

NEW RANGE OF **OUTDOOR** LED LIGHTING





MILLION



PLL PROFESSIONAL LIGHTING LED







BETTER QUALITY AND MORE EFFICIENT

New series of our **ATMOS**LED, range more efficient, designed and manufactured in Televes.

ENEC Certification.



ADVANTAGES MAKE THE DIFFERENCE

Designed and manufactured in Televes.

- WIDE RANGE OF COLOUR TEMPERATURES From ultra warm white to cool white
 - 3,000, 4,000 or 5,000K
 - **2,200K** (Ultra warm white)
- CLASS II No need for grounding connection.
- SELV Output voltage under 60V.
- INDIVIDUAL OUTPUTS FOR EACH LED CIRCUIT They ensure the same current flows across all LEDs at all times.
- DIMMING OR LIGHTING LEVEL CONTROL Optimizes energy savings.
- WIDE RANGE OF OPERATING TEMPERATURES From -20° to 50 °C *.
- NEW CIRCUIT AND LED MODULE More efficient.

- **IK10** Tamper proof.
- MULTIPLE MOUNTING OPTIONS Can be adapted to multiple anchoring systems and positions.
- CORROSION RESISTANT Made of anodised aluminium with IP67 protection degree.
- LIGHT POLLUTION PREVENTION No light is emitted to the upper hemisphere.
- VERSATILE FINISH Multiple anodized or painted finishes in any colour in the RAL range.
- L80 B10 Estimated luminaire life > 100,000 hours for a working environment temperature of 25°C.
- UP TO 10 KV ELECTRIC DISCHARGE PROTECTION.

* The maximum range depends on the specific model.

CERTIFICACIÓN ENEC



ENEC (*European Norms Electrical Certification*). A certification recognized both nationally and internationally, granted in Spain to manufacturers only by AENOR, in the role of entity for product conformity assessment. With this certification, AENOR certifies:

- The product was evaluated in an independent, impartial laboratory according to the applicable standards.
- The manufacturer passed the audit on manufacturing requirements, quality controls and production facilities.
- A 100% of the products passed a specific electric test in compliance with the electrical safety regulations.
- The manufacturer is ISO 9001 and ISO 14001 certified.
- Annual production revision to assess conformity with the requirements.

CHARACTERISTICS

STRUCTURE

- Extruded anodized aluminium ehousing, specifically designed for a perfect thermal management keeping both LED and driver's temperature as low as possible.
- Two independent areas: a eaLED cavity (IP67) where both equipment and electrical connections are housed, and a ventilated cavity that functions as a heat sink.
- Manufactured in Televes. From the LED circuit and the driver to the luminaire blend.

THERMAL MANAGEMENT

Heat conduction and convection in the luminaire is favoured by dissipation curves included in the profile itself and located inside a ventilated cavity, separated from the electric area.





OUTSTANDING CORROSION RESISTANCE

The structure's anodized finish improves both hardness and corrosion resistance.

COLOURS

- MATT STEEL lacquered (RAL 9006 aluminium).
- Available in any RAL colour on demand.



SCREWS

All screws are corrosion resistant stainless steel.

SIDE COVERS

- Made of injection-moulded lacquered aluminium.
- They have vents to allow the air to flow in the ventilated cavity.

TIGHTNESS

The optical system is IP67 certified for water and dust tightness.



The **ATMOS**LED luminaires are equipped with a pressure compensation device to prevent dust and humidity to be absorbed whenever the inside pressure is lower than the outside pressure.

CONNECTIONS

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- **ATMOS**LED luminaire connections provide permanent tightness and electrical safety.
- The M16 stuffing gland ensures IP67 is met in the equipment's tight cavity.
- External IP68 connector for 6 to 12 mm diameters (Ø 6 -12 mm)

숨 ATMOSLED E and N Series

- The E SERIES stands out for efficiency and performance, up to 160 lum/W.
- The N SERIE. Televes has developed the new range aiming at maximum efficiency and robustness. The N series is equipped with an ANSI C136.41 NEMA regulation connector, which allows establishing a plug-and-play connection with the remote control nodes, therefore providing connection capacity to IoT infrastructures.



