



VEGA ①②  
LED LIGHTING



Vega series luminaire is the ideal Led lighting solution for any road, street or pedestrian area. Vega create a more attractive urban living environment and visual comfort for public and residential zone.

Competitive and efficient, it will fit perfectly in renovation projects as well as new installations on highways, roundabouts and urban roads.

The proposed Vega range consists of three sizes. The VEGA 0 up to 48 LEDs is good choice for service roads, lighting residential streets, ground park and car parks. The VEGA 1 up to 96 LEDs is ideally suited for urban roads, lighting residential streets, and car parks, while the Vega 2 up to 144 LEDs is perfect for avenues, large roads and motorways.

With its light-level efficiency, long lifetime, easy and limited maintenance requirements, the Vega range minimizes your total cost of ownership.

- CE
- IP66
- IK09
- 55°C
- EMC
- UL
- RoHS



01

## Key advantages



### ECOLOGY

The Vega is designed with sustainable materials (aluminum and glass) without the use of glue improving the recyclability of the product. The optical system's high-level performances combined with various dimming and management options limit energy consumption and consequently the CO2 emissions.

### PERFORMANCE

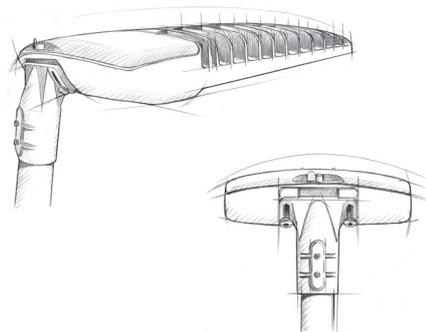
The choice of number of Led modules offers a wide range of lumen packages and future proof solutions. Each Led is associated with a specific lens that generates the photometric distribution of the luminaire. These photometric engines combined with the driving currents and dimming options ensure the optimal lighting performance. The thermal design of Vega range is based on the heat extraction to maintain the luminous flux over time and ensure the life time of the Leds.

### MAINTENANCE

With the reversible fixation device, it's easy to install the Vega range in side-entry or post-top mountings. When supplied with a factory fitted power cable the luminaire can be installed and adjusted on-site without being opened. The tool free access of the IP66 gear and electronic compartment combined with the tool free removable gear tray provide an easy and quick maintenance. The high-level tightness of the optical compartment sealed with an extra-clear glass protector ensures a high quality transmission of the luminous flux.

### SECURITY

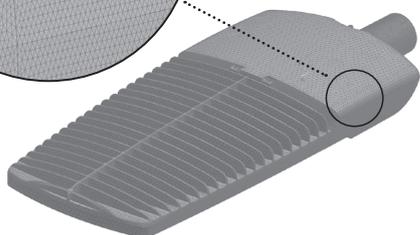
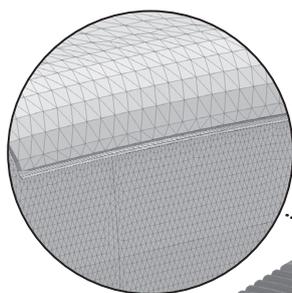
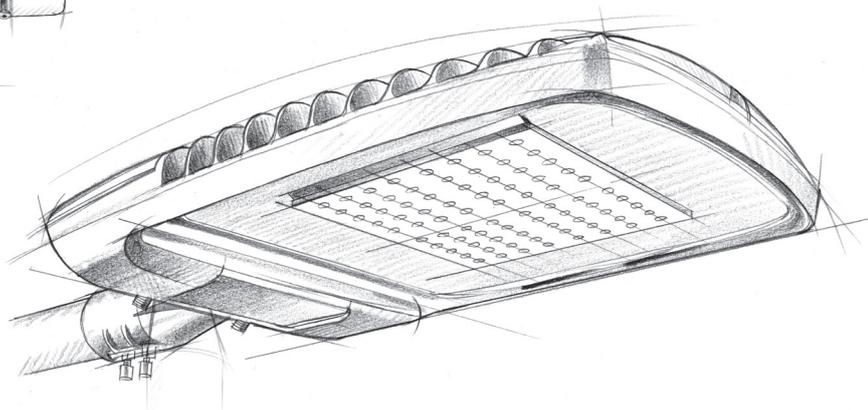
The luminaire is protected for a high voltage surge of 10/20kV.



