

# Clamod

GEN 6



CP4

CPF

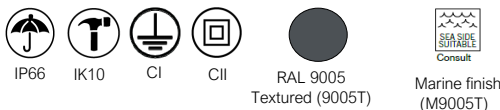


SP5

SPF

## KEY BENEFITS

- Up to 4 fixations .
- Tool-free access to the driver and PCB from the top for easy maintenance.
- Durability and sturdiness: IP66+ IK10.
- Die Cast aluminium with low copper content
- Energy Efficient: 159 lm/W
- Up to 16 photometric distributions.
- Sustainability: Replaceable LED engine
- Smart Ready: Designed to house a communication node (Depending on model).
- Future Proof: Zhaga-compliant.
- Lifetime L90B10 100.000 (Ta) 25°C
- Night Friendly: ULR Arrêté du 27 décembre 2018.
- 5 years warranty.

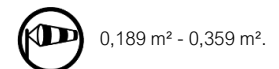
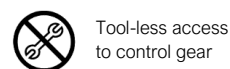
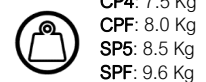
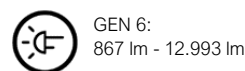
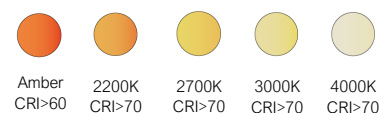


## DESCRIPTION

Clamod Gen 6 is a classic four-sided luminaire with a refreshed design that combines timeless aesthetics and modern efficiency.

It features a replaceable LED engine that improves performance, allows for upgrades, and promotes sustainability.

Thanks to its multiple fixations and optics, it adapts the lighting to all types of urban environments such as parks, squares, pedestrian areas, and residential zones, creating safe and pleasant spaces.



## STANDARD COMPLIANCE

- CE
- RoHS
- UNE-EN 60598-1
- UNE-EN 60598-2-3
- UNE-EN 61000-3-2
- UNE-EN 61000-3-3
- UNE-EN 55015
- UNE-EN 61547
- UNE-EN 62031
- UNE-EN 61347-2-13
- UNE-EN 62384
- UNE-EN 13032-4

220 - 240V / 100V - 277V (consult)  
50-60Hz  
L90B10 100.000h  
Ta 25°C

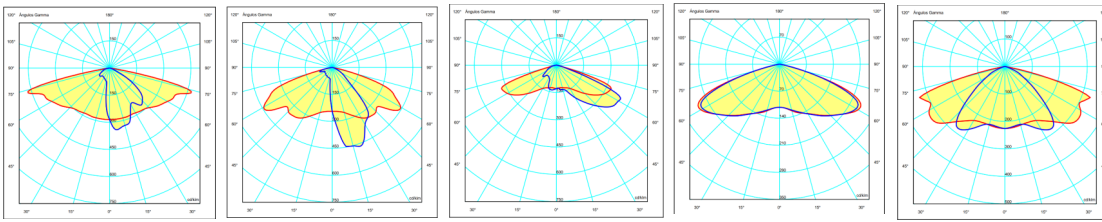
Distributor: EPK elektro s.r.o.  
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PHOTOMETRIC DISTRIBUTIONS

GEN 6

It has 16 photometric distributions designed for environmental applications:

