

### CIES Luminaire Z-Series 12LED 40W

Ecological lights made of technical polymer invulnerable everywhere

CIES is the first series of luminaires made of technical polymers specially designed by Televes, combining design, mechanical engineering and the latest electronic technology. These luminaires have a unique style that is also customisable! You can choose from a large number of alternatives: different casing colours, wide colour temperature range, different optics options, and much more.

CIES is an eco-friendly lighting option, from its production from 100% recyclable materials, in a process that minimises the carbon footprint, to its high energy efficiency and durability, which reduces waste generation. What's more, the materials are very light and at the same time resistant, which optimises all the transport, installation and maintenance tasks that are naturally linked to a public luminaire.

Thanks to this range of luminaires, an innovative and ideal solution is provided for the most aggressive environments, especially for maritime and seaside areas.

The Z series offers maximum flexibility by adding dimming connectors under the Zhaga book 18 standard, which allows connection to remote management nodes, thus enabling communication with IoT infrastructures. It also offers the possibility of DALI2 dimming, CLO (Constant Lumen Output), communication via NFC, and preprogrammed 5-step multi-level dimming.

In addition, this open interface allows the Z series

to be connected to any remote management system, combining the possibilities of full integration with additional sensorisation. Thus, our luminaires can be perfectly integrated into any Smart City project

Ref.	60090200
EAN13	8424450306574

#### Other features

Number of LEDs	12
Lighting control	Remote control
Power	40.00 W
Packaging info	
Box	1 pcs.

#### Physical data

4,151.00 g
5,351.00 g
263.00 mm
250.00 mm
504.00 mm
4,151.00 g

#### Highlights

- **Resistant in any environment:** made of corrosion-resistant materials, self-formulated technical polymers and stainless steel
- **Maximum safety:** technical polymer casing (non-conductive material) and automatic electrical disconnection on opening. Class II and SELV
- **Easy installation and maintenance:** light weight and handy format with tool-free opening and locking of the top cover. Quick on-site replacement of all components
- **Eco-friendly luminaire:** produced from 100% recyclable materials, in a manufacturing process that minimises the carbon footprint. Thanks to this and to its high operating efficiency, CIES helps to preserve the environment and respect for ecology

- **Supports the quality of the night sky:** in accordance with the IAC (Instituto de Astrofísica de Canarias) requirements, the luminaire is suitable for areas of special protection from light pollution (flux emission to the upper hemisphere < 0.1%)
- 100% made in Televes: technology designed and manufactured in our cutting-edge facilities, guaranteeing total control, with demanding quality monitoring, over each of the production phases

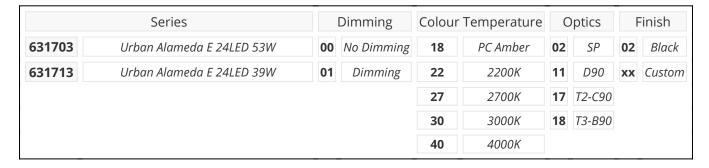
#### Discover

Our ranges of luminaires encompass a wide range of powers and number of LEDs, in addition to being customizable in the types of lighting control, colour temperatures, optics and their light distribution, and finishes. A product can be configured according to these parameters, and ordered by its numerical or logical reference, as follows:

#### Selecting the luminaire by the numerical reference:

This is a numerical code made up of 14 digits:

- The first 6 digits represent a code that depends on the Series of the luminaire, the number of LEDs and the power
- The next 8 digits allow you to choose the configurable parameters of the luminaire: lighting control, colour temperature, type of optics and finish



#### **Selecting the luminaire by logical reference:**

This is an alphanumeric code composed of an unlimited number of characters, describing the luminaire's characteristics using logical abbreviations, to facilitate its interpretation. It is divided into 2 groups of characters, separated by a hyphen:

