



**CATALOG** 2025 ■

STREETLIGHTING - URBAN LIGHTING  
FLOODLIGHTS - INDUSTRIAL - CANOPIES  
TUNNELS - PHOTOVOLTAIC

The Detas group relies on the experience passed down from generation to generation **since 1896** when in Pola (Istria), the first company was founded, manufacturing electrical components and systems.

As the years passed, the production of power supplies started and Detas specialized in **industrial automation**, a branch still active and growing today.

In 1998 the **D-POWER** division was founded, active in the **road safety** field and pioneer in developing **LED signaling devices**. D-POWER is nowadays an European reference in its market thanks to continuing product innovation, patented optics, certified flashers and a range of well-known quality.

In 2008 we extended the road safety mission to **lighting of tunnels, canopies and streets** with the **DLEDS** division. The cross experience between power supplies-LEDs-optics allowed us to offer since the beginning high performing and reliable products. As the years passed, we extended the range of products to **industrial, urban lighting** and luminaires designed to meet specific functional lighting needs.

The DLEDS brand is a synonym of quality and reliability for our customers, with a sales network and positive references throughout the world.

In our factory in Rezzato (Brescia), our lights are engineered, manufactured and tested. Our technical department relies on years of experience and specific instruments such as an in-house **goniophotometer** to develop optics and photometric files, an **IP and salt spray corrosion test chamber**, electrical parameters meters, **surge testers** and chromameters.

Detas factory is under strict surveillance from the **ENEC, TÜV** and **NRTL** inspectors to maintain our quality approvals.

The final quality control is completed individually after a 48 hours burn in and guarantees the maximum constancy of the delivered products.

**Detas invests in reliability, performance and service, offering always the most effective solutions to meet your needs and the shortest payback time.**



<b>CERTIFICATIONS</b>	04
<hr/>	
<b>OPTICS</b>	05 - 07
<hr/>	
<b>GLOSSARY OF LIGHTINGS TERMS</b>	08 - 11
<hr/>	
<b>LIGHTING</b>	12 - 14
<hr/>	
<b>FOCUS ABOUT TUNNELS</b>	15
<hr/>	
<b>PRODUCT INDEX</b>	16 - 17
<hr/>	
<b>STREETLIGHTING</b>	20 - 33
<hr/>	
<b>URBAN LIGHTING</b>	36 - 59
<hr/>	
<b>FLOODLIGHTS</b>	62 - 73
<hr/>	
<b>INDUSTRIAL</b>	76 - 109
<hr/>	
<b>CANOPIES</b>	112 - 117
<hr/>	
<b>TUNNELS</b>	120 - 137
<hr/>	
<b>PHOTOVOLTAIC</b>	140 - 143
<hr/>	
<b>COMPARATIVE CHARTS</b>	146 - 159
<hr/>	
<b>APL</b>	160 - 161



The energy efficiency of the appliance is rated in terms of a set of energy efficiency classes from A to G, A being the most energy efficient, G the less efficient.



(European Norms Electrical Certification)



The products marked with this logo are certified according to the European electrical and photobiological safety quality standards.



All our products are manufactured in compliance with the EU directives concerning electrical devices.



Compliance with EU regulations on waste electrical and electronic equipment (WEEE II and WEEE II II). WEEE II regulates how products are managed at the end of their life cycle and encourages recycling and reuse in accordance with EU Directive 2012/19/EC.



All our products are manufactured in compliance with the LV and EMC EU directives.



The products marked with this logo are available in an ATEX compliant version for installations in explosive atmosphere.



Our manufacturing and quality control processes are monitored and certified according to ISO 9001 and ISO 14001.

Our suppliers:

LED

LUMILEDS

DRIVER

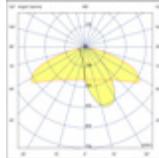
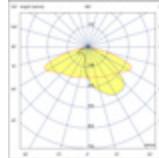
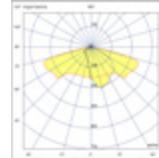
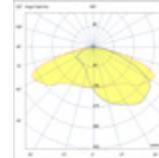
OSRAM PHILIPS TRIDONIC

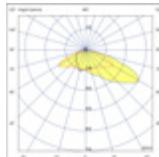
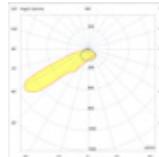
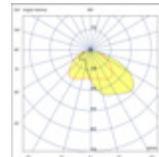
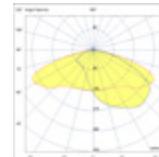


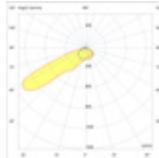
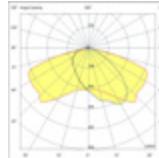
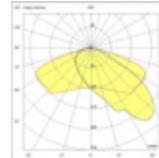
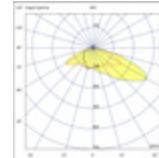
## In the heart of the light

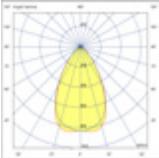
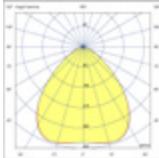
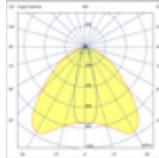
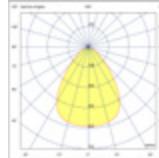
more than **100 unique optics**, internally developed, are the key to the success of our products. An unmatched offer, directly from our experience **on world's roads**.

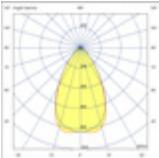
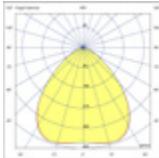
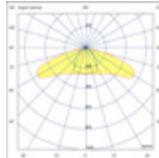
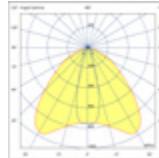
**A powerful instrument in your hands.**

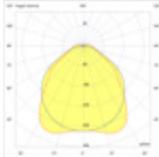
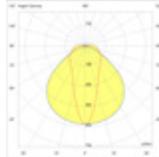
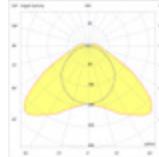
<b>STREETLIGHTING</b>					
<b>OPTIC</b>	<b>205A</b>	<b>206A</b>	<b>213A</b>	<b>277A</b>	
<b>DESCRIPTION</b>	Narrow beam optics for road applications such as acceleration/ deceleration lanes, pedestrian roads where precise light control is required.	Street optics with wide transversal for roadways beyond 2 lanes. Also used in tunnels with side position for its high luminance values.	Most widely used street optic. It is characterized by the highest interdistance to height ratio, ensuring excellent performance and high longitudinal uniformity.	Street optics with wide transversal for roadways beyond 2 lanes. Also used for roundabouts, providing good illuminance values.	
<b>DISTANCE/ HEIGHT RATIO</b>	Interdist. = $3,6 * h$	Interdist. = $3,4 * h$	Interdist. = $4,6 * h$	Interdist. = $4 * h$	
<b>ILLUMINATED WIDTH</b>	Length = $0,85 * h$	Length = $1,24 * h$	Length = $1 * h$	Length = $1,35 * h$	

<b>LIGHT TOWERS/ YARDS</b>					
<b>OPTIC</b>	<b>201A</b>	<b>218A</b>	<b>208A</b>	<b>277A</b>	
<b>DESCRIPTION</b>	It is used for specific applications such as light towers, parking lots and industrial perimeter lighting. It provides high uniformity.	It provides higher illuminance values than 201A, but with a slightly lower level of uniformity.	It is used to provide high illuminance but limiting transversal emission. Useful for relatively close light towers or the exterior of building where the interdistance is not wide.	Hybrid optics between street and light towers. Covers greater interdistance than 201A while also providing higher illuminance levels, but offers lower transversal.	
<b>ILLUMINATED WIDTH</b>	Length = $2,12 * h$	Length = $2,38 * h$	Length = $1,98 * h$	Length = $1,83 * h$	

<b>TUNNELS</b>					
<b>OPTIC</b>	<b>218A</b>	<b>244A</b>	<b>247A</b>	<b>201A</b>	
<b>DESCRIPTION</b>	Benchmark optics for both single and two-wire counterflow installations. Provides high luminance levels and good transversal uniformity.	Optics mainly used in tunnels with a cross section diameter of 8m or less. It is also used in symmetrical (S) configuration for roadway centerline installations.	Optics used in tunnels with 2 or 3 lanes, because of its greater transversal contribution. It is also used in symmetrical (S) configuration for installations in the center of the roadway.	Optics used in very wide tunnels (4 lanes) or in conditions with lateral arrangement on a single row. It is characterized by low glare and good uniformity with narrow interdistances.	

<b>INDUSTRIAL</b>				
<b>OPTIC</b>	<b>211S</b>	<b>212S</b>	<b>207S</b>	<b>450S</b>
<b>DESCRIPTION</b>	<p>Narrow-beam (60°) rotosymmetric optics for industrial applications at high ceilings. Recommended above 9-10m height, it can still provide high illuminance levels.</p> <p>Medium-beam (90°) rotosymmetric optics for industrial applications with useful ceiling heights of even 7-8m. Primarily prioritizes uniformity for 1:1 replacements of old industrial high bays.</p> <p>A dedicated optic for shelwarehouses shelves, even for very considerable mounting heights. Provides high illuminance values. Suitable for linear arrangements in aisles with shelves or rectangular arrangements in warehouses.</p> <p>General 90° optics only for the PAD ECO 3 product. Considering the product's efficiency, it privileges uniformity for 1:1 replacements of old industrial high bays while preserving high illuminance levels.</p>			

<b>CANOPIES</b>				
<b>OPTIC</b>	<b>211S</b>	<b>212S</b>	<b>205S</b>	<b>207S</b>
<b>DESCRIPTION</b>	<p>Narrow-beam (60°) rotosymmetrical optics also suitable for canopies where the interdistance between lamps is reduced. Provides high horizontal illuminance values at the disadvantage of worse vertical illuminance.</p> <p>Medium-beam (90°) rotosymmetrical optics suitable for most gas stations canopies. Privileges uniformity for 1:1 replacements of old discharge lamps.</p> <p>Rectangular optic suitable for toll collection lanes. It also helps to illuminate the non-overlay part of the lanes.</p> <p>Rectangular optic suitable for lighting lanes of toll collection stations. Maximizes energy savings due to its narrower and more accurate beam.</p>			

<b>LINEAR</b>				
<b>OPTIC</b>	<b>SB</b>	<b>UGR</b>	<b>NB</b>	<b>WB</b>
<b>DESCRIPTION</b>	<p>Standard optics for KES STRIP TN, TF weather-proof ceiling lights. Thanks to the high transmittance diffusion cover, it guarantees high lm/w outputs and useful light diffusion for the majority of applications.</p> <p>Reduced glare optics (UGR &lt;22) featuring a transparent body that, by partially being illuminated, lowers the level of glare.</p> <p>Narrow beam optics obtained by outer screen machining. Ideal for ceiling heights above 7m, it is available for both KES STRIP TN and TF.</p> <p>Wide-beam optics achieved by machining the outer shield. Ideal for parking lots or all those installations where the installation height is less than 3m and/or in case of high spacing interdistance.</p>			

**LUMINOUS FLUX** [Lumen]

The **luminous flux** is the amount of light generated from a luminaire. This value is only relatively representing the performance of a product, as it is up to the optics to use this light in an efficient way. Distributing the lumens (light) only where needed provides extra energy savings. We strictly declares the lumens of broadly available products, not theoretical values as many competitors do.

**ILLUMINANCE** [Em, lux]

The **illuminance** is the quantity of light hitting a specific surface, like a road or a warehouse floor. Illuminance is the measuring parameter to consider for sidewalks, pedestrian crossings, roundabouts and all the industrial lighting.

**LUMINANCE** [L, cd/m<sup>2</sup>]

The **luminance** is the quantity of light that the observer's eyes (usually a driver) see, reflected from an area of 1m<sup>2</sup> of the road surface seen from distance. It is the measuring parameter for streetlighting and tunnell lighting, as it represents a model of the real world driving conditions, where obstacles must be identified in time to permit a reaction.

**LONGITUDINAL UNIFORMITY** [UI]

**Longitudinal uniformity** is calculated from the ratio between minimum luminance [Lmin] and maximum luminance [Lmax], measured on the axis of the lane. The measurement is repeated for every lane. It's a primary importance value in street and tunnel lighting design. An uniformity level below the minimum requirement is clearly visible when dark and bright stripes are evident on the pavement.

**OVERALL UNIFORMITY** [Uo]

The **overall uniformity** is calculated from the ratio between minimum luminance [Lmin] and average luminance [Lav], measured in all the points of the matrix drawn in the norm.

**TRANSVERSAL UNIFORMITY** [Ut]

The **transversal uniformity** is the worst ratio between Lmin and Lmed between all transversal lines perpendicular to the centerline. This value applies only for tunnel lighting calculations.

**GLARE** [TI, %]

The TI index measures the **debilitating glare**, caused from the presence of light sources in the sight of an observer. The percent value measures the increment of luminance that should be applied to the road to compensate the presence of the said light source, keeping the same visibility of obstacles. TI applies only for street and tunnel lighting.

**GLARE** [UGR]

The UGR is a grid of values used to classify the **glare** produced from luminaires in indoor environments. It's not a number that can be assigned to a luminaire but it can be obtained only running a lighting simulation of the room, defining an observer point (like a workstation) and including in the calculation parameters such as the light emitting surfaces and the surrounding illuminance.

**PRODUCT NOMENCLATURE**

Example: TALOS-N 24D530-W216A-230

Model	LED quantity	LED type	LED drive [mA]	Light colour	Optics	Voltage
Talos-N	12	D (LUMILEDS 5050)	350	W: 5700 K N: 4000 K M: 3000 K G: 2200 K	201A	230 VAC ± 10% 50/60 Hz
			440		214A	
			530		202A	
			600		215A	
			700		203A	
	24	P (LUMILEDS 5050 HE+)	830		216A	
			1000		204A	
			...		...	

# FROM DESIGN TO REALITY: OUR PLEDGE

We **support** lighting designers by offering one of the widest and most unique photometric portfolio, allowing simulation of the performance of our products for industrial, street and tunnel applications.

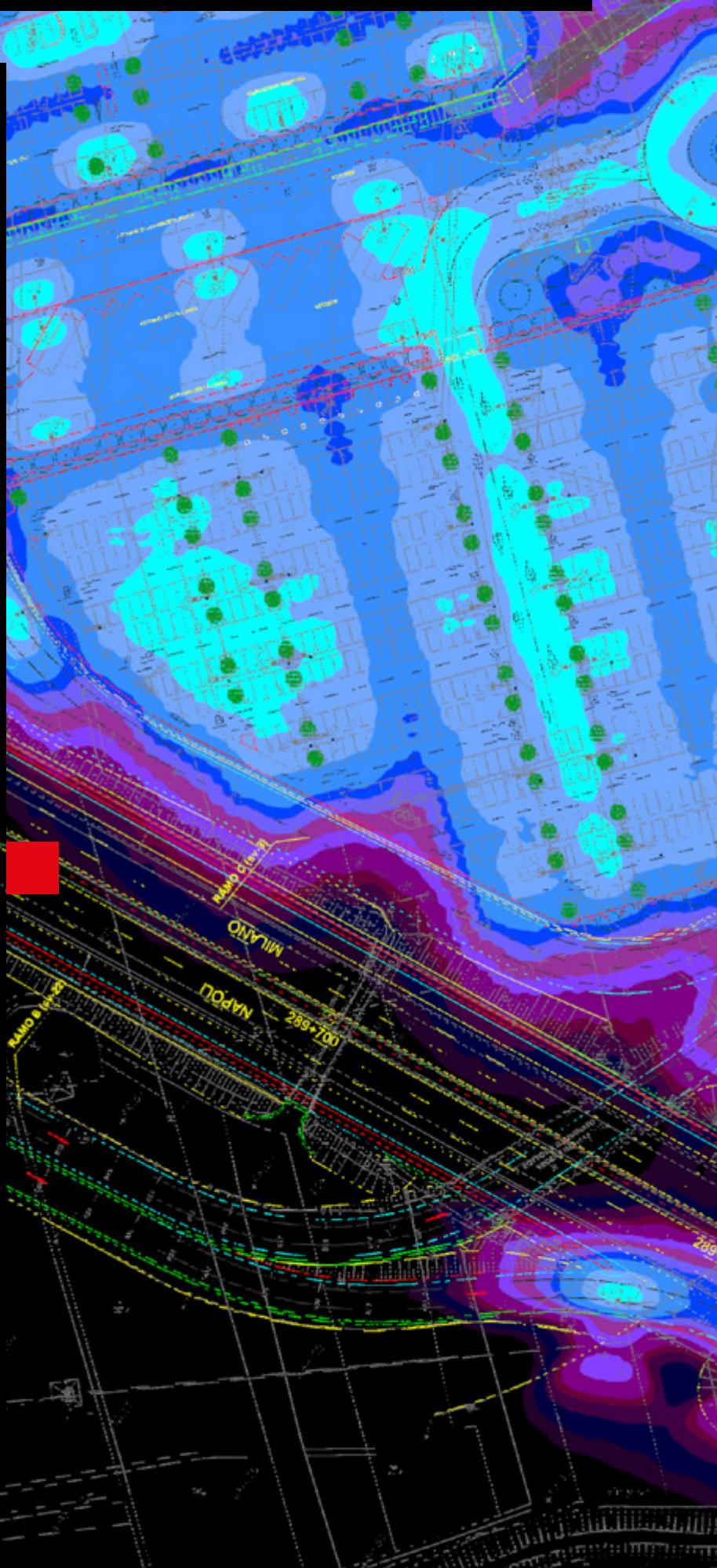
Our **projects** are developed according to the standards and maximizing the energy saving: even a small reduction of Watt per luminaire makes a difference in the long run. On request we provide a complete lighting evaluation, including a 3D model.

We support the **economic assessment** of the project, with analysis of the upfront cost, energy savings, payback time and white certificates, including the installation cost and future maintenance.

The **lighting of streets, industries and tunnels** is a particular functional lighting application, as the delivered performance has to meet well defined targets, set from the applicable norms, different from every area of the world.

The European standards are the following:

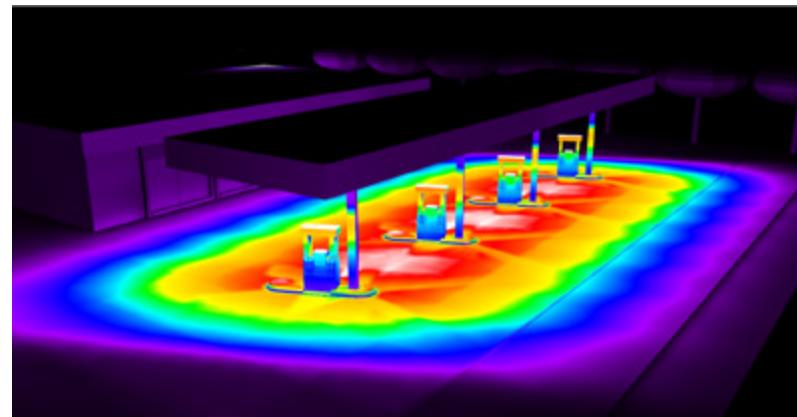
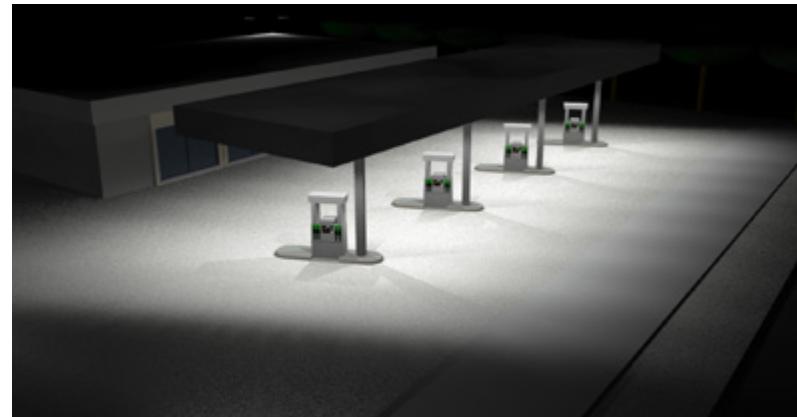
- **EN 13201** and **UNI 11248** streetlighting.
- **EN 12464** illumination of working places.



## CANOPIES

### Example of gas station lighting.

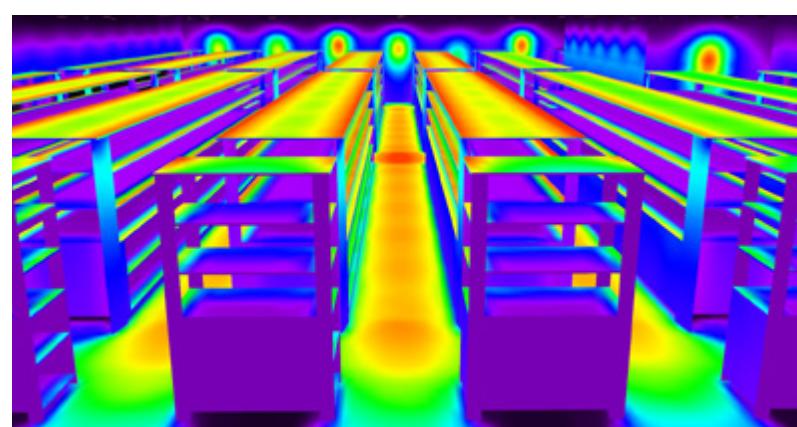
The areas surrounding the fuel pumps and ATM columns have to maintain an average of 150 lux (EN 12464-2).



## INDUSTRIAL

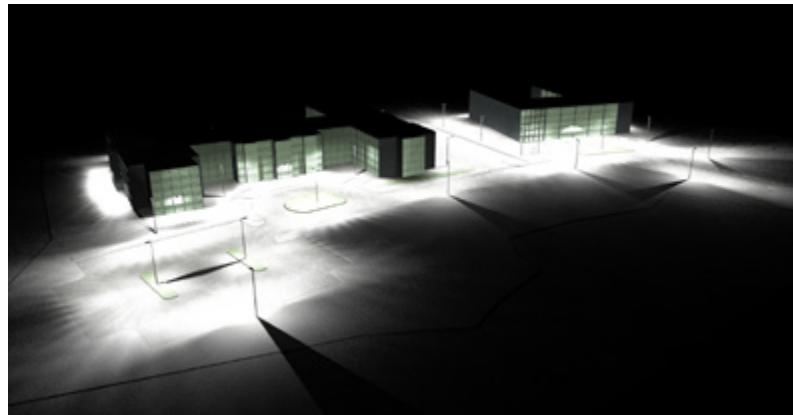
### Shelving warehouse lighting.

It is visible how the outer part of each shelf is well illuminated to ease the view of products and reading labels.



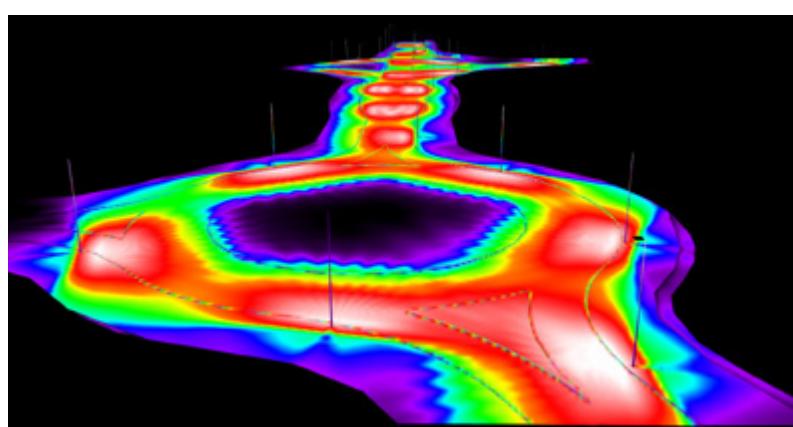
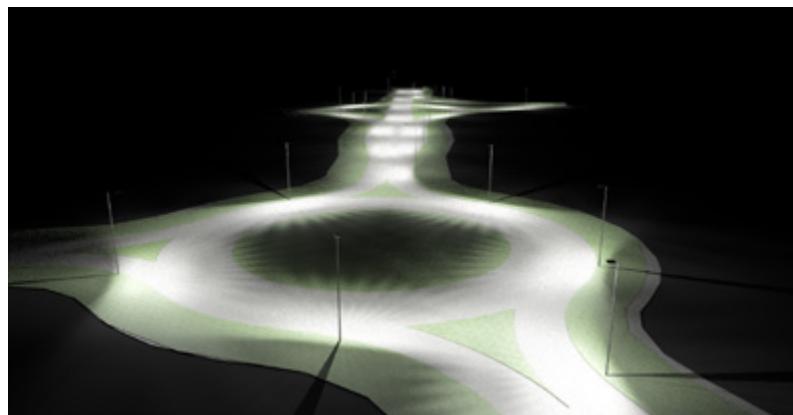
## PARKING LOTS

**Lighting of a parking lot**, where a very high level of uniformity is achieved and the lighting pollution towards adjacent properties must be zero.



## STREET

**Example of a streetlighting project**, specifically a suburban junction between two traffic arteries.



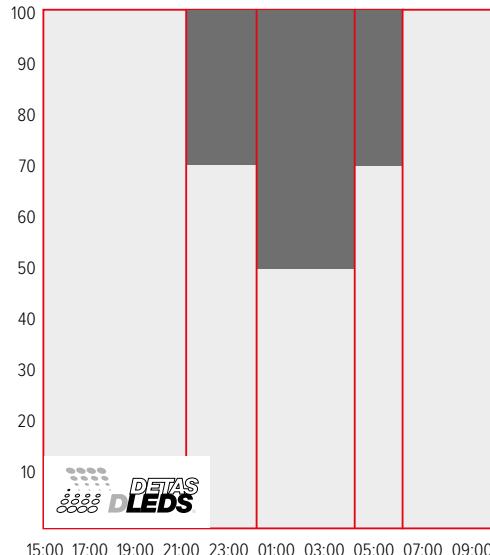
# LIGHTING CONTROLS

LED lighting offers much more controlling possibilities than traditional systems, applicable to new installations or updating an existing systems.

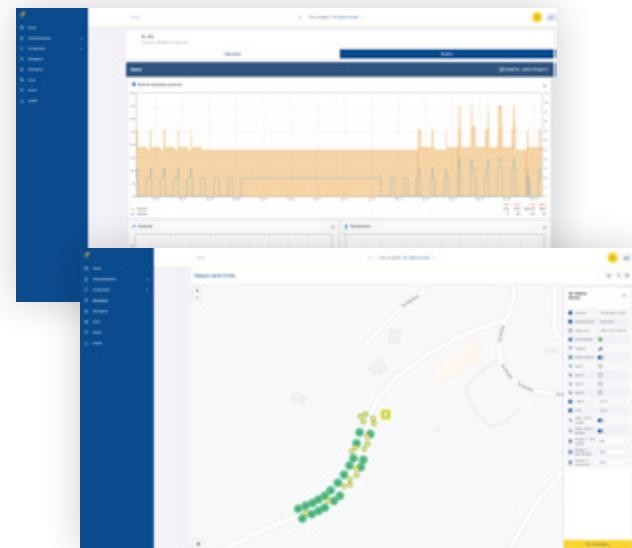
In addition to the energy saved by the new technology, integrating LEDs with a control system can offer an additional 20-30% saving.

