

Televes®



CiES SERIES

ECOLOGICAL LIGHTS MADE OF TECHNICAL POLYMER
INDESTRUCTIBLE IN ANY SETTING

CiES

CiES is the first series of lights manufactured using **technical polymers especially designed by Televes**, combining design, mechanical and materials engineering, and the latest electronic technology to satisfy the most demanding customers. This series offers an innovative solution for the lighting market, is ideal for the most demanding environments and streamlines operation, installation, and maintenance.

DISCOVER A LIGHTING SYSTEM WITH PERSONALITY...

CiES features a slightly wavy design that evokes the coastal tides surrounding the natural park of the Atlantic Islands of Galicia.

Created in a marine island environment, CiES is known for its excellent durability in the face of extreme weather conditions, including its **immunity to corrosion and resistance to UV damage**.

The robustness of the Galician archipelago is embodied in the **superior strength** of the lighting system, which **stands up to blows and impacts**. By contrast, its **light and mellow design** blends with the island's dunes.

The cool breeze of the Atlantic flows effortlessly through the heart of CiES, as its specialized technical polymer dissipater offers **excellent thermal conductivity**. This results in a ventilated core that is **highly resistant to heat**, maintaining a cool temperature which **maximizes the lighting's longevity**.

Inspired by a protected natural park, CiES lighting uses **recyclable materials** and **minimizes the carbon footprint** of its manufacturing process to promote **environmental preservation and respect**.

CiES... Born to shine... designed to last...



MULTIPLE USES



(INTER) URBAN LIGHTING

Streets, promenades, doors, piers, boulevards, plazas, parks, residential areas, industrial parks, freeways, highways, and more...



VARIOUS OUTDOOR AREAS

The outside of industrial facilities, shopping malls, recreation areas, sports facilities, parking lots.

INNOVATION AND ENGINEERING DEFINE ITS STYLE

INVULNERABLE IN ANY ENVIRONMENT

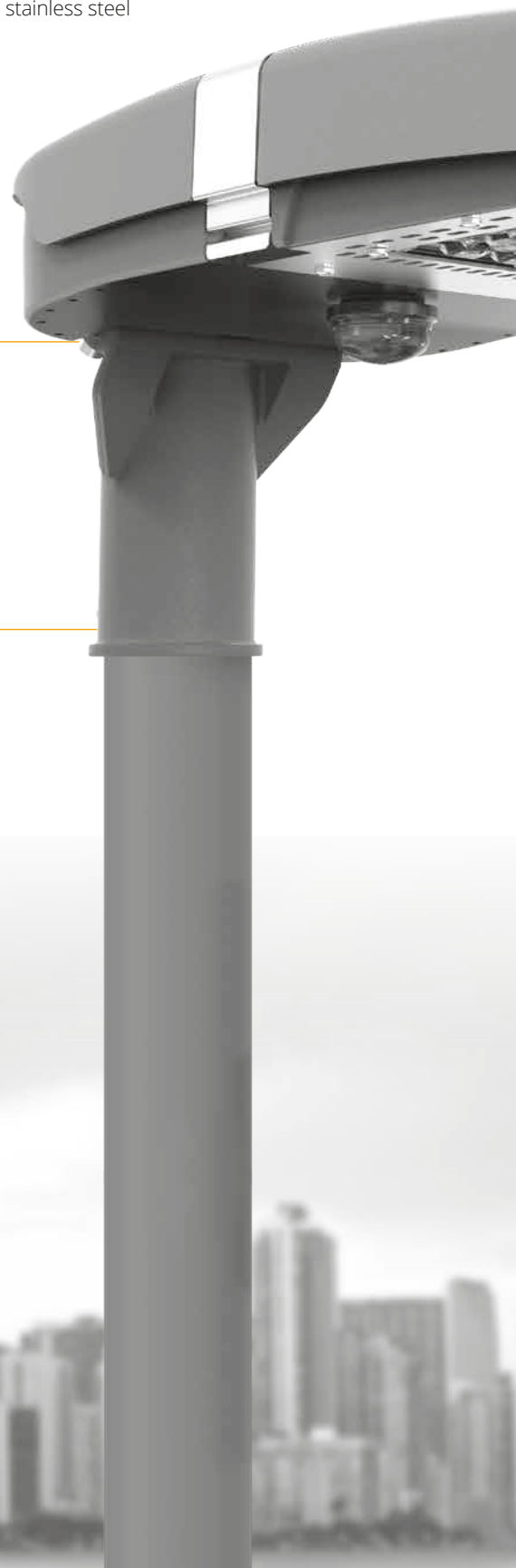
- Durable in any surroundings, especially in adverse weather conditions (high levels of humidity, salinity, pollution, etc.)
- Made with corrosion-proof materials: technical polymers with a proprietary formula and stainless steel
- No mixed metals (eliminates galvanic corrosion)
- Casing resistant to damage from continuous exposure to UV rays.
- IK09 anti-vandalism rating, extremely durable and impact resistant.
- Operate in extreme temperatures: from -30°C to 40°C
- Immune to common mode surges.