## AESTHETIC

A unique style at the top of its category. The Vega range is the result of the symbiosis between shape and function for a performance level without compromise.

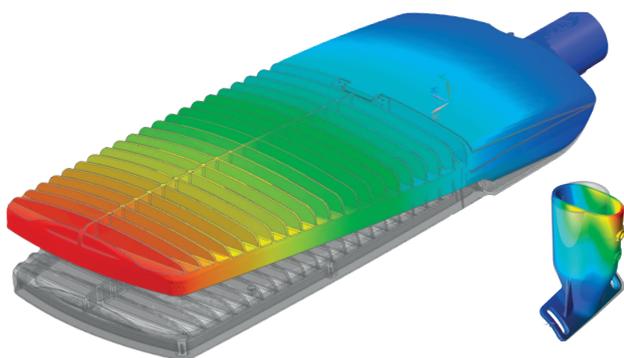
All the features are perfectly integrated into a fluid and light aesthetic.



## FINITE ELEMENT METHOD

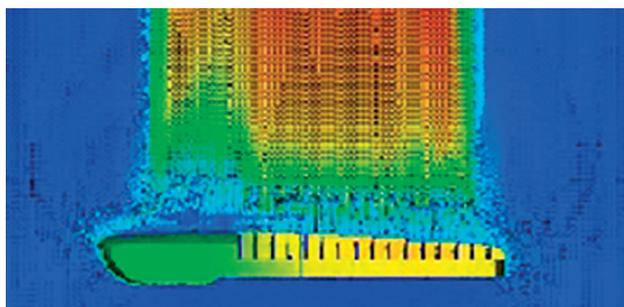
Finite Element Analysis (FEA) is a computerized method to predict how a product reacts to real-world, forces, vibrations, heat, fluid flow and other physical effects.

Element analysis works by breaking down a real object into a large number of finite elements, such as little cubes. Mathematical equations help predict the behavior of each elements.



## MECHANICAL STRESS AND VIBRATION

FEA is used to understand the physical behavior of the luminaire (mechanical stress and displacements) under the conditions of vibration, of wind speed and of tightening torque of the fixation device. The modifications of the geometry of the luminaire are done until we reach the optimal design.



## THERMAL SIMULATION

The temperatures are computed considering conduction, internal and external natural convection. The model is defined to work under 55 degrees of ambient temperature while respecting the acceptable maximal temperatures of the various components.

The final geometry of the thermal extractor is defined after having optimized the thickness, the height and the quantity of the cooling fins.



IP66 optical compartment sealed with an extra-clear glass protector for an optimal luminous flux transmission

Durable and recyclable materials: Aluminum and Glass

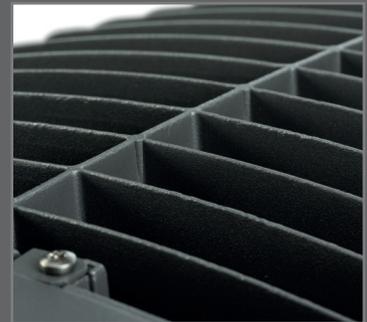
The choice of number of Led modules offers a wide range of lumen packages and future proof solutions



Post-top and side-entry mountings are done with a reversible fixation device that allows a precise on-site adjustment of the luminaire.



Tool free access to gear and electronic compartment



Design for an optimal heat dissipation that withstand high temperature (+55°C)



Each Led is associated with a specific lens that generates the photometric distribution of the light.

IP66 gear and electronic compartment

IP66 led driver

Plug-in terminal

Tool free removal gear tray

High-quality silicone gasket

Surge protection device up to 10/20kV



## LUMEN PACKAGE AND POWER

### VEGA<sup>®</sup>

Neutral white 4000K		1M	2M	3M
350 mA	Nominal flux (lm)*	2680	5360	8040
	Power consumption (W)	18	36	51
525 mA	Nominal flux (lm)*	3890	7780	11670
	Power consumption (W)	27	52	78
700 mA	Nominal flux (lm)*	4990	9980	14970
	Power consumption (W)	37	70	102

### VEGA<sup>①</sup>

Neutral white 4000K		1M	2M	3M	4M	5M	6M
350 mA	Nominal flux (lm)*	2680	5360	8040	10720	13400	16080
	Power consumption (W)	18	36	51	68	83	100
525 mA	Nominal flux (lm)*	3890	7780	11670	15560	19450	23340
	Power consumption (W)	27	52	78	102	127	153
700 mA	Nominal flux (lm)*	4990	9980	14970	19960	24950	29940
	Power consumption (W)	37	70	172	136	171	208**

