Veka S PP

Pedastrian crossing

KEY BENEFITS

- Up to 5 fixations.
- Tool-free access from the top
- Durability and sturdiness: IP66 + IK10.
- Die Cast aluminium (Cu<0.1%).
- Energy Efficient: Up to 168 lm/W (S)
- Sturdiness: IP66 + IK08
- Energy Efficient:
  GEN1: 155lm /W
  GENA: 162lm/W
- Up to 17 optical distributions.
- Smart Ready: Designed to house both indoor and outdoor communication nodes.
- Future Proof: Zhaga-compliant.
- Lifetime L90B10 100.000h (Tª) 25ºC.
- Night Friendly: ULR Arrêté du 27/12/ 2018.
- High speed Sensor capability.
- 5 years warranty.

IP66 | IK08 | CI | CII | RAL 9016B Smooth Gloss | Marine finish (RAL M9006B)

Dark-Sky Association certification
≤ 3.000K no disponible para 4.000K.
Ajuste mecánico: máx. + o - 15 grados para permitir la nivelación en el terreno.

DESCRIPTION

Veka S PP luminaire harmoniously blends into the road environment to offer lighting that attracts the attention of drivers. It boosts the horizontal and vertical field of vision of pedestrians while also incorporating a flashing orange light war-ning the presence of a pedestrian crossing.

		CRI>60		CRI>70	CRI>70	CRI>70	CRI>70	CRI>70
		Amber optic + 4000K	PC amber	2200K	2700K	3000K	4000K	5700K (Veka S PP)
U500	GEN1	<0,2%	<0,25%	<6%	<10%	<15%	< 22%	28,9%
	GENA	-	-	-	-	12,36%	19,7%	-

STANDARDS / CERTIFICATES

- CE
- RoHS
- UNE-EN 60598-1
- UNE-EN 60598-2-3
- UNE-EN 62471:2009
- 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
- UNE-EN ISO 9227 NSS: 2017 (1,000 h)

GEN1:
757lm - 13.992lm
GENA:
1.489lm - 16.252lm

PT: 0.1m²
SE: 0.11m²
FM: 0.1m²

GEN1:155lm /W
GENA: 162lm/W
Luminaire

-40ºC - +55ºC

6 Kg

0,0%

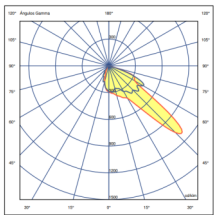
Tool-less access to control gear

220 - 240V / 100V - 277V
50-60Hz
L90B10 100,000 h
Ta 25 ºC

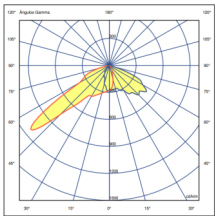
Distributor: EPK elektro s.r.o.
info@carandini.cz - www.carandini.cz

PHOTOMETRIC DISTRIBUTIONS

2 photometric configurations are available for use in the various environments where this type of luminaire might be installed, meaning it can be adapted to suit all



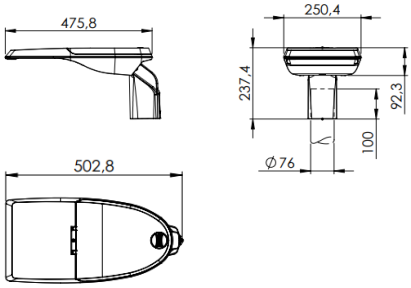
PCE1



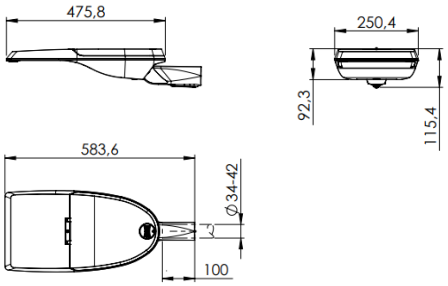
PCE2

DIMENSIONS

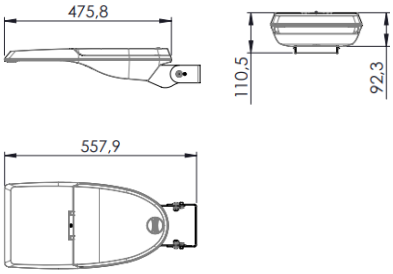
Vertical fixation ø76 mm (PT1)