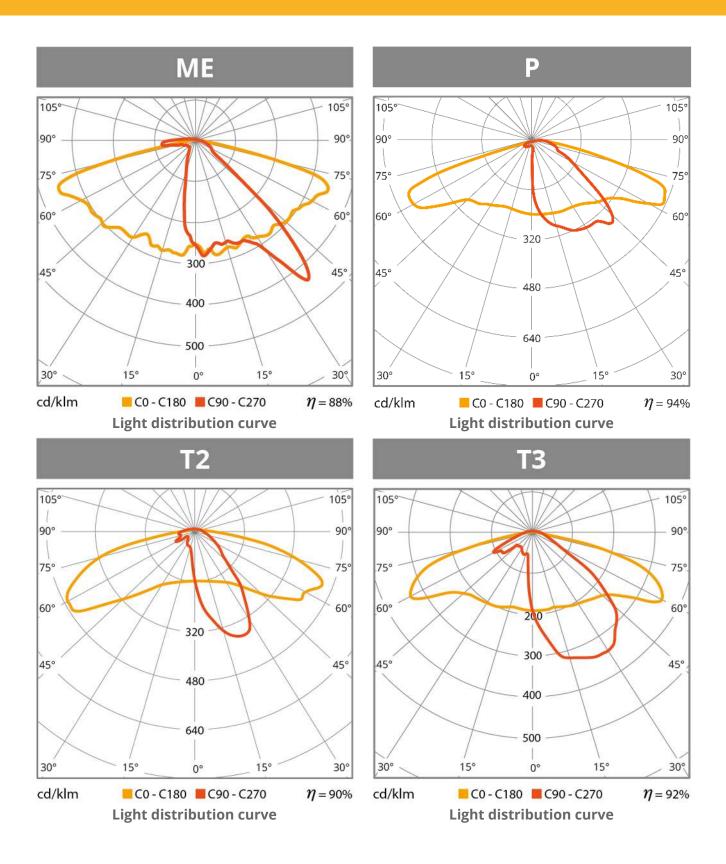
- The first group specifies: the luminaire series, the number of LEDs, the colour temperature, and the lighting control
- The second group specifies: the type of optics, the finish and the power

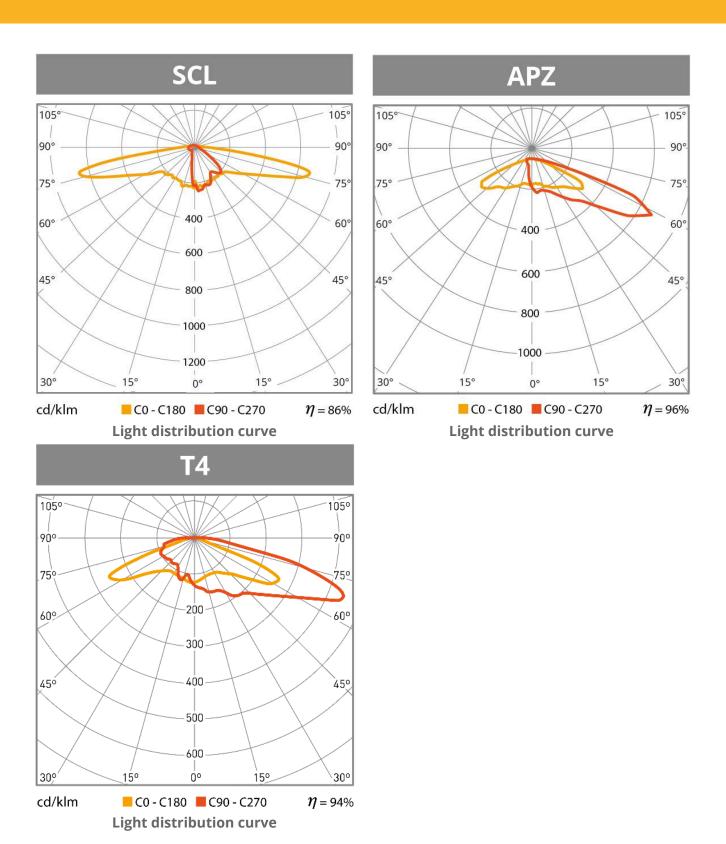
An example of a logical reference: UA2418D-D90BL53

- **UA** Urban Alameda
- **24** 24 LEDs
- 18 Colour Temperature: PC Amber
- **D** Dimming included
- **D90** D90 Optics
- BL Black colour
- **53** *53W Power*

	Range & LED number	Colour Temperature		Dimming		Optics	Finish		Power	
UA24	Urban Alameda E 24LED	18	PC Amber	(Ø)	No Dimming	SP	BL	Black	53	53W
		22	2200K	D	Dimming	D90	XX	Custom	39	39W
		27	2700K			T2-C90				
		30	3000K			T3-B90				
		40	4000K							

#### Graphic documentation





#### **Features**

#### A luminaire with a unique personality

It combines design, engineering and modernity



CIES features a slightly wavy design, that evokes the ocean tides of the environment surrounding the natural park of the Atlantic Islands of Galicia. Created in a maritime and island environment, CIES is known for its excellent performance in extreme weather conditions.