100% ELECTRICAL SAFETY

- Casing made from a non-conductive technical polymer
- Electrical insulation: Class II+ and SELV
- Automatic electrical disconnection when opened
- Proprietary ultra-safe LED driver: IP67 casing, ENEC certified with integrated surge protection (10KV)

EASY INSTALLATION AND MAINTENANCE

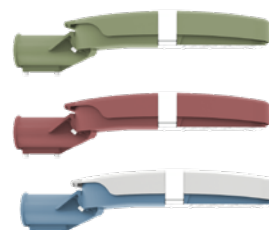
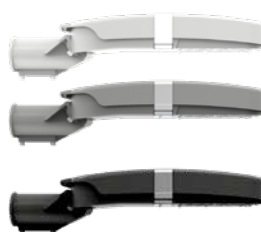
- Cover can be removed and fixed in place without tools
- Self-cleaning: the grooves on the top channel rain, helping to clean the fixture
- All components can be replaced quickly on-site
- Light with an easy-to-handle size
- Single arm for horizontal and vertical installation, with an adjustable angle ($\pm 15^\circ$)



A WORLD OF POSSIBILITIES...



- Standard model in two colours, RAL9002 top cover, and the rest of the body in RAL7045 grey
- Wide selection of color temperatures (3SCDM): 2,200, 2,700, 3,000, 4,000°K...
- Different types of optics:
- CRI>70, with CRI>80 and CRI>90 available to order
- Intensity regulation or configurable dimming
- Complete control with remote management



PERFECT THERMAL MANAGEMENT

- Exclusive dissipater made from a proprietary technical polymer, optimized to guarantee high thermal conductivity
- Enclosure with high thermal conductivity which maintains an optimal temperature within the lighting fixture
- Electronics compartment separated from the LEDs
- Pressure compensator which minimised the absorption of dust and humidity
- Thermal protection of the electronics, maximizing the light's lifetime (L90B10 >100,000h at 25°C) and improving its efficiency (up to 160 lm/W)

A BETTER WORLD A GREENER WORLD

CIES RESPECTS THE ENVIRONMENT AND FOLLOWS THE 3 R'S



REDUCE

Our production process has a carbon footprint which is 50% lower than that for equivalent products in aluminum.



RE-USE

The lighting fixture can live on in the infrastructure, thanks to sustainable replacement of the LED driver and module which supports the circular economy.



RECYCLE

The lighting fixture is made up of 100% recyclable materials.

AND SUPPORTING THE QUALITY OF THE NIGHT SKIES

In accordance with the IAC (Instituto de Astrofísica de Canarias) requirements, the lighting system can be used in areas subject to special protection from light pollution (<0.1% of light reaches the sky)

100% MADE IN TELEVES

Technology designed and manufactured in our cutting-edge facilities, guaranteeing total control, with rigorous quality monitoring, over every phase of production.

With over 60 years of European manufacturing experience.

- Complete research & development of the product
- In-house automated production of the LED modules and drivers
- Production and injection of the polymers
- Production and quality control of the components

Televes®



OUR COMMITMENT TO A CONNECTED WORLD

We offer a wide variety of management solutions: from simple controls for dimming to more precise remote management using point-to-point and IoT platform solutions, including total integration with sensing (twilight sensors, presence sensors, weather sensors, etc.)