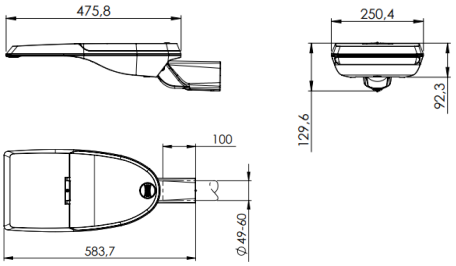
Lateral fixation ø34/42 mm (SE1)



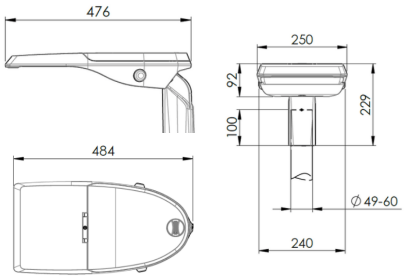
Wall fixation. Bracket included (FM1)



Lateral fixation ø49/60 mm (SE2)



Pedestrian crossings



APPLICATIONS

Pedestrian crossings

Distributor: EPK elektro s.r.o.
info@carandini.cz - www.carandini.cz

VEKA S PP CHARACTERISTICS

GENERAL INFORMATION

Sustainability	Recyclability: 99,38% Carbon footprint per use: 0,026677Kg kW/h de CO2
CE mark	Yes
ENEC Certificate	Yes
RoHS-compliant	Yes
Testing standards	LM 79-80 (all measurements at ISO17025 certified laboratory)

GENERAL CHARACTERISTICS

Body and mounting	Die cast aluminum EN AC-44100 with low copper content <0.1%.
Closure	Tempered glass 5mm
Nuts outer and bolts	Stainless steel (AISI304).
Watertightness	IP66 (EN 60598-1 and EN 60529)
Impact protection grade	IK08 (EN 62262)
Operating temperature	Ta -40 ºC a +50 ºC According to luminaire configuration.
Lifetime	L90B10 100,000h at Ta of 25°C. Light maintenance assessments to TM-21 based on
Cable	Class I/II Cable from 4 to 8 metres Cross-section: 2x1.5 ; 3x1.5 ; 4x1.5 ; 5x1.5; 2x2.5; 3x2.5

ELECTRICAL CHARACTERISTICS

Electrical class	Class I o Class II
Voltage / Frequency	220V - 240V / 50Hz - 60Hz Optional 120V - 277V
Power factor	> 0,9
Harmonic distortion	< 15%
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

Package real light	GEN 1: 757 lm to 13,992 lm (12 - 112W) 155lm /W GENA: 1.489lm to 16.252lm (12 - 112W) 162lm/W
LED colour temperature	5,700K (Neutral White, nw). 4,000K (Neutral White, nw). 3,000K (Warm White, ww). 2,700K (Warm White, ww). 2,200K (Warm White, ww). Optionally amber color temperature.
Index of reproduction chromatic (CRI)	CRI>70. Optional CRI80.
LEDs	Incorporate from 16, 24, 36 and 48 LEDs.
FHS/ULR	0,0%
Optics	PMMA polymethylmethacrylate.
Photometric distributions	PCE1=> Throw 50º Spread 55º/60º (Type III) PCE2=> Throw 50º Spread 45º/55º (Type II)
LED thermal control	Heat dissipation by conduction through the specific design for this luminaire, since it has been specifically designed for LED technology. (Heatsink).

