

AtmosLED Luminaire Z-Series 48LED 109W

Luminaires for intercity roads and diverse outdoor areas

Highly versatile road luminaire adaptable to any outdoor environment, built in extruded anodised aluminium specially designed for perfect thermal management, optimised service life and resistance to aggressive environments. Designed to increase energy savings and reduce maintenance costs thanks to its high efficiency and durability.

AtmosLED offers multiple options in terms of power, number of LEDs and optics. In this way, these luminaires are suitable for a wide range of locations, being ideal both in areas that require a large amount of homogeneously distributed light and in areas with greater restrictions, regarding both in terms of light intensity and light projection.

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.	68390200
EAN13	8424450307809

Other features

Number of LEDs	48
Lighting control	Remote control
Power	109.00 W
Packaging info	
Box	1 pcs.

Physical data

Net weight	6,330.00 g
Gross weight	7,530.00 g
Width	336.00 mm
Height	338.00 mm
Depth	88.00 mm
Main product weight	6,330.00 g

Highlights

- **Durability and resistance:** compact extruded and anodised aluminium structure, corrosion resistant even in the most aggressive environments
- High versatility: AtmosLED adapts to all types of contexts and situations
- 100% electrical safety: class II with no need for grounding and SELV certification
- **Energy saving:** long lifetime without the need for maintenance, which increases the savings compared to other technologies, achieving savings of up to 80%
- **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

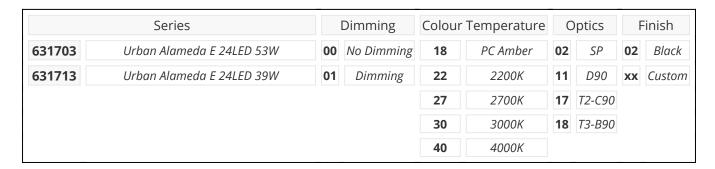
Discover

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

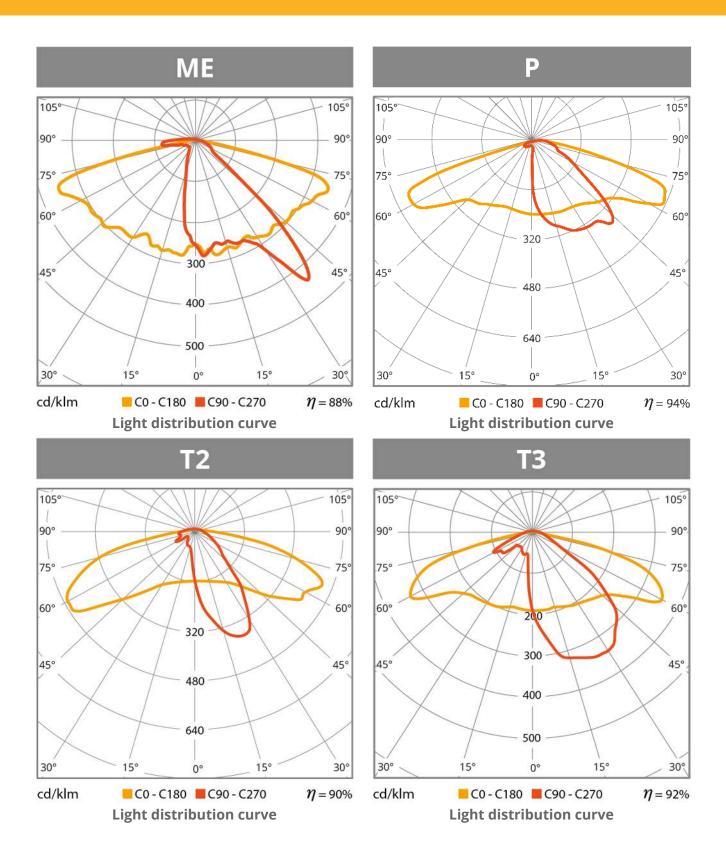
An example of a logical reference: UA2418D-D90BL53

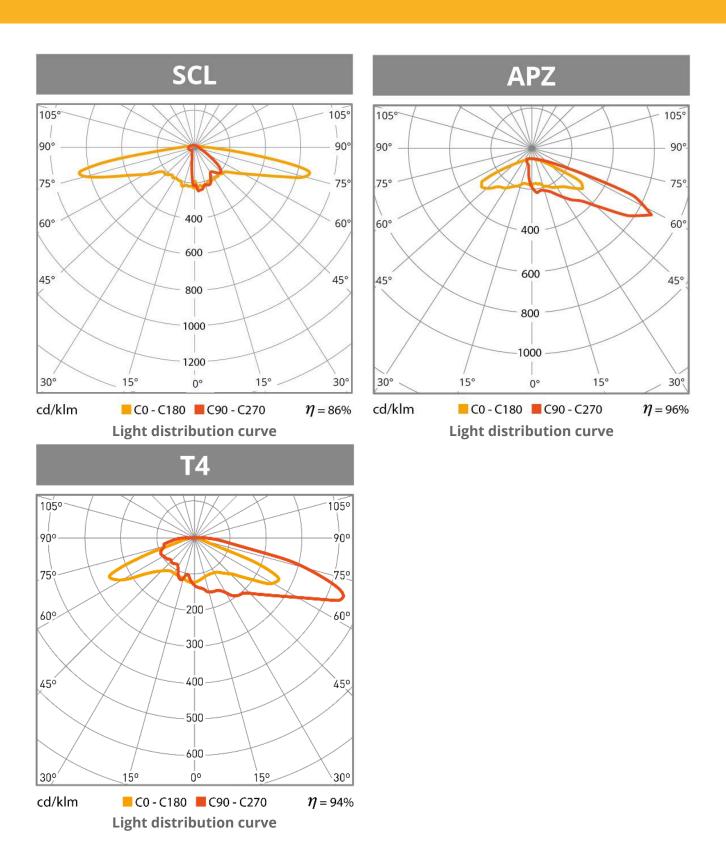
- UA Urban Alameda
- **24** 24 LEDs
- 18 Colour Temperature: PC Amber