POINT-TO-POINT REMOTE MANAGEMENT



Point-to-point connectivity of LED lighting systems has become a must in Smart City management due to the extension, complexity, and undeniable benefits it brings to the citizens.



The main advantages are:

- **System efficiency** increase, as sensorization allows the modification of intensity based on the population needs in each location, in a much more flexible way than pre-set timing schedules.
- Capacity to **control**, and therefore to adapt to instant lighting changes required in the city (level increase due to unscheduled causes such as events, patron saints' feasts, or emergency situations).
- Capacity to **monitor the network**, and therefore to early detect incidents, which opens the door to planning and efficiency in network operation and maintenance.

DIMMING OR AUTONOMOUS LIGHTING CONTROL

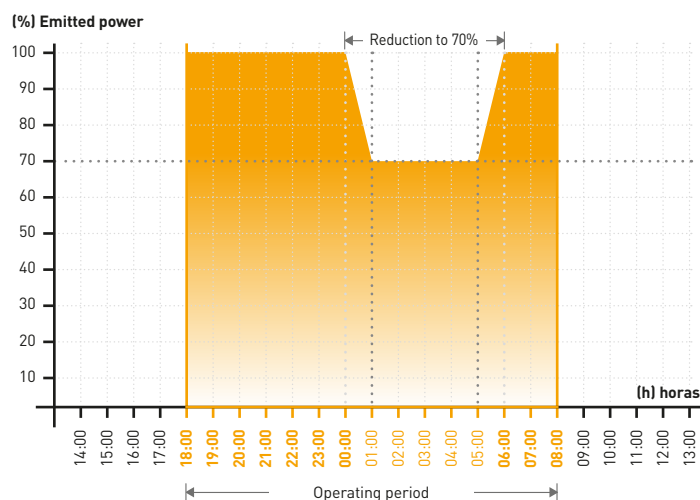


Dimming or lighting control allows the regulation of each light point to the level supported by the lamp; in this case, 10 light levels.

This **STANDALONE SOLUTION** consists in a controller installed on each luminaire with a pre-programmed timing for each lamppost that specifies the light level required for each hour of the night.

This system increases components' operating life, thus reducing maintenance costs and helping to increase the energy savings associated with LED lighting.

By default, the dimming's lighting plan consists in two time slots with maximum lighting and an intermediate slot with lower lighting. The system adjusts to the on/off schedule specified on the control panel, so that maximum lighting level (100%) is provided during the busy hours (early in the morning and late at night), and is progressively reduced during quieter times (dawn), reaching a lighting level of 70%. Furthermore, dimming is readjusted to adapt to schedule changes according to the time of year.



SENSORING



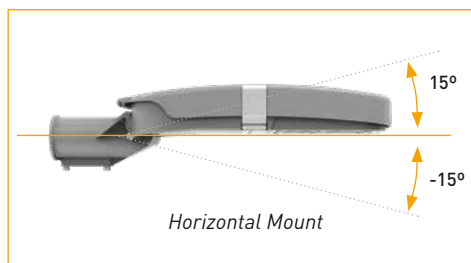
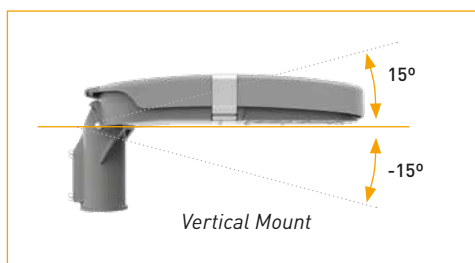
- The CIES lighting system opens up the possibility of integrating multiple sensors thanks to NEMA ANSI C136.41 or ZHAGA book 18 standard connection interfaces
- Presence sensor
- Twilight sensor
- Other environmental sensors for movement, sound, air quality, etc.