The objective of controlling the light is to reduce the light output when the need is lower or absent.

In the following pages we are presenting the control systems available with most of our products, from controlling few fixtures to entire industries and cities.



Example of virtual midnight pre-set program.



Example of wireless control interface.



## STREETLIGHTING CONTROLS

- Virtual midnight
- Lineswitch
- Power-line communication
- Remote wireless control
- Motion sensor
- Photocell



## TUNNEL LIGHTING CONTROLS

- Power-line communication
- Remote wireless control



## INDUSTRIAL LIGHTING CONTROLS

- 1-10V / DALI
- Motion sensor
- Illuminance sensor
- Zigbee



## VIRTUAL MIDNIGHT

It's an automatic system, completely integrated in the light fixtures that does not require any additional wiring or external hardware.

It reduces the luminous flux according to a preset program (up to 5 dimming and time steps), adjustable like the picture shown in the left page.

For three days after the installation, the lights will work at full power, reading the on/off time, starting to reduce the luminous flux from the fourth day.

The operation is based on calculating a virtual midnight (average on-off moment) used as reference to apply the pre-set program.

The calculation of the virtual midnight is automatic and keeps updating during the year, adjusting to the daylight hours. The system is mostly used for parking lot lighting and streetlighting.



## LINESWITCH

Lineswitch is a cost effective one step dimming system and easy to integrate with installations where the control wire is present, where a 230V signal is distributed.

When the light drivers receive the signal, they reduce the power to the pre-set step.

The signal can be controlled from a variety of sources such as timers or motion sensors.

The possible applications of the Lineswitch vary according to the type of signal generation system, mostly used for streetlighting, parking lots, gas stations and perimetric industrial lighting.



## 1/10 V / DALI

These are wired lighting controlled systems, both require the installation of additional wiring besides the power supply ones.

**1-10V** is an analog control system, based on sending a signal to the lights between 1V (10% luminous intensity) and 10V (100% luminous intensity).

One or more lights can be controlled using this system with a motion or illuminance sensor.

The polarity of the controlling cables must be followed during the installation.

**DALI** is a digital control system, based on creating a network where an unique address is assigned to every light fixture, allowing an individual control and a communication with the lights to verify the status. Using the DALI network it is possible to create control groups, managing the lighting of entire buildings.



## MOTION AND ILLUMINANCE SENSORS

We offer a range of motion and illuminance sensor to control our lights.

The **motion sensors** can control a simple on/off of the lights or reduce the intensity down to a pre-set step when motion is not detected, keeping a safety level.

The **illuminance sensors** can operate as a photocell or vary in real time the luminous intensity according to the ambient lighting level, keeping a constant light level in the room.

Internal sensors are available with the streetlights for a standalone control; external sensors working with 1-10V / DALI or Lineswitch are available to control groups of lights.



## REMOTE WIRELESS CONTROL

Our street and tunnel lights are available with a proprietary remote wireless control to manage the dimming, monitor power consumption and failures.

The adjustment of the luminous intensity is done individually or by group of lights, creating up to 6 fully automatic dimming profiles.

The interface is completely online and can be used from anyb device including smartphones and tablets. It includes a Google

Maps window for an immediate localization of the lights/ group.

The communication between the interface and the wireless coordinator is totally safe and encrypted using an HTTPS protocol.

The system is composed by:

- A wireless coordinator, responsible for the information exchange with the lamps (dimming commands and status check) that needs an active connection to Internet. Available in a less expensive Ethernet version or with 3G GPRS capability. Every coordinator can control up to 150 lights and the maximum distance between the it and the first light should not exceed 50m.
- Radio controllers mounted inside the light fixtures, operating at 868MHz. To achieve a better operating reliability and distance, the lights create a mesh network, where every fixture replicates the signal coming from the coordinator. Consequently, not every light has to be in the range of the coordinator.

The system is mainly used to control the lighting of streets, parking lots and tunnel entrances.



## ZIGBEE

It's a control system that allows controlling lights directly from a smartphone or tablet using a dedicate app.

The gateway and the lights communicate using a local wireless network. No active internet connection is required for the operation.



## POWER-LINE COMMUNICATION

This is a system that uses the existing power cables to control the lights. A central unit sends high frequency signals through the cables, much higher than 50/60Hz, that the units mounted in the lights read as instructions to vary the luminous intensity.

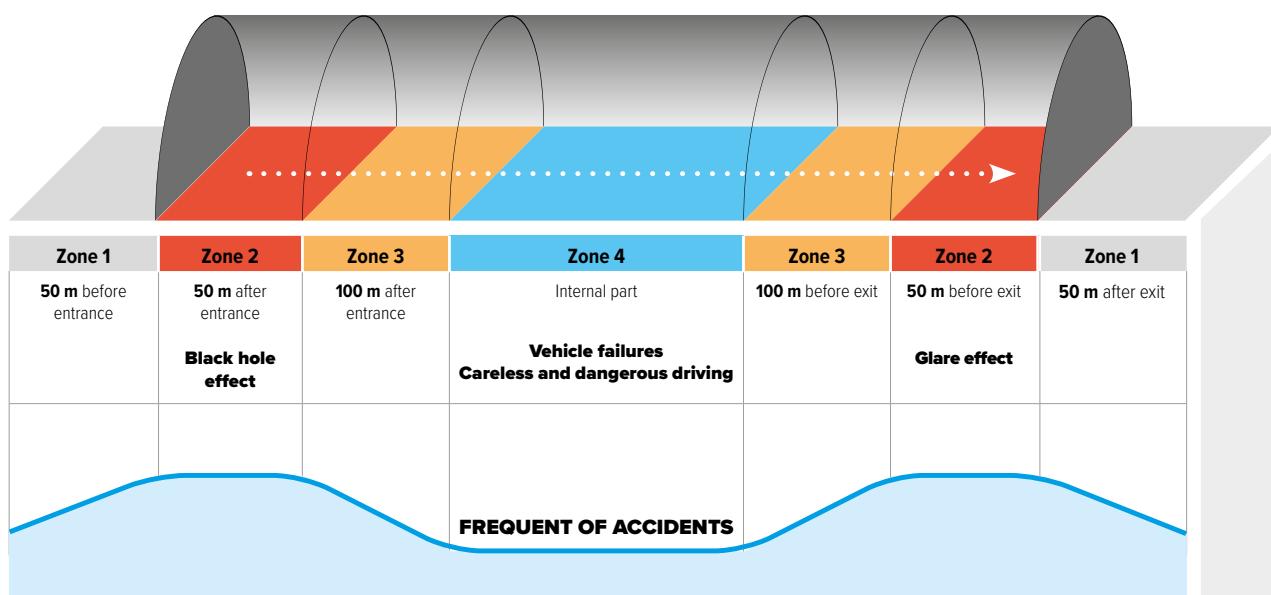
The system can be used with all our streetlights and tunnel lights.



## LUMINANCE SENSOR

Our remote wireless control system and the power-line communication can be completed with a luminance sensor mounted outside the tunnel that adjusts in real time the level of the entrance lights according to the outer natural light, avoiding the black hole and glare effect.

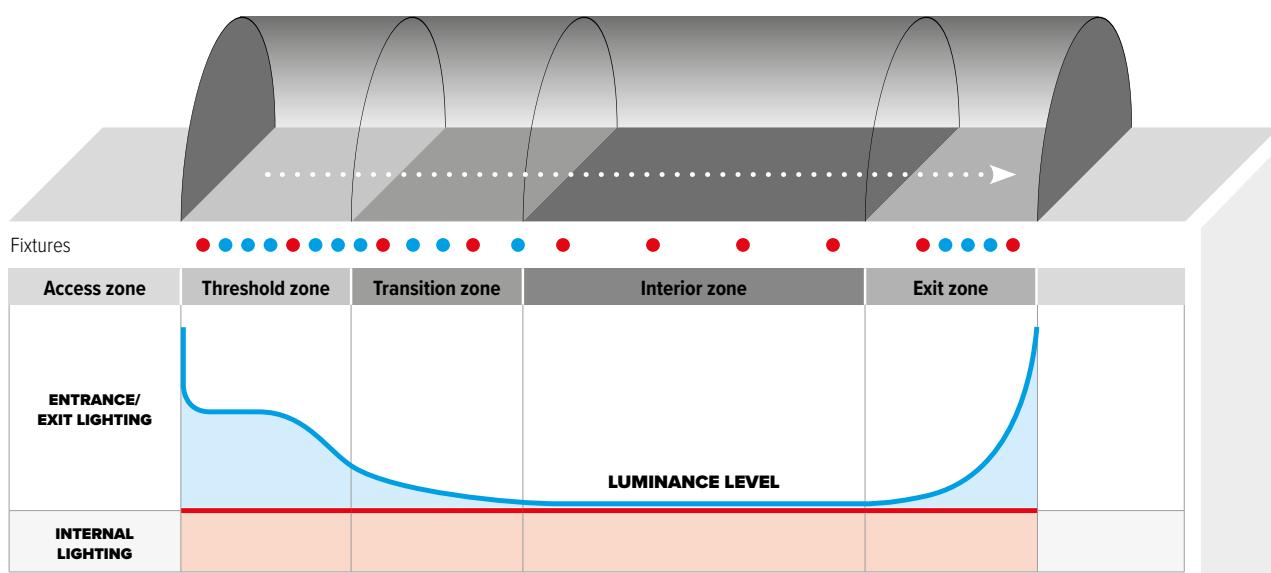
# TUNNEL LIGHTING



Roadway statistics demonstrate that generally, accidents in tunnels happen less frequently than on equivalent open air roads. The main reasons are that traffic in tunnels is not exposed to weather, there are no intersections, headlight glare is limited and there is no pedestrian conflict.

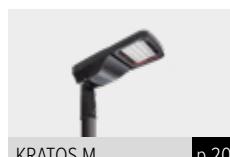
Entrance and exit areas however, if not illuminated properly, can be dangerous traps for road users. The glare and the black hole effect, can make a driver unable to identify obstacles such as a line of stopped vehicles or others, inhibiting a reaction in a timely manner.

The levels of luminance, illuminance and uniformities are determined from the norms according to the type of traffic, pavement quality and speed limit.



The graphic up here shows a typical layout of the tunnel luminaires according to the light levels required in each tunnel zone.

Entrance and exit lighting have to be adjusted throughout the day to make entering and exiting the tunnel as safe as possible. At nighttime, the entrance / exit system is turned off and the internal lighting may be dimmed according to the project. The best control can be achieved controlling entrance/exit lighting with a luminance photometer, for a real time adjustment of the luminous flux according to the outside lighting level.

**STREETLIGHTING**

KRATOS M p.20



KRATOS N p.22



KRATOS G p.24



KRATOS H p.26



TALOS M p.28



TALOS N p.30



TALOS G p.32

**URBAN LIGHTING**

POLIS STEEL N p.36



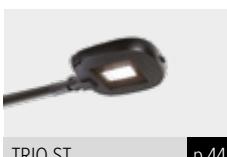
POLIS STEEL G p.38



TRIO B p.40



TRIO 2B p.42



TRIO ST p.44



TRIO TS p.46



AVALON p.48



MRL IP67-RETROFIT p.50



MRL IP67 ICU-RETROFIT p.52



CITY 2 p.54



QUINCY 3 p.56



QUINCY 4 p.58

**FLOODLIGHTS**

RADIANT 2x2 p.62



RADIANT 2x3 p.64



MAYA 8A p.66



MAYA 8B p.68



MAYA 9C p.70



MAYA 9D p.72

**INDUSTRIAL**

RADIANT 6M1 ICU p.76



RADIANT 6M1 DCE p.78



PAD ECO 3 p.80



PAD LLC 3 ICU p.82



PAD LLC 3 DCE p.84



PAD LLC 3B ICU p.86



PAD LLC 3B DCE p.88



TRILOGY N p.90



KES STEEL HV p.92



KES STRIP TN p.94



KES STRIP TI p.96



KES STRIP TF p.98

**HIGH TEMPERATURE**

RADIANT 2 DCE HT p.102



PAD LLC 3B DCE HT p.104



KES STRIP TF HT p.106



KES STEEL HV HT p.108

**CANOPIES**

ATLAS PE p.112



ATLAS TRL p.114



ATLAS BOX p.116

**TUNNELS**

RADIANT 6M1 p.120



RADIANT 6M2 p.122



RADIANT 6M3 - 6M3Q p.124



RADIANT 8S p.126



RADIANT 8BS p.128



RADIANT 8L p.130



RADIANT 8XL p.132



RADIANT 8XXL p.134



RADIANT 8QL p.136

**PHOTOVOLTAIC**

TALOS N FV p.140



SOLAR POLIS FV p.142

**COMPARATIVE CHARTS**

p.146





## STREETLIGHTING

# KRATOS M



Kratos M is our best value-for-money solution dedicated to street and parking lots, for wattages up to 59 W. Its design offers a very small surface area exposed to the wind. In addition, the choice of more than 40 different optics enables design optimization and, as a result, provides additional energy savings.

## FEATURES

- Suitable for wattages up to 59 W.
- Die-cast aluminum body for better dissipation and corrosion resistance due to very low copper content.
- Driver compartment opening without tools with quick release.
- Full cut-off optics.
- Tempered glass to protect the optics and LEDs.
- System efficiency up to 192 lm/W.
- High comfort for road users thanks to a very low level of glare.
- Compliant with all Regional Laws for the reduction of light pollution.
- Modern design without rear fins and internally integrated heat sink.

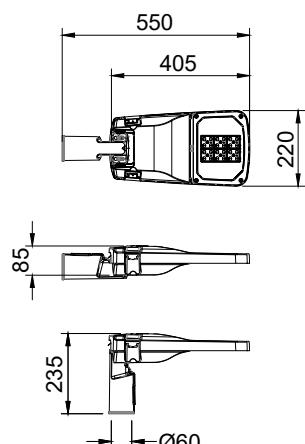
## Available control systems

- 1-10V / DALI.
- Virtual midnight.
- Wireless (Zhaga Book 18).
- Powerline.
- Lineswitch.
- PIR motion sensor on Zhaga Book 18.

## TECHNICAL DATA

LED type	<b>Datas by Lumileds</b>
Step Mac-Adam	<b>3</b>
LED driver	<b>Philips - Tridonic</b>
Nominal Input voltage [V]	<b>220-230V~ 50/60Hz</b>
Surge protection	<b>10kV</b>
Efficiency up to	<b>173lm/W (D) - 192lm/W (P)</b>
Rated abrupt failure value T <sub>p,Tc</sub>	<b>F10 @ 100.000h, &lt;0,02% @ 1000h</b>
Rated median useful life [hrs] @T <sub>c</sub>	<b>L90B10 &gt;100.000h</b>
Power factor	<b>&gt;0,95</b>
Housing material	<b>Die-cast aluminum</b>
Protective glass type	<b>Tempered</b>
Glass thickness [mm]	<b>5</b>
Colour temperature	<b>2200K - 3000K - 4000K - 5700K</b>
Colour rendering index (CRI)	<b>&gt;70</b>
Degree of protection (EN 60529)	<b>IP66</b>
IK code (EN 62262)	<b>IK09</b>
Insulation class	<b>I &amp; II</b>
Operating temperature [°C]	<b>-40 ÷ +50</b>
Wind-exposed surface [m <sup>2</sup> ]	<b>Side: 0.03m<sup>2</sup> / Top: 0.08m<sup>2</sup></b>
Housing colour	<b>RAL9004 Signal black</b>
Weight [Kg]	<b>4</b>

## DIMENSIONS



## OPTICS

201A	205A	206A	208A	213A	214A
215A	217A	218S	247A	250A	277A

Other optics available on the website

## MODELS

	Total power [W]	Overall flux [lm]	Optical flux [lm]
8P350	8	1543	1606
8P440	10	1882	2033
8P530	12	2203	2472
8P600	14	2475	2819
8P700	17	2890	3318
8P1000	24	4163	4860
16P350	16	3048	3211
16P440	20	3904	4067
16P530	25	4534	4944
16P600	28	4886	5637
16P700	33	5533	6637
16P830	40	6570	7954
16P1000	49	8048	9719
24P350	24	4572	4817
24P440	31	5763	6100
24P530	37	6710	7415
24P600	42	7504	8456
24P650	46	7870	9194
24P700	50	8384	9955
24P725	52	8660	10329
24P750	54	8931	10704
24P800	57	9526	11479
24P825	59	9855	11838

Reference configuration: Optic 206A - 4000 K



KRATOS M



# KRATOS N



Kratos N is our best value-for-money solution dedicated to street and parking lots, for wattages up to 86 W. Its design offers a very small surface area exposed to the wind. In addition, the choice of more than 40 different optics enables design optimization and, as a result, provides additional energy savings.

## FEATURES

- Suitable for power ratings up to 86 W.
- Die-cast aluminum body for better dissipation and corrosion resistance due to very low copper content.
- Driver compartment opening without tools with quick release.
- Full cut-off optics.
- Tempered glass to protect the optics and LEDs.
- System efficiency of up to 185 lm/W.
- High comfort for road users thanks to a very low level of glare.
- Compliant with all Regional Laws for the reduction of light pollution.
- Modern design without rear fins and internally integrated heat sink.

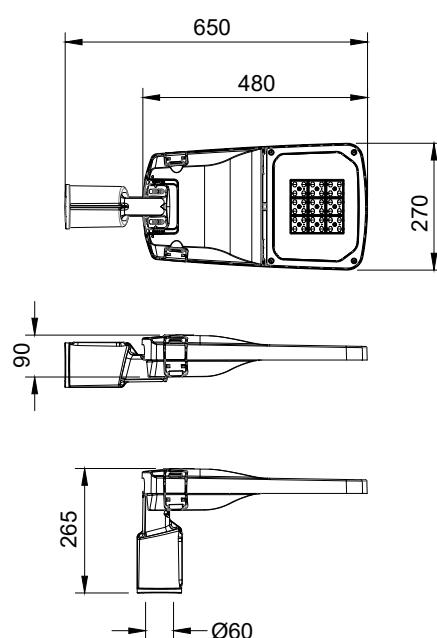
## Available control systems

- 1-10V / DALI.
- Virtual midnight.
- Wireless (Zhaga Book 18).
- Powerline.
- Lineswitch.
- PIR motion sensor on Zhaga Book 18.

## TECHNICAL DATA

LED type	Datas by Lumileds
Step Mac-Adam	3
LED driver	Philips - Tridonic
Nominal Input voltage [V]	220-230V~ 50/60Hz
Surge protection	10kV
Efficiency up to	166lm/W (D) - 185lm/W (P)
Rated abrupt failure value T <sub>p,Tc</sub>	F10 @ 100.000h, <0,02% @ 1000h
Rated median useful life [hrs] @T <sub>c</sub>	L90B10 >100.000h
Power factor	>0,95
Housing material	Supercast® die-cast aluminum
Protective glass type	Tempered
Glass thickness [mm]	4
Colour temperature	2200K - 3000K - 4000K - 5700K
Colour rendering index (CRI)	>70
Degree of protection (EN 60529)	IP66
IK code (EN 62262)	IK09
Insulation class	I & II
Operating temperature [°C]	-40 ÷ +50
Wind-exposed surface [m <sup>2</sup> ]	Side: 0.03m <sup>2</sup> / Top: 0.11m <sup>2</sup>
Housing colour	RAL9004 Signal black
Weight [Kg]	5

## DIMENSIONS



## OPTICS

201A	205A	206A	208A	213A	214A
215A	217A	218S	247A	250A	277A

Other optics available on the website

## MODELS

	Total power [W]	Overall flux [lm]	Optical flux [lm]
12P350	12	2198	2408
12P440	15	2630	3050
12P530	19	3224	3708
12P600	21	3619	4228
12P700	25	4004	4977
12P830	30	4727	5965
12P900	33	5136	6503
12P1000	36	5811	7289
24P350	24	4457	4817
24P440	31	5568	6100
24P530	37	6605	7415
24P600	42	7440	8456
24P650	46	7774	9194
24P700	50	8470	9955
24P750	54	8556	10704
24P830	60	9564	11931
24P1000	73	11454	14579
36P350	36	6212	7225
36P440	46	7633	9150
36P530	56	9138	11123
36P600	63	10124	12684
36P700	75	11706	14932
36P750	80	12559	16056
36P770	83	12844	16514
36P800	86	13310	17219

Reference configuration: Optic 206A - 4000 K



KRATOS N



# KRATOS G



Kratos G is our best value-for-money solution dedicated to street and parking lots, with wattages up to 175 W. Its design offers a very small surface area exposed to the wind. In addition, the choice of more than 40 different optics enables design optimization and, as a result, provides additional energy savings.

## FEATURES

- Suitable for power ratings up to 175 W.
- Die-cast aluminum body for better dissipation and corrosion resistance due to very low copper content.
- Driver compartment opening without tools with quick release.
- Full cut-off optics.
- Tempered glass to protect the optics and LEDs.
- System efficiency up to 190 lm/W
- High comfort for road users thanks to a very low level of glare.
- Compliant with all Regional Laws for the reduction of light pollution.
- Modern design without rear fins and internally integrated heat sink.

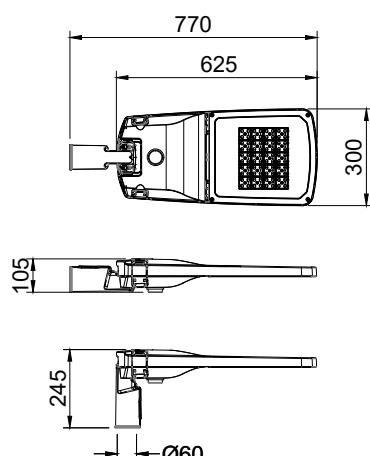
## Available control systems

- 1-10V / DALI.
- Virtual midnight.
- Wireless (Zhaga Book 18).
- Powerline.
- Lineswitch.
- PIR motion sensor on Zhaga Book 18.

## TECHNICAL DATA

LED type	Datas by Lumileds
Step Mac-Adam	3
LED driver	Philips - Tridonic
Nominal Input voltage [V]	220-230V~ 50/60Hz
Surge protection	10kV
Efficiency up to	172lm/W (D) - 190lm/W (P)
Rated abrupt failure value T <sub>p,Tc</sub>	F10 @ 100.000h, <0,02% @ 1000h
Rated median useful life [hrs] @T <sub>c</sub>	L90B10 >100.000h
Power factor	>0,95
Housing material	Supercast® die-cast aluminum
Protective glass type	Tempered
Glass thickness [mm]	4
Colour temperature	2200K - 3000K - 4000K - 5700K
Colour rendering index (CRI)	>70
Degree of protection (EN 60529)	IP66
IK code (EN 62262)	IK09
Insulation class	I & II
Operating temperature [°C]	-25 ± +50
Wind-exposed surface [m <sup>2</sup> ]	Side: 0.05m <sup>2</sup> / Top: 0.23m <sup>2</sup>
Housing colour	RAL9004 Signal black
Weight [Kg]	7

## DIMENSIONS



## OPTICS

201A	205A	206A	208A	213A	214A
215A	217A	218S	247A	250A	277A

Other optics available on the website

## MODELS

	Total power [W]	Overall flux [lm]	Optical flux [lm]
32P530	49	9324	9800
32P700	66	12210	13200
32P830	80	14161	16000
32P1000	97	16613	19400
48P530	74	13776	14800
48P600	85	15458	17000
48P700	100	17830	20000
48P750	107	19060	21400
48P830	119	20894	23800
48P900	130	22306	26000
48P1000	146	24363	29200
64P530	99	18417	19800
64P600	113	20659	22600
64P650	123	22049	24600
64P700	133	23670	26600
64P750	143	25041	28600
64P800	153	26509	30600
64P830	159	27480	31800
80P600	141	25333	28200
80P650	153	27411	30600
80P700	166	29179	33200
80P735	175	29878	35000

Reference configuration: Optic 206A - 4000 K



KRATOS G



# KRATOS H



The Kratos H light fixture is a high-power solution dedicated to street lighting and parking lots, with wattages up to 233 W. Its design offers a very small surface area exposed to the wind. In addition, the choice of more than 40 different optics allows for the optimization of the design and, as a result, provides additional energy savings.

## FEATURES

- Suitable for wattages up to 233 W.
- Die-cast aluminum body for better dissipation and corrosion resistance due to very low copper content.
- Driver compartment opening without tools with quick release.
- Full cut-off optics.
- Tempered glass to protect the optics and LEDs.
- System efficiency up to 181 lm/W.
- High comfort for road users thanks to a very low level of glare.
- Compliant with all Regional Laws for the reduction of light pollution.
- Modern design without rear fins and internally integrated heat sink.

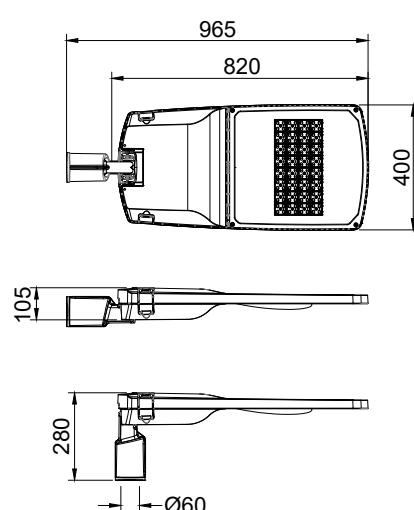
## Available control systems

- 1-10V / DALI.
- Virtual midnight.
- Wireless (Zhaga Book 18).
- Powerline.
- Lineswitch.
- PIR motion sensor on Zhaga Book 18.

## TECHNICAL DATA

LED type	<b>Deltas by Lumileds</b>
Step Mac-Adam	<b>3</b>
LED driver	<b>Philips - Tridonic</b>
Nominal Input voltage [V]	<b>220-230V~ 50/60Hz</b>
Surge protection	<b>10kV</b>
Efficiency up to	<b>160lm/W (D) - 181lm/W (P)</b>
Rated abrupt failure value T <sub>p,Tc</sub>	<b>F10 @ 100.000h, &lt;0,02% @ 1000h</b>
Rated median useful life [hrs] @T <sub>c</sub>	<b>L90B10 &gt;100.000h</b>
Power factor	<b>&gt;0,95</b>
Housing material	<b>Supercast® die-cast aluminum</b>
Protective glass type	<b>Tempered</b>
Glass thickness [mm]	<b>4</b>
Colour temperature	<b>2200K - 3000K - 4000K - 5700K</b>
Colour rendering index (CRI)	<b>&gt;70</b>
Degree of protection (EN 60529)	<b>IP66</b>
IK code (EN 62262)	<b>IK09</b>
Insulation class	<b>I &amp; II</b>
Operating temperature [°C]	<b>-25 ± +50</b>
Wind-exposed surface [m <sup>2</sup> ]	<b>Side: 0.05m<sup>2</sup> / Top: 0.23m<sup>2</sup></b>
Housing colour	<b>RAL9004 Signal black</b>
Weight [Kg]	<b>12.6</b>

## DIMENSIONS



## OPTICS

201A	205A	206A	208A	213A	214A
215A	217A	218S	247A	250A	277A

Other optics available on the website

## MODELS

	Total power [W]	Overall flux [lm]	Optical flux [lm]
80P530	124	22401	24718
80P600	141	24963	28187
80P700	166	28326	33183
80P750	178	30069	35681
80P830	199	33389	39769
80P900	217	35806	43353
80P950	230	36932	45923
96P600	169	29781	33825
96P650	184	30633	36776
96P700	199	33977	39820
96P750	214	36067	42817
96P810	232	38900	46491
112P600	197	33644	39462
112P650	215	35904	42906
112P700	232	38738	46456
128P440	163	29331	32534
128P530	198	34205	39549
128P600	225	38739	45100
128P620	233	40362	46687

Reference configuration: Optic 206A - 4000 K



KRATOS H



# TALOS M



The Talos M luminaire is used for street and parking lot lighting for wattages up to 49 W with an excellent price/performance ratio. The compact design integrates perfectly into street, pedestrian or parking areas. Thanks to the wide range of optics, it is possible to maximize efficiency and thus energy savings.