### VEGA<sup>②</sup>

Neutral white 4000K		5M	6M	7M	8M	9M
350 mA	Nominal flux (lm)*	13400	16080	18760	21440	24120
	Power consumption (W)	83	100	116	134	150
525 mA	Nominal flux (lm)*	19450	23340	27230	31120	35010
	Power consumption (W)	127	153	178	205	231
700 mA	Nominal flux (lm)*	24950	29940	34930	39920	44910
	Power consumption (W)	171	208	240	273	307**

\* The indicated flux is @ T<sub>p</sub> 25°C and based on Led manufacturer's data. Such flux can improve with the advance of Led technology.

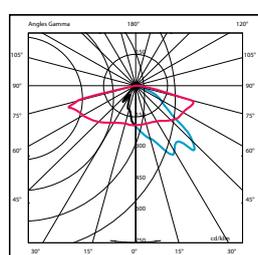
\*\* Limited to 50 °C T<sub>a</sub>

Note: Led module geometry according to Zhaga book 15.

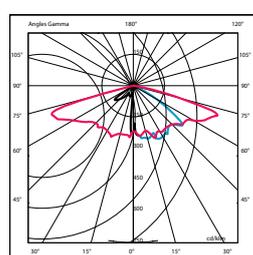
## APPLICATION TYPE



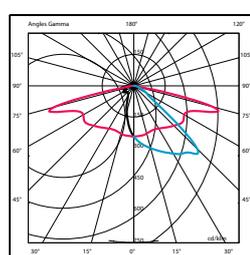
## LIGHT DISTRIBUTION



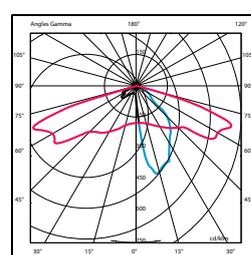
RESIDENTIAL



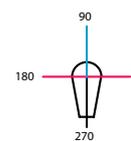
URBAN



NARROW



MOTORWAY

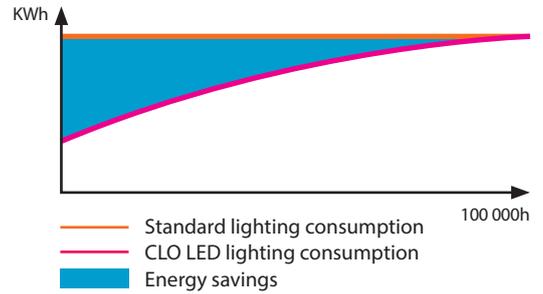


C Demi-plans  
270.0 —  
180.00 — .0  
90.0 —

NB: Other light distributions available on demand in compliance with the Ledil 2x2 Strada range

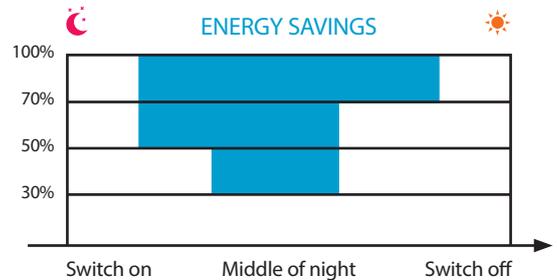
CONSTANT LUMEN OUTPUT

The constant lumen maintenance feature of the driver helps to maintain the required output of the fixture at a constant level throughout its lifetime. In general, Leds lumen output will depreciate over time and in order to maintain sufficient light level towards the end of lifetime, the Leds are driven at a higher current than initially and will result in more energy consumption. The constant lumen maintenance will give the flexibility to drive the Leds at optimal driving current throughout its lifetime. This helps in energy savings, constant light output and enhanced reliability of the system.