FINISHES

PREDEFINED COLOUR OF THE LUMINAIRE

RAL 9016	RAL-9016 Traffic white glossy smooth

Corrosion protection

SEA SIDE SUITABLE	Marine Finish (1.000h)

VEKA S PP CHARACTERISTICS

MAINTENANCE AND ASSEMBLY

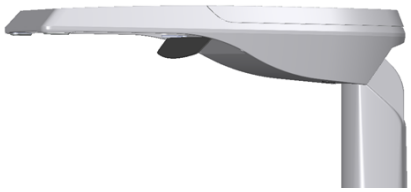
Installation and maintenance	Tool-free luminaire access system designed by Carandini. Access to the driver from the top.
Installation	PT1: Vertical fixation ø 76mm.* SE1: Lateral fixation ø 34/42mm. SE2: Lateral fixation ø 49/60mm. FM1: Wall fixation . Includes bracket for direct installation on wall. * The PT1 fixation shall be supplied horizontally mounted with SE for sustainability.
Mechanical adjustment	Vertical and lateral fixations offers an angle of inclination range of +-10º every 2.5º. The fork for wall installation offers a range of inclination of +-40º every 2.5º.
Equipped weight	PT1: 6.2 Kg SE1: 5.7 Kg / SE2: 6 Kg FM1: 5.9 Kg
Wind Surf.	PT: 0.1m² SE: 0.11m² FM: 0.1m²
Pressure equalisation valve	The luminaire is fitted with a valve that compensates any interior pressure to prevent the build-up of condensation, thereby extending the lifespan of the components.

MANAGEMENT AND CONTROL

Equipment	**1N:** 1 Level **RC:** Controller dimmed **RD:** DALI **AF:** 1 - 10 V **RL:** Pulse adjustable LED **2N:** 2 Level **SR:** Smart Ready (D4i)
Autonomous regulation	Regulations programmed from the factory: **56**: 50% of the 24: 00h at 6: 00h. **66**: 60% of the 24: 00h at 6: 00h. **76**: 70% of the 24: 00h at 6: 00h. **SC**: Programming according to client.
CLO regulation	Flow rate during the life of the product: **7**: 70% luminous flux throughout the life of the luminaire. **8**: 80% luminous flux throughout the life of the lumi-
Socket connection	**3-U:** NEMA 3 pin socket with/without IP66 cover. **5-V:** NEMA 5 pin socket with/without IP66 cover. **7-W:** NEMA 7 pin socket with/without IP66 cover. **X:** Larger Zhaga socket with/without IP66 cover. **O-Y:** Smaller Zhaga socket with/without IP66 cover. **P-Q:** Smaller/larger Zhaga socket with/without IP66 cover.
Sensor	**1:** Photocell for NEMA 3, 5 and 7 pin socket (20 lux) **2:** Photocell for larger Zhaga socket (20 lux) **3:** Motion sensor for smaller Zhaga socket. **4:** Photocell for larger Zhaga socket (20 lux) and motion sensor for smaller Zhaga socket.
Node	CD: Citydim BS : Controlux Basic IMCU Pedestrian crossing: Controlux Sense