ACCESSORIES TO COMPLETE THE SYSTEM



SUPPORTING ARM

- A single accessory for horizontal and vertical positions
- Very strong and durable: made from a specially-formulated technical polymer
- Rotate the lighting unit up to 30°
- Fits posts, columns, and arms with Ø 42 to 60 mm
- Adapters available for other diameters
- Colour can be customised on request



SURGE PROTECTOR MODULE

- Accessory for protection against extreme surges (up to 10KV) produced by electrical storms
- Reduce your maintenance costs and increase the product's lifetime
- Two models with different maximum currents: 10,000A or 20,000A.
- Compliant with standards UL1449 and IEC61643-11 for Class II



REGULATION

EN 60598-1:2015 + A1:2018
EN 60598-2-3:2003 + A1:2011
EN 62471:2008

EN 62031:2008 + A1:2013 + A2:2015
EN 62493:2015
EN 55015:2013 + A1:2015

EN 61547:2009
EN 61000-3-2:2014
EN 61000-3-3:2013

TESTS PERFORMED IN A
LABORATORY CERTIFIED
BY A ACCREDITED ENTITY
IN EUROPE



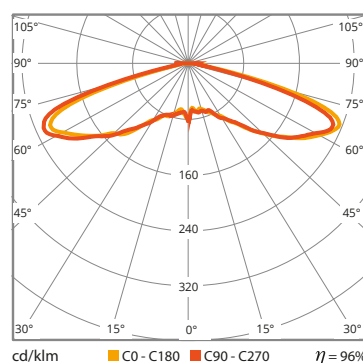
Foro de
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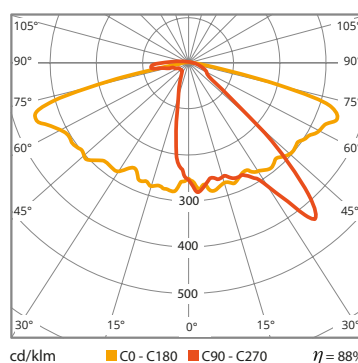
LIGHT DISTRIBUTIONS

Approximate reference illumination diagrams

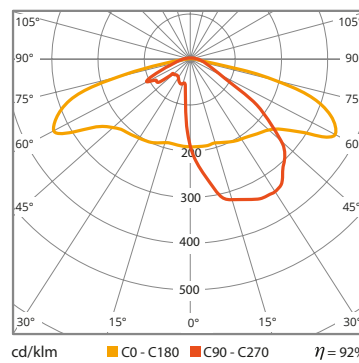
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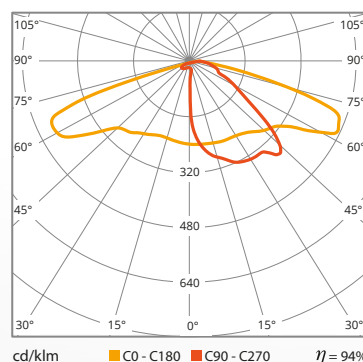
Type ME



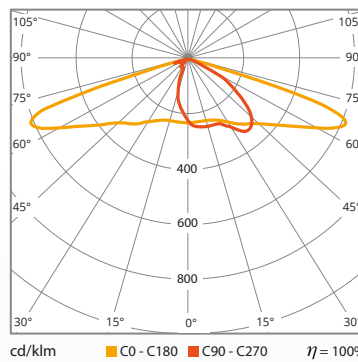
Type T3



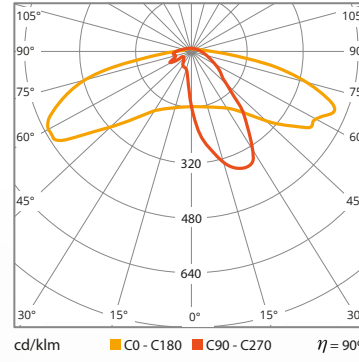
Type P



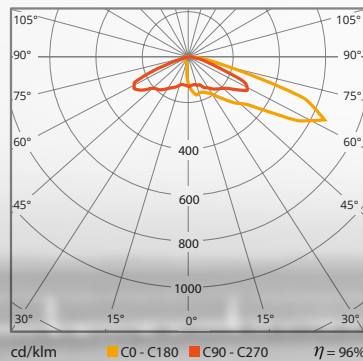
Type K



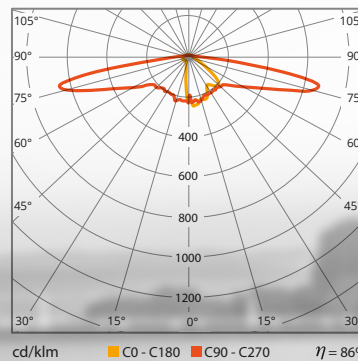
Type T2



Type APZ



Type SCL



TECHNICAL SPECIFICATIONS

CIES: *Without dimming or with 5-step programmable dimming*



REFERENCES	No. LEDs	WHEIGHT (kg)	OPERATING CURRENT (mA)
600600xxxxxxx	12	3.4	500
601600xxxxxxx	24	4	370

