded
Tightness level	IP 66
Impact resistance	IK 08
Access for maintenance	Direct access to the gear compartment by loosening screws on the top cover

## OPERATING CONDITIONS

Operating temperature range (Ta)	-30°C up to +35°C / -22°F up to 95°F
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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
Power factor (at full load)	0.9
Surge protection options (kV)	10
Electromagnetic compatibility (EMC)	EN 55015:2013/A1:2015, EN 61547:2009
Control protocol(s)	1-10V, DALI
Control options	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.

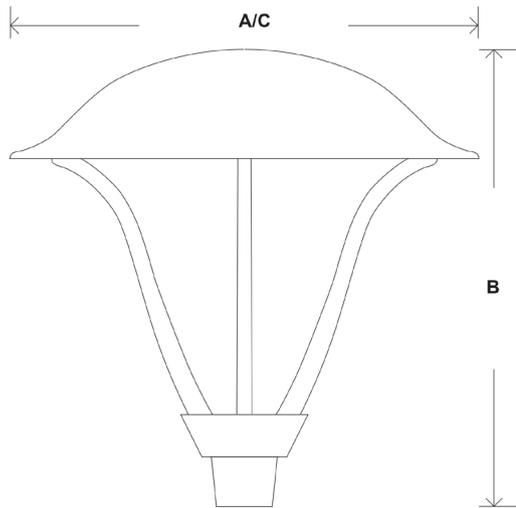
· ULR may be different according to the configuration. Please consult us.

## LIFETIME OF THE LEDS @ TQ 25°C

All configurations	100,000h - L90
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## DIMENSIONS AND MOUNTING

AxBxC (mm   inch)	647x636x647   25.5x25.0x25.5
Weight (kg   lbs)	9.5   20.9
Aerodynamic resistance (CxS)	0.06
Mounting possibilities	Post-top slip-over – Ø60mm Post-top slip-over – Ø76mm





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			
ISLA LED	16	350	1600	1900	1700	2000	1700	2000	1800	2100	18.1	116	
	16	400	1700	2100	1900	2200	1900	2200	2000	2400	20.6	117	
	16	500	2100	2500	2300	2700	2300	2700	2400	2900	25.8	112	
	24	350	2400	2800	2500	3000	2500	3000	2700	3200	26.6	120	
	24	400	2600	3200	2800	3400	2800	3400	3000	3600	30.4	118	
	24	500	3100	3700	3300	4000	3300	4000	3600	4300	38.1	113	
	32	350	3200	3800	3400	4000	3400	4000	3600	4300	34.6	124	
	32	400	3500	4200	3700	4500	3700	4500	4000	4800	39.5	122	
	32	450	3900	4600	4100	4900	4100	4900	4400	5300	44.5	119	
	32	500	4200	5000	4400	5300	4400	5300	4800	5700	49.5	115	

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