ACCESSORIES

Optional pre- or post-installation shielding for these luminaires



LOGISTICAL INFORMATION

PT

Box dimensions: 515 x 260 x 275 mm

Box weight: 6.2 kg

Number of boxes: 36 units

American pallet: 1200 x 800 x 1850 mm

Number of levels: 6 levels

Surface area used: 83.7%

Volume used: 76.7%

Total gross weight: 243 kg

SE

Box dimensions: 630 x 290 x 170 mm

Box weight: 6.2 kg

Number of boxes: 36 units

American pallet: 1200 x 800 x 1500 mm

Number of levels: 7 levels

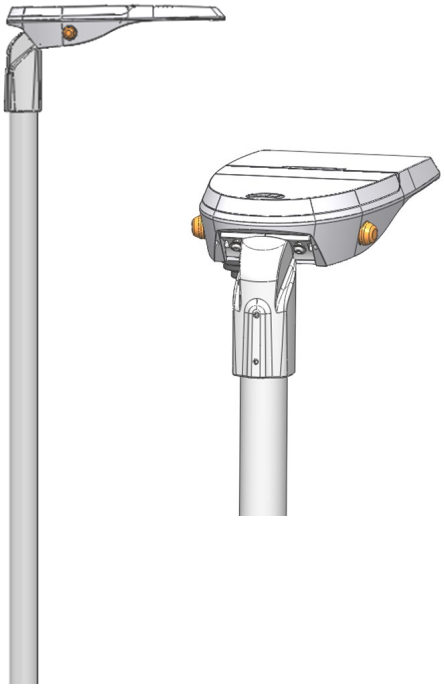
Surface area used: 76%

Volume used: 73%

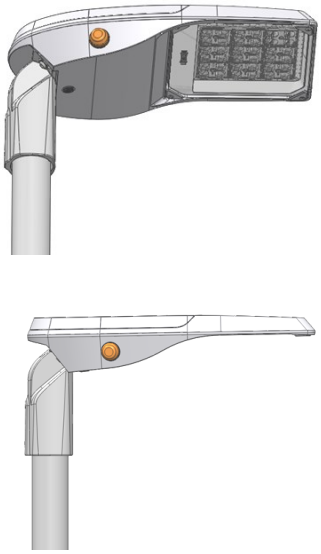
Total gross weight: 210 kg

PHOTOGRAPHS

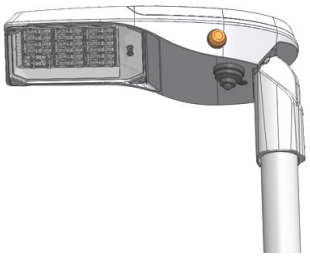
Veka S PP

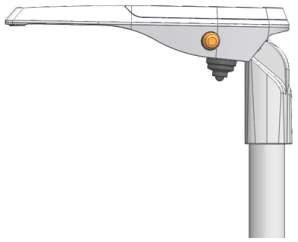


No presence sensor

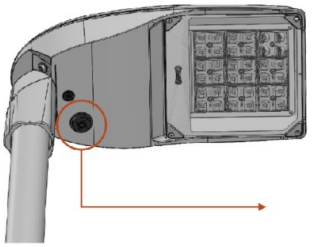


With presence sensor





With presence sensor



MOTION SENSOR

The FDP sensor series allows your fixture to participate in the internet-of-things (IoT) revolution. This sensor family features bi-directional communication between sensor and driver, enabling connected systems for smarter, more energy efficient and data-driven applications. The FDP sensor series is compatible with with various intelligent drivers. By connecting to an intelligent driver, the FDP sensor series does not need its own power supply which will save cost and space inside the luminaire.

CHARACTERISTICS

- SR-certified by Philips (FDP-301SR only)*
- 4 pin connector (for Zhaga book 18 socket installation)
- DALI 103 and 303* compatible (FDP-301 only)
- High or low trim fully adjustable from 1 to 10V
- Time delay from 30 seconds to 30 minutes
- Optional cut off delay
- Ramp up and fade down times (2 seconds; 10 seconds)
- 2 lens configurations for 8â€“15 ft or 40 ft
- Bluetooth Commissioning utilizing the Wattstopper Configuration App
- Polycarbonate construction; flame retardant, UV resistant, impact resistant, recyclable UL244A and UL508; IP66 rated (when fully assembled and installed) for use in wet locations
- This product meets the materials restrictions of RoHS.

OPERATION

Typically, the sensor ramps lighting On to the selected High mode level when motion is detected and the ambient light level is below the hold off setpoint. After the sensor stops detecting movement and the time delay elapses, lights fade to the Low mode level. If there is no motion during the subsequent cut off time delay, the lights will turn Off. For dusk to dawn control, the integral photocell can switch the lights On and Off based on the ambient light level so that lighting remains on overnight even without motion detection.

LUMINAIRE DIMMING

By programming the driver

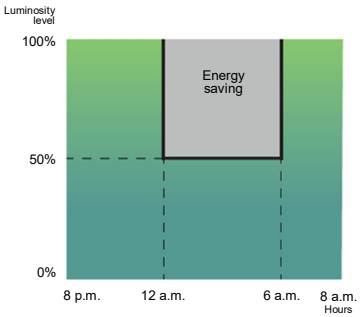
Smart luminaires drivers can be programmed in the fac-tory without needing a control system, additional wiring or maintenance costs. A schedule is pre-programmed for light flow to be automatically reduced at quieter times of the night while respecting light levels and uniformity.