## FEATURES

- Suitable for power ratings up to 49 W.
- Die-cast aluminum body for better dissipation and corrosion resistance due to very low copper content.
- PHILIPS/TRIDONIC drivers integrated into the product.
- Full cut-off optics.
- High comfort for road users, thanks to a very low level of glare.
- Compliant with all regional laws on light pollution reduction.
- Modern design without rear fins and integrated heat sink.

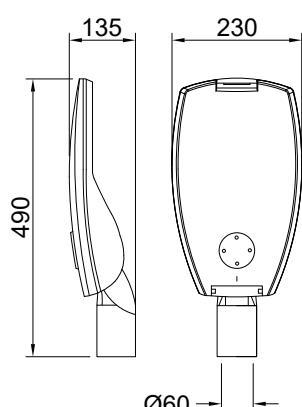
## Available control systems

- 1-10V / DALI.
- Virtual midnight.
- Wireless (Zhaga Book 18).
- Powerline.
- Lineswitch.
- PIR motion sensor on Zhaga Book 18.

## TECHNICAL DATA

LED type	Datas by Lumileds
Step Mac-Adam	3
LED driver	Philips - Tridonic
Nominal Input voltage [V]	220-230V~ 50/60Hz
Surge protection	10kV
Efficiency up to	172lm/W (D) - 192lm/W (P)
Rated abrupt failure value T <sub>p,Tc</sub>	F10 @ 100.000h, <0,02% @ 1000h
Rated median useful life [hrs] @T <sub>c</sub>	L90B10 >100.000h
Power factor	>0,95
Housing material	Die-cast aluminum
Protective glass type	Tempered
Glass thickness [mm]	5
Colour temperature	2200K - 3000K - 4000K - 5700K
Colour rendering index (CRI)	>70
Degree of protection (EN 60529)	IP66
IK code (EN 62262)	IK09
Insulation class	I & II
Operating temperature [°C]	-40 ÷ +60
Wind-exposed surface [m <sup>2</sup> ]	Side: 0.03m <sup>2</sup> / Top: 0.08m <sup>2</sup>
Housing colour	RAL9023 Pearl dark grey
Weight [Kg]	3,5

## DIMENSIONS



## OPTICS

201A	205A	206A	208A	213A	214A
215A	217A	218S	247A	250A	277A

Other optics available on the website

## MODELS

	Total power [W]	Overall flux [lm]	Optical flux [lm]
8P350	8	1455	1606
8P530	12	2218	2472
8P700	17	2844	3318
8P1000	24	3760	4860
16P350	16	3076	3211
16P440	20	3743	4067
16P530	25	4266	4944
16P600	28	4842	5637
16P700	33	5481	6637
16P830	40	6399	7954
16P1000	49	7438	9719

Reference configuration: Optic 206A - 4000 K



TALOS M



# TALOS N



The Talos N luminaire is especially designed for street and parking lot lighting, with wattages up to 86 W. Its modern, minimalist design makes for a pleasant aesthetic impact, especially in urban settings. In addition, the choice of more than 40 different optics enables design optimization and additional energy savings.

## FEATURES

- Suitable for power ratings up to 86 W.
- Die-cast aluminum body for better dissipation and corrosion resistance due to very low copper content.
- Tool-free opening with quick release.
- Full cut-off optics.
- High comfort for road users due to a very low level of glare.
- Compliant with all regional laws for the reduction of light pollution.
- Modern design without rear fins and integrated heat sink internally.

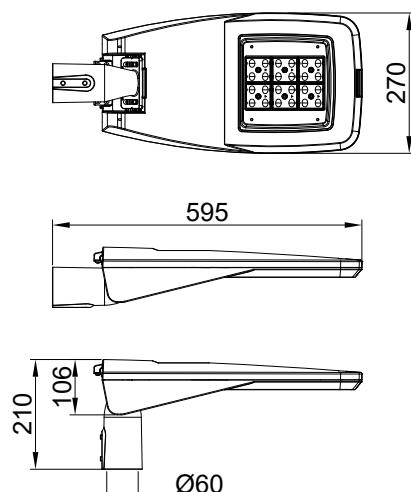
## Available control systems

- 1-10V / DALI.
- Virtual midnight.
- Wireless (Zhaga Book 18).
- Powerline.
- Lineswitch.
- PIR motion sensor on Zhaga Book 18.

## TECHNICAL DATA

LED type	Deltas by Lumileds
Step Mac-Adam	3
LED driver	Philips - Tridonic
Nominal Input voltage [V]	220-230V~ 50/60Hz
Surge protection	10kV
Efficiency up to	170lm/W (D) - 196lm/W (P)
Rated abrupt failure value T <sub>p,Tc</sub>	F10 @ 100.000h, <0,02% @ 1000h
Rated median useful life [hrs] @T <sub>c</sub>	L90B10 >100.000h
Power factor	>0,95
Housing material	Supercast® die-cast aluminum
Protective glass type	Tempered
Glass thickness [mm]	4
Colour temperature	2200K - 3000K - 4000K - 5700K
Colour rendering index (CRI)	>70
Degree of protection (EN 60529)	IP66
IK code (EN 62262)	IK09
Insulation class	I & II
Operating temperature [°C]	-40 ÷ +50
Wind-exposed surface [m <sup>2</sup> ]	Side: 0.03m <sup>2</sup> / Top: 0.11m <sup>2</sup>
Housing colour	RAL9023 Pearl dark grey
Weight [Kg]	5

## DIMENSIONS



## OPTICS

201A	205A	206A	208A	213A	214A
215A	217A	218S	247A	250A	277A

Other optics available on the website

## MODELS

	Total power [W]	Overall flux [lm]	Optical flux [lm]
12P350	12	2325	2408
12P530	19	3412	3708
12P700	25	4238	4977
12P830	30	5002	5965
12P1000	36	6150	7289
24P350	24	4716	4817
24P440	31	5892	6100
24P530	37	6990	7415
24P600	42	7873	8456
24P700	50	8963	9955
24P750	54	9222	10704
24P830	60	10121	11931
24P950	69	11508	13777
24P1000	73	12120	14579
36P350	36	6573	7225
36P440	46	8077	9150
36P530	56	9670	11123
36P600	63	10713	12684
36P700	75	12388	14932
36P750	80	13290	16056
36P800	86	14196	17219

Reference configuration: Optic 206A - 4000 K



TALOS N



# TALOS G



The Talos G luminaire is dedicated to street and parking lot lighting, for wattages up to 166 W. Its modern design makes for a pleasant aesthetic impact, especially in urban settings. In addition, the possibility of choosing from more than 40 different optics allows optimization of the project ensuring additional energy savings.

## FEATURES

- Suitable for power ratings up to 166 W.
- Die-cast aluminum body for better dissipation and corrosion resistance due to very low copper content.
- Tool-free opening with quick release.
- Full cut-off optics.
- Tempered glass to protect optics and LEDs.
- System efficiency up to 185 lm/W.
- High comfort for road users thanks to a very low level of glare.
- Complies with all regional laws for the reduction of light pollution.
- Modern design without rear fins and heat sink integrated internally.

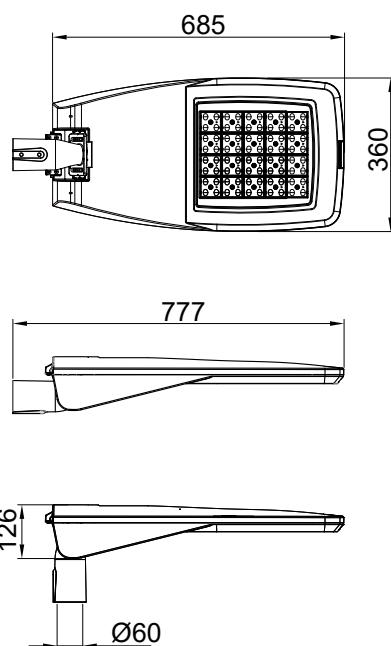
## Available control systems

- 1-10V / DALI.
- Virtual midnight.
- Wireless (Zhaga Book 18).
- Powerline.
- Lineswitch.
- PIR motion sensor on Zhaga Book 18.

## TECHNICAL DATA

LED type	<b>Deltas by Lumileds</b>
Step Mac-Adam	<b>3</b>
LED driver	<b>Philips - Tridonic</b>
Nominal Input voltage [V]	<b>220-230V~ 50/60Hz</b>
Surge protection	<b>10kV</b>
Efficiency up to	<b>165lm/W (D) - 185lm/W (P)</b>
Rated abrupt failure value T <sub>p,Tc</sub>	<b>F10 @ 100.000h, &lt;0,02% @ 1000h</b>
Rated median useful life [hrs] @T <sub>c</sub>	<b>L90B10 &gt;100.000h</b>
Power factor	<b>&gt;0,95</b>
Housing material	<b>Supercast® die-cast aluminum</b>
Protective glass type	<b>Tempered</b>
Glass thickness [mm]	<b>4</b>
Colour temperature	<b>2200K - 3000K - 4000K - 5700K</b>
Colour rendering index (CRI)	<b>&gt;70</b>
Degree of protection (EN 60529)	<b>IP66</b>
IK code (EN 62262)	<b>IK09</b>
Insulation class	<b>I &amp; II</b>
Operating temperature [°C]	<b>-25 ÷ +50</b>
Wind-exposed surface [m <sup>2</sup> ]	<b>Side: 0.05m<sup>2</sup> / Top: 0.23m<sup>2</sup></b>
Housing colour	<b>RAL9023 Pearl dark grey</b>
Weight [Kg]	<b>7</b>

## DIMENSIONS



## OPTICS

201A	205A	206A	208A	213A	214A
215A	217A	218S	247A	250A	277A

Other optics available on the website

## MODELS

	Total power [W]	Overall flux [lm]	Optical flux [lm]
32P350	32	5953	6422
32P530	49	8851	9887
32P700	66	11592	13273
32P1000	97	15771	19438
48P350	48	8461	9633
48P530	74	13078	14831
48P600	85	14676	16912
48P700	100	16927	19910
48P750	107	18094	21409
48P830	119	19835	23862
48P900	130	21176	26012
48P1000	146	23129	29157
64P350	65	11680	13011
64P530	99	17484	19775
64P600	113	19613	22550
64P700	133	22470	26546
64P800	153	25166	30611
64P830	159	26088	31815
80P530	124	21423	24718
80P600	141	24050	28187
80P700	166	27701	33183

Reference configuration: Optic 206A - 4000 K



TALOS G







URBAN LIGHTING





# POLIS STEEL N

Polis Steel series luminaires combine high corrosion resistance with a modern design. The fully stainless steel A2 (AISI 304) construction and powder-coated powders are ideal for installations in marine environments, coastal areas, islands, and anywhere there is an aggressive saline environment, which compromises the durability of traditional light fixtures.

## FEATURES

- Suitable for power ratings up to 63 W.
- A2 (AISI 304) stainless steel body for perfect resistance to oxidation and corrosion. Body in AISI 316L on request.
- Full cut-off optics.
- High comfort for road users thanks to a very low level of glare.
- Compliant with all Regional laws on light pollution reduction.
- Modern design with a pleasant aesthetic impact in urban settings.

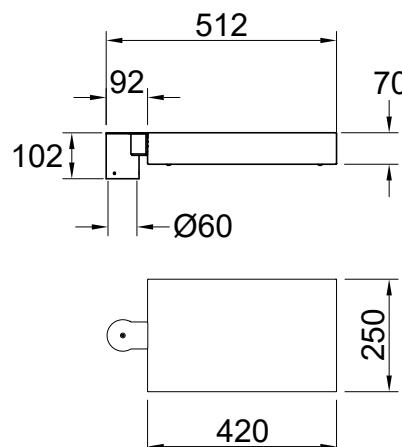
## Available control systems

- 1-10V / DALI.
- Virtual midnight.
- Presence and illuminance sensor.
- Wireless (Zhaga Book 18).
- Powerline.
- Lineswitch.
- PIR motion sensor on Zhaga Book 18.

## TECHNICAL DATA

LED type	Deltas by Lumileds
Step Mac-Adam	3
LED driver	Philips - Tridonic
Nominal Input voltage [V]	220-230V~ 50/60Hz
Surge protection	10kV
Efficiency up to	173lm/W (D) - 193lm/W (P)
Rated abrupt failure value T <sub>p,Tc</sub>	F10 @ 100.000h, <0,02% @ 1000h
Rated median useful life [hrs] @T <sub>c</sub>	L90B10 >100.000h
Power factor	>0,95
Housing material	AISI 304 / 316L stainless steel
Protective glass type	Tempered
Glass thickness [mm]	4
Colour temperature	2200K - 3000K - 4000K - 5700K
Colour rendering index (CRI)	>70
Degree of protection (EN 60529)	IP66
IK code (EN 62262)	IK09
Insulation class	I & II
Operating temperature [°C]	-25 ÷ +50
Wind-exposed surface [m <sup>2</sup> ]	Side: 0.03m <sup>2</sup> / Top: 0.11m <sup>2</sup>
Housing colour	RAL9005 Jet black
Weight [Kg]	5

## DIMENSIONS



## OPTICS

201A	205A	206A	208A	213A	214A
215A	217A	218S	247A	250A	277A

Other optics available on the website

## MODELS

	Total power [W]	Overall flux [lm]	Optical flux [lm]
24P200	14	2598	2701
24P250	17	3154	3396
24P300	20	3897	4098
24P350	24	4639	4817
24P440	31	5623	6100
24P530	37	6665	7415
24P600	42	7426	8456
24P700	50	8463	9955
24P830	60	9804	11931
36P350	36	6674	7225
36P440	46	8286	9150
36P530	56	9673	11123
36P600	63	10807	12684

Reference configuration: Optic 206A - 4000 K



POLIS STEEL N





# POLIS STEEL G

Polis Steel series luminaires combine high corrosion resistance with a modern design. The fully stainless steel A2 (AISI 304) construction and powder-coated powders are ideal for installations in marine environments, coastal areas, islands, and anywhere there is an aggressive saline environment that compromises the surface of traditional light fixtures.

## FEATURES

- Suitable for power ratings up to 133 W.
- A2 (AISI 304) stainless steel body for maximum resistance to oxidation and corrosion. Body in AISI 316L on request.
- Full cut-off optics.
- High comfort for road users thanks to a very low level of glare.
- Compliant with all Regional laws on light pollution reduction.
- Modern design with a pleasant aesthetic impact in urban settings.

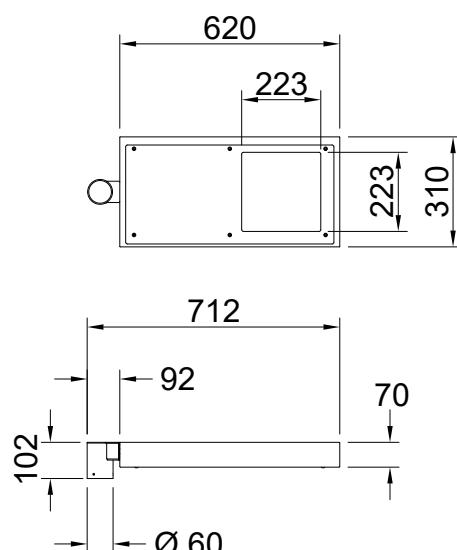
## Available control systems

- 1-10V / DALI.
- Virtual midnight.
- Wireless (Zhaga Book 18).
- Powerline.
- Lineswitch.
- PIR motion sensor on Zhaga Book 18.

## TECHNICAL DATA

LED type	Datas by Lumileds
Step Mac-Adam	3
LED driver	Philips - Tridonic
Nominal Input voltage [V]	220-230V~ 50/60Hz
Surge protection	10kV
Efficiency up to	150lm/W (D) - 170lm/W (P)
Rated abrupt failure value T <sub>p,Tc</sub>	F10 @ 100.000h, <0,02% @ 1000h
Rated median useful life [hrs] @T <sub>c</sub>	L90B10 >100.000h
Power factor	>0,95
Housing material	AISI 304 / 316L stainless steel
Protective glass type	Tempered
Glass thickness [mm]	4
Colour temperature	2200K - 3000K - 4000K - 5700K
Colour rendering index (CRI)	>70
Degree of protection (EN 60529)	IP66
IK code (EN 62262)	IK09
Insulation class	I & II
Operating temperature [°C]	-25 ÷ +50
Wind-exposed surface [m <sup>2</sup> ]	Side: 0.05m <sup>2</sup> / Top: 0.20m <sup>2</sup>
Housing colour	RAL9005 Jet black
Weight [Kg]	7

## DIMENSIONS



## OPTICS

201A	205A	206A	208A	213A	214A
215A	217A	218S	247A	250A	277A

Other optics available on the website

## MODELS

	Total power [W]	Overall flux [lm]	Optical flux [lm]
48P350	48	8195	9633
48P440	61	10231	12200
48P530	74	12077	14831
48P600	85	13495	16912
48P700	100	15345	19910
48P830	119	17972	23862
48P900	130	19041	26012
64P350	65	10982	13011
64P440	81	13551	16267
64P530	99	16008	19775
64P600	113	17933	22550
64P700	133	20262	26546

Reference configuration: Optic 206A - 4000 K



POLIS STEEL G



# TRIO B



The TRIO B light fixture, characterized by its modern design, is designed for urban redevelopment urban and for furniture or street lighting applications. The installation of products from the Trio family can be done in a head-pole version, in a lateral reach version or suspended for steel ropes in urban centers. This feature makes the product very versatile while maintaining the same design for all applications.

## FEATURES

- Head-pole mounting, single claw.
- Unique combination of modern/decorative line and functional optics road.
- Full cut-off optics.
- High comfort for road users due to a very low level of glare.
- Compliant with all regional laws for the reduction light pollution.
- Modern design without rear fins and integrated heat sink internally.

## Available control systems

- 1-10V / DALI.
- Virtual midnight.
- Wireless (Zhaga Book 18).
- Powerline.
- Lineswitch.

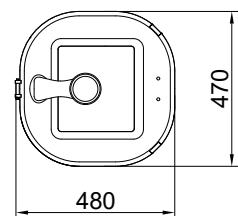
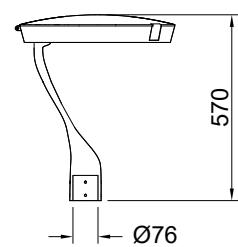
## Also available in the following versions:

<b>2B</b>	Head-pole mounting, double claw.	<b>ST</b>	Side mounting Ø60 mm.	<b>TS</b>	Suspended on steel rope.
-----------	--	-----------	--------------------------	-----------	-----------------------------

## TECHNICAL DATA

LED type	Datas by Lumileds
Step Mac-Adam	3
LED driver	Philips - Tridonic
Nominal Input voltage [V]	220-230V~ 50/60Hz
Surge protection	10kV
Efficiency up to	163lm/W (D) - 189lm/W (P)
Rated abrupt failure value T <sub>p,Tc</sub>	F10 @ 100.000h, <0,02% @ 1000h
Rated median useful life [hrs] @T <sub>c</sub>	L90B10 >100.000h
Power factor	>0,95
Housing material	Supercast® die-cast aluminum
Protective glass type	Tempered
Glass thickness [mm]	4
Colour temperature	2200K - 3000K - 4000K - 5700K
Colour rendering index (CRI)	>70
Degree of protection (EN 60529)	IP66
IK code (EN 62262)	IK08
Insulation class	I & II
Operating temperature [°C]	-25 +50
Wind-exposed surface [m <sup>2</sup> ]	Side: 0.06m <sup>2</sup> / Top: 0.19m <sup>2</sup>
Housing colour	RAL9005 Jet black
Weight [Kg]	9

## DIMENSIONS



## OPTICS

201A	205A	206A	208A	213A	214A
215A	217A	218S	247A	250A	277A

Other optics available on the website

## MODELS

	Total power [W]	Overall flux [lm]	Optical flux [lm]
24P200	14	2550	2701
24P350	24	4454	4817
24P440	31	5590	6100
24P530	37	6665	7415
24P600	42	7629	8456
24P700	50	8766	9955
24P830	60	9914	11931
24P1000	73	11638	14579
32P530	49	8886	9887
32P600	56	10171	11275
32P700	66	11578	13273
32P830	80	13219	15908
32P1000	97	15568	19438
48P530	74	13494	14831
48P600	85	15153	16912
48P700	100	17374	19910
48P830	119	19958	23862
64P440	81	14898	16267
64P530	99	17808	19775
64P600	113	19908	22550
64P700	133	22933	26546

Reference configuration: Optic 206A - 4000 K



TRIO B



# TRIO 2B



The TRIO 2B luminaire features a modern two arms design and is designed for urban redevelopment, furniture or street lighting applications. Trio family products can be installed as a head-pole version, for lateral fixing or suspended for steel ropes in urban centers: this feature makes the product very versatile while maintaining for all applications the same design.

## FEATURES

- Head-pole mounting, double claw.
- Unique combination of modern/decorative line and functional optics road.
- Full cut-off optics.
- High comfort for road users due to a very low level of glare.
- Compliant with all regional laws for the reduction light pollution.
- Modern design without rear fins and integrated heat sink internally.

## Available control systems

- 1-10V / DALI.
- Virtual midnight.
- Wireless (Zhaga Book 18).
- Powerline.
- Lineswitch.

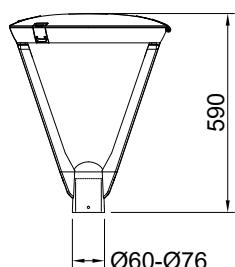
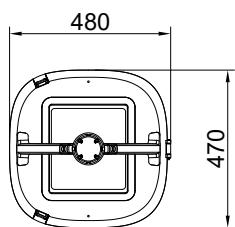
## Also available in the following versions:

<b>B</b>	Head-pole mounting, single claw.	<b>ST</b>	Side mounting Ø60 mm.	<b>TS</b>	Suspended on steel rope.
----------	--	-----------	--------------------------	-----------	-----------------------------

## TECHNICAL DATA

LED type	Datas by Lumileds
Step Mac-Adam	3
LED driver	Philips - Tridonic
Nominal Input voltage [V]	220-230V~ 50/60Hz
Surge protection	10kV
Efficiency up to	149lm/W (D) - 170lm/W (P)
Rated abrupt failure value T <sub>p,Tc</sub>	F10 @ 100.000h, <0,02% @ 1000h
Rated median useful life [hrs] @T <sub>c</sub>	L90B10 >100.000h
Power factor	>0,95
Housing material	Supercast® die-cast aluminum
Protective glass type	Tempered
Glass thickness [mm]	4
Colour temperature	2200K - 3000K - 4000K - 5700K
Colour rendering index (CRI)	>70
Degree of protection (EN 60529)	IP66
IK code (EN 62262)	IK08
Insulation class	I & II
Operating temperature [°C]	-25 ± +50
Wind-exposed surface [m <sup>2</sup> ]	Side: 0.06m <sup>2</sup> / Top: 0.19m <sup>2</sup>
Housing colour	RAL9005 Jet black
Weight [Kg]	9

## DIMENSIONS



## MODELS

	Total power [W]	Overall flux [lm]	Optical flux [lm]
24P200	14	2295	2701
24P350	24	4008	4817
24P440	31	5031	6100
24P530	37	5998	7415
24P600	42	6866	8456
24P700	50	7889	9955
24P830	60	8922	11931
24P1000	73	10474	14579
32P530	49	7998	9887
32P600	56	9155	11275
32P700	66	10420	13273
32P830	80	11897	15908
32P1000	97	14011	19438
48P530	74	12145	14831
48P600	85	13637	16912
48P700	100	15637	19910
48P830	119	17962	23862
64P440	81	13408	16267
64P530	99	16027	19775
64P600	113	17917	22550
64P700	133	20639	26546

## OPTICS

201A	205A	206A	208A	213A	214A
215A	217A	218S	247A	250A	277A

Other optics available on the website

Reference configuration: Optic 206A - 4000 K



TRIO 2B



# TRIO ST



The TRIO ST light fixture features a modern design engineered for urban redevelopment, street lighting or furniture applications. Installation of products in the Trio family can be done in a head-pole version, for lateral fixing or suspended for steel ropes in urban centers: this feature makes the product very versatile while maintaining the same design for all applications.

## FEATURES

- Side mounting on Ø60 mm pole.
- Unique combination of modern/decorative line and functional street optics.
- Full cut-off optics.
- High comfort for users of the road thanks to a very low level of glare.
- Complies with all regional laws for light pollution reduction.
- Modern design without rear fins and internally integrated heat sink.

## Available control systems

- 1-10V / DALI.
- Virtual midnight.
- Wireless (Zhaga Book 18).
- Powerline.
- Lineswitch.