LIGHT DISTRIBUTIONS









Approximate reference illumination diagrams





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

SERIES	REF.	No. LEDs	WEIGTH		OPERATING CURRENT	TOTAL POWER CONSUMPTION [±8%]	TOTAL LUMINOUS FLUX (4,000K)	WORKING LIFE**
			(kg)	(mm)	(mA)	(W)	(lm)	(h)
	680500xxxxxxx	12	5.9	260	400	29	4,350	>100,000
					500	39	5,538	
	681500xxxxxxxx	24	7	340	330	49	7,746	>100,000
					370	59	8,968	
	682500xxxxxxxx	36	7.2	340	310	69	10,626	>100,000
					330	78	11,622	
	683500xxxxxxxx	48	9.4	388	300	86	14,040	>100,000
					340	108	15,984	

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					370	59	8,968	
	682300xxxxxxxx	36	7.2	340	310	69	10,626	>100,000
					330	78	11,622	
	683300xxxxxxxx	48	9.4	388	300	86	14,040	- >100,000
					340	108	15,984	

- Working environment temperature should be in the -15 °C to 45 °C range.

* On demand: CRI > 80.

*** L80 B10 for a working environment temperature of 25 $^{\rm o}{\rm C}.$

Estimated working life of the luminaire:

L: Luminous flux maintenance.B: Probability of luminous flux loss.

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%.

LxBy for a given number of hours and a given



The last 8 digits of each reference will depend on the requested configuration for the luminaire.

Taking accout of the Dimming, the colour temperature, the optic and the chassis where the luminaire is mounted as well as the chassis colour.





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.

Televes has equipped the new luminaire series with **ATMOS**LED **N** the **ANSI C136.41 NEMA**, regulation connector that allows establishing a plug-and-play connection with the remote control nodes, therefore providing connection capacity to IoT infrastructures.

This **open interface** allows our **ATMOS**LED **N** series to connect to any remote control system, irrespective of the technology used in each Smart City project, based both on the terrain and on the presence or not of other IoT networks in the city, or in the use cases and control to be implemented, which may be based on an electric line connection (PLC, wideband PLC) or on wireless networks (3G, NB-IoT, LoraWan, LoraMesh, Zigbee...).

- PLC: Traditional electric power line transmission technology for communication signal transmission purposes. PLC takes advantage of the electricity grid to convert it into a high-speed digital line for data transmission.
- **3G**: The third generation of mobile telephony voice and data transmission using UMTS (*Universal Mobile Telecommunications System*).

NBIOT: (NarrowBand IoT). First open, standard communication technology to connect the small objects of our everyday life to the Internet. This technology uses the mobile network (3G/4G/5G) to connect any object of our everyday life in an easy, safe and reliable way. Since it uses the communications network of a mobile operator, it provides better coverage levels both indoors and outdoors.

LoRa: Wireless technology that uses one type of radio frequency modulation.

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

RoHS

IP67

IK10

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DIMMING OR AUTONOMOUS LIGHTING CONTROL

El *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.



Other programming options are available on demand (check with us). Dimming is only available for the references specified in the annex.

LOCATION

MOUNTING HEIGHTS

The charts below show the approximate heights that are appropriate for each of the series types.



ATMOSLED E Series



ATMOSLED N Series



MULTIPLE APPLICATIONS



MOUNTING

Our luminaires can be mounted in different positions which allows them to adapt to any environment conditions.



ACCESSORIES

ARM

Made of injection aluminium and lacquered in RAL 9006 aluminium colour.

Available in other RAL range colours on demand.

- Adaptable or mounting on commercial columns with diameters ranging from 40 to 60 mm (Ø: 40 - 60 mm). Adapters are available for other tube diameters.
- Allows a luminaire rotation up to 30°.



▲ 69000201 (Horizontal support) 69000401 (Vertical support) 69000601 (Double support)

Rotation adjustable in 5-degree steps





WALL MOUNT SUPPORT

- Support designed for luminaire anchoring.
- Made of corrosion-resistant galvanized and lacquered steel. Available in any of the RAL range colours on demand.
- Allows a luminaire rotation up to 60°.



SPD MODULE

- Complementary accessory that provides additional surge protection in case of thunderstorms.
- Two models are available: **10,000 or 20,000 A** maximum current.
- Compliant with UL1449 and IEC61643-11 standards for Class II.
- They allow for maintenance costs reduction and ensure an even longer product service life.
- 10 KV surge protection.

España | Portugal | France | United Kingdom | United Arab Emirates | Italia | United States | Deutschland | China | Polska | Russia | Scandinavia



BOUND BY TECHNOLOGY

Televes Corporation is at the heart of a group of technological companies representing global leadership in desing 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 (España, Portugal, France, United Kingdom, United Arab Emirates, Italia, United States, Deutschland, China, Polska, Russia, Scandinavia) and through an extensive network of professional distributors.