Ceramic LED



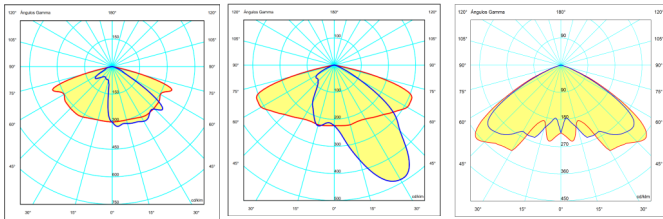
ALM1

AME1

AMA1

SMA1

SME1

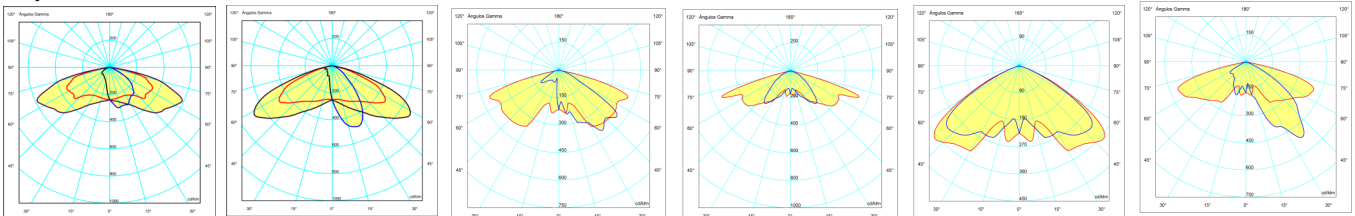


AMM1

AME2

SCM1

Polymeric LED



ALM1

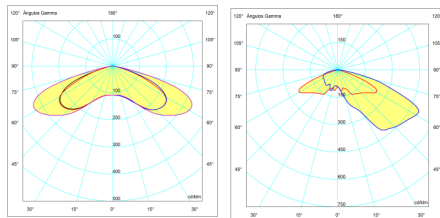
AME1

AMM1

SME1

SCM1

AME2



SMA1

AMA3

APPLICATIONS

Historical areas, train and bus stations, parks, squares and gardens, greenways and bike lane, shopping areas, streets and avenues, residential and pedestrian areas.



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## CLAMOD CHARACTERISTICS

### GENERAL INFORMATION

Sustainability	Valorisation: 97,7% Maximum carbon footprint per use: 0,024621 kg kW/h of CO2
CE marking	Yes
ENEC Certificate	Yes
RoHS compliance	Yes
Test standard	LM 79-80 (all measurements in the laboratory certified according to ISO17025)

### GENERAL CHARACTERISTICS

Housing and dome	Die-cast aluminium EN AC-44300 with low copper content <0,1%
Accessories	Die-cast aluminium
Closure	CC: Flat glass .
Nuts outer and bolts	Stainless steel (AISI304).
Watertightness	IP66 (EN 60598-1 and EN 60529).
Impact protection grade	IK10 (EN 62262)
Operating temperature	Ta -40°C to +50°C. Depending on luminaire configuration.
Lifetime	L90B10 100.000 h at Ta of 25°C. Light maintenance values at 25 °C are calculated in accordance with TM-21 based on LM-80 data.
Cable	Clase I/II Cable from 2 to 8 metres Cross-section: 2x1,5 ; 3x1,5; 4x1,5; 5x1,5

### FINISHES

#### Predefined luminaire colour

RAL 9005	Polyester Powder 9005 Intense Black Textured Matt.
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#### Corrosion protection

SEA SIDE SUITABLE	Marine Finish (1.000h)
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### ELECTRICAL CHARACTERISTICS

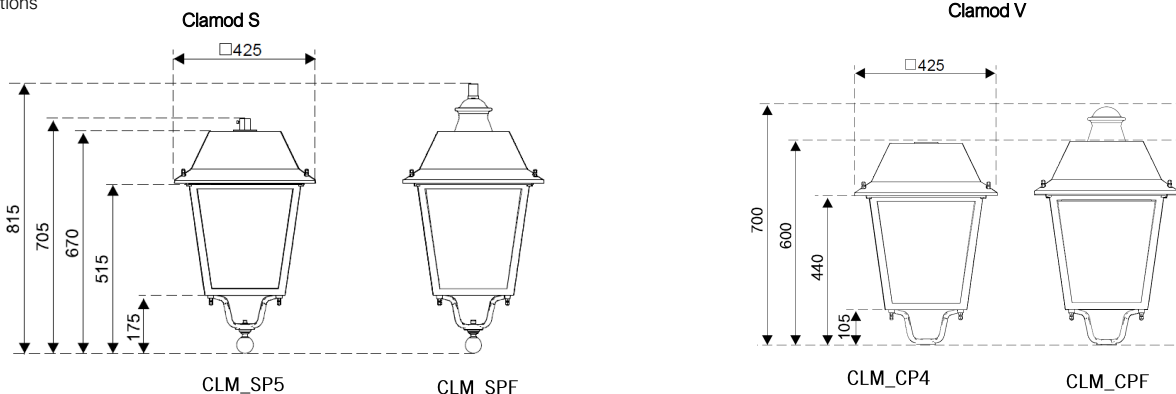
Electrical class	Class I Class II
Voltage / Frequency	220V - 240V / 50Hz - 60Hz Optional 100V - 277V
Power factor	> 0,9
Harmonic distortion	< 10%
Surge protector	Surge protection (1.2 / 50) 10 kV. Maximum current (8/20) 10kA. Maximum voltage (L-N) 320 V. Maximum voltage (L / N-GND) 400 V. Optional overvoltage protection: 20kA, 20kV