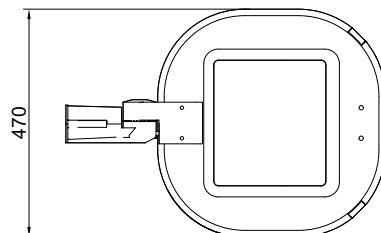
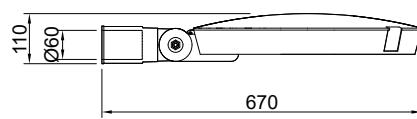
## Also available in the following versions:

<b>B</b>	Head-pole mounting, single claw.	<b>2B</b>	Head-pole mounting, double claw.	<b>TS</b>	Suspended on steel rope.
----------	----------------------------------	-----------	----------------------------------	-----------	--------------------------

## TECHNICAL DATA

LED type	Deltas by Lumileds
Step Mac-Adam	3
LED driver	Philips - Tridonic
Nominal Input voltage [V]	220-230V~ 50/60Hz
Surge protection	10kV
Efficiency up to	176lm/W (D) - 190lm/W (P)
Rated abrupt failure value T <sub>p,Tc</sub>	F10 @ 100.000h, <0,02% @ 1000h
Rated median useful life [hrs] @T <sub>c</sub>	L90B10 >100.000h
Power factor	>0,95
Housing material	Supercast® die-cast aluminum
Protective glass type	Tempered
Glass thickness [mm]	4
Colour temperature	2200K - 3000K - 4000K - 5700K
Colour rendering index (CRI)	>70
Degree of protection (EN 60529)	IP66
IK code (EN 62262)	IK09
Insulation class	I & II
Operating temperature [°C]	-25 +50
Wind-exposed surface [m <sup>2</sup> ]	Side: 0.05m <sup>2</sup> / Top: 0.21m <sup>2</sup>
Housing colour	RAL9005 Jet black
Weight [Kg]	7,5

## DIMENSIONS



## OPTICS

201A	205A	206A	208A	213A	214A
215A	217A	218S	247A	250A	277A

Other optics available on the website

## MODELS

	Total power [W]	Overall flux [lm]	Optical flux [lm]
24P350	24	4826	4817
24P440	31	6057	6100
24P530	37	7222	7415
24P600	42	8266	8456
24P700	50	9498	9955
24P830	60	10743	11931
24P1000	73	12610	14579
32P530	49	9629	9887
32P600	56	11021	11275
32P700	66	12545	13273
32P830	80	14323	15908
32P1000	97	16868	19438
48P530	74	14621	14831
48P600	85	16419	16912
48P700	100	18826	19910
48P830	119	21625	23862
64P350	65	13003	13011
64P440	81	16142	16267
64P530	99	19296	19775
64P600	113	21571	22550
64P700	133	24849	26546

Reference configuration: Optic 206A - 4000 K



TRIO ST



# TRIO TS

The TRIO TS light fixture features a modern design engineered for urban redevelopment, street lighting or furniture applications. The TS version allows suspended installation on the center of the road. The installation of the Trio family products can be in a head-pole version, side fixing or suspended for steel cables in urban areas: this feature makes the product very versatile while maintaining the same design for all applications.



## FEATURES

- Suspended installation on steel ropes.
- Unique combination of modern/decorative line and functional street optics.
- Full cut-off optics.
- High comfort for users of the road thanks to a very low glare level.
- Complies with all regional laws for light pollution reduction.
- Modern design without rear winglets and internally integrated heat sink.

## Available control systems

- 1-10V / DALI.
- Virtual midnight.
- Wireless (Zhaga Book 18).
- Powerline.
- Lineswitch.

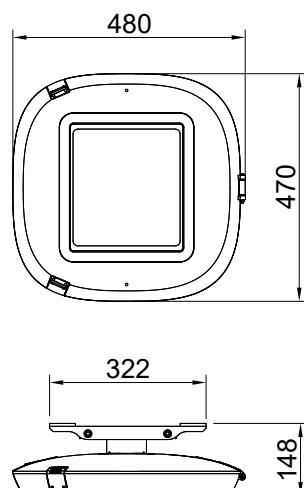
## Also available in the following versions:

<b>B</b>	Head-pole mounting, single claw.	<b>2B</b>	Head-pole mounting, double claw.	<b>ST</b>	Side mounting Ø60 mm.
----------	----------------------------------	-----------	----------------------------------	-----------	-----------------------

## TECHNICAL DATA

LED type	Deltas by Lumileds
Step Mac-Adam	3
LED driver	Philips - Tridonic
Nominal Input voltage [V]	220-230V~ 50/60Hz
Surge protection	10kV
Efficiency up to	176lm/W (D) - 190lm/W (P)
Rated abrupt failure value Tp,Tc	F10 @ 100.000h, <0,02% @ 1000h
Rated median useful life [hrs] @Tc	L90B10 >100.000h
Power factor	>0,95
Housing material	Supercast® die-cast aluminum
Protective glass type	Tempered
Glass thickness [mm]	4
Colour temperature	2200K - 3000K - 4000K - 5700K
Colour rendering index (CRI)	>70
Degree of protection (EN 60529)	IP66
IK code (EN 62262)	IK09
Insulation class	I & II
Operating temperature [°C]	-25 +50
Wind-exposed surface [m <sup>2</sup> ]	Side: 0.05m <sup>2</sup> / Top: 0.21m <sup>2</sup>
Housing colour	RAL9005 Jet black
Weight [Kg]	7,5

## DIMENSIONS



## OPTICS

201A	205A	206A	208A	213A	214A
215A	217A	218S	247A	250A	277A

Other optics available on the website

## MODELS

	Total power [W]	Overall flux [lm]	Optical flux [lm]
24P350	24	4826	4817
24P440	31	6057	6100
24P530	37	7222	7415
24P600	42	8266	8456
24P700	50	9498	9955
24P830	60	10743	11931
24P1000	73	12610	14579
32P530	49	9629	9887
32P600	56	11021	11275
32P700	66	12545	13273
32P830	80	14323	15908
32P1000	97	16868	19438
48P530	74	14621	14831
48P600	85	16419	16912
48P700	100	18826	19910
48P830	119	21625	23862
64P350	65	13003	13011
64P440	81	16142	16267
64P530	99	19296	19775
64P600	113	21571	22550
64P700	133	24849	26546

Reference configuration: Optic 206A - 4000 K



TRIO TS



# AVALON

The Avalon light fixture is DLEDS proposal for illuminating all kinds of urban spaces. The modern LED technology of the product aesthetically and efficiently enhances every type of urban situations, from squares to streets, from green areas to residential areas.



## FEATURES

- Unique combination of modern/decorative line and functional street optics.
- Full optics cut-off.
- High comfort for road users thanks to a very low level of glare.
- Compliant with all regional laws for the reduction of light pollution.
- Modern design without rear fins and integrated heat sink internally.

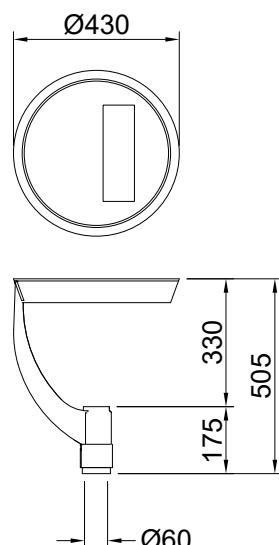
## Available control systems

- 1-10V / DALI.
- Virtual midnight.
- Wireless (Zhaga Book 18).
- Powerline.
- Lineswitch.

## TECHNICAL DATA

LED type	Datas by Lumileds
Step Mac-Adam	3
LED driver	Philips - Tridonic
Nominal Input voltage [V]	220-230V~ 50/60Hz
Surge protection	10kV
Efficiency up to	158lm/W (D) - 177lm/W (P)
Rated abrupt failure value T <sub>p,Tc</sub>	F10 @ 100.000h, <0,02% @ 1000h
Rated median useful life [hrs] @T <sub>c</sub>	L90B10 >100.000h
Power factor	>0,95
Housing material	Supercast® die-cast aluminum
Protective glass type	Tempered
Glass thickness [mm]	5
Colour temperature	2200K - 3000K - 4000K - 5700K
Colour rendering index (CRI)	>70
Degree of protection (EN 60529)	IP65 (Optic IP67)
IK code (EN 62262)	IK08
Insulation class	I & II
Operating temperature [°C]	-25 ÷ +50
Wind-exposed surface [m <sup>2</sup> ]	Side: 0.06m <sup>2</sup> / Top: 0.14m <sup>2</sup>
Housing colour	RAL 9005 Jet black - Embossed
Weight [Kg]	6,3

## DIMENSIONS



## MODELS

	Total power [W]	Overall flux [lm]	Optical flux [lm]
16P350	16	2834	3211
16P440	20	3511	4067
16P530	25	4168	4944
16P600	28	4691	5637
16P700	33	5412	6637
16P830	40	6275	7954
16P1000	49	7297	9719

## OPTICS

201A	205A	206A	208A	213A	214A
215A	217A	218S	247A	250A	277A

Other optics available on the website

Reference configuration: Optic 206A - 4000 K



AVALON



# MRL IP67 - RETROFIT

The MRL IP67 solution is DLEDS proposed upgrade for existing light fixtures, such as the traditional lanterns in historic centers. Thanks to the customizable IP67 Retrofit KIT, which allows a choice of more than 40 types of optics, it is possible to maximize efficiency and therefore energy savings. The KIT can be installed either on existing products that already guarantee waterrproof or on structures with a lower IP rating.



## FEATURES

- Aluminum heat sink.
- Suitable for wattages up to 63 W.
- Simplified mounting of the plate specially designed for any existing lantern type.
- High comfort for users of the road thanks to a very low level of glare.
- Compliant with all Laws Regional Laws for the reduction of light pollution.
- Modern design with positive impact aesthetics in urban settings.
- Philips/Tridonic drivers.

## Available control systems

- 1-10V / DALI.
- Virtual midnight.
- Wireless (Zhaga Book 18).
- Powerline.
- Lineswitch.

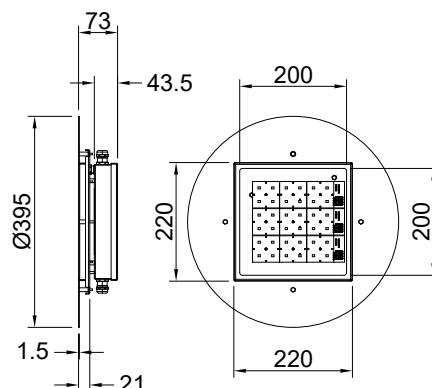


Customizable plate

## TECHNICAL DATA

LED type	Datas by Lumileds
Step Mac-Adam	3
LED driver	Philips - Tridonic
Nominal Input voltage [V]	220-230V~ 50/60Hz
Surge protection	10kV
Efficiency up to	170lm/W (D) - 191lm/W (P)
Rated abrupt failure value T <sub>p,Tc</sub>	F10 @ 100.000h, <0,02% @ 1000h
Rated median useful life [hrs] @T <sub>c</sub>	L90B10 >100.000h
Power factor	>0,95
Housing material	Aluminum
Protective glass type	Tempered
Glass thickness [mm]	5
Colour temperature	2200K - 3000K - 4000K - 5700K
Colour rendering index (CRI)	>70
Degree of protection (EN 60529)	IP67
IK code (EN 62262)	IK08
Insulation class	I & II
Operating temperature [°C]	-40 ÷ +50
Housing colour	RAL9004 Signal black
Weight [Kg]	1

## DIMENSIONS



## OPTICS

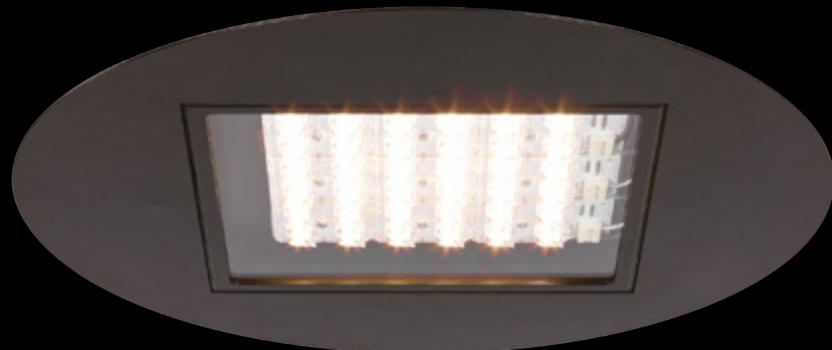
201A	205A	206A	208A	213A	214A
215A	217A	218S	247A	250A	277A

Other optics available on the website

## MODELS

	Total power [W]	Overall flux [lm]	Optical flux [lm]
12P350	12	2325	2408
12P440	15	2783	3050
12P530	19	3412	3708
12P600	21	3830	4228
12P700	25	4238	4977
12P830	30	5002	5965
12P900	33	5435	6503
24P350	24	4716	4817
24P440	31	5892	6100
24P530	37	6990	7415
24P600	42	7873	8456
24P700	50	8963	9955
36P350	36	6573	7225
36P440	46	8077	9150
36P530	56	9670	11123
36P600	63	10713	12684

Reference configuration: Optic 206A - 4000 K



MRL IP67 - RETROFIT



# MRL IP67 ICU - RETROFIT



The MRL IP67 solution is DLEDS proposed upgrade for existing light fixtures, such as the traditional lanterns in historic centers. Thanks to the customizable IP67 Retrofit KIT, which allows a choice of more than 40 types of optics, it is possible to maximize efficiency and therefore energy savings. The KIT can be installed either on products that are already waterproof, or on structures with lower IP rating.

## FEATURES

- Aluminum heatsink.
- Suitable for power ratings up to 63 W.
- Mounting simplified by the plate provided specifically for each type of lantern to be "retrofitted."
- High comfort for road users thanks to a very low level of glare.
- Compliant with all Regional Laws for the reduction of light pollution.
- Modern design with a positive aesthetic impact in urban settings.
- OSRAM-Inventronics IP67 DALI driver.

## Available control systems

- 1-10V / DALI.
- Virtual midnight.
- Wireless (Zhaga Book 18).
- Powerline.
- Lineswitch.

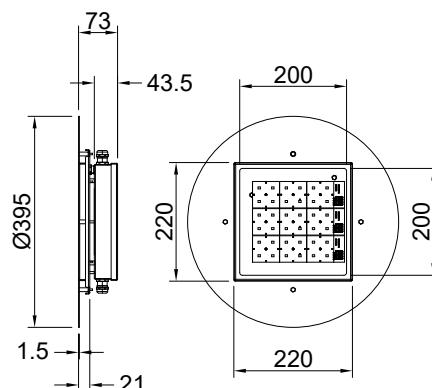


Customizable plate

## TECHNICAL DATA

LED type	Datas by Lumileds
Step Mac-Adam	3
LED driver	OSRAM-Inventronics IP67 DALI
Nominal Input voltage [V]	220-230V~ 50/60Hz
Surge protection	10kV
Efficiency up to	176lm/W (D) - 191lm/W (P)
Rated abrupt failure value T <sub>p,Tc</sub>	F10 @ 100.000h, <0,02% @ 1000h
Rated median useful life [hrs] @T <sub>c</sub>	L90B10 >100.000h
Power factor	>0,95
Housing material	Aluminum
Protective glass type	Tempered
Glass thickness [mm]	5
Colour temperature	2200K - 3000K - 4000K - 5700K
Colour rendering index (CRI)	>70
Degree of protection (EN 60529)	IP67
IK code (EN 62262)	IK08
Insulation class	I & II
Operating temperature [°C]	-40 ÷ +50
Housing colour	RAL9004 Signal black
Weight [Kg]	1

## DIMENSIONS



## OPTICS

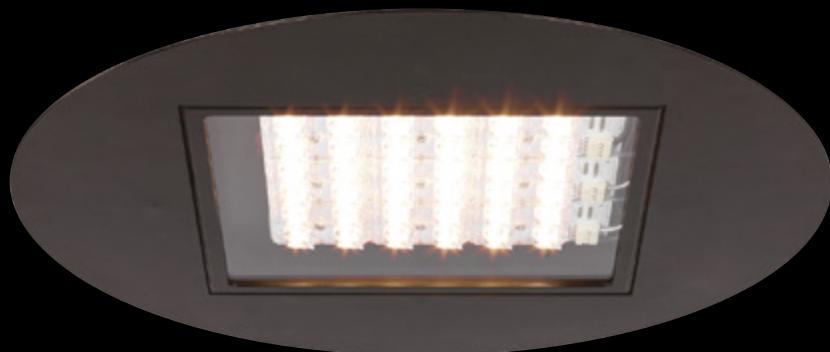
201A	205A	206A	208A	213A	214A
215A	217A	218S	247A	250A	277A

Other optics available on the website

## MODELS

	Total power [W]	Overall flux [lm]	Optical flux [lm]
12P350	12	2325	2408
12P440	15	2783	3050
12P530	19	3412	3708
12P600	21	3830	4228
12P700	25	4238	4977
12P830	30	5002	5965
12P900	33	5435	6503
24P350	24	4716	4817
24P440	31	5892	6100
24P530	37	6990	7415
24P600	42	7873	8456
24P700	50	8963	9955
36P350	36	6573	7225
36P440	46	8077	9150
36P530	56	9670	11123
36P600	63	10713	12684

Reference configuration: Optic 206A - 4000 K



MRL IP67 ICU - RETROFIT



# CITY 2

The City 2 light fixture is DLEDS proposal for illuminating urban spaces, with mounting top head-pole. Thanks to the most advanced LED technology, City 2 aesthetically and efficiently any kind of urban situation, from squares to streets, from green areas to residential. Customizable with RAL on request.



## FEATURES

- Suitable for wattages up to 75 W.
- PHILIPS/TRIDONIC drivers integrated within the product.
- Full cut-off optics.
- High comfort for road users due to a very low level of glare.
- Compliant with all regional laws for the reduction light pollution.

## Available control systems

- 1-10V / DALI.
- Virtual midnight.
- Wireless (Zhaga Book 18).
- Powerline.
- Lineswitch.

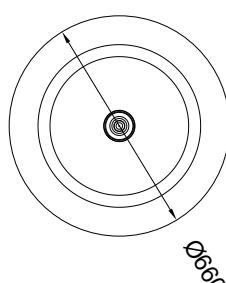
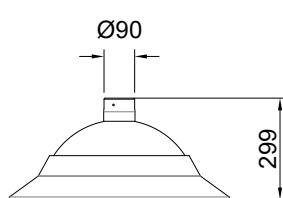


Customizable painting (RAL)

## TECHNICAL DATA

LED type	<b>Datas by Lumileds</b>
Step Mac-Adam	<b>3</b>
LED driver	<b>Philips - Tridonic</b>
Nominal Input voltage [V]	<b>220-230V~ 50/60Hz</b>
Surge protection	<b>10kV</b>
Efficiency up to	<b>170lm/W (D) - 196lm/W (P)</b>
Rated abrupt failure value T <sub>p,Tc</sub>	<b>F10 @ 100.000h, &lt;0,02% @ 1000h</b>
Rated median useful life [hrs] @T <sub>c</sub>	<b>L90B10 &gt;100.000h</b>
Power factor	<b>&gt;0,95</b>
Housing material	<b>Aluminum</b>
Protective glass type	<b>Tempered</b>
Glass thickness [mm]	<b>5</b>
Colour temperature	<b>2200K - 3000K - 4000K - 5700K</b>
Colour rendering index (CRI)	<b>&gt;70</b>
Degree of protection (EN 60529)	<b>IP65</b>
IK code (EN 62262)	<b>IK08</b>
Insulation class	<b>I &amp; II</b>
Operating temperature [°C]	<b>-40 ÷ +50</b>
Wind-exposed surface [m <sup>2</sup> ]	<b>Side: 0.10m<sup>2</sup> / Top: 0.33m<sup>2</sup></b>
Housing colour	<b>RAL 9005 Jet black - Embossed</b>
Weight [Kg]	<b>5</b>

## DIMENSIONS



## OPTICS

201A	205A	206A	208A	213A	214A
215A	217A	218S	247A	250A	277A

Other optics available on the website

## MODELS

	Total power [W]	Overall flux [lm]	Optical flux [lm]
12P350	12	2325	2408
12P440	15	2783	3050
12P530	19	3412	3708
12P600	21	3830	4228
12P700	25	4238	4977
12P830	30	5002	5965
12P900	33	5435	6503
12P1000	36	6150	7289
24P350	24	4716	4817
24P440	31	5892	6100
24P530	37	6990	7415
24P600	42	7873	8456
24P700	50	8963	9955
24P830	60	10121	11931
24P1000	73	12120	14579
36P350	36	6573	7225
36P440	46	8077	9150
36P530	56	9670	11123
36P600	63	10713	12684
36P700	75	12388	14932

Reference configuration: Optic 206A - 4000 K



CITY 2



# QUINCY 3



The Quincy 3 light fixture is the solution proposed by DLEDS to replace the traditional lanterns placed in historic city centers or used for street lighting. Characterized by extremely small dimensions, it is also available in a wider version Quincy 4. It can be mounted either head-pole or with an upper adapter.

## FEATURES

- Unique combination of classic line and state-of-the-art functional road optics.
- Full cut-off optics.
- High comfort for road users thanks to a very low level of glare.
- Compliant with all regional laws for the reduction light pollution.

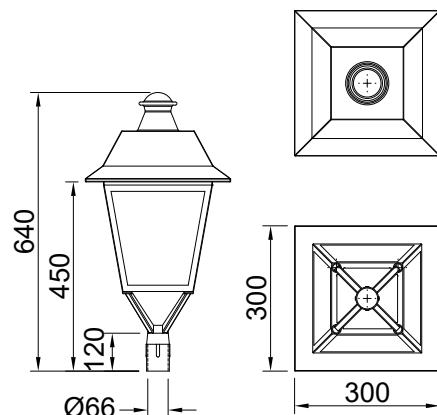
## Available control systems

- 1-10V / DALI.
- Virtual midnight.
- Wireless (Zhaga Book 18).
- Powerline.
- Lineswitch.

## TECHNICAL DATA

LED type	Datas by Lumileds
Step Mac-Adam	3
LED driver	Philips - Tridonic
Nominal Input voltage [V]	220-230V~ 50/60Hz
Surge protection	10kV
Efficiency up to	168lm/W (D) - 187lm/W (P)
Rated abrupt failure value T <sub>p,Tc</sub>	F10 @ 100.000h, <0,02% @ 1000h
Rated median useful life [hrs] @T <sub>c</sub>	L90B10 >100.000h
Power factor	>0,95
Housing material	Die-cast aluminum
Protective glass type	Tempered
Glass thickness [mm]	5
Colour temperature	2200K - 3000K - 4000K - 5700K
Colour rendering index (CRI)	>70
Degree of protection (EN 60529)	IP65 (optic IP67)
IK code (EN 62262)	IK08
Insulation class	I & II
Operating temperature [°C]	-25 ÷ +50
Wind-exposed surface [m <sup>2</sup> ]	Side: 0.01m <sup>2</sup> / Top: 0.01m <sup>2</sup>
Housing colour	RAL9005 Jet black
Weight [Kg]	2,8

## DIMENSIONS



## MODELS

	Total power [W]	Overall flux [lm]	Optical flux [lm]
16P350	16	3004	3211
16P440	20	3472	4067
16P530	25	4194	4944
16P600	28	4690	5637
16P700	33	4487	6637

## OPTICS

201A	205A	206A	208A	213A	214A
215A	217A	218S	247A	250A	277A

Other optics available on the website

Reference configuration: Optic 206A - 4000 K



QUINCY 3



# QUINCY 4



The Quincy 4 light fixture is the solution proposed by DLEDS to replace the traditional lanterns in historical city centers, green areas or city squares. It can be mounted either head-pole or from above with an adapter. It is also available in the Quincy 3 version, which is smaller in size.

## FEATURES

- Unique combination of classic line and state-of-the-art functional road optics.
- Full cut-off optics.
- High comfort for road users thanks to a very low level of glare.
- Compliant with all regional laws for the reduction light pollution.

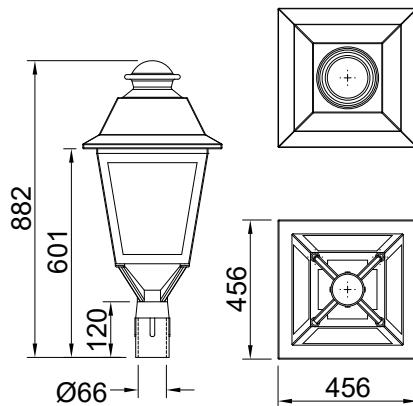
## Available control systems

- 1-10V / DALI.
- Virtual midnight.
- Wireless (Zhaga Book 18).
- Powerline.
- Lineswitch.

## TECHNICAL DATA

LED type	<b>Datas by Lumileds</b>
Step Mac-Adam	<b>3</b>
LED driver	<b>Philips - Tridonic</b>
Nominal Input voltage [V]	<b>220-230V~ 50/60Hz</b>
Surge protection	<b>10kV</b>
Efficiency up to	<b>140lm/W (D) - 166lm/W (P)</b>
Rated abrupt failure value T <sub>p,Tc</sub>	<b>F10 @ 100.000h, &lt;0,02% @ 1000h</b>
Rated median useful life [hrs] @T <sub>c</sub>	<b>L90B10 &gt;100.000h</b>
Power factor	<b>&gt;0,95</b>
Housing material	<b>Die-cast aluminum</b>
Protective glass type	<b>Tempered</b>
Glass thickness [mm]	<b>5</b>
Colour temperature	<b>2200K - 3000K - 4000K - 5700K</b>
Colour rendering index (CRI)	<b>&gt;70</b>
Degree of protection (EN 60529)	<b>IP65 (optic IP67)</b>
IK code (EN 62262)	<b>IK08</b>
Insulation class	<b>I &amp; II</b>
Operating temperature [°C]	<b>-25 ÷ +50</b>
Wind-exposed surface [m <sup>2</sup> ]	<b>Side: 0.01m<sup>2</sup> / Top: 0.01m<sup>2</sup></b>
Housing colour	<b>RAL9005 Jet black</b>
Weight [Kg]	<b>6,5</b>

## DIMENSIONS



## MODELS

	Total power [W]	Overall flux [lm]	Optical flux [lm]
12P350	12	2003	2408
12P530	19	2950	3708
12P700	25	3811	4977
12P1000	36	5161	7289
24P350	24	3855	4817
24P440	31	4785	6100
24P530	37	5672	7415
24P600	42	6323	8456
24P700	50	7211	9955
24P830	60	8323	11931
24P1000	73	9751	14579
36P350	36	5809	7225
36P440	46	7201	9150
36P530	56	8467	11123
36P600	63	9478	12684
36P650	69	10095	13791

## OPTICS

201A	205A	206A	208A	213A	214A
215A	217A	218S	247A	250A	277A

Other optics available on the website

Reference configuration: Optic 206A - 4000 K



QUINCY 4







FLOODLIGHTS

# RADIANT 2x2



The Radiant 2X2 light fixture is a high power light designed for delivering up to 694 W. Typical applications of this luminaire are light towers, sports fields, harbors, etc.. Thanks to the different optics, it can be supplied in both asymmetric and symmetric concentrating versions.

## FEATURES

- Suitable for power ratings up to 694 W.
- Supercast® die-cast aluminum body for better dissipation and corrosion resistance due to the very low copper content. Frame made of galvanized and painted steel.
- Separate power supply box allows for less "exposed" weight from the light tower for easier weight distribution.
- Full cut-off optics.
- Compliant with all Laws Regional Laws for light pollution reduction.
- Modular design for scalable wattages at 347 / 694 W depending on the number of modules used.

## Available control systems

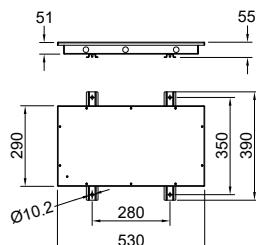
- 1-10V / DALI.
- Virtual midnight.
- Wireless (Zhaga Book 18).
- Powerline.
- Lineswitch.