Its design inspired by the Galician archipelago is manifested in the contrast between the strength and hardness of its materials and the lightness and mellowness of its style, such as the fine sand dunes that harmonise with the robustness of the islands.

#### Invulnerable in any environment

Designed to last



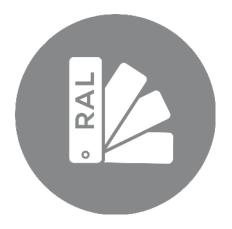
CIES is made of corrosion-proof materials: technical polymers with a proprietary formula and stainless steel. By avoiding the use of mixed metals, the possibility of galvanic corrosion is completely eliminated, thus ensuring a long life for the luminaire.

Its UV-stabilised technical polymer casing is vandal-resistant, withstanding impacts of IK10 level.

CIES is the ideal luminaire for maritime areas, as it is particularly resistant to exposure to adverse weather conditions with high levels of humidity and/or salinity.

#### A world of possibilities

Customisable style for every situation



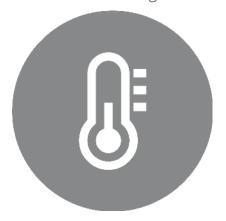
Each situation requires specific lighting features, that's why our luminaires offer multiple alternatives to meet the needs of each context:

- A wide selection of highly homogeneous colour temperatures (SDCM<3): PC Amber, 2,200, 2,700, 3,000 and 4,000°K</li>
- 7 different types of optics are available to achieve lighting adapted to any environment: P, ME, T2, T3, T4, APZ and SCL
- Variety of finishes in any colour of the RAL range
- CRI>70 and available on request CRI>80 and CRI>90

And if you don't find what you are looking for, we have even more options available on request. We are pleased to study your project in a tailored, non-binding way. Contact us, and we will help you choose the perfect lighting.

#### **Perfect thermal management**

Materials and design that enhance dissipation



The CIES luminaire has a passive cooling system for the light source. High-quality thermopolymer heat sinks ensure thermal conductivity, resulting in great temperature stability.

In addition, the electronics compartment is separated from the LED modules, which prevents heat transfer between the two points. Thanks to the thermal protection of the electronics, the light's lifetime is maximised (L90B10 > 100,000h at 25°C) and its efficiency is greatly improved (up to 160 lm/W).

#### Easy installation and maintenance

On-site and tool-free replacement



CIES has been designed to simplify installation and maintenance tasks as much as possible. From its light weight and handy format, to its tool-free cover opening and locking system, facilitating on-site replacement of any of its components.

Moreover, the luminaire has a self-cleaning system thanks to the grooves located in the top part of the luminaire, helping to clean and preventing possible degradation due to the accumulation of dirt.

#### Sustainable and ecological lighting

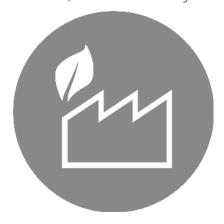
Supporting the quality of the night sky



Inspired by a protected natural area, CIES supports the preservation of the environment and respects the ecology and quality of the night sky. According to the requirements of the IAC (Instituto de Astrofísica de Canarias), CIES is suitable for areas of special protection against light pollution, with a light emission to the upper hemisphere of less than 0.1%, emitting an adequate luminous flux, directed only towards the areas of interest.

#### **Environmentally friendly under the 3 R's**

Reduce, re-use and recycle



In order to reduce environmental damage and take care of our planet, we take responsibility to contribute by following the 3 R rule:

- Reduce: Our manufacturing process reduces by 50% the carbon footprint generated, compared to aluminium equivalents
- Reuse: The luminaire can live on in the infrastructure, thanks to a LED module and driver replacement sustainably, supporting the circular economy
- Recycle: The luminaire is made of 100% recyclable materials

#### 100% electrical safety

Maximum protection

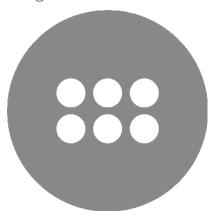


This luminaire has the best levels of electrical protection: its Class II guarantees safety without the need for ground connection thanks to the double isolation of the components. Furthermore, the SELV certificate guarantees an output voltage of less than 60V, minimising the risk of electrocution in the event of system failure. In addition, its driver, optical group and IP68 connections offer integral protection to all the optical and electronic elements against the ingress of water and dust, eliminating any effect caused by external agents.