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 multione 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

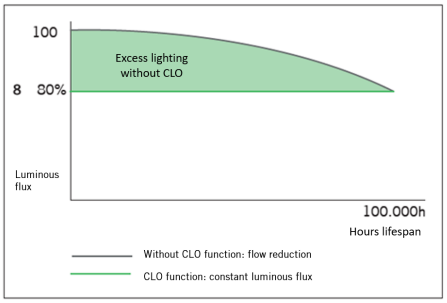
Luminaire luminous flux at 80% to maintain light levels throughout its service life.

Up to

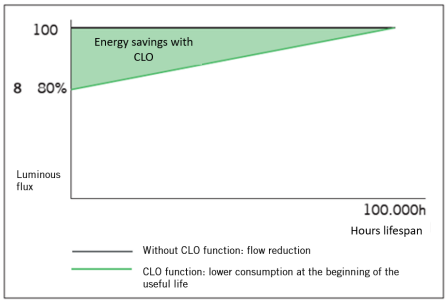
10% savings

and increase in luminaire service life

Luminous flux chart



Consumption graph



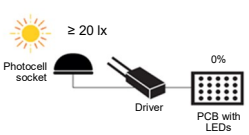
By adding an extra element

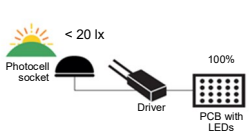
Photocell

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 Sockets or Zhaga Sockets, 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 Sockets 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 - 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 Dii4'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	LEDset 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

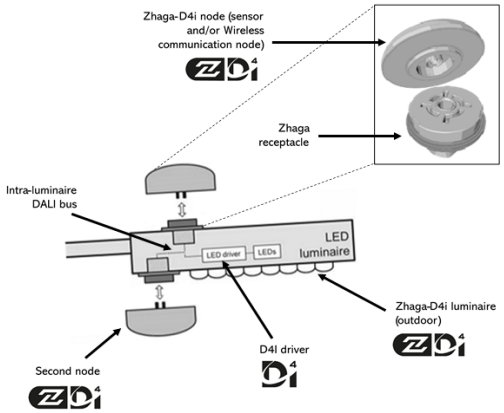
Zhaga-D4i certification covers all the essential characteristics, including automatic adjustment, digital communication, data reporting and power requirements in any single luminaire, ensuring plug-and-play interoperability for luminaires (drivers) and peripherals, such as connectivity nodes.

STANDARDISATION AS A MEANS TO ACHIEVE SUSTAINABILITY

The Veka S PP luminaire has been designed to function with the latest available market-proven technology based on standards. This also enables it to meet the CARANDINI sustainability requirements and become a product ready for maintenance in the future under better guarantees while respecting the environment and society.

The luminaires marked as Zhaga are a “Future Proof” design, meaning it is based on and designed around standard Zhaga components. These components are mainly the LED modules and the drivers. The electric compartment and dissipation area for LED modules has space and additional mountings to include any driver compliant with Zhaga “Book 13” based on market driver dimensions, or any LED module compliant with Zhaga “Book 15” based on LED controller interface specifications.

This makes it possible to have a sustainable product that can be updated over time.



CONNECTIVITY

D4i specifications take the best of the standard DALI2 protocol and adapt it to an interconnected lighting environment, but with certain limitations. Only the control devices installed in the luminaires can be combined with a Zhaga-D4i luminaire. According to the specifications, the control devices are respectively limited to an average power consumption of 2W and 1W.

SMART CITY

Luminaires marked ZD4i are a "Smart Ready" design, which means they are designed to house both indoor and outdoor communication nodes through connection bases compliant with the Zhaga “Book 18” & Zhaga-D4i standard on sensor and communication node interoperability.