## TECHNICAL DATA

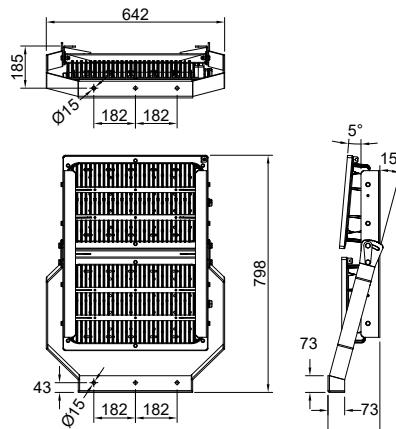
LED type	Deltas by Lumileds
Step Mac-Adam	3
LED driver	Philips - Tridonic
Nominal Input voltage [V]	220-230V~ 50/60Hz
Surge protection	10kV
Efficiency up to	159lm/W (D) - 180lm/W (P)
Rated abrupt failure value T <sub>p,Tc</sub>	F10 @ 100.000h, <0,02% @ 1000h
Rated median useful life [hrs] @T <sub>c</sub>	L90B10 >100.000h
Power factor	>0,95
Housing material	Supercast® die-cast aluminum
Protective glass type	Tempered
Glass thickness [mm]	4
Colour temperature	2200K - 3000K - 4000K - 5700K
Colour rendering index (CRI)	>70
Degree of protection (EN 60529)	IP66
IK code (EN 62262)	IK08
Insulation class	I & II
Operating temperature [°C]	-25 ± +50
Wind-exposed surface [m <sup>2</sup> ]	Side: 0.09m <sup>2</sup> / Top: 0.48m <sup>2</sup>
Housing colour	RAL 9005 Jet black
Weight [Kg]	25+7

## DIMENSIONS

Power supply BOX



LED BOX



## OPTICS

201A	205A	206A	208A	213A	214A
215A	217A	218S	247A	250A	277A

Other optics available on the website

## MODELS

	Total power [W]	Overall flux [lm]	Optical flux [lm]
256P530	395	71320	79099
256P600	451	79664	90199
256P700	531	91639	106186
256P750	571	95715	114179
256P830	636	105753	127262
256P900	694	113715	138730

Reference configuration: Optic 206A - 4000 K



RADIANT 2X2



# RADIANT 2x3



Radiant 2X3 is a high power floodlight designed for delivering up to 1040 W. Typical applications of this luminaire are light towers, sports fields, harbors, etc.. Thanks to the different optics, it can be supplied in both asymmetric and symmetric concentrating versions.

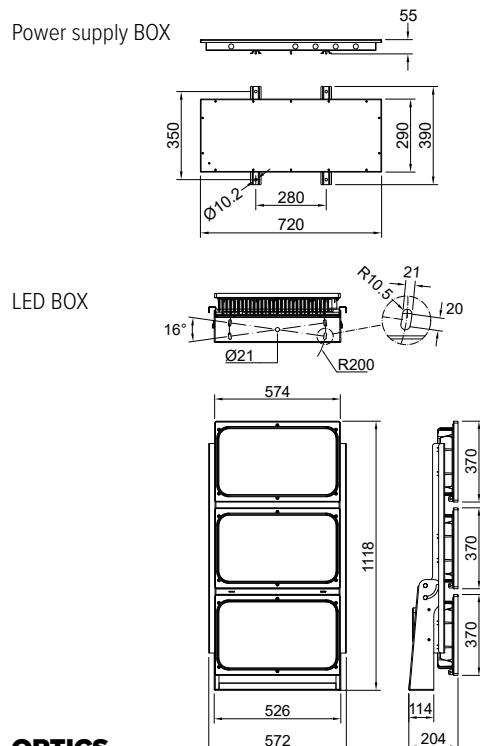
## FEATURES

- Suitable for power ratings up to 1040 W.
- Supercast® die-cast aluminum body for better dissipation and corrosion resistance due to the very low copper content. Frame made of galvanized and painted steel.
- Individually adjustable lamps.
- Power cassette separate allows for reduced "exposed" weight from the light tower for easier weight distribution.
- Full cut-off optics.
- Complies with all Regional Laws for the reduction light pollution.
- Modular design for scalable powers to 347/694/1040 W depending on the number of modules used.

## Available control systems

- 1-10V / DALI.
- Virtual midnight.
- Wireless (Zhaga Book 18).
- Powerline.
- Lineswitch.

## DIMENSIONS



## OPTICS

201A	205A	206A	208A	213A	214A
215A	217A	218S	247A	250A	277A

Other optics available on the website

## TECHNICAL DATA

LED type	Datas by Lumileds
Step Mac-Adam	3
LED driver	Philips - Tridonic
Nominal Input voltage [V]	220-230V~ 50/60Hz
Surge protection	10kV
Efficiency up to	159lm/W (D) - 180lm/W (P)
Rated abrupt failure value T <sub>p,Tc</sub>	F10 @ 100.000h, <0,02% @ 1000h
Rated median useful life [hrs] @T <sub>c</sub>	L90B10 >100.000h
Power factor	>0,95
Housing material	Supercast® die-cast aluminum
Protective glass type	Tempered
Glass thickness [mm]	4
Colour temperature	2200K - 3000K - 4000K - 5700K
Colour rendering index (CRI)	>70
Degree of protection (EN 60529)	IP66
IK code (EN 62262)	IK08
Insulation class	I & II
Operating temperature [°C]	-25 ÷ +50
Wind-exposed surface [m <sup>2</sup> ]	Side: 0.14m <sup>2</sup> / Top: 0.63m <sup>2</sup>
Housing colour	RAL 9005 Jet black
Weight [Kg]	35+11

## MODELS

	Total power [W]	Overall flux [lm]	Optical flux [lm]
384P530	593	106981	118648
384P600	676	119496	135299
384P700	796	137458	159278
384P750	856	143573	171268
384P830	954	158629	190893
384P900	1040	170572	208095



RADIANT 2X3



# MAYA 8A



The minimalist design of the Maya 8A projectors is suitable for wall or ceiling installations with reduced height. The thin footprint is designed to offer little exposure to wind. It provides high efficiency and uniformity of illuminance with a choice of more than 40 optics. It is available in both symmetric and asymmetric versions.

## FEATURES

- Suitable for power ratings up to 75 W.
- Die-cast aluminum body for better dissipation and corrosion resistance due to very low copper content.
- Drivers PHILIPS/TRIDONIC integrated in the product.
- Full cut-off optics.
- Tempered glass to protect the optics and LEDs.
- System efficiency up to 190 lm/W.
- Ideal for use as an under-gutter street light or for illuminating the outdoor areas of industrial warehouses, industrial halls, parking lots.
- Complies with all regional Laws for the reduction of light pollution/light pollution.
- Modern design for installations and low altitude.

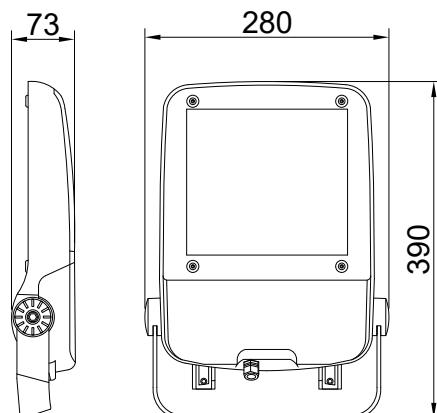
## Available control systems

- 1-10V / DALI.
- Virtual midnight.
- Wireless (Zhaga Book 18).
- Powerline.
- Lineswitch.

## TECHNICAL DATA

LED type	Deltas by Lumileds
Step Mac-Adam	3
LED driver	Philips - Tridonic
Nominal Input voltage [V]	220-230V~ 50/60Hz
Surge protection	10kV
Efficiency up to	161lm/W (D) - 190lm/W (P)
Rated abrupt failure value T <sub>p,Tc</sub>	F10 @ 100.000h, <0,02% @ 1000h
Rated median useful life [hrs] @ T <sub>c</sub>	L90B10 >100.000h
Power factor	>0,95
Housing material	Die-cast aluminum
Protective glass type	Tempered
Glass thickness [mm]	5
Colour temperature	2200K - 3000K - 4000K - 5700K
Colour rendering index (CRI)	>70
Degree of protection (EN 60529)	IP66
IK code (EN 62262)	IK09
Insulation class	I & II
Operating temperature [°C]	-25 ± +50
Wind-exposed surface [m <sup>2</sup> ]	Side: 0.02m <sup>2</sup> / Top: 0.10m <sup>2</sup>
Housing colour	RAL7040 Window grey
Weight [Kg]	3,6

## DIMENSIONS



## MODELS

	Total power [W]	Overall flux [lm]	Optical flux [lm]
12P350	12	2284	2408
12P440	15	2689	3050
12P530	19	3280	3708
12P600	21	3549	4228
12P700	25	4131	4977
12P830	30	4945	5965
12P1000	36	5825	7289
24P350	24	4385	4817
24P440	31	5361	6100
24P530	37	6350	7415
24P600	42	7211	8456
24P700	50	8296	9955
24P830	60	9577	11931
24P1000	73	11301	14579
36P350	36	6677	7225
36P440	46	8178	9150
36P530	56	9593	11123
36P600	63	10321	12684
36P700	75	12040	14932

## OPTICS

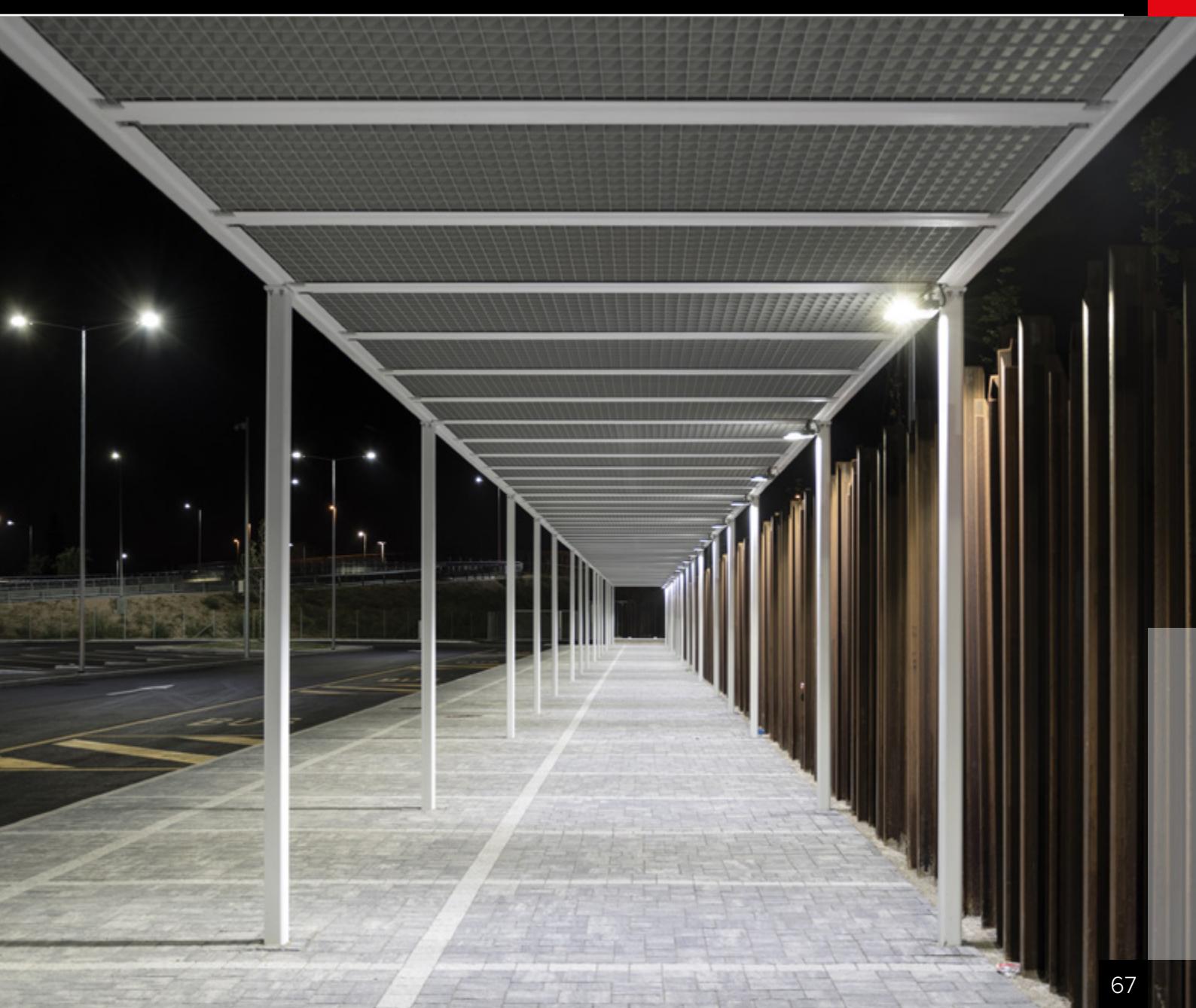
201A	205A	206A	208A	213A	214A
215A	217A	218S	247A	250A	277A

Other optics available on the website

Reference configuration: Optic 206A - 4000 K



MAYA 8A



# MAYA 8B



The minimalist design of the Maya 8B projectors finds a place in installations with a reduced height, whether wall or ceiling mounted. The thin footprint is designed to offer little exposure to wind. It provides high efficiency and uniformity of illuminance, thanks to the choice of more than 40 optics, both symmetrical and asymmetrical.

## FEATURES

- Suitable for power ratings up to 130 W.
- Die-cast aluminum body for better dissipation and corrosion resistance due to very low copper content.
- Drivers PHILIPS/TRIDONIC integrated inside the product.
- Full cut-off optics.
- Tempered glass to protect the optics and LEDs.
- System efficiency up to 176 lm/W.
- Ideal for use as an under-gutter street light or for illuminating the outdoor areas of industrial warehouses industrial halls, parking lots.
- Complies with all regional Laws for the reduction of light pollution.
- Modern design for installations a few meters high.

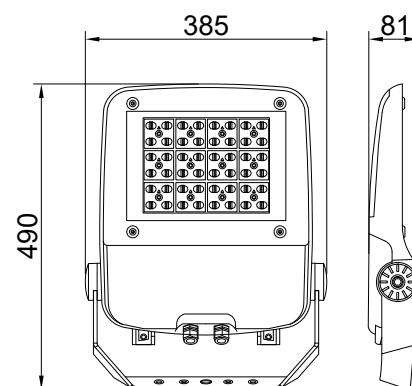
## Available control systems

- 1-10V / DALI.
- Virtual midnight.
- Wireless (Zhaga Book 18).
- Powerline.
- Lineswitch.

## TECHNICAL DATA

LED type	Datas by Lumileds
Step Mac-Adam	3
LED driver	Philips - Tridonic
Nominal Input voltage [V]	220-230V~ 50/60Hz
Surge protection	10kV
Efficiency up to	155lm/W (D) - 176lm/W (P)
Rated abrupt failure value T <sub>p,Tc</sub>	F10 @ 100.000h, <0,02% @ 1000h
Rated median useful life [hrs] @T <sub>c</sub>	L90B10 >100.000h
Power factor	>0,95
Housing material	Die-cast aluminum
Protective glass type	Tempered
Glass thickness [mm]	5
Colour temperature	2200K - 3000K - 4000K - 5700K
Colour rendering index (CRI)	>70
Degree of protection (EN 60529)	IP66
IK code (EN 62262)	IK09
Insulation class	I & II
Operating temperature [°C]	-25 ± +50
Wind-exposed surface [m <sup>2</sup> ]	Side: 0.03m <sup>2</sup> / Top: 0.16m <sup>2</sup>
Housing colour	RAL7040 Window grey
Weight [Kg]	7,5

## DIMENSIONS



## MODELS

	Total power [W]	Overall flux [lm]	Optical flux [lm]
36P700	75	12107	14932
36P830	89	13264	17896
36P1000	109	15400	21868
48P350	48	8493	9633
48P440	61	10481	12200
48P530	74	12006	14831
48P600	85	13316	16912
48P700	100	15263	19910
48P830	119	17499	23862
48P900	130	18801	26012
60P350	60	10540	12041
60P440	76	12867	15250
60P530	93	15235	18539
60P600	106	16964	21140
60P700	124	18928	24887
60P730	130	19927	26000

## OPTICS

201A	205A	206A	208A	213A	214A
215A	217A	218S	247A	250A	277A

Other optics available on the website

Reference configuration: Optic 206A - 4000 K



MAYA 8B



# MAYA 9C



Maya 9C projectors are mainly used on light towers and outside of industrial buildings. The small lateral footprint is designed to offer little exposure to wind; the asymmetrical or symmetrical concentrating optics, on the other hand, allow high levels of illuminance and uniformity even in sporting settings.

## FEATURES

- Suitable for power ratings up to 236 W.
- Supercast® die-cast aluminum body for better dissipation and corrosion resistance due to very low copper content.
- Drivers PHILIPS/TRIDONIC integrated inside the product.
- Full cut-off optics.
- Tempered glass to protect the optics and LEDs.
- System efficiency up to 185 lm/W.
- Compliant with all Regional Laws for the reduction of light pollution.
- Design studied to reduce drastically the surface area exposed to wind.

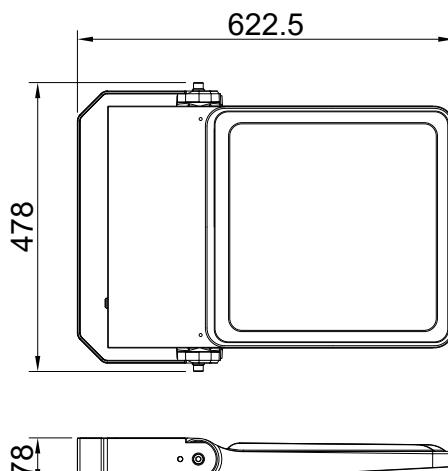
## Available control systems

- 1-10V / DALI.
- Virtual midnight.
- Wireless (Zhaga Book 18).
- Powerline.
- Lineswitch.

## TECHNICAL DATA

LED type	Deltas by Lumileds
Step Mac-Adam	3
LED driver	Philips - Tridonic
Nominal Input voltage [V]	220-230V~ 50/60Hz
Surge protection	10kV
Efficiency up to	162lm/W (D) - 185lm/W (P)
Rated abrupt failure value T <sub>p,Tc</sub>	F10 @ 100.000h, <0,02% @ 1000h
Rated median useful life [hrs] @T <sub>c</sub>	L90B10 >100.000h
Power factor	>0,95
Housing material	Supercast® die-cast aluminum
Protective glass type	Tempered
Glass thickness [mm]	5
Colour temperature	2200K - 3000K - 4000K - 5700K
Colour rendering index (CRI)	>70
Degree of protection (EN 60529)	IP66
IK code (EN 62262)	IK09
Insulation class	I & II
Operating temperature [°C]	-25 ÷ +50
Wind-exposed surface [m <sup>2</sup> ]	Side: 0.03m <sup>2</sup> / Top: 0.26m <sup>2</sup>
Housing colour	RAL7037 Dusty grey
Weight [Kg]	12,7

## DIMENSIONS



## MODELS

	Total power [W]	Overall flux [lm]	Optical flux [lm]
72P600	127	21850	25369
72P700	149	25597	29865
72P770	165	27539	33028
72P830	179	29356	35792
72P1000	219	34586	43736
96P350	96	17496	19266
96P440	122	21853	24400
96P530	148	26463	29662
96P560	157	27609	31455
96P600	169	29599	33825
96P700	199	33773	39820
96P830	239	38760	47723
120P350	120	22240	24083
120P440	153	27651	30500
120P530	185	32904	37077
120P600	211	36787	42281
120P660	234	40127	46762
144P350	144	26575	28900
144P440	183	32801	36601
144P530	222	39133	44493
144P560	236	40337	47183

## OPTICS

201A	205A	206A	208A	213A	214A
215A	217A	218S	247A	250A	277A

Other optics available on the website

Reference configuration: Optic 206A - 4000 K



MAYA 9C



# MAYA 9D

Maya 9D floodlights find ideal application on light towers, sports fields, industrial sheds, etc. The small height footprint is designed to offer little exposure to wind. Concentrating asymmetric or symmetric optics allow high levels of illuminance and uniformity even in sports areas.



## FEATURES

- Suitable for power ratings up to 451 W.
- Supercast® die-cast aluminum body for better dissipation and corrosion resistance due to very low copper content.
- Drivers PHILIPS/TRIDONIC integrated inside the product.
- Full cut-off optics.
- Tempered glass to protect the optics and LEDs.
- System efficiency up to 186 lm/W.
- Compliant with all Regional Laws for the reduction of light pollution.
- Design studied to reduce drastically the surface area exposed to wind.

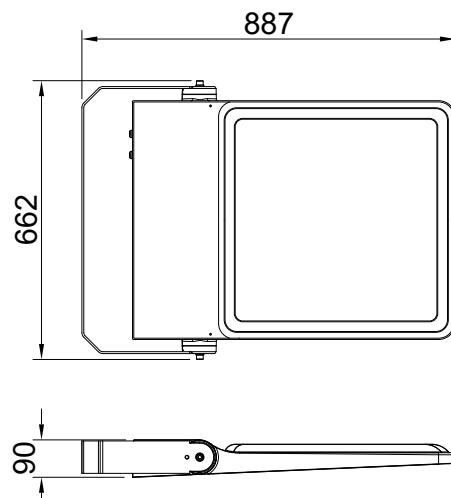
## Available control systems

- 1-10V / DALI.
- Virtual midnight.
- Wireless (Zhaga Book 18).
- Powerline.
- Lineswitch.

## TECHNICAL DATA

LED type	Deltas by Lumileds
Step Mac-Adam	3
LED driver	Philips - Tridonic
Nominal Input voltage [V]	220-230V~ 50/60Hz
Surge protection	10kV
Efficiency up to	162lm/W (D) - 186lm/W (P)
Rated abrupt failure value T <sub>p,Tc</sub>	F10 @ 100.000h, <0,02% @ 1000h
Rated median useful life [hrs] @T <sub>c</sub>	L90B10 >100.000h
Power factor	>0,95
Housing material	Supercast® die-cast aluminum
Protective glass type	Tempered
Glass thickness [mm]	4
Colour temperature	2200K - 3000K - 4000K - 5700K
Colour rendering index (CRI)	>70
Degree of protection (EN 60529)	IP66
IK code (EN 62262)	IK08
Insulation class	I & II
Operating temperature [°C]	-25 ÷ +50
Wind-exposed surface [m <sup>2</sup> ]	Side: 0.06m <sup>2</sup> / Top: 0.52m <sup>2</sup>
Housing colour	RAL7037 Dusty grey
Weight [Kg]	21,5

## DIMENSIONS



## OPTICS

201A	205A	206A	208A	213A	214A
215A	217A	218S	247A	250A	277A

Other optics available on the website

## MODELS

	Total power [W]	Overall flux [lm]	Optical flux [lm]
128P530	198	35660	39549
128P600	225	39832	45100
128P700	265	45819	53093
128P750	285	47858	57089
128P830	318	52877	63631
128P1000	389	61644	77753
192P530	297	53030	59324
192P600	338	59132	67649
192P700	398	68077	79639
192P750	428	73281	85634
256P350	257	47671	51377
256P440	325	58863	65068
256P530	395	70578	79099
256P600	451	78652	90199

Reference configuration: Optic 206A - 4000 K



MAYA 9D





A photograph of an industrial interior, likely a basement or utility room. The ceiling is made of concrete with several long, linear fluorescent light fixtures. Large, white, curved pipes are mounted on the wall and ceiling. A metal grating or vent is visible on the ceiling. The overall lighting is dim, with the primary light source being the overhead fixtures.

INDUSTRIAL



# RADIANT 6M1 ICU



Radiant 6M1-ICU is a modular solution made of LM6 aluminum, ideal in surface mounting industrial applications. The use of multiple optics to distribute the luminous flux allows to maximize energy savings. Comes with OSRAM-Inventronics IP67 driver.

## FEATURES

- Power ratings up to 139 W / 128 W (Ta +40°C/+50°C).
- LM6 aluminum body.
- Tempered glass to protection of optics and LEDs.
- System efficiency up to 188 lm/W.
- Glare content.
- Optics selectable according to type of working area and height of mounting.
- Also available in modular version for higher wattages.
- Drivers OSRAM-Inventronics IP67 DALI.
- Available with emergency kit.

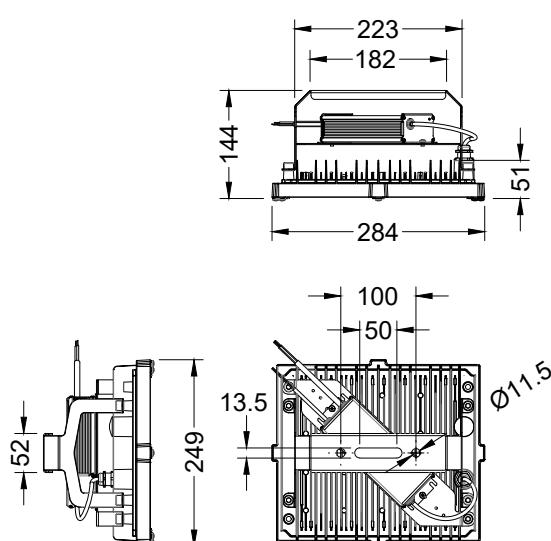
## Available control systems

- DALI included.
- Powerline.
- Presence sensor.
- Sensor of illuminance.
- Presence and illuminance sensor.
- IP68 connector provided as an option.

## TECHNICAL DATA

LED type	Deltas by Lumileds
Step Mac-Adam	3
LED driver	OSRAM-Inventronics IP67 DALI
Nominal Input voltage [V]	220-230V~ 50/60Hz
Surge protection	10kV
Efficiency up to	167lm/W (D) - 188lm/W (P)
Rated abrupt failure value T <sub>p,Tc</sub>	F10 @ 100.000h, <0,02% @ 1000h
Rated median useful life [hrs] @T <sub>c</sub>	L90B10 >100.000h
Power factor	>0,95
Housing material	LM6 Aluminum
Protective glass type	Tempered
Glass thickness [mm]	5
Colour temperature	2200K - 3000K - 4000K - 5700K
Colour rendering index (CRI)	>70
Degree of protection (EN 60529)	IP66
IK code (EN 62262)	IK09
Insulation class	I & II
Operating temperature [°C]	-25 ÷ +50
Housing colour	RAL9005 Jet black
Weight [Kg]	7,5

## DIMENSIONS



## OPTICS

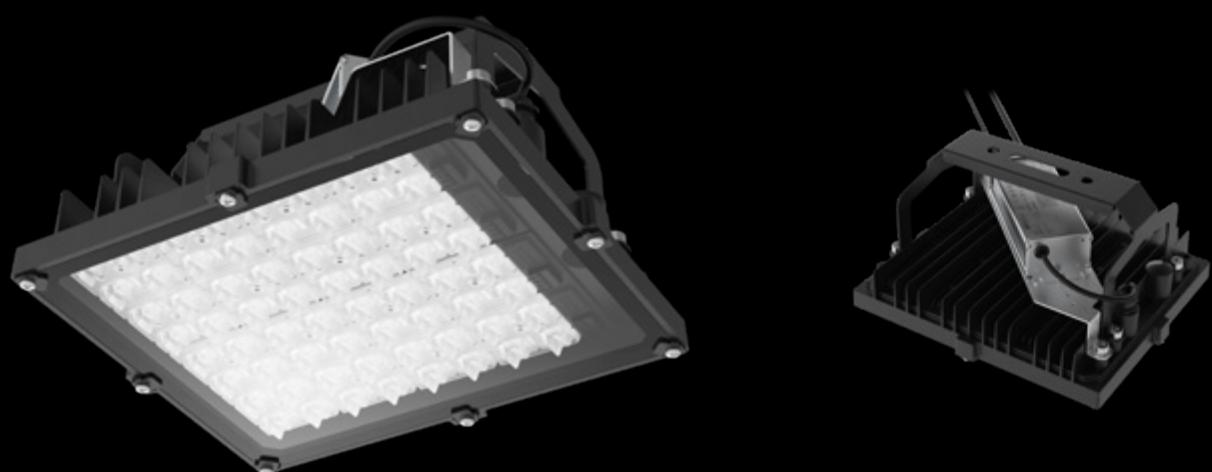
201A	205S	206S	207S	211S	212S
213S	218A	235S	243S	244S	247S

Other optics available on the website

## MODELS

	Total power [W]	Overall flux [lm]	Optical flux [lm]
32P530	49	9292	9887
32P560	52	9804	10485
32P600	56	10361	11275
32P700	66	12169	13273
48P530	74	13730	14831
48P700	100	17770	19910
48P830	119	20824	23862
64P600	113	20590	22550
64P700	133	23590	26546
64P730	139	24362	27734

Reference configuration: Optic 211S - 4000 K



RADIANT 6M1 ICU



# RADIANT 6M1 DCE



Radiant 6M1-DCE is a modular solution made of LM6 aluminum, ideal in surface mounting industrial applications. The use of multiple optics to distribute the luminous flux allows to maximize energy savings. Comes with PHILIPS/TRIDONIC drivers.

