

# ISLA LED

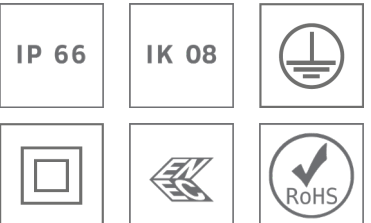


## Elegant and economical solution with LED technology

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 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 Owlet 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 %)
- Designed to incorporate Owlet control and sensor solutions
- Smart-city ready (NEMA) and ZD4i compliant (Zhaga)



## LensoFlex®2

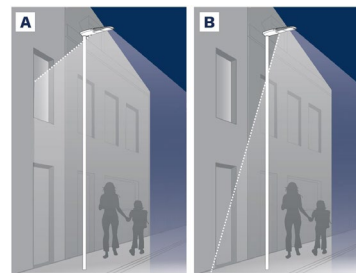
LensoFlex®2 is based upon the addition principle of photometric distribution. Each LED is associated with a specific PMMA lens that generates the complete photometric distribution of the luminaire. The number of LEDs in combination with the driving current determines the intensity level of the light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



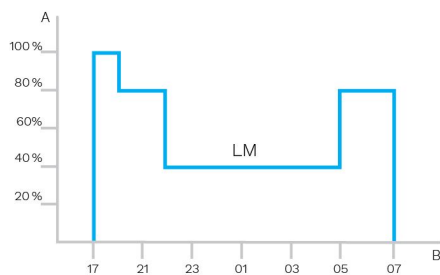
A. Without Back Light control | B. With Back Light control



### 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.

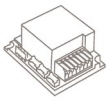


### PIR sensor: motion detection

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

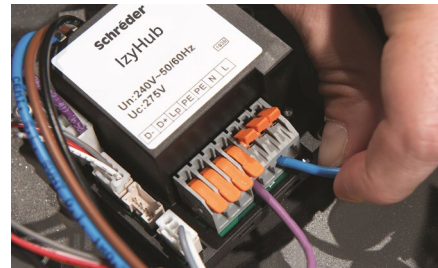
IzyHub features a built-in surge protection device. This prevents electrical surges resulting from lightning strikes and other transient voltages that originate from the mains network from damaging the luminaire, even in the most demanding conditions. The protective device also includes an end-of-life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

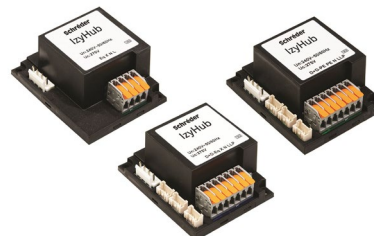


### Versions and upgrades

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.



## Owlet IoT

Owlet IoT remotely controls luminaires in a lighting network, creating opportunities for improved efficiency, accurate real-time data and energy savings of up to 85%.



### ALL-IN-ONE

The LUCO P7 CM controller includes the most advanced features for optimised asset management. It also provides an integrated photocell and operates with an astronomical clock for seasonal dimming profile adaptations.

### EASY TO DEPLOY

Thanks to wireless communication, no cabling is needed. The network is not subject to physical constraints or limitations. From a single control unit to an unlimited network, you can expand your lighting scheme at any time.

With real-time geolocation and automatic detection of luminaire features, commissioning is quick and easy.

### USER-FRIENDLY

Once a controller is installed on a luminaire, the luminaire automatically appears with its GPS coordinates on a web-based map.

An easy-to-use dashboard enables each user to organise and customise screens, statistics and reports. Users can gain relevant, real-time insights.

The Owlet IoT web application can be accessed at all times from anywhere in the world with a device connected to the Internet. The application adapts to the device to offer an intuitive and user-friendly experience.

Real-time notifications can be pre-programmed to monitor the most important elements of the lighting scheme.



### SECURE

The Owlet IoT system uses a local wireless mesh communication networks to control the on-site luminaires combined with a remote control system utilising the cloud to ensure smooth data transfers to and from the central management system.