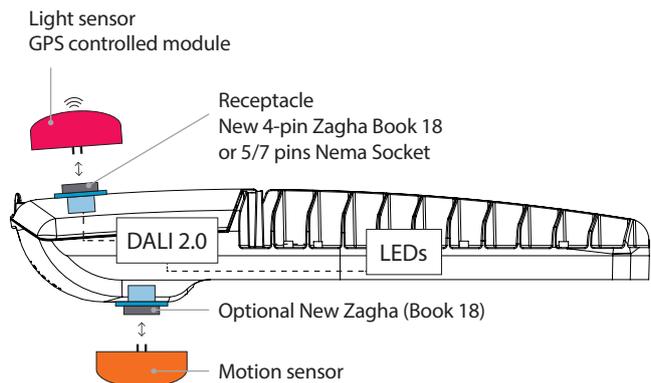
TIME RELATED DIMMING SYSTEM

This dimming system provides multistage night-time power reductions based on an internal timer; there is no need for an external control infrastructure nor external control wiring. Compared with conventional system there are significant cost savings, reduction of light pollution and extension of lifetime for drivers and Leds.

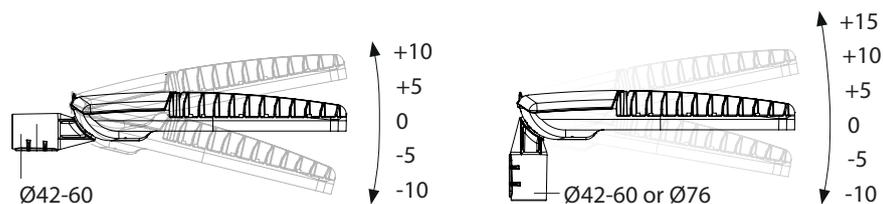


SMART CITY CONNECTIVITY

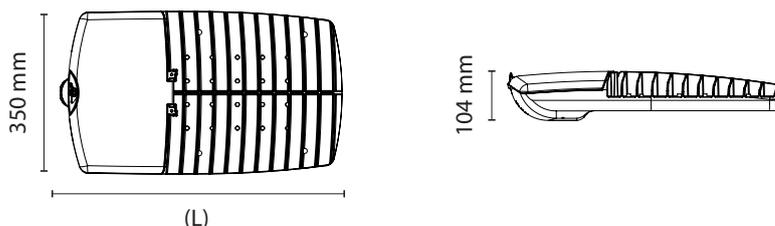
Vega luminaires could be equipped with a 5-7 pin contacts Nema receptacle (conform to ANSI C136 41 standard) allowing the use of any connector node. Vega luminaire equipped with the new 4 pin contacts Zhaga book 18 receptacle combined with drivers based on DALI 2.0 interface will make your luminaires ready for current and future IoT possibilities. An additional new 4 pin contacts Zhaga book 18 receptacle can also be used to attach a downward motion sensor to the luminaire.



## MOUNTING



## DIMENSIONS



VEGA<sup>®</sup>

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L	Weight	C x S*	Height
484 mm	8,2 kg	0,03933 m <sup>2</sup>	4 to 10 m
585 mm	11,2 kg	0,0413 m <sup>2</sup>	4 to 14 m
785mm	14,9kg	0,0480m <sup>2</sup>	8 to 30 m

\* Aerodynamic resistance

## CHARACTERISTICS

Insulation class	Class I (II in option)
Nominal voltage	120V - 277V 50-60 Hz
Thightness level	IP66 for gear and optical compartment
Impact resistance	IK09
Gear tray	Removable without tool
Gear acces	Free tool acces
Operating temperature	-40°C > +55°C

## MATERIALS

Fixation-Body-Cover	Die-cast aluminium EN1706 AC 47100 powder painted
Protector	Extra clear tempered glass. Anti-reflective glass in option
Color	Grey AKZO 900 sand. All RAL color in option
Gasket	Extruded silicone

## LED SOURCE

LED module	Removable & Future Proof (according to ZHAGA book 15)
LED source efficiency	176 lm/W @ 350mA Tj=85°C 4000K
LED current	350 mA / 525 mA / 700 mA
Surge protection	Integrated surge protection device 10/20kV
Color rendering index	CRI > 70
Life time (Tq=25°C)	L70 B30 > 100 000 hrs @ 700 mA L80 B20 > 100 000 hrs @ 700 mA

## OPTIONS

Light distributions	All distributions compatible with the 2x2 strada lenses from Ledil
Color temperature	CCT 3000K other CCTs on demand
Color rendering index	CRI > 80
Programmations	Constant Lumen Output / Time-related dimming system
Lighting management system	All versions folowing Zagma Book 18 / Drivers based on DALI 2.0 interface
Installation	Pre-cable with custom lenght
Life time (Tq=25°C)	L90 B10 > 100 000 hrs @ 700 mA

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