## FEATURES

- Power ratings up to 139 W / 128 W (Ta +40°C/+50°C).
- LM6 aluminum body.
- Tempered glass to protection of optics and LEDs.
- System efficiency up to 188 lm/W.
- Glare content.
- Optics selectable according to type of working area and height of mounting.
- Also available in modular version for higher wattages.
- Drivers Philips/Tridonic.
- Available with emergency kit.

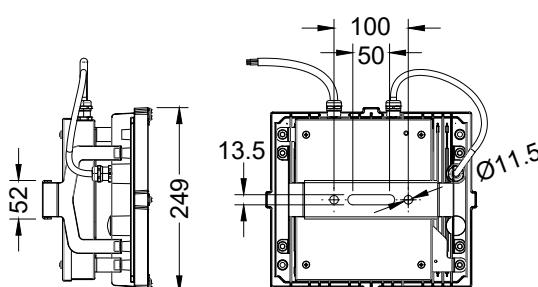
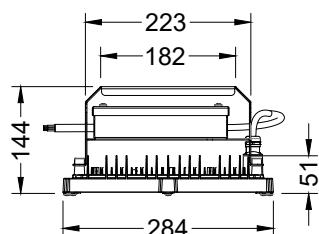
## Available control systems

- 1-10V / DALI.
- - Powerline.
- - Wireless (Zhaga Book 18).
- - Presence sensor.
- - Illuminance sensor.
- - Presence and illuminance sensor.
- - IP68 connector provided as an option.

## TECHNICAL DATA

LED type	Deltas by Lumileds
Step Mac-Adam	3
LED driver	Philips - Tridonic
Nominal Input voltage [V]	220-230V~ 50/60Hz
Surge protection	10kV
Efficiency up to	167lm/W (D) - 188lm/W (P)
Rated abrupt failure value T <sub>p,Tc</sub>	F10 @ 100.000h, <0,02% @ 1000h
Rated median useful life [hrs] @T <sub>c</sub>	L90B10 >100.000h
Power factor	>0,95
Housing material	LM6 Aluminum
Protective glass type	Tempered
Glass thickness [mm]	5
Colour temperature	2200K - 3000K - 4000K - 5700K
Colour rendering index (CRI)	>70
Degree of protection (EN 60529)	IP66
IK code (EN 62262)	IK09
Insulation class	I & II
Operating temperature [°C]	-25 ÷ +50
Housing colour	RAL9005 Jet black
Weight [Kg]	7,5

## DIMENSIONS



## OPTICS

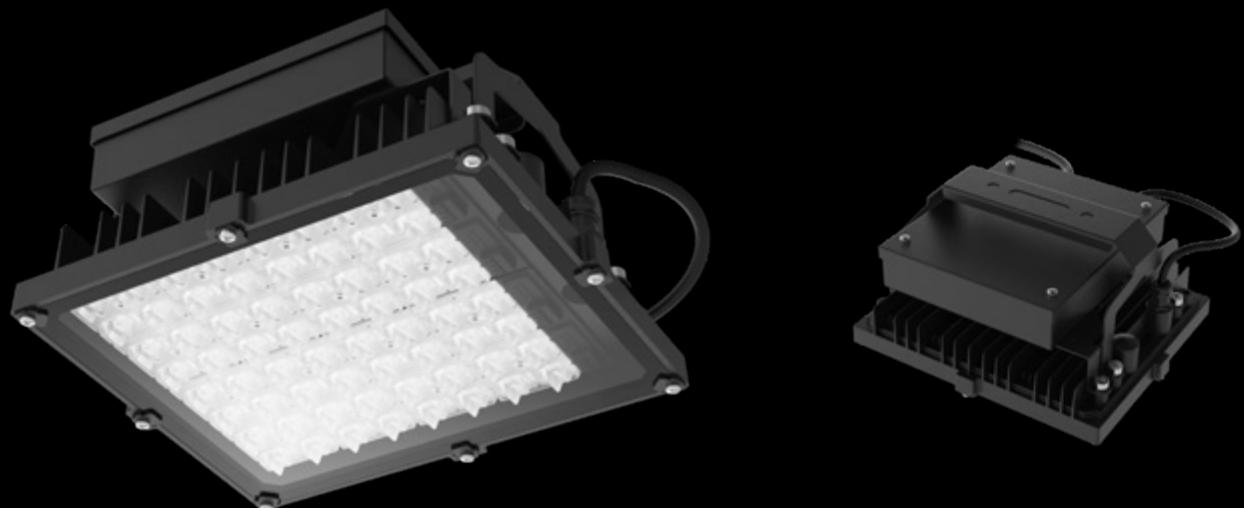
201A	205S	206S	207S	211S	212S
213S	218A	235S	243S	244S	247S

Other optics available on the website

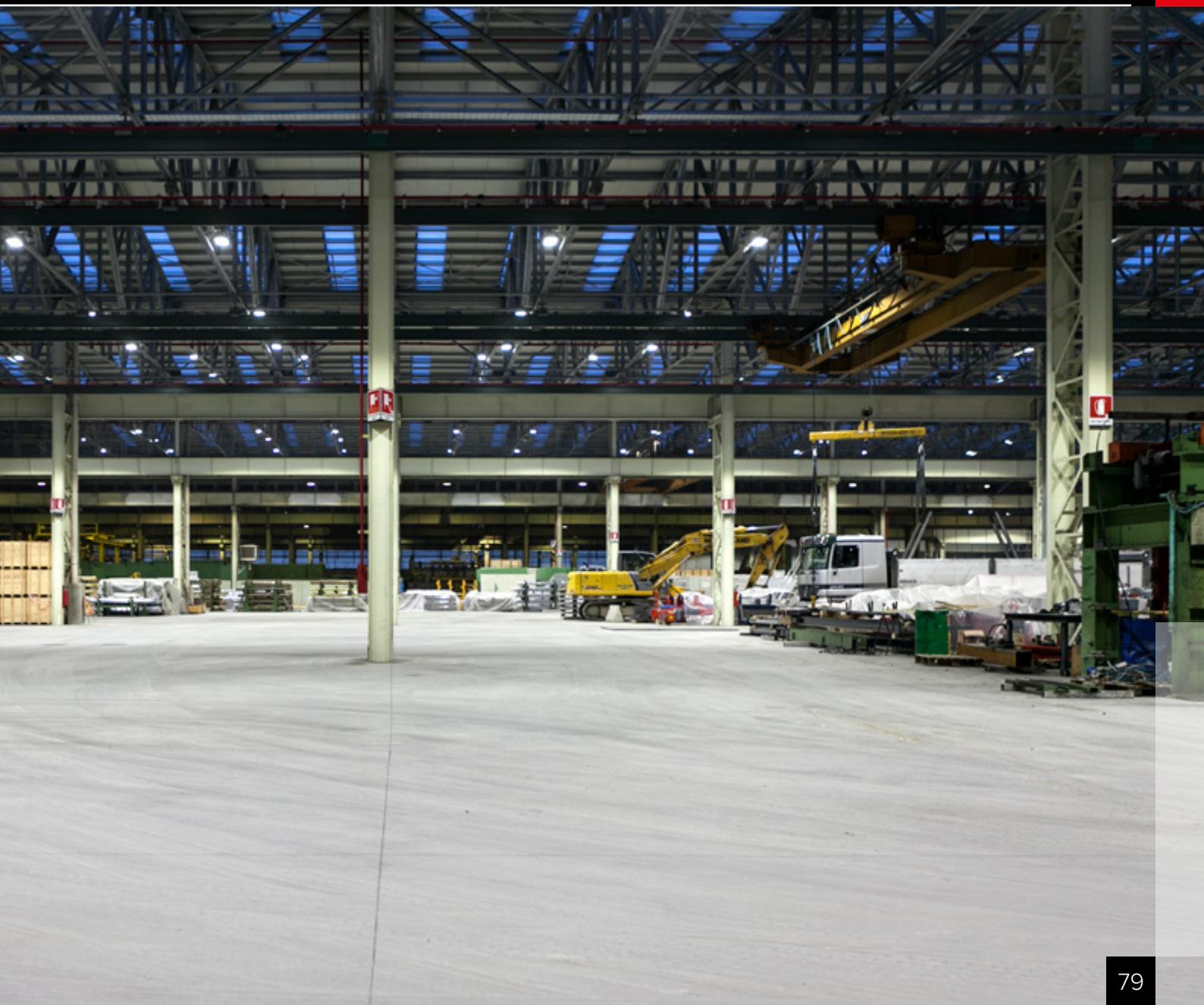
## MODELS

	Total power [W]	Overall flux [lm]	Optical flux [lm]
32P530	49	9292	9887
32P560	52	9804	10485
32P600	56	10361	11275
32P700	66	12169	13273
48P530	74	13730	14831
48P700	100	17770	19910
48P830	119	20824	23862
64P600	113	20590	22550
64P700	133	23590	26546
64P730	139	24362	27734

Reference configuration: Optic 211S - 4000 K



RADIANT 6M1 DCE



# PAD ECO 3



The PAD ECO 3 luminaire is our most economical solution for industrial suspended installations. The use of 90° optics ensures good compatibility with any installation 1:1. It is characterized by the possibility of selecting the luminaire wattage directly on the driver and the standard Zhaga Book 18 setup.

## FEATURES

- Suitable for power ratings up to 200 W.
- 90° optics.
- Suspension mounting.
- MOSO driver with power selection (120-150-200 W).
- Socket Zhaga Book 18 included as standard.

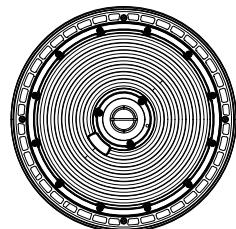
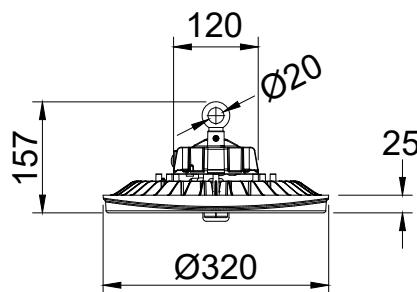
## Available control systems

- 1-10V.
- Presence sensor ZB18.
- Illuminance sensor ZB18.
- Presence and illuminance sensor ZB18.

## TECHNICAL DATA

LED type	Custom
Step Mac-Adam	3
LED driver	MOSO (power selectable)
Nominal Input voltage [V]	220-230V~ 50/60Hz
Surge protection	4kV
Efficiency up to	180lm/W
Rated abrupt failure value T <sub>p,Tc</sub>	F10 @ 70.000h, <0,02% @ 1000h
Rated median useful life [hrs] @T <sub>c</sub>	L90B10 >60.000h
Power factor	>0,95
Housing material	Die-cast aluminum
Protective glass type	PC
Glass thickness [mm]	Optic
Colour temperature	2200K - 3000K - 4000K - 5700K
Colour rendering index (CRI)	>80
Degree of protection (EN 60529)	IP65
IK code (EN 62262)	IK08
Insulation class	I
Operating temperature [°C]	-25 ÷ +50
Housing colour	RAL9005 Jet black
Weight [Kg]	3

## DIMENSIONS



## MODELS

	Total power [W]	Overall flux [lm]	Optical flux [lm]
PAD ECO 3 120	120	21071	22200
PAD ECO 3 150	150	25641	27750
PAD ECO 3 200	200	34020	37000

## OPTICS

205S	206S	207S	211S	212S	213S
235S	243S	244S	247S	-	-

Other optics available on the website

Reference configuration: Optic 211S - 4000 K



PAD ECO 3



# PAD LLC 3 ICU



The PAD LLC 3-ICU light fixture is designed for industrial suspension or ceiling installations. Using multiple optics to distribute the luminous flux, it maximizes the energy savings. It differs from the standard version in the use of OSRAM IP67 DALI drivers and the presence of an omega bracket useful for mounting on earthquake-bars.

## FEATURES

- Suitable for power ratings up to 173 W.
- Optics selectable according to the type of area working area and mounting height.
- Tempered glass to protect optics and LEDs.
- Suspension/ceiling mounting with the included Omega bracket.
- Emergency kit available. emergency.
- OSRAM-Inventronics IP67 DALI driver.

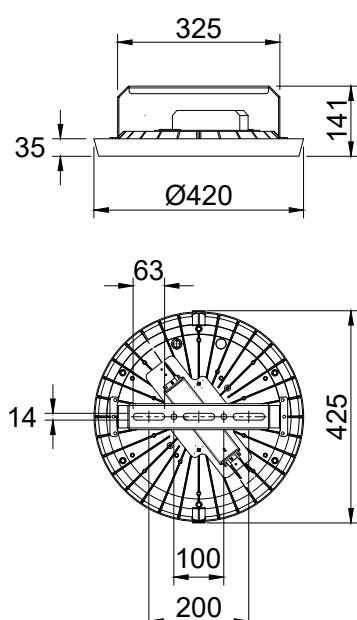
## Available control systems

- DALI Included as standard.
- Presence sensor.
- Illuminance sensor.
- Sensor for presence and illuminance.

## TECHNICAL DATA

LED type	Datas by Lumileds
Step Mac-Adam	3
LED driver	OSRAM-Inventronics IP67 DALI
Nominal Input voltage [V]	220-230V~ 50/60Hz
Surge protection	10kV
Efficiency up to	169lm/W (D) - 192lm/W (P)
Rated abrupt failure value T <sub>p,Tc</sub>	F10 @ 100.000h, <0,02% @ 1000h
Rated median useful life [hrs] @T <sub>c</sub>	L90B10 >100.000h
Power factor	>0,95
Housing material	Die-cast aluminum
Protective glass type	Tempered
Glass thickness [mm]	4
Colour temperature	2200K - 3000K - 4000K - 5700K
Colour rendering index (CRI)	>70
Degree of protection (EN 60529)	IP66
IK code (EN 62262)	IK09
Insulation class	I & II
Operating temperature [°C]	-25 ÷ +40
Housing colour	RAL9005 Jet black
Weight [Kg]	5

## DIMENSIONS



## OPTICS

205S	206S	207S	211S	212S	213S
235S	243S	244S	247S	-	-

Other optics available on the website

## MODELS

	Total power [W]	Overall flux [lm]	Optical flux [lm]
32P750	71	12159	14272
32P900	87	14386	17341
32P950	92	15026	18369
48P530	74	13358	14831
48P600	85	15171	16912
48P650	92	16392	18388
48P700	100	17673	19910
48P830	119	20653	23862
64P375	69	13239	13787
64P440	81	15562	16267
64P550	103	19006	20558
64P625	118	21376	23532
64P700	133	23590	26546
64P750	143	25326	28545
64P830	159	27515	31815
64P900	173	29612	34683

Reference configuration: Optic 211S - 4000 K



PAD LLC 3 ICU



# PAD LLC 3 DCE



The PAD LLC 3 DCE light fixture is designed for industrial suspension and ceiling installations. The use of multiple optics to distribute the luminous flux maximizes the energy savings. It differs from the standard version in the use of drivers PHILIPS/TRIDONIC and for the presence of an Omega bracket useful for mounting on earthquake-proof bars.

## FEATURES

- Suitable for power ratings up to 173 W.
- Optics selectable according to the type of area working area and mounting height.
- Tempered glass to protect optics and LEDs.
- Suspension/ceiling/earthquake bars mounting with the included Omega bracket.
- Available with emergency kit.
- Philips/Tridonic drivers.

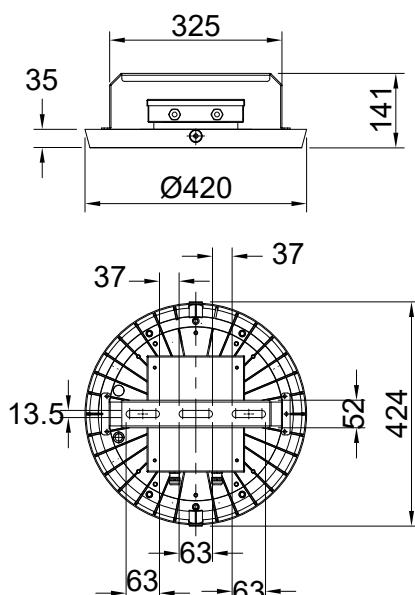
## Available control systems

- 1-10V / DALI.
- Wireless.
- Presence sensor.
- Illuminance sensor.
- Sensor of presence and illuminance.
- IP68 connector provided as an option.

## TECHNICAL DATA

LED type	Deltas by Lumileds
Step Mac-Adam	3
LED driver	Philips - Tridonic
Nominal Input voltage [V]	220-230V~ 50/60Hz
Surge protection	10kV
Efficiency up to	169lm/W (D) - 192lm/W (P)
Rated abrupt failure value T <sub>p,Tc</sub>	F10 @ 100.000h, <0,02% @ 1000h
Rated median useful life [hrs] @T <sub>c</sub>	L90B10 >100.000h
Power factor	>0,95
Housing material	Die-cast aluminum
Protective glass type	Tempered
Glass thickness [mm]	4
Colour temperature	2200K - 3000K - 4000K - 5700K
Colour rendering index (CRI)	>70
Degree of protection (EN 60529)	IP66
IK code (EN 62262)	IK08
Insulation class	I & II
Operating temperature [°C]	-25 ÷ +40
Housing colour	RAL9005 Jet black
Weight [Kg]	5.5

## DIMENSIONS



## OPTICS

205S	206S	207S	211S	212S	213S
235S	243S	244S	247S	-	-

Other optics available on the website

## MODELS

	Total power [W]	Overall flux [lm]	Optical flux [lm]
32P750	71	12159	14272
32P900	87	14386	17341
32P950	92	15026	18369
48P530	74	13358	14831
48P600	85	15171	16912
48P650	92	16392	18388
48P700	100	17673	19910
48P830	119	20653	23862
64P375	69	13239	13787
64P440	81	15562	16267
64P550	103	19006	20558
64P625	118	21376	23532
64P700	133	23590	26546
64P750	143	25326	28545
64P830	159	27515	31815
64P900	173	29612	34683

Reference configuration: Optic 211S - 4000 K



PAD LLC 3 DCE



# PAD LLC 3B ICU



The PAD LLC 3B-ICU light fixture is designed for industrial suspension and ceiling. By using multiple optics to distribute the luminous flux, it maximizes the energy savings. It differs from the standard version because of OSRAM IP67 DALI drivers and for the presence of an omega bracket useful for mounting on earthquake bars.

## FEATURES

- Suitable for wattages up to 199 W.
- Optics selectable according to the type of area working area and mounting height.
- Tempered glass to protect optics and LEDs.
- Suspension/ceiling/anti-seismic bar mounting with the supplied Omega bracket.
- Available with emergency kit.
- OSRAM-Inventronics IP67 DALI driver.

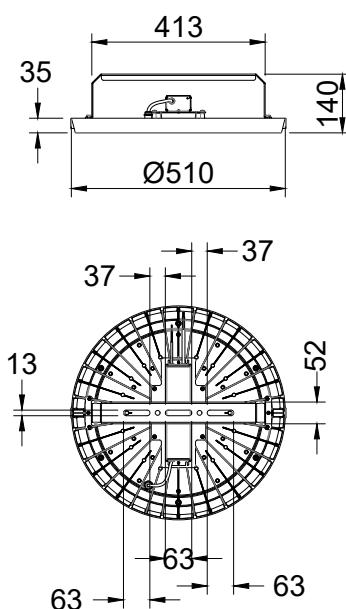
## Available control systems

- DALI as standard.
- Presence sensor.
- Illuminance sensor.
- Presence and illuminance.
- Optional IP68 connector.

## TECHNICAL DATA

LED type	Deltas by Lumileds
Step Mac-Adam	3
LED driver	OSRAM-Inventronics IP67 DALI
Nominal Input voltage [V]	220-230V~ 50/60Hz
Surge protection	6kV (10kV optional)
Efficiency up to	168lm/W (D) - 192lm/W (P)
Rated abrupt failure value T <sub>p,Tc</sub>	F10 @ 100.000h, <0,02% @ 1000h
Rated median useful life [hrs] @T <sub>c</sub>	L90B10 >100.000h
Power factor	>0,95
Housing material	Die-cast aluminum
Protective glass type	Tempered
Glass thickness [mm]	4
Colour temperature	2200K - 3000K - 4000K - 5700K
Colour rendering index (CRI)	>70
Degree of protection (EN 60529)	IP66
IK code (EN 62262)	IK08
Insulation class	I & II
Operating temperature [°C]	-25 ÷ +40
Housing colour	RAL9005 Jet black
Weight [Kg]	7

## DIMENSIONS



## OPTICS

205S	206S	207S	211S	212S	213S
235S	243S	244S	247S	-	-

Other optics available on the website

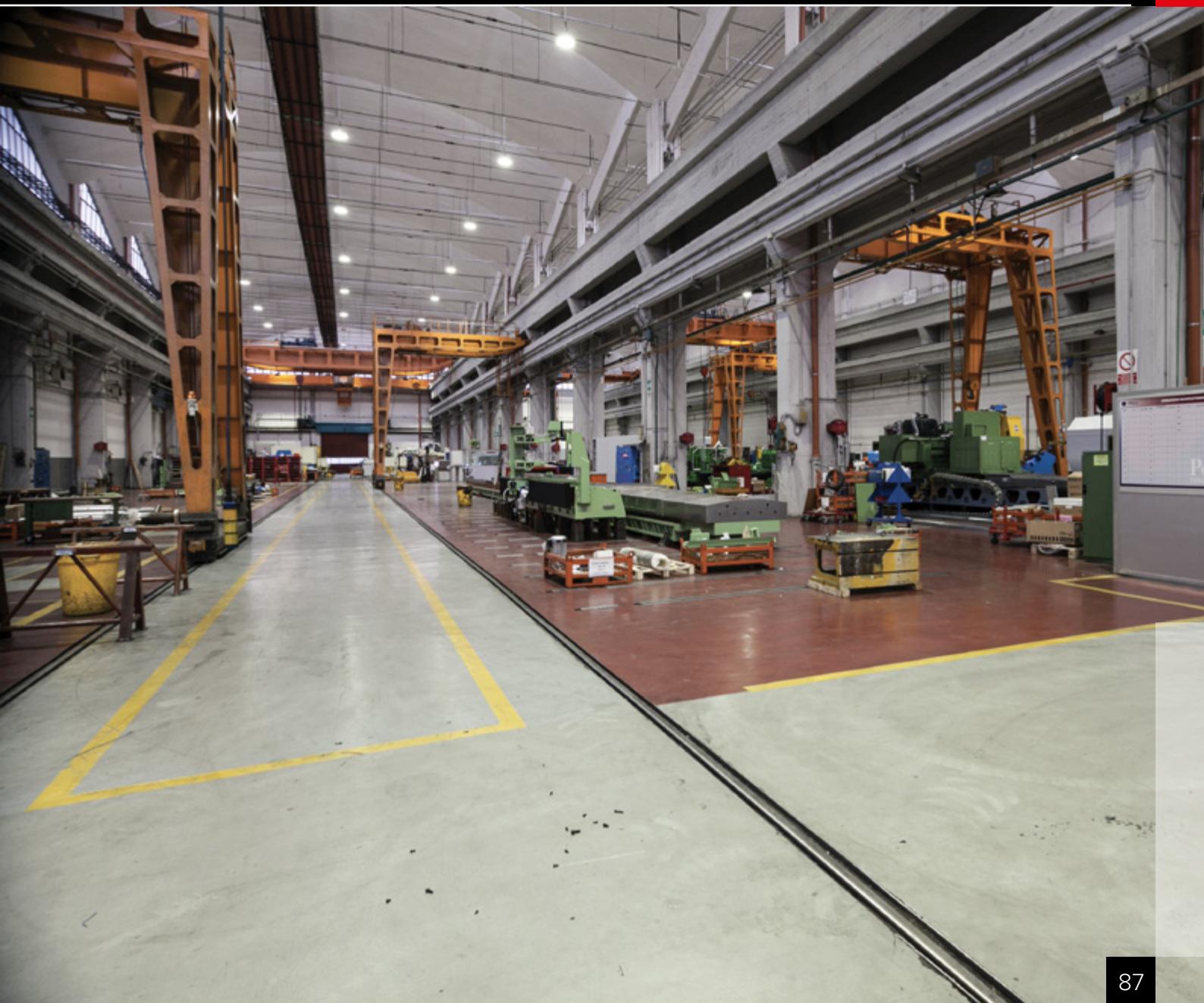
## MODELS

	Total power [W]	Overall flux [lm]	Optical flux [lm]
64P625	118	18774	23532
64P700	133	22411	26546
80P530	124	22000	24718
80P600	141	25423	28187
80P700	166	28845	33183
80P750	178	30496	35681
80P830	199	33780	39769
96P440	122	23407	24400
96P530	148	27106	29662
96P600	169	30126	33825
96P700	199	34824	39820

Reference configuration: Optic 211S - 4000 K



PAD LLC 3B ICU



# PAD LLC 3B DCE



The PAD LLC 3B DCE light fixture is designed for high power industrial suspended installations. Using multiple optics to distribute the luminous flux, it maximizes the energy savings. It differs from the standard version in the use of drivers PHILIPS/TRIDONIC and for the presence of an Omega bracket useful for mounting on anti-seismic bars.

## FEATURES

- Suitable for wattages up to 239 W.
- Optics selectable according to the type of area working area and mounting height.
- Tempered glass to protect optics and LEDs.
- Suspension/ceiling/earthquake bar mounting with included Omega bracket.
- Available with emergency kit.
- Philips/Tridonic driver.