CIES-N: *ANSI C136.41 standard connector*



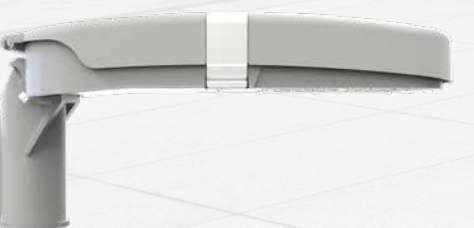
REFERENCES	No. LEDs	WHEIGHT (kg)	OPERATING CURRENT (mA)
600800xxxxxxx	12	3.8	500
601800xxxxxxx	24	4.4	370

CIES-Z: *They incorporate D4i drivers that allow DALI2/CLO/NFC/5-step programmable control options.*



REFERENCES	No. LEDs	WHEIGHT (kg)	OPERATING CURRENT (mA)
600902xxxxxxx	12	3.6	500
601902xxxxxxx	24	4.2	450

CIES-4: *They incorporate D4i drivers that allow DALI2/CLO/NFC/5-step programmable control options.*



REFERENCES	No. LEDs	WHEIGHT (kg)	OPERATING CURRENT (mA)
600602xxxxxxx	12	3.6	500
601602xxxxxxx	24	4.2	450

Working environment temperature should be in the -30 to 40°C range.
(1) L90 B10 at ambient working temperature of 25°C.

Estimated working life of the luminaire: L: Luminous flux maintenance. B: Probability of luminous flux loss.

LxB y for a given number of hours and a given ambient temperature, usually 25°C.

Indicates the time when the flux level of y% of the LED population used for a given type of luminaire is likely to be below x%.

CRI = 70 - CCT 2,200 / 2,700 / 3,000 / 4,000 / 5,000K - FHS<0.1% - PF>0.95

	TOTAL POWER CONSUMPTION [±8%] (W)	LUMINOUS FLUX (lm)	LIFESPAN ⁽¹⁾ (h)
	39	5,850	>100,000
	53	7,950	>100,000

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	39	5,850	>100,000
	53	7,950	>100,000