- **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	хх	Custom	39	39W
		27	2700K			T2-C90				
		30	3000K			T3-B90				
		40	4000K							

Graphic documentation





Features

Resistance and durability



The AtmosLED luminaire consists of an extruded and anodised aluminium body that increases its hardness, obtaining an IK10 degree of protection against physical impact. The side covers are made of injected lacquered aluminium and all the screws are made of stainless steel, making it highly resistant to corrosion and guaranteeing its durability.

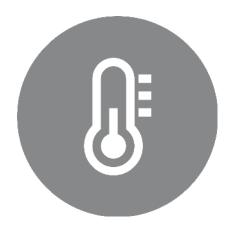
A luminaire for all situations



The AtmosLED range is presented as a highly versatile lighting solution that adapts to all types of roadways. There are multiple options of power and number of LEDs, as well as different placement possibilities, so AtmosLED manages to adapt to each of the needs of the environment.

Its aesthetics combine simplicity with functionality, making it ideal for use in urban areas (streets, avenues, squares...), traffic areas (motorways, expressways, roads...) and various outdoor areas (shopping centres, industrial areas, parkings...).

Flawless thermal management



The structure of the AtmosLED luminaire consists of an extruded aluminium enclosure with dissipation curves that form part of the profile itself and are located in a ventilated cavity. There are two independent zones, a watertight cavity (IP67) in which the equipment and electrical connections are located and a ventilated cavity that acts as a heat sink, preventing heat transfer between the two points. The thermal protection of the electronics maximises the useful life of the luminaire (L90B10 > 100,000h at 25°C) and improves its efficiency (up to 160 lm/W).

Convenient installation



The compact and slim design of the luminaire makes it easy to handle during the installation process, reducing assembly times.

Complete watertightness



The AtmosLED series has an IP66 degree of watertightness on the complete luminaire. This guarantees absolute protection of every electronic component and internal element against the ingress of solid particles and liquids.

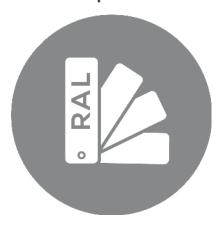
In addition, it has a pressure compensating device which prevents the possible absorption of dust and humidity due to differences in pressure between the inside and outside of the luminaire. In the same way, the connections of the AtmosLED luminaires provide watertightness and electrical safety at all times, thanks to the use of M16 stuffing glands that ensure an IP67 degree in the watertight cavity of the equipment and an IP68 degree in the external connectors.

Maximum security



The AtmosLED luminaire has the highest levels of electrical protection: its Class II guarantees safety without the need for grounding thanks to the double isolation of the components. Furthermore, the SELV certificate provides an output voltage of less than 60V, minimising the risk of electrocution in the case of system failure. In addition, its driver, optical group and IP67 connections offer integral protection to all optical and electronic elements against water and dust ingress, eliminating any effect caused by external agents.

A world of possibilities



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
- 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

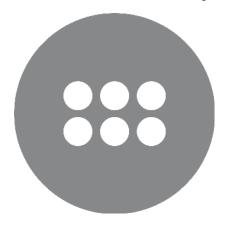
And if you don't find what you are looking for, we have even more options available on request. We are pleased to study your project in a tailored, non-binding way. Contact us, and we will help you choose the perfect lighting.

Design and manufacture 100% made in Televes



Our edge facilities include all the means for the creation of this luminaire, from start to finish. This involves everything from electronic and mechanical design, through advanced simulation processes, to the manufacture of the circuits, plates and all the chassis elements, through meticulous construction processes and assembly on robotic lines. A proprietary design and manufacturing process also offers other benefits, such as quality verification at every point of development.

Control and connectivity



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...).



Technical specifications: Ref. 68390200

Number of leds					48				
Power	W	40							
Pre-programmed dimming		Yes							
Control interface		Dali 2							
Node/sensor connection type		1x Zhaga							
Optic type options		P T2 T3 ME APZ SCL							
Lens type		PC lens	PC lens	PC lens	PC lens	PC lens	PC lens	PC lens	
Color temperature options		2200K		2700K	3000K	4000	K	PC Amber	
Luminous flux	lm	13080		14170	14715	1635	16350 67		
Lighting efficiency	lm/W	120		130	135	150		62	
LED current	mA	340		340	340	340		680	
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		Class II Yes							
IK Rating (light module)		10							
IK Rating (whole luminaire)					10				
IP Rating (light module)		10 68							
IP Rating (whole luminaire)					66				
Colour					Aluminum				
Material					Aluminium				
Material cover					Without cover				
Fixation Material					Aluminium				
Mast diameter Max	mm				60				
Mast diameter Min	mm				42				
Mounting method					Post top/side entry				
Surface facing the wind	m ²				0.096				
Number of LED modules					4				
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				3-0	ole waterproof conne	ctor			
Inrush current	A				65				
Input voltage Max	Vac				240				
Input voltage Min	Vac				220				
Mains frequency					50 Hz				
Max. Operating temperature	°C				40				
Min. Operating temperature	°C	-35							