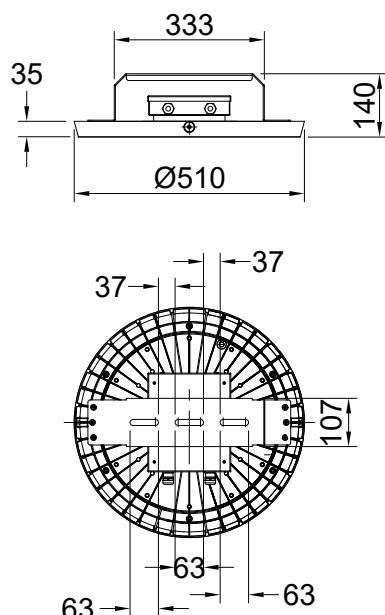
## Available control systems

- 1-10V / DALI.
- Presence sensor.
- Illuminance sensor.
- Presence and illuminance.
- Optional IP68 connector.

## TECHNICAL DATA

LED type	<b>Deltas by Lumileds</b>
Step Mac-Adam	<b>3</b>
LED driver	<b>Philips - Tridonic</b>
Nominal Input voltage [V]	<b>220-230V~ 50/60Hz</b>
Surge protection	<b>10kV</b>
Efficiency up to	<b>168lm/W (D) - 192lm/W (P)</b>
Rated abrupt failure value T <sub>p,Tc</sub>	<b>F10 @ 100.000h, &lt;0,02% @ 1000h</b>
Rated median useful life [hrs] @T <sub>c</sub>	<b>L90B10 &gt;100.000h</b>
Power factor	<b>&gt;0,95</b>
Housing material	<b>Die-cast aluminum</b>
Protective glass type	<b>Tempered</b>
Glass thickness [mm]	<b>4</b>
Colour temperature	<b>2200K - 3000K - 4000K - 5700K</b>
Colour rendering index (CRI)	<b>&gt;70</b>
Degree of protection (EN 60529)	<b>IP66</b>
IK code (EN 62262)	<b>IK08</b>
Insulation class	<b>I &amp; II</b>
Operating temperature [°C]	<b>-25 ÷ +40</b>
Housing colour	<b>RAL9005 Jet black</b>
Weight [Kg]	<b>7.5</b>

## DIMENSIONS



## OPTICS

205S	206S	207S	211S	212S	213S
235S	243S	244S	247S	-	-

Other optics available on the website

## MODELS

	Total power [W]	Overall flux [lm]	Optical flux [lm]
64P625	118	18774	23532
64P700	133	22411	26546
80P530	124	22000	24718
80P600	141	25423	28187
80P700	166	28845	33183
80P750	178	30496	35681
80P830	199	33780	39769
96P440	122	23407	24400
96P530	148	27106	29662
96P600	169	30126	33825
96P700	199	34824	39820
96P830	239	39726	47723

Reference configuration: Optic 211S - 4000 K



PAD LLC 3B DCE



# TRILOGY N



The Trilogy N light fixture is an aluminum linear projector, available in different lengths, mainly used for illuminating building facades, canopies, signage advertising or in industrial applications for shelving and indoor or exteriors.

## FEATURES

- Linear profile, easy application and aesthetic integration.
- Tempered glass to protect of the optics and LEDs.
- Degree of protection: IP66, for maximum protection from corrosive agents corrosive agents even in cases of the most severe industrial applications.
- Special 20S optics available for spot applications (light beam 8°).
- Mounting brackets that can be swiveled and sliding.

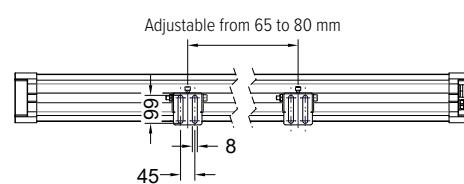
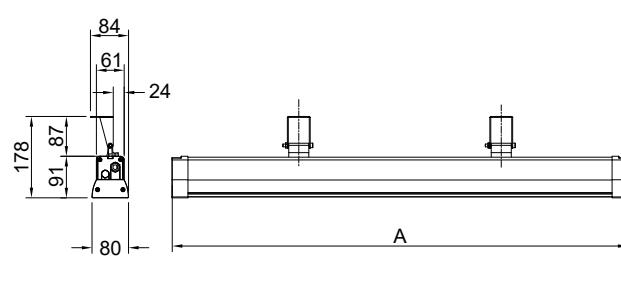
## Available control systems

- 1-10V.
- DALI.

## TECHNICAL DATA

LED type	<b>Deltas by Lumileds</b>
Step Mac-Adam	<b>3</b>
LED driver	<b>Philips - Tridonic</b>
Nominal Input voltage [V]	<b>220-230V~ 50/60Hz</b>
Surge protection	<b>10kV</b>
Efficiency up to	<b>120lm/w</b>
Rated abrupt failure value T <sub>p,Tc</sub>	<b>F10 @ 500.000h, &lt;0,02% @ 1000h</b>
Rated median useful life [hrs] @T <sub>c</sub>	<b>L80B10 &gt;100.000h</b>
Power factor	<b>&gt;0,95</b>
Housing material	<b>Aluminum</b>
Protective glass type	<b>Tempered</b>
Glass thickness [mm]	<b>4</b>
Colour temperature	<b>3000K - 4000K - 5700K</b>
Colour rendering index (CRI)	<b>&gt;70</b>
Degree of protection (EN 60529)	<b>IP66</b>
IK code (EN 62262)	<b>IK08</b>
Insulation class	<b>I</b>
Operating temperature [°C]	<b>-0,5</b>
Housing colour	<b>Anodized aluminum gray</b>
Weight [Kg]	<b>4</b>

## DIMENSIONS



Dimensions	A [mm]
TRILOGY N-30	300
TRILOGY N-60	600
TRILOGY N-100	1000

## MODELS

	Total power [W]	Overall flux [lm]	Optical flux [lm]
30	10	1100	1500
30	12	1290	1850
60	33	3400	4125
60	36	4916	6660
60	50	5525	9250
100	35	3600	4375
100	40	4350	5000
100	59	6980	7965
100	77	8950	10241



TRILOGY N



# KES STEEL HV

The KES STEEL HV model finds application in aggressive environments characterized by the presence of corrosive agents that can quickly damage classic plastic lights. It is available in wattages ranging from 10 to 55 W, for industrial or tunnel optics.



## FEATURES

- AISI 316 or 304 stainless steel body.
- Energy savings of more than 55% compared with an equivalent T8/T5 ceiling light.
- Better light quality than fluorescent tubes (CRI >80, flicker-free).
- Built-in surge protection device, up to 6/10kV depending on version.
- Available with built-in emergency kit.
- SMD LED source with the possibility of mounting optics to reduce glare and have better control of the light.

## Available control systems

- 1-10V / DALI.
- Powerline.
- Presence/illuminance sensor.

Also available on request in ATEX version with the following specifications:

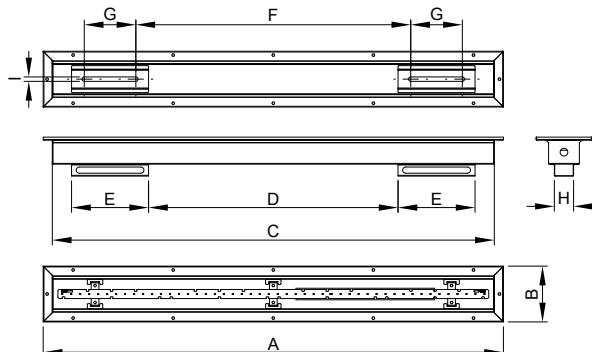
**CLASSIFICATION FOR ZONE 2 GAS:** II3GEXNAIIT4(135°C)GC

**CLASSIFICATION FOR ZONE 22 DUST:** II3DEXTCIIIT4(135°C)DC

## TECHNICAL DATA

LED type	Tridonic / Custom
Step Mac-Adam	3
LED driver	Philips - Tridonic
Nominal Input voltage [V]	220-230V~ 50/60Hz
Surge protection	6kV
Efficiency up to	145lm/w
Rated abrupt failure value Tp,Tc	F10 @ 50.000h, <0,04% @ 1000h
Rated median useful life [hrs] @Tc	>50.000h (150cm - 54W)
Power factor	>0,95
Housing material	AISI 304 / AISI 316L
Protective glass type	Tempered
Glass thickness [mm]	4
Colour temperature	2200K - 3000K - 4000K - 5700K
Colour rendering index (CRI)	>80
Degree of protection (EN 60529)	IP66
IK code (EN 62262)	IK08
Insulation class	I
Operating temperature [°C]	-25 ÷ +40
Housing colour	AISI 304
Weight [Kg]	4 (60cm) - 6 (120cm)

## DIMENSIONS



Dimensions	KES STEEL HV-60	KES STEEL HV-120
A	622.9	1195.4
B	144.9	144.9
C	575.5	1148
D	275.5	648
E	100	200
F	100	200
G	50	50

## MODELS

	Total power [W]	Overall flux [lm]	Optical flux [lm]
KES STEEL 60 HV-10N	10	1447	1850
KES STEEL 60 HV-22N	22	3152	4070
KES STEEL 60 HV-28,5N	29	4062	5273
KES STEEL 120 HV-20N	20	2894	3700
KES STEEL 120 HV-36N	36	5184	6660
KES STEEL 120 HV-44N	44	6304	8140
KES STEEL 120 HV-57N	55	8124	11840

## OPTICS

205S	206S	207S	211S	212S	400S
401S	402S	403S	404S	-	-

Reference configuration: Optic SB - 4000 K



KES STEEL HV



# KES STRIP TN



KES STRIP TN is a product designed to achieve the best price/performance ratio in linear-type industrial lighting. It is sized to replace with a ratio of at least 1:1 conventional fluorescent ceiling lights. It is available with a PC or ABS body for corrosive environments and can be equipped with different filters for light distribution in narrow/narrow/medium/wide.

## FEATURES

- Mounting without opening the luminaire, thanks to the connector (standard configuration).
- Better light quality than fluorescent tubes. (CRI >80, flicker-free).
- UGR<22 for dedicated low UGR version.
- Polycarbonate body and screen, no glass components.
- Also available Supplied in ABS version for corrosive environments.
- Built-in surge protection device, up to 6 kV.
- Ceiling or pendant mounting.
- Available with built-in emergency kit 3 W/1 h.
- Available with presence and illuminance sensors to provide additional energy savings.

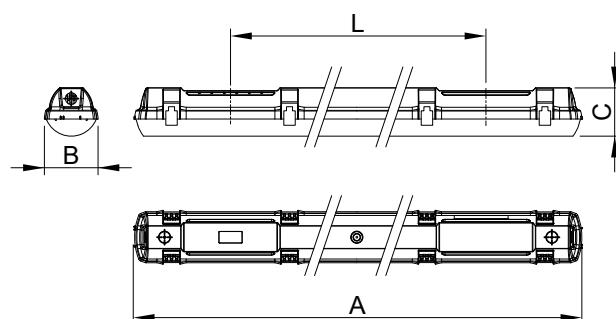
## Available control systems

- 1-10V / DALI.
- Integrated presence sensor.
- Integrated illuminance sensor.

## TECHNICAL DATA

LED type	TCI
Step Mac-Adam	3
LED driver	TCI
Nominal Input voltage [V]	220-230V~ 50/60Hz
Surge protection	6kV
Efficiency up to	162lm/w
Rated abrupt failure value T <sub>p</sub> ,T <sub>c</sub>	F10 @ 50.000h, <0,04% @ 1000h
Rated median useful life [hrs] @T <sub>c</sub>	50.000h
Power factor	>0,95
Housing material	PC
Protective glass type	PC
Colour temperature	2200K - 3000K - 4000K - 5700K
Colour rendering index (CRI)	>80
Degree of protection (EN 60529)	IP66
IK code (EN 62262)	IK10
Insulation class	I
Operating temperature [°C]	-25÷+40 (+35 a 54W 150cm / a 43W 120cm)
Housing colour	RAL7035 Light grey
Weight [Kg]	0,9 (60cm) - 1,7 (120cm) - 2 (150cm)

## DIMENSIONS



Dimensions	(A)	(B)	(C)	(L)
KES STRIP 60 TN	670 mm	85 mm	88 mm	395 mm
KES STRIP 120 TN	1220 mm	85 mm	88 mm	845 mm
KES STRIP 150 TN	1520 mm	85 mm	88 mm	1135 mm

## MODELS

	Total power [W]	Overall flux [lm]	Optical flux [lm]
KES STRIP 60 TN-10N	10	1490	1850
KES STRIP 60 TN-14N	14	2070	2590
KES STRIP 120 TN-20N	20	2920	3700
KES STRIP 120 TN-27N	27	4090	4995
KES STRIP 120 TN-38N	38	5880	7030
KES STRIP 120 TN-43N	43	6493	7955
KES STRIP 150 TN-20N	20	3050	3700
KES STRIP 150 TN-24N	24	3650	4440
KES STRIP 150 TN-33N	33	5090	6105
KES STRIP 150 TN-45N	45	7280	8325
KES STRIP 150 TN-54N	54	8600	9990

## OPTICS

SB	NB	WB	UGR	TL	-
-	-	-	-	-	-

Reference configuration: Optic SB - 4000 K



KES STRIP TN



# KES STRIP TI



KES STRIP TI is the DLEDS proposal for linear-type industrial lighting where it is necessary to provide sealed lighting fixtures. It is available with a PC or ABS body for corrosive environments and with different filters, for narrow/medium/wide beam distributions.

## FEATURES

- Mounting without opening the luminaire, thanks to the connector (configuration standard).
- Better light quality than fluorescent tubes (CRI >80, flicker-free).
- Polycarbonate body and screen, no glass components.
- Supplied in ABS version for corrosive environments.
- Built-in surge protection device, up to 6 kV.
- Ceiling or pendant mounting.
- Available with built-in emergency kit internal.

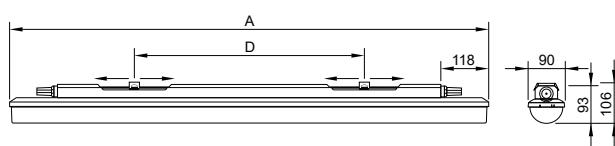
## Available control systems

- DALI.

## TECHNICAL DATA

LED type	<b>TCI</b>
Step Mac-Adam	<b>3</b>
LED driver	<b>TCI</b>
Nominal Input voltage [V]	<b>220-230V~ 50/60Hz</b>
Surge protection	<b>6kV</b>
Efficiency up to	<b>162lm/w</b>
Rated abrupt failure value T <sub>p,Tc</sub>	<b>F10 @ 50.000h, &lt;0,04% @ 1000h</b>
Rated median useful life [hrs] @T <sub>c</sub>	<b>50.000h</b>
Power factor	<b>&gt;0,95</b>
Housing material	<b>PC</b>
Protective glass type	<b>PC</b>
Colour temperature	<b>2200K - 3000K - 4000K - 5700K</b>
Colour rendering index (CRI)	<b>&gt;80</b>
Degree of protection (EN 60529)	<b>IP66</b>
IK code (EN 62262)	<b>IK10</b>
Insulation class	<b>I</b>
Operating temperature [°C]	<b>-25 ÷ +40</b>
Housing colour	<b>RAL7035 Light grey</b>
Weight [Kg]	<b>1.5 (120cm) - 1.8 (150cm)</b>

## DIMENSIONS



Dimensions	(A)	(D)
KES STRIP 120 TI	1170 mm	420-700 mm
KES STRIP 150 TI	1450 mm	700-980 mm

## MODELS

	Total power [W]	Overall flux [lm]	Optical flux [lm]
KES STRIP 120 TI-20N	20	2920	3700
KES STRIP 120 TI-27N	27	4090	4995
KES STRIP 120 TI-38N	38	5880	7030
KES STRIP 120 TI-51N	51	8190	9435
KES STRIP 150 TI-24N	24	3650	4440
KES STRIP 150 TI-33N	33	5090	6105
KES STRIP 150 TI-45N	45	7280	8325
KES STRIP 150 TI-71N	71	11330	13135

## OPTICS

SB	NB	-	-	-	-
-	-	-	-	-	-

Reference configuration: Optic SB - 4000 K



KES STRIP TI



# KES STRIP TF



KES STRIP TF is the most powerful DLEDS proposal for linear-type industrial lighting. It is available with PC or ABS body for corrosive environments and with different shields, for distributions in narrow/medium/wide beam. It is also capable of replacing 4x58 W ceiling lights or discharge lamps of 250 W.

## FEATURES

- Mounting without opening the luminaire, thanks to the connector (configuration dedicated).
- Better light quality than fluorescent tubes (CRI >80, flicker-free).
- Polycarbonate body and screen, no glass components.
- Supplied in ABS version for corrosive environments.
- Built-in surge protection device, up to 6 kV.
- Ceiling or suspension mounting.
- Available with built-in emergency kit interior.
- Versions with presence and illuminance sensors also available on request to provide further energy savings.

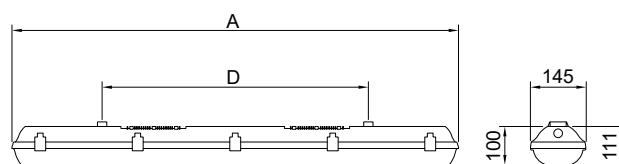
## Available control systems

- 1-10V / DALI.
- Integrated presence sensor.
- Integrated illuminance sensor.

## TECHNICAL DATA

LED type	TCI
Step Mac-Adam	3
LED driver	TCI
Nominal Input voltage [V]	220-230V~ 50/60Hz
Surge protection	6kV
Efficiency up to	161lm/w
Rated abrupt failure value T <sub>p</sub> ,T <sub>c</sub>	F10 @ 50.000h, <0,04% @ 1000h
Rated median useful life [hrs] @T <sub>c</sub>	50.000h
Power factor	>0,95
Housing material	ABS
Protective glass type	ABS
Colour temperature	2200K - 3000K - 4000K - 5700K
Colour rendering index (CRI)	>80
Degree of protection (EN 60529)	IP66
IK code (EN 62262)	IK10
Insulation class	I
Operating temperature [°C]	-25÷+40 (+35 a 104W 150cm / a 84W 120cm)
Housing colour	RAL7035 Light grey
Weight [Kg]	1,5 (60cm) - 3 (120cm) - 3,9 (150cm)

## DIMENSIONS



Dimensions	(A)	(D)
KES STRIP 60 TF	612 mm	475 mm
KES STRIP 120 TF	1172 mm	700 mm
KES STRIP 150 TF	1452 mm	940 mm

## MODELS

	Total power [W]	Overall flux [lm]	Optical flux [lm]
KES STRIP 60 TF-16N	16	2470	2960
KES STRIP 60 TF-19N	19	2926	3515
KES STRIP 60 TF-27N	27	4130	4995
KES STRIP 120 TF-31N	31	4840	5735
KES STRIP 120 TF-37N	37	5880	6845
KES STRIP 120 TF-51N	51	8190	9435
KES STRIP 120 TF-84N	84	13160	15540
KES STRIP 150 TF-38N	38	6000	7030
KES STRIP 150 TF-46N	46	7290	8510
KES STRIP 150 TF-71N	71	11330	13135
KES STRIP 150 TF-84N	84	13356	15540
KES STRIP 150 TF-104N	104	16500	19240

## OPTICS

SB	NB	-	-	-	-
-	-	-	-	-	-

Reference configuration: Optic SB - 4000 K



KES STRIP TF





**INDUSTRIAL LAMPS  
SUITABLE FOR HIGH  
TEMPERATURE ENVIRONMENTS**



CANOPIES

# RADIANT 2 DCE HT



The RADIANT 2-DCE HT light fixture is designed for suspended industrial installations in harsh environments with Ta up to 70°C. The use of multiple optics to distribute the luminous flux, allows maximizing energy savings. It uses PHILIPS/TRIDONIC drivers and comes with a useful bracket for ceiling or wall mounting.

## FEATURES

- Suitable for power ratings up to 225 W.
- PC optics selectable according to the type of working area and mounting height.
- Tempered glass to protect optics and LEDs.
- Suspension/ceiling/earthquake bar mounting with the included Omega bracket.
- Drivers Philips/Tridonic.

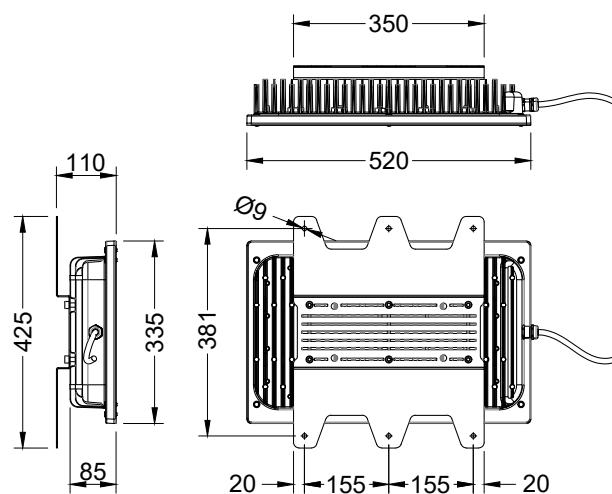
## Available control systems

- 1-10V / DALI.
- Presence sensor.
- Illuminance sensor.
- Presence and illuminance sensor.
- IP68 connector provided as an option.

## TECHNICAL DATA

LED type	Deltas by Lumileds
Step Mac-Adam	3
LED driver	Philips - Tridonic
Nominal Input voltage [V]	220-230V~ 50/60Hz
Surge protection	10kV
Efficiency up to	164lm/W (D) - 188lm/W (P)
Rated abrupt failure value T <sub>p,Tc</sub>	F10 @ 100.000h, <0,02% @ 1000h
Rated median useful life [hrs] @T <sub>c</sub>	L90B10 >100.000h
Power factor	>0,95
Housing material	Die-cast aluminum
Protective glass type	Tempered
Glass thickness [mm]	4
Colour temperature	2200K - 3000K - 4000K - 5700K
Colour rendering index (CRI)	>70
Degree of protection (EN 60529)	IP66
IK code (EN 62262)	IK08
Insulation class	I
Operating temperature [°C]	-40 ÷ +70
Housing colour	RAL9005 Jet black
Weight [Kg]	14

## DIMENSIONS



## MODELS

	Total power [W]	Overall flux [lm]	Optical flux [lm]
128P440	163	30559	32534
128P500	186	34436	37243
128P530	198	36398	39549
128P550	206	37336	41117
128P600	225	40798	45100

## OPTICS

331S	332S	-	-	-	-
-	-	-	-	-	-

Reference configuration: Optic 331S - 4000 K



RADIANT 2 DCE HT





# PAD LLC 3B DCE HT

The PAD LLC 3B DCE HT light fixture is designed for suspended industrial installations in harsh environments with Ta up to 70°C. The use of multiple optics to distribute the luminous flux, allows maximizing energy savings. It uses PHILIPS/TRIDONIC drivers and comes with an Omega bracket useful for mounting on seismic bars.

## FEATURES

- Suitable for power ratings up to 154 W.
- PC optics selectable according to the type of working area and mounting height.
- Tempered glass to protect optics and LEDs.
- Suspension/ceiling/earthquake mounting with the supplied Omega bracket.
- Drivers Philips/Tridonic.

## Available control systems

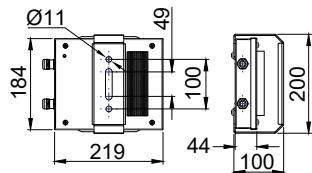
- 1-10V / DALI.
- Presence sensor.
- Illuminance sensor.
- Presence and illuminance sensor.
- IP68 connector provided as an option.

## TECHNICAL DATA

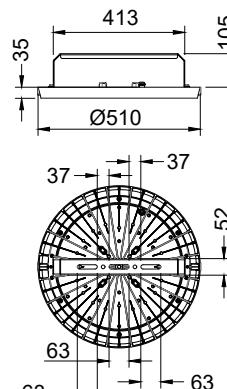
LED type	<b>Deltas by Lumileds</b>
Step Mac-Adam	<b>3</b>
LED driver	<b>Philips - Tridonic</b>
Nominal Input voltage [V]	<b>220-230V~ 50/60Hz</b>
Surge protection	<b>10kV</b>
Efficiency up to	<b>165lm/W (D) - 186lm/W (P)</b>
Rated abrupt failure value T <sub>p,Tc</sub>	<b>F10 @ 100.000h, &lt;0,02% @ 1000h</b>
Rated median useful life [hrs] @T <sub>c</sub>	<b>L90B10 &gt;100.000h</b>
Power factor	<b>&gt;0,95</b>
Housing material	<b>Die-cast aluminum</b>
Protective glass type	<b>Tempered</b>
Glass thickness [mm]	<b>4</b>
Colour temperature	<b>2200K - 3000K - 4000K - 5700K</b>
Colour rendering index (CRI)	<b>&gt;70</b>
Degree of protection (EN 60529)	<b>IP66</b>
IK code (EN 62262)	<b>IK08</b>
Insulation class	<b>I</b>
Operating temperature [°C]	<b>-40 ÷ +70</b>
Housing colour	<b>RAL9005 Jet black</b>
Weight [Kg]	<b>7</b>

## DIMENSIONS

Power supply BOX



LED BOX



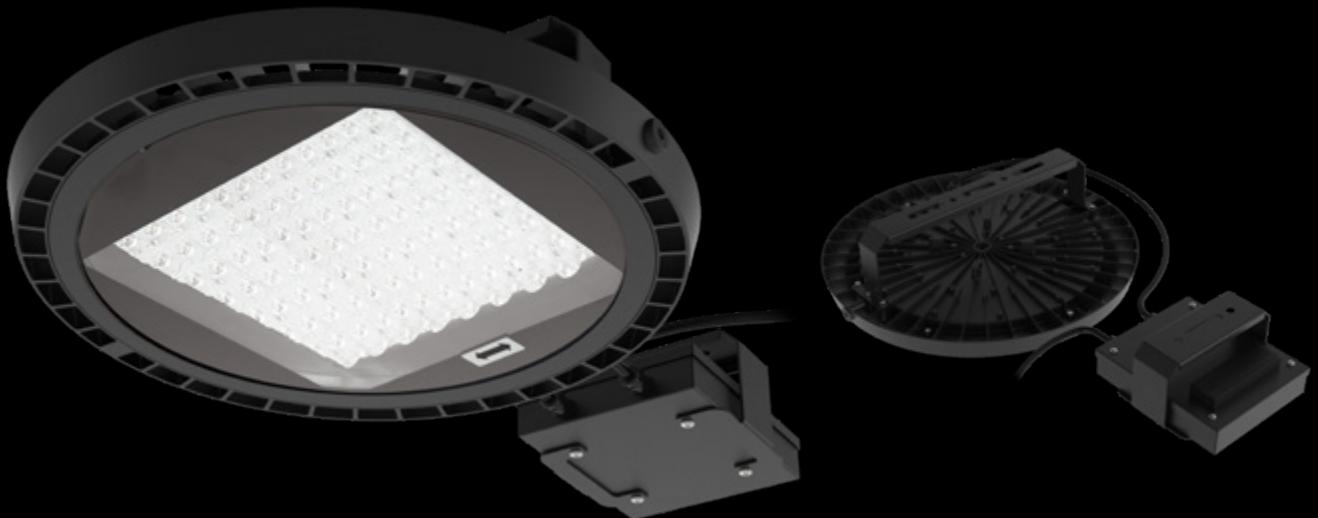
## OPTICS

205S	206S	207S	211S	212S	213S
235S	243S	244S	247S	-	-

## MODELS

	Total power [W]	Overall flux [lm]	Optical flux [lm]
64P625	118	18774	23532
64P700	133	22411	26546
80P530	124	22000	24718
80P600	141	25423	28187
96P440	122	22671	24400
96P500	140	25836	27932
96P530	148	27466	29662
96P550	154	28246	30837

Reference configuration: Optic 211S - 4000 K



PAD LLC 3B DCE HT



# KES STRIP TF HT



KES STRIP TF HT is DLEDS proposal as a linear product for high-temperature environments. It is available with a PC body and wattages up to 71 W. It is also capable of replacing 4x58 W ceiling lights or 250 W discharge lamps.