### LIGHTING CHARACTERISTICS

Real light package	GEN 6: 867 lm - 12.993 lm (9 W - 87 W)
LED colour temperature	4.000K (Neutral White , nw). 3.000K (Warm White , ww). 2.700K (Warm White , ww). 2.200K (Warm White , ww). Amber optic colour temperature
Colour rendering index (CRI)	CRI>70 CRI80 on request
LEDs	Incorporates various types of modules with 12, 24 and 36 LEDs.
FHS / ULR	0,3%
Optics	PMMA polymethylmethacrylate.
Photometric distributions	<b>ALM1</b> => Throw angle 60° spread angle 75° (Type II) <b>AME1</b> => Throw angle 45° spread angle 75° (Type II) <b>AME2</b> => Throw angle 60° spread angle 75° (Type II) <b>AMA1</b> => Throw angle 65° spread angle 70° (Type IV) <b>AMA3</b> => Throw angle 75° spread angle 65° (Type IV) <b>AMM1</b> => Throw angle 60° spread angle 70° (Type III) <b>SCM1</b> => Throw angle 60° spread angle 60° (Type VS) <b>SMA1</b> => Throw angle 70° spread angle 70° (Type VS) <b>SME1</b> => Throw angle 70° spread angle 75° (Type II)
LED thermal control	Heat dissipation by conduction, radiation and convection designed for LED technology.

## DIMENSIONS (mm)

4 fixations



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CLAMOD CHARACTERISTICS

MAINTENANCE AND ASSEMBLY

Installation and maintenance	Top access to the driver through the dome with fall protection. Tool-free opening. Supplied assembled, with wiring option.
Fixation	<p><b>CP4:</b> Vertical fixation 3/4 in. GAS  <b>CPF:</b> Vertical fixation 3/4 in. GAS, with top finish  <b>SP5:</b> Suspended fixation 3/4 in. GAS Female  <b>SPF:</b> Suspended fixation 3/4 in. GAS Male, with top finish.</p> <p>*CP4 and SP5 fixations are supplied with SR equipment and Zhaga sockets.</p> <p>* CP4 and SP5 fixations are supplied with RD equipment and Nema sockets.</p>
Accessories	<p><b>Elements independent of the luminaire:</b>  <b>CBSM-530-H:</b> Wall mounting arm for Clamod Suspended SPF.  <b>CBSM-530-M:</b> Wall mounting arm for Clamod Suspended SP5.  <b>CBVM-530-M:</b> Wall mounting arm for Clamod Vertical CP4 and CPF.  <b>CFV-60:</b> Coupling for Clamod Vertical to Column ø 60mm CP4 and CPF.</p>
Weight with equipment	<p><b>CP4:</b> 7.5 Kg  <b>CPF:</b> 8.0 Kg  <b>SP5:</b> 8.5 Kg  <b>SPF:</b> 9.6 Kg</p>

MANAGEMENT AND CONTROL

Equipment	<p><b>1N:</b> Level 1  <b>RD:</b> DALI protocol adjustable  <b>RL:</b> Dimming profile adjustable through mains (pulses)  <b>SR:</b> Smart Ready D4i</p>
Autonomous regulation	<p>Regulations programmed from the factory:  <b>56:</b> 50% from 24:00h to 6:00h.  <b>66:</b> 60% from 24:00h to 6:00h.  <b>76:</b> 70% from 24:00h to 6:00h.  <b>SC:</b> Programming according to client.</p>
CLO regulation	<p>Flow rate during the life of the product:  <b>7:</b> 70% luminous flux throughout the life of the luminaire  <b>8:</b> 80% luminous flux throughout the life of the luminaire  <b>9:</b> 90% luminous flux throughout the life of the luminaire</p>
Socket connection	<p><b>7-W:</b> NEMA socket 7 pins with/without cover IP66  <b>X:</b> ZHAGA top socket 4 pins with IP66 cover  <b>Y:</b> ZHAGA lower socket 4 pin with IP66 cover (With nodes of maximum ø50mm)  <b>Q:</b> ZHAGA lower and top socket with IP66 cover (For CPF and SPF fixation, nodes of maximum ø50mm)</p>
Photocell	<p><b>1:</b> Photocell for base NEMA 3, 5 and 7 (20 LUX)  <b>2:</b> Photocell for upper ZHAGA base (20 LUX)</p>