The system uses encrypted IP V6 communication to protect data transmission in both directions. Using a secure APN, Owlet IoT ensures a high level of protection.

In the exceptional case of a communication failure, the built-in astronomical clock and photocell will take over to switch the luminaires on and off, thus avoiding a complete blackout at night.

### EFFICIENT

Thanks to sensors and/or pre-programmed settings, lighting scenarios can be easily adapted to cope with live events, providing the right lighting levels at the right time and in the right place.

The integrated utility grade meter offers the highest accuracy available on the market today, enabling decisions based on real figures.

Accurate real-time feedback and clear reporting ensures that the network operates efficiently and maintenance is optimised.

When LED luminaires are switched on, the inrush current can create problems for the electricity grid. Owlet IoT incorporates an algorithm to preserve the grid at all times.

### OPEN

The LUCO P7 CM controller can be plugged onto the standard 7 pin NEMA socket and operates through either a DALI or 1-10V interface to control the luminaire.

Owlet IoT is based on the IPv6 protocol. This method for addressing devices can generate an almost unlimited number of unique combinations to connect non-traditional components to the Internet or computer network.

Through open APIs, Owlet IoT can be integrated into existing or future global management systems.



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

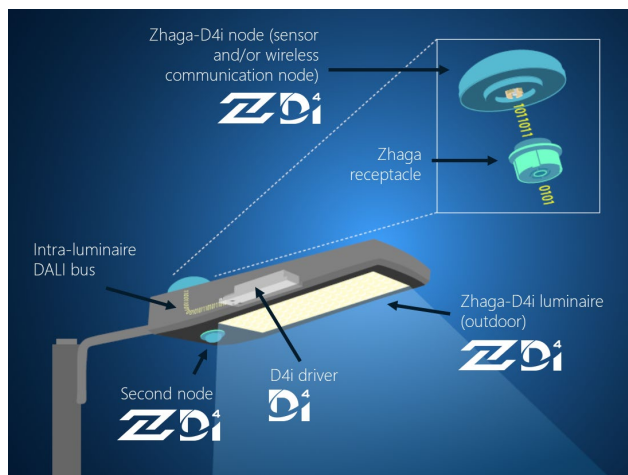
As a founding member of the Zhaga consortium, Schröder has participated in the creation of, and therefore supports, the Zhaga-D4i certification program and the initiative of this group to standardise an interoperable ecosystem. The D4i specifications take the best of the standard DALI2 protocol and adapt 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.



The Schröder Bluetooth solution consists of 3 main components:

- A Bluetooth dongle plugged into the modular driver of the luminaire (BLE transceiver)
- A Bluetooth antenna fitted on the luminaire
- A smartphone application called Sirius BLE

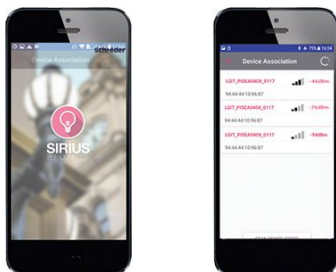


## Easy to use

The Schröder Bluetooth solution is ideal for the on-site configuration of individual outdoor luminaires using Bluetooth. From the ground, the user is able to switch the luminaire on or off, adapt the dimming curve, read diagnostic data and much more. A user-friendly application called Sirius BLE provides an easy and secure access to the control and configuration functions. Whether you are managing a lighting network in an urban or a residential area, this solution will make it easy to control your outdoor luminaires while simply standing by the pole.

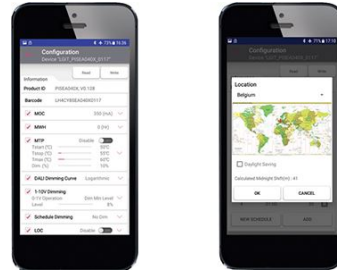
## Quick and easy pairing

Get the Sirius App from Schröder. Go to the menu. Press the "SCAN DEVICE (START)" button, to search for the surrounding BLE modules. They will be displayed with a bar graphic (signal intensity) to indicate the closest and the most distant one you can reach. Click on the device you want to connect to and enter your personal access key to control the luminaire.



## Defining the settings

Once you are connected to a luminaire, you can set various parameters such as the maximum output current, minimum dimming level and custom dimming profile.



## Manual dimming control

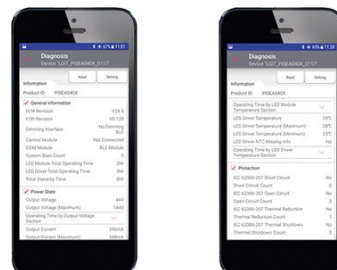
The App enables you to do a manual override to adapt the dimming levels instantly. Simply tap on the "Dimming" button in the main menu and adjust the dimming using the wheel and button. Predefined dimming levels can be applied immediately. The

corresponding value is displayed on the wheel. This enables you to test the ON / OFF and dimming features of the luminaire paired to the smartphone.



## On-site diagnostic

When a luminaire is paired, you can access various diagnostic information: total number of power up events, operation time of LED module and driver, total energy consumption of LED driver... etc. You can also track operating events (short circuits, thermal shutdowns...). The diagnostic values may be the current state or values accumulated to date.





## 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)	Bluetooth, 1-10V, DALI
Control options	Bi-power, Custom dimming profile, Photocell, Remote management
Socket	Optional Zhaga socket - Zhaga-D4i certified product NEMA 7-pin (optional)
Associated control system(s)	Sirius BLE Owlet Nightshift Owlet IoT
Sensor	PIR (optional)

## OPTICAL INFORMATION

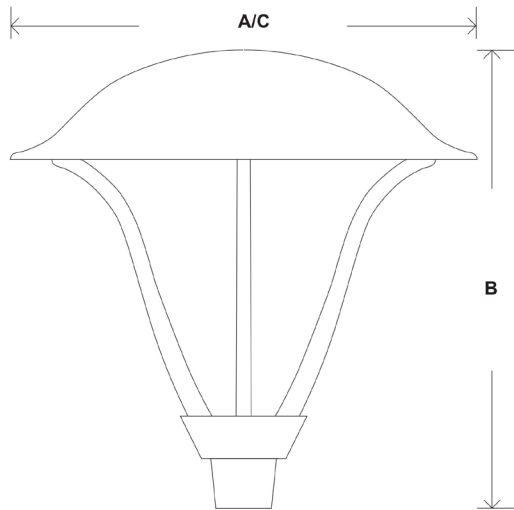
LED colour temperature	2200K (Warm White 822) 2700K (Warm White 727) 3000K (Warm White 730) 3000K (Warm White 830) 4000K (Neutral White 740)
Colour rendering index (CRI)	>80 (Warm White 822) >70 (Warm White 727) >70 (Warm White 730) >80 (Warm White 830) >70 (Neutral White 740)
Upward Light Output Ratio (ULOR)	0%

## 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 822		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	Min	Max	Min	Max		
ISLA LED	16	350	1500	1800	1700	2000	1200	1400	1500	1800	1700	2100	18.1	18.1	116	
	16	400	1700	2000	1900	2200	1300	1600	1700	2000	1900	2300	20.6	20.6	117	
	16	500	2000	2400	2300	2700	1600	1900	2000	2400	2300	2800	25.8	25.8	112	
	24	350	2300	2700	2500	3000	1800	2100	2300	2700	2600	3100	26.6	26.6	120	
	24	400	2500	3000	2800	3400	2000	2400	2500	3000	2900	3500	30.4	30.4	118	
	24	500	3000	3600	3300	4000	2400	2800	3000	3600	3400	4100	38.1	38.1	113	
	32	350	3000	3600	3400	4000	2400	2800	3000	3600	3500	4200	35	35	123	
	32	400	3400	4000	3700	4500	2600	3200	3400	4000	3900	4600	39.9	39.9	120	
	32	450	3700	4400	4100	4900	2900	3500	3700	4400	4200	5100	45	45	118	
	32	500	4000	4800	4400	5300	3100	3800	4000	4800	4600	5500	49	49	116	

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