## FEATURES

- Mounting without opening the luminaire, thanks to the connector (configuration dedicated).
- Better light quality than fluorescent tubes (CRI >80, flicker-free).
- Polycarbonate body and screen, no glass components.
- Device for built-in surge protection, up to 6 kV.
- Ceiling mount or suspension.
- Upon request also versions with presence and illuminance sensors to ensure additional energy savings.

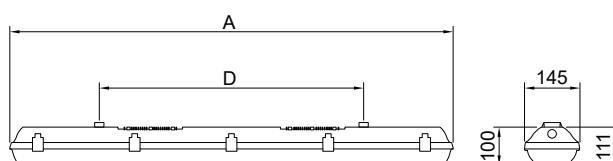
## Available control systems

- 1-10V / DALI.
- Integrated presence sensor.
- Integrated illuminance sensor.

## TECHNICAL DATA

LED type	TCI
Step Mac-Adam	3
LED driver	TCI
Nominal Input voltage [V]	220-230V~ 50/60Hz
Surge protection	6kV
Efficiency up to	161lm/w
Rated abrupt failure value T <sub>p,Tc</sub>	F10 @ 50.000h, <0,04% @ 1000h
Rated median useful life [hrs] @T <sub>c</sub>	50.000h
Power factor	>0,95
Housing material	PC
Protective glass type	PC
Colour temperature	2200K - 3000K - 4000K - 5700K
Colour rendering index (CRI)	>80
Degree of protection (EN 60529)	IP66
IK code (EN 62262)	IK10
Insulation class	I
Operating temperature [°C]	-25 ÷ +60
Housing colour	RAL7035 Light grey
Weight [Kg]	1,5 (60cm) - 3 (120cm) - 3,9 (150cm)

## DIMENSIONS



Dimensions	(A)	(D)
KES STRIP 60 TF	612 mm	475 mm
KES STRIP 120 TF	1172 mm	700 mm
KES STRIP 150 TF	1452 mm	940 mm

## MODELS

	Total power [W]	Overall flux [lm]	Optical flux [lm]
KES STRIP 120 TF-37N	37	5880	6845
KES STRIP 120 TF-51N	51	8190	9435
KES STRIP 150 TF-46N	46	7290	8510
KES STRIP 150 TF-71N	71	11330	13135

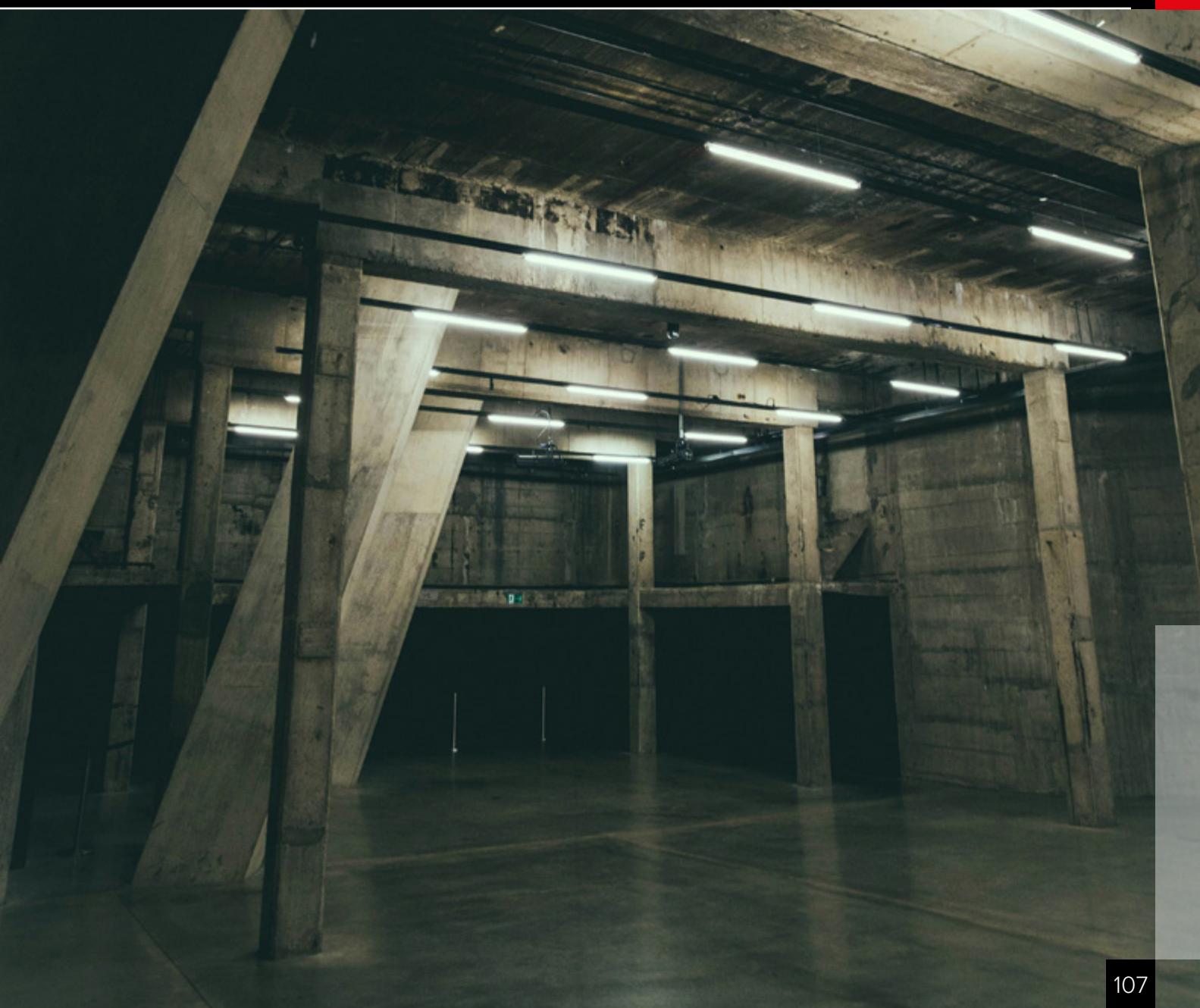
## OPTICS

SB	-	-	-	-	-
-	-	-	-	-	-

Reference configuration: Optic SB - 4000 K



KES STRIP TF



# KES STEEL HV HT



The KES STEEL HV model finds application in aggressive environments characterized by the presence of corrosive agents that can quickly damage classic plastic lights. It is available in wattages ranging from 10 to 55 W, for industrial or tunnel optics.

## FEATURES

- AISI 316 or 304 stainless steel body.
- Energy savings of more than 55% compared with an equivalent T8/T5 ceiling light.
- Better light quality than fluorescent tubes (CRI >80, flicker-free).
- Built-in surge protection device, up to 6/10 kV depending on depending on version.
- Available with built-in emergency kit.
- SMD LED source with the possibility of mounting optics to reduce glare and have better control of the light.

## Available control systems

- 1-10V / DALI.
- Powerline.
- Presence/illuminance sensor.

Also available on request in ATEX version with the following specifications:

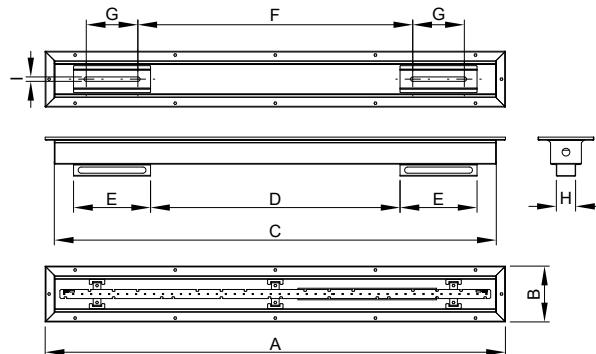
**CLASSIFICATION FOR ZONE 2 GAS:** II3GEXNAIIT4(135°C)GC

**CLASSIFICATION FOR ZONE 22 DUST:** II3DEXTCIIIT4(135°C)DC

## TECHNICAL DATA

LED type	Tridonic / Custom
Step Mac-Adam	3
LED driver	Philips - Tridonic
Nominal Input voltage [V]	220-230V~ 50/60Hz
Surge protection	6kV
Efficiency up to	145lm/w
Rated abrupt failure value T <sub>p,Tc</sub>	F10 @ 50.000h, <0,04% @ 1000h
Rated median useful life [hrs] @T <sub>c</sub>	>50.000h (150cm - 54W)
Power factor	>0,95
Housing material	AISI 304 / AISI 316L
Protective glass type	Tempered
Glass thickness [mm]	4
Colour temperature	2200K - 3000K - 4000K - 5700K
Colour rendering index (CRI)	>80
Degree of protection (EN 60529)	IP66
IK code (EN 62262)	IK08
Insulation class	I
Operating temperature [°C]	-25 ÷ +70
Housing colour	AISI 304
Weight [Kg]	4 (60cm) - 6 (120cm)

## DIMENSIONS



Dimensions	KES STEEL HV-60	KES STEEL HV-120
A	622.9	1195.4
B	144.9	144.9
C	575.5	1148
D	275.5	648
E	100	200
F	100	200
G	50	50

## MODELS

	Total power [W]	Overall flux [lm]	Optical flux [lm]
KES STEEL 60 HV-10N	10	1447	1850
KES STEEL 60 HV-22N	22	3152	4070
KES STEEL 60 HV-28,5N	29	4062	5273
KES STEEL 120 HV-20N	20	2894	3700
KES STEEL 120 HV-36N	36	5184	6660
KES STEEL 120 HV-44N	44	6304	8140
KES STEEL 120 HV-57N	55	8124	11840

## OPTICS

205S	206S	207S	211S	212S	400S
401S	402S	403S	404S	-	-

Reference configuration: Optic SB - 4000 K



KES STEEL HV







CANOPIES



# ATLAS PE



The Atlas PE light fixture is the DLEDS solution for illuminating toll collection stations and gas stations. The front cover facilitates mounting on any type of bus shelter.

## FEATURES

- Available with dedicated optics for highway canopies or gas stations.
- Glass tempered anti-glare to protect optics and LEDs.
- Maximum visual comfort for traffic vehicular Highway and vehicular/pedestrian traffic present in service stations.
- Optics certified photobiological risk free.

## Available control systems

- 1-10V / DALI.
- External presence sensor.

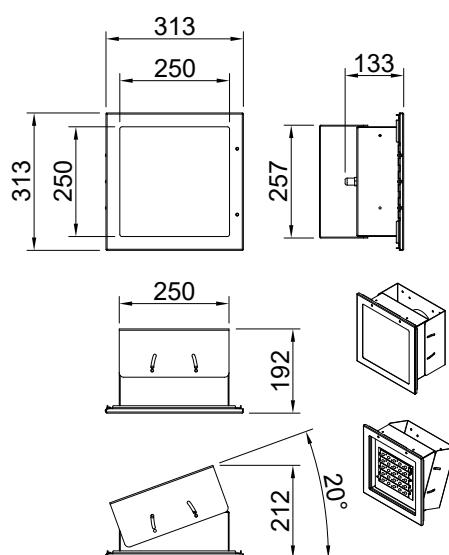


ATEX version available.

## TECHNICAL DATA

LED type	Deltas by Lumileds
Step Mac-Adam	3
LED driver	Philips - Tridonic
Nominal Input voltage [V]	220-230V~ 50/60Hz
Surge protection	10kV
Efficiency up to	163lm/W (D) - 188lm/W (P)
Rated abrupt failure value T <sub>p,Tc</sub>	F10 @ 100.000h, <0,02% @ 1000h
Rated median useful life [hrs] @T <sub>c</sub>	L90B10 >100.000h
Power factor	>0,95
Housing material	Peraluman aluminum
Protective glass type	Tempered
Glass thickness [mm]	5
Colour temperature	2200K - 3000K - 4000K - 5700K
Colour rendering index (CRI)	>70
Degree of protection (EN 60529)	IP65
IK code (EN 62262)	IK08
Insulation class	I & II
Operating temperature [°C]	-25 ÷ +50
Housing colour	Anodized gray
Weight [Kg]	4.8

## DIMENSIONS



## MODELS

	Total power [W]	Overall flux [lm]	Optical flux [lm]
24P350	24	4516	4817
24P440	31	5643	6100
24P530	37	6693	7415
24P600	42	7540	8456
24P700	50	8623	9955
24P830	60	9691	11931
32P700	66	11364	13273

## OPTICS

205S	206S	207S	211S	212S	213S
235S	243S	244S	247S	-	-

Other optics available on the website

Reference configuration: Optic 211S - 4000 K



ATLAS PE



# ATLAS TRL



The Atlas TRL lighting fixture is the product designed by DLEDS to illuminate the gas service stations. It differs from the ATLAS PE in that the outer frame can be adapted to any existing hole. With wattages up to 63 W and lumen output up to 10,000 Lm, it can replace lamps with discharge technology up 150 W.

## FEATURES

- Excellent price/performance ratio.
- Customizable exterior frame based on the measurements of existing recesses.
- Ceiling mounting kit available.
- Frame in A4 stainless steel (AISI 316L).

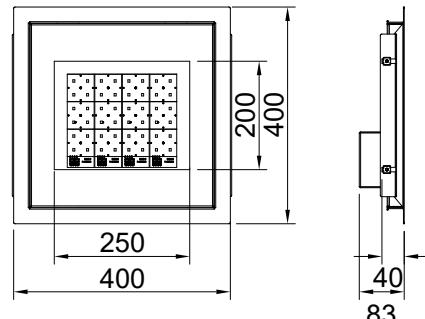
## Available control systems

- 1-10V.
- DALI.
- External presence sensor.

## TECHNICAL DATA

LED type	Custom
Step Mac-Adam	3
LED driver	Philips
Nominal Input voltage [V]	220-230V~ 50/60Hz
Surge protection	10kV
Efficiency up to	169lm/W (D) - 195lm/W (P)
Rated abrupt failure value T <sub>p,Tc</sub>	F10 @ 100.000h, <0,02% @ 1000h
Rated median useful life [hrs] @T <sub>c</sub>	L90B10 >100.000h
Power factor	>0,95
Housing material	Aluminum
Protective glass type	Tempered
Glass thickness [mm]	5
Colour temperature	2200K - 3000K - 4000K - 5700K
Colour rendering index (CRI)	>70
Degree of protection (EN 60529)	IP67
IK code (EN 62262)	IK08
Insulation class	I & II
Operating temperature [°C]	-25 ÷ +50
Housing colour	RAL 9010 Pure white
Weight [Kg]	1

## DIMENSIONS



## MODELS

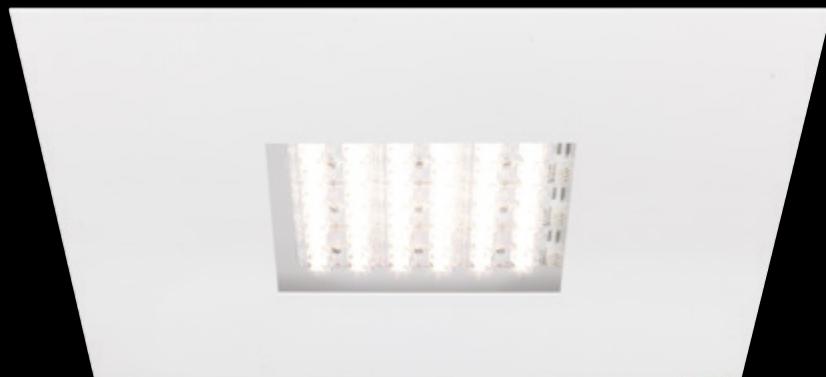
	Total power [W]	Overall flux [lm]	Optical flux [lm]
12P350	12	2258	2408
12P440	15	2738	3050
12P530	19	3394	3708
12P600	21	3820	4228
12P700	25	4215	4977
12P830	30	4932	5965
12P900	33	5289	6503
24P350	24	4690	4817
24P440	31	5860	6100
24P530	37	6953	7415
24P600	42	7830	8456
24P700	50	8846	9955
36P350	36	6537	7225
36P440	46	8035	9150
36P530	56	9618	11123
36P600	63	10814	12684

## OPTICS

205S	206S	207S	211S	212S	213S
235S	243S	244S	247S	-	-

Other optics available on the website

Reference configuration: Optic 211S - 4000 K



ATLAS TRL



# ATLAS BOX



The Atlas Box light fixture is the DLEDS solution for high-power lighting of gas stations, toll collection canopies and other recessed applications. The kit consists of a frame and a removable LED module. With wattages up to 94 W, it can replace lamps with 250 W discharge technology.

## FEATURES

- Power up to 94 W.
- LED module with outer frame/frame adaptable to the measurements of existing recesses.
- Optics designed to provide high levels of horizontal and vertical illuminance.
- Ceiling mount kit available.

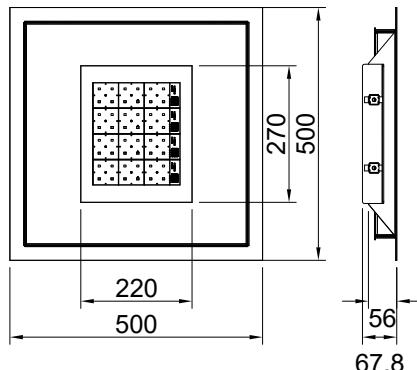
## Available control systems

- 1-10V / DALI.
- Presence and illuminance sensor.

## TECHNICAL DATA

LED type	<b>Deltas by Lumileds</b>
Step Mac-Adam	<b>3</b>
LED driver	<b>Philips - Tridonic</b>
Nominal Input voltage [V]	<b>220-230V~ 50/60Hz</b>
Surge protection	<b>10kV</b>
Efficiency up to	<b>177lm/W (D) - 201lm/W (P)</b>
Rated abrupt failure value T <sub>p,Tc</sub>	<b>F10 @ 100.000h, &lt;0,02% @ 1000h</b>
Rated median useful life [hrs] @T <sub>c</sub>	<b>L90B10 &gt;100.000h</b>
Power factor	<b>&gt;0,95</b>
Housing material	<b>Aluminum</b>
Protective glass type	<b>Tempered</b>
Glass thickness [mm]	<b>5</b>
Colour temperature	<b>2200K - 3000K - 4000K - 5700K</b>
Colour rendering index (CRI)	<b>&gt;70</b>
Degree of protection (EN 60529)	<b>IP66</b>
IK code (EN 62262)	<b>IK08</b>
Insulation class	<b>I &amp; II</b>
Operating temperature [°C]	<b>-25 ÷ +50</b>
Housing colour	<b>RAL 9010 Pure white</b>
Weight [Kg]	<b>5</b>

## DIMENSIONS



## MODELS

	Total power [W]	Overall flux [lm]	Optical flux [lm]
48P350	48	9672	9633
48P530	74	14070	14831
48P600	85	15758	16912
48P660	94	16633	18705

## OPTICS

205S	206S	207S	211S	212S	213S
235S	243S	244S	247S	-	-

Other optics available on the website

Reference configuration: Optic 211S - 4000 K



ATLAS BOX







TUNNELS



# RADIANT 6M1

Radiant 6M1 is a modular solution made of LM6 aluminum, mainly used for access tunnel lighting. It withstands the corrosive agents normally found in these environments. Available with a selection of counterflow optics or with classic asymmetric/symmetric solutions.



## FEATURES

- Power ratings up to 139 W.
- LM6 aluminum body and brackets made entirely of A2 stainless steel (AISI 304).
- Tempered glass to protect optics and LEDs.
- System efficiency up to 188 lm/W.
- Low glare.
- Wide choice of optics suitable for different placements within the gallery.
- Allows for both lateral and counterflow inclinations.

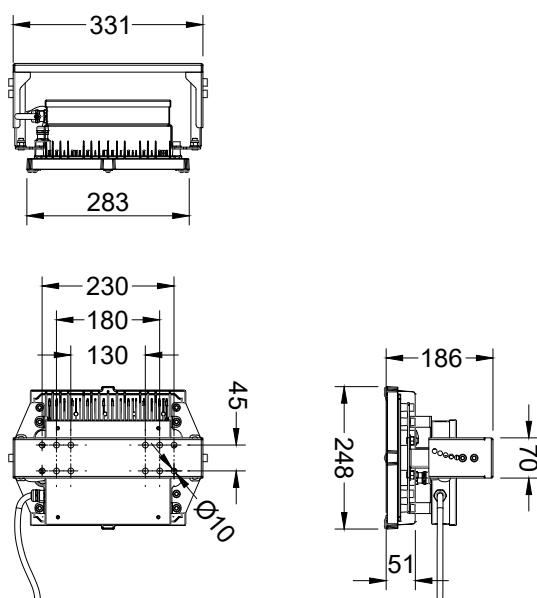
## Available control systems

- 1-10V.
- DALI.
- Wireless (Zhaga Book 18).
- Powerline.

## TECHNICAL DATA

LED type	Deltas by Lumileds
Step Mac-Adam	3
LED driver	Philips - Tridonic
Nominal Input voltage [V]	220-230V~ 50/60Hz
Surge protection	10kV
Efficiency up to	167lm/W (D) - 188lm/W (P)
Rated abrupt failure value T <sub>p,Tc</sub>	F10 @ 100.000h, <0,02% @ 1000h
Rated median useful life [hrs] @T <sub>c</sub>	L90B10 >100.000h
Power factor	>0,95
Housing material	LM6 Aluminum
Protective glass type	Tempered
Glass thickness [mm]	4
Colour temperature	2200K - 3000K - 4000K - 5700K
Colour rendering index (CRI)	>70
Degree of protection (EN 60529)	IP66
IK code (EN 62262)	IK09
Insulation class	I & II
Operating temperature [°C]	-25 ÷ +40
Wind-exposed surface [m <sup>2</sup> ]	Side: 0.03m <sup>2</sup> / Top: 0.16m <sup>2</sup>
Housing colour	RAL9005 Jet black
Weight [Kg]	5

## DIMENSIONS



## OPTICS

201A	206A	218A	229A	244A	244S
247A	247S	249A	279A	-	-

Other optics available on the website

## MODELS

	Total power [W]	Overall flux [lm]	Optical flux [lm]
32P530	49	9292	9887
32P560	52	9803	10485
32P600	56	10472	11275
32P700	66	12168	13273
48P530	74	13730	14831
48P700	100	17771	19910
48P830	119	20824	23862
64P600	113	20590	22550
64P700	133	23590	26546
64P730	139	24363	27734

Reference configuration: Optic 247A - 4000 K



RADIANT 6M1



# RADIANT 6M2



Radiant 6M2 is a modular solution made of LM6 aluminum, mainly used for access tunnel lighting. It withstands the corrosive agents normally found in these environments. Available with a selection of counterflow optics or with classic asymmetric/symmetric solutions.

## FEATURES

- Power ratings up to 265 W.
- LM6 aluminum body and brackets made entirely of A2 stainless steel (AISI 304).
- Tempered glass to protect optics and LEDs.
- System efficiency up to 188 lm/W.
- Low glare.
- Wide choice of optics suitable for different placements within the gallery.
- Allows for both lateral and counterflow inclinations.

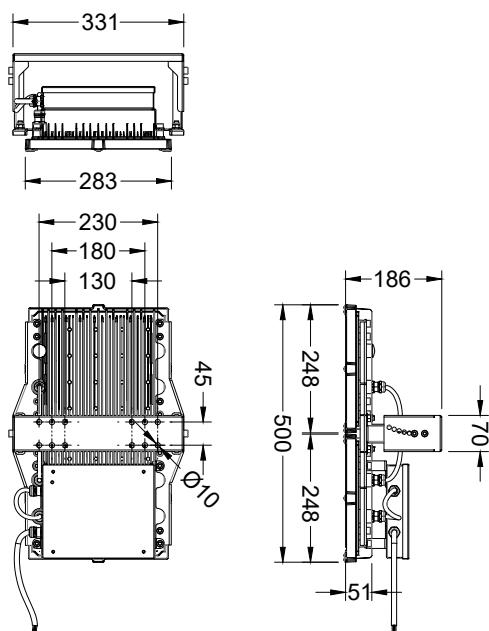
## Available control systems

- 1-10V.
- DALI.
- Wireless (Zhaga Book 18).
- Powerline.

## TECHNICAL DATA

LED type	Deltas by Lumileds
Step Mac-Adam	3
LED driver	Philips - Tridonic
Nominal Input voltage [V]	220-230V~ 50/60Hz
Surge protection	10kV
Efficiency up to	167lm/W (D) - 188lm/W (P)
Rated abrupt failure value T <sub>p,Tc</sub>	F10 @ 100.000h, <0,02% @ 1000h
Rated median useful life [hrs] @T <sub>c</sub>	L90B10 >100.000h
Power factor	>0,95
Housing material	LM6 Aluminum
Protective glass type	Tempered
Glass thickness [mm]	4
Colour temperature	2200K - 3000K - 4000K - 5700K
Colour rendering index (CRI)	>70
Degree of protection (EN 60529)	IP66
IK code (EN 62262)	IK08
Insulation class	I & II
Operating temperature [°C]	-25 ÷ 40
Wind-exposed surface [m <sup>2</sup> ]	Side: 0.06m <sup>2</sup> / Top: 0.25m <sup>2</sup>
Housing colour	RAL9005 Jet black
Weight [Kg]	6.5

## DIMENSIONS



## MODELS

	Total power [W]	Overall flux [lm]	Optical flux [lm]
128P440	163	30659	32534
128P530	198	36711	39549
128P600	225	41180	45100
128P650	245	43950	49035
128P700	265	47180	53093

## OPTICS

201A	206A	218A	229A	244A	244S
247A	247S	249A	279A	-	-

Other optics available on the website

Reference configuration: Optic 247A - 4000 K



RADIANT 6M2



# RADIANT 6M3 - 6M3Q



Radiant 6M3 is a modular solution made of LM6 aluminum, mainly used for access tunnel lighting. It withstands the corrosive agents normally found in these environments. Available with a selection of counterflow optics or with classic asymmetric/symmetric solutions.

## FEATURES

- Power ratings up to 416 W.
- LM6 aluminum body and brackets made entirely of A2 stainless steel (AISI 304).
- Tempered glass to protect optics and LEDs.
- System efficiency up to 188 lm/W.
- Low glare.
- Wide choice of optics suitable for different placements within the gallery.
- Allows for both lateral and counterflow inclinations.