Finally, the casing made of technical polymer (non-conductive material) eliminates completely the possibility of electrocution in the event of contact with the luminaire.

#### **Control and connectivity**

Range of luminaires with Zhaga Book 18 socket and D4i certified driver



This range is equipped with D4i (Digital Illumination Interface Alliance) certified drivers, which have the ability to store luminaire data. At the same time, D4i defines how to feed from the driver to other DALI2 devices connected through the bus, simplifying communication with sensors.

All Z Series luminaires are DALI2 and CLO dimmable and include the standard Zhaga Book 18 socket, which allows Plug&Play connection with remote management nodes and the integration of multiple sensors (presence, twilight, noise, air quality...).

#### Televes quality guarantee

With over 60 years of European manufacturing experience

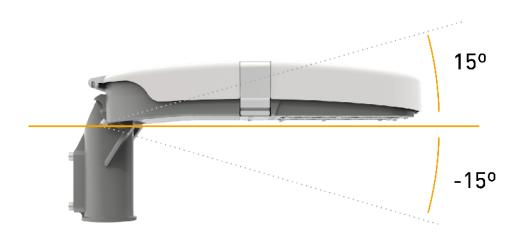


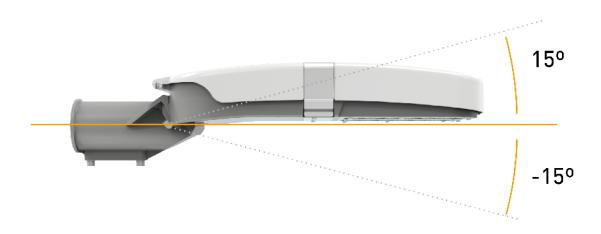
Our cutting-edge facilities are equipped with all the means to guarantee a quality and reliable luminaire, highlighting precise traceability and rigorous verification of all processes. This is possible thanks to an advanced methodology of product design under simulation and in-house manufacturing on robotised lines, in collaboration with national and local providers.

#### Mounting details

Quick and easy mounting by using a single accessory for vertical and horizontal position of great strength and durability, made from a specially-formulated technical polymer.

The rotation of the lighting unit can be adjusted up to  $30^{\circ}$ . It is also adaptable to posts, columns and arms with Ø 42 to 60 mm, and adapters are available for other diameters.





Tool-free top opening for access to electronics and LED module. Electrical disconnection on opening to minimise the risk of electrocution.





### **Technical specifications**: Ref. 60090200

Number of leds						12					
Power	W	40									
Pre-programmed dimming											
Control interface		Dali 2									
Node/sensor connection type		1x Zhaga									
Optic type options		Р	T2		T3	ME	APZ	SCL	T4		
Lens type		PC lens	PC lens	S	PC lens	PC lens	PC lens	PC lens	PC lens		
Color temperature options		2200K		2700	K	3000K	4000	K	PC Amber		
Luminous flux	lm	4540		4996	5	5520	5720	)	2340		
Lighting efficiency	lm/W	113.5		124.9	9	138	143		58.5		
LED current	mA	500		500		500	500		1000		
Duration	h					100000					
Working life						L90B10					
Constant ligh output (CLO)						Yes					
Standard Deviation Colour Matching (SDCM)			< 3								
Color rendering index (CRI)						70					
CE Mark						Yes					
ENEC Certificate						No					
Protection Class IEC		Class II									
EU RoHS Compliant		Yes									
IK Rating (light module)		10									
IK Rating (whole luminaire)		10									
IP Rating (light module)			66 66								
IP Rating (whole luminaire)						66					
Colour						White/Grey					
Material						Tecnical Polymer					
Material cover						Without cover					
Fixation Material						Tecnical Polymer					
Mast diameter Max	mm					60					
Mast diameter Min	mm					42					
Mounting method						Post top/side entry					
Surface facing the wind	m²					0.115					
Number of LED modules						1					
Minimum power factor						0.9500					
Lighting source type						LED					
Replaceable light source						Yes					
Cable						Yes					
Power consumption tolerance	%					5					
Lighting flux tolerance	%					8					
Electric connection					3-00	ole waterproof conne	ctor				
nrush current	A					26					
Input voltage Max	Vac					240					
nput voltage Min	Vac					220					
Mains frequency						50 Hz					
Max. Operating temperature	°C					40					
Min. Operating temperature	°C					-35					