Zhaga book 18 standard connector

	TOTAL POWER CONSUMPTION [±8%] (W)	LUMINOUS FLUX (lm)	LIFESPAN ⁽¹⁾ (h)
	40	6,000	>100,000
	70	10,500	>100,000

Compatible with flow regulators upon request

	TOTAL POWER CONSUMPTION [±8%] (W)	LUMINOUS FLUX (lm)	LIFESPAN ⁽¹⁾ (h)
	40	6,000	>100,000
	70	10,500	>100,000



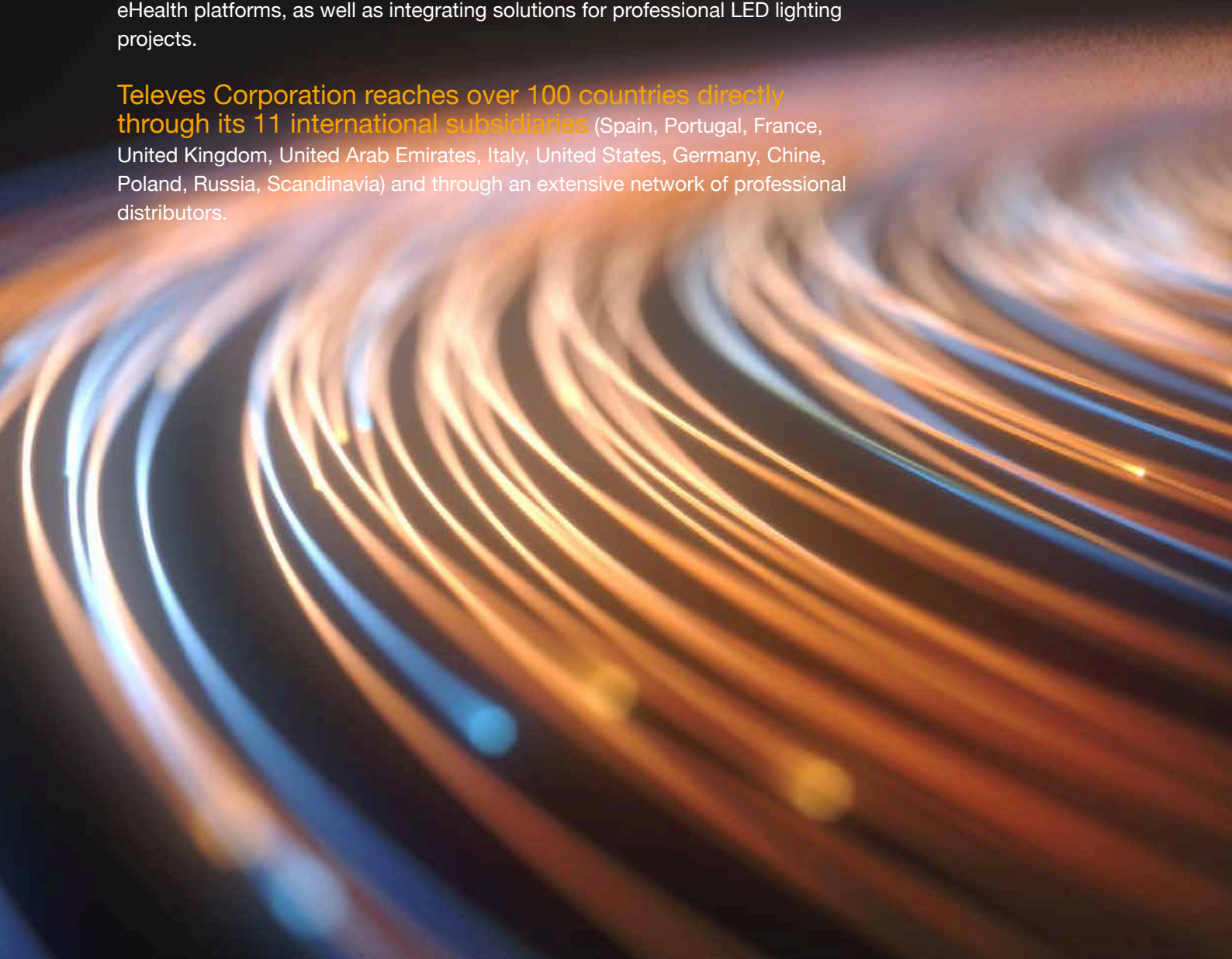
TIMELESS VALUES FOR PROFESSIONAL LED LIGHTING

Combining their extensive experience in electronic technology, metal structure manufacturing, and polymer component injection, Televes offers a complete catalogue of indoor and outdoor solutions within the Televes Professional LED Lighting range. Televes' luminaires allow for energy savings of up to 80% as compared to conventional lighting systems. They stand out for their first-class engineering and their excellence in thermal management that ensure a long maintenance-free working life.

Televes Corporation is at the heart of a group of technological companies representing global leadership in design and development of equipment for all types of telecom infrastructures in cities, buildings and homes.

Televes Corporation groups more than 20 companies that work together pursuing the common goal of designing, developing and manufacturing in Spain high quality products and solutions for various sectors in the field of telecommunications, such as transmission and distribution of television services, implementation of multiservice networks in Hospitality, development of advanced eHealth platforms, as well as integrating solutions for professional LED lighting projects.

Televes Corporation reaches over 100 countries directly through its 11 international subsidiaries (Spain, Portugal, France, United Kingdom, United Arab Emirates, Italy, United States, Germany, China, Poland, Russia, Scandinavia) and through an extensive network of professional distributors.



Televes®

since 1958



Televes®

PROFESSIONAL LED LIGHTING

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