PHOTOGRAPHS



Threaded ornaments on the upper dome and lower fixation in brass colour



Tool-free dome opening for driver access



Brass ball on SP5 and SPF fixations



Ornament on CPF and SPF fixations

ACCESSORIES

CBSM-530-H+  
SPF



Ref. 320947

CBSM-530-M+  
SP5



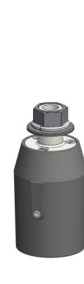
Ref. 306012

CBVM-530-M +  
CP4 / CPF



Ref. 306011

CFV-60  
CP4/ CPF



Ref. 301717

## LOGISTICAL INFORMATION \*

	CP4	CPF	SP5	SPF
<b>American pallet</b>	1200x1000x1940 mm	1200x1000x1940 mm	1200x1000x1940 mm	1200x1000x1940 mm
<b>Box dimensions</b>	900 x 460 x 470 mm	900 x 460 x 470 mm	900 x 460 x 470 mm	900 x 460 x 470 mm
<b>Box weight</b>	9,5 kg	11,6 kg.	10 kg	12 kg
<b>Number of boxes</b>	8 units	8 units	8 units	8 units
<b>Total dimension</b>	1200x 1000 x 1940 mm	1200x 1000 x 1940 mm	1200x 1000 x 1940 mm	1200x 1000 x 1940 mm
<b>Number of levels</b>	2 levels	2 levels	2 levels	2 levels
<b>Total gross weight</b>	96 kg	112,8 kg.	100 kg	116 kg.
<b>Total net weight</b>	76 kg	92,8 kg	80 kg.	96 kg

*If the luminaire includes a cable, ask for box dimensions.*

## LUMINAIRE DIMMING

### By programming the driver

Smart luminaires drivers can be programmed in the factory without needing a control system, additional wiring or maintenance costs. A schedule is pre-programmed for light flow to be automatically reduced at quieter times of the night while respecting light levels and uniformity.

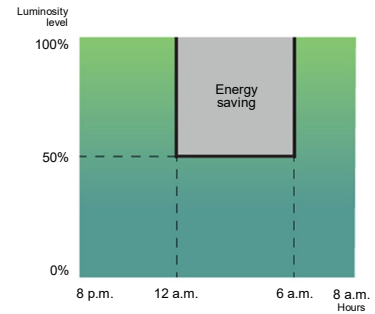
#### Programming profile 56

From 00:00 to 06:00 the luminaire reduces its initial intensity by 50%.

Up to

**26%**  
savings

NOTE: Programming the Dynadimmer using the multitone scheduling tool is done for wintertime. In summer everything is delayed by an hour.



### Using the CLO function

Taking into account lighting depreciation over the years, the driver is programmed to start at a reduced level and gradually increase power over the lifetime of the luminaire, which saves energy and increases the service life of the system. In addition, the level of illumination of the area in which it is located is always kept constant.

#### Constant luminous flux 8

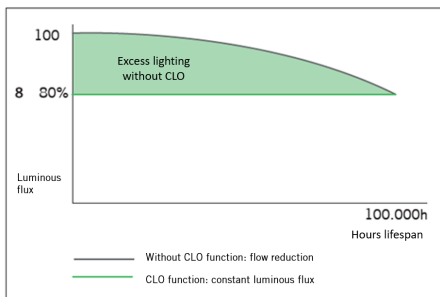
Luminaire luminous flux at 80% to maintain light levels throughout its service life.

Up to

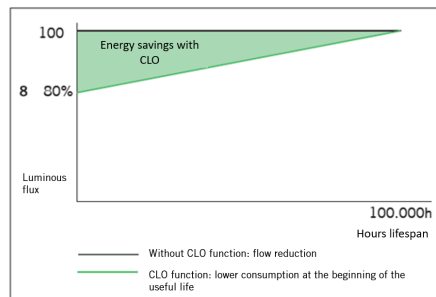
**10%**  
savings

and increase in luminaire service life

Luminous flux chart



Consumption graph



### By adding an extra element

#### Photocell

The photocell allows the luminaire to be switched on or off depending on the intensity of the sunlight it captures.

This is very useful, to avoid having luminaires on at times when there is still enough natural light.

Example with 20 lx photocell:



## INNOVATIVE AND UPDATABLE OVER TIME (Zhaga/ ZD4i)

All luminaires incorporating Nema Bases or Zhaga Bases, where the control system is not the responsibility of Carandini, must always incorporate IP 66 covers in order to ensure the correct safety and operation of the product.

The sale of luminaires with Nema or Zhaga Bases without the IP 66 cover will only be permitted upon receipt of a written assurance from the customer that the control system using NEMA or ZHAGA Nodes will be installed by the customer at the same time as the luminaires".

## Zhaga

### Zhaga - Future Proof

Zhaga is an industry-wide consortium that aims to standardise specifications for interfaces between LED luminaires and light sources. The aim is to achieve interchangeability between products made by different manufacturers. Zhaga defines test procedures for luminaire and LED light sources so that the luminaire can receive the LED source.



### Zhaga D4i - Sensor Ready

The Zhaga consortium joined up with DiiA to create a unique Zhaga-D4i certification that combines Zhaga's Book 18 version 2 outdoor connectivity specifications with Dii's D4i specifications for intra-luminaire DALI.

### BOOKS PER APPLICATION. A COST-EFFECTIVE SOLUTION.

ZHAGA Consortium		Book 1-25 Overview by application			
	Office & Industry	Retail & Hospitality		Outdoor	
Integrated LED light engines	14, 2,8	17	16		
LED modules (non-integrated)	7, 21, 14	12, 9, 5, 3,10	4	15, 19	
Drivers	13	22,23		24,25	
Sensor and communication modules		20		18	

The specifications that mark a component as Zhaga-compliant are contained in a series of books, available only to consortium members, that allow you to design to the marked standard. The benefits for society are evident since, apart from reducing the consumption of materials, it favours the reuse of luminaires, aiming towards a circular economy.

### CERTIFICATION PROGRAMME

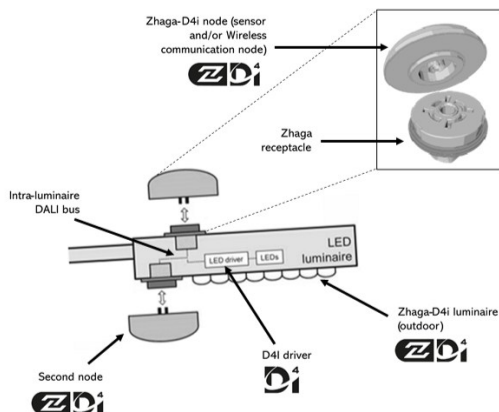
Zhaga-D4i certification covers all essential features, including automatic setting, digital communication, data reporting and power requirements within a single luminaire, ensuring plug-and-play interoperability for luminaires (drivers) and peripherals such as connectivity nodes.

### STANDARDISATION AS A MEANS TOWARDS SUSTAINABILITY

The **Clamod GEN6** luminaire has been designed to operate with the latest tried and tested technology available on the market, in accordance with current standards, which allows it to meet CARANDINI's values of sustainability, making it a product that conforms to CARANDINI's values of sustainability and that can guarantee future maintenance while respecting society and the environment.

Luminaires marked as **Zhaga** feature **Future Proof** design, meaning that they are based on and designed around Zhaga standard components. These components are mainly LED modules and drivers. The electrical compartment and dissipation area for the LED modules have additional space and mountings to integrate any driver that complies with Zhaga standard Book 13, based on the required dimensions for drivers on the market or any LED module that complies with Zhaga Book 15, based on the LED driver interface specifications.

Eso permite tener un producto sostenible y actualizable en el tiempo.



### CONNECTIVITY

The D4i specification takes the best of the standard protocol and adapts it to an intra-luminaire environment, but it has certain limitations. Only the control devices installed within the luminaires can be combined with a Zhaga-D4i luminaire. In accordance with the specification, the control devices are limited to an average power consumption of 2W and 1W respectively.

### SMART CITY

Luminaires marked as **ZD4i** are a **Smart Ready design**, meaning they are designed to accommodate both interior and exterior communication nodes through docking stations which comply with Zhaga & Zhaga-D4i standard Book 18 on interoperability of sensors and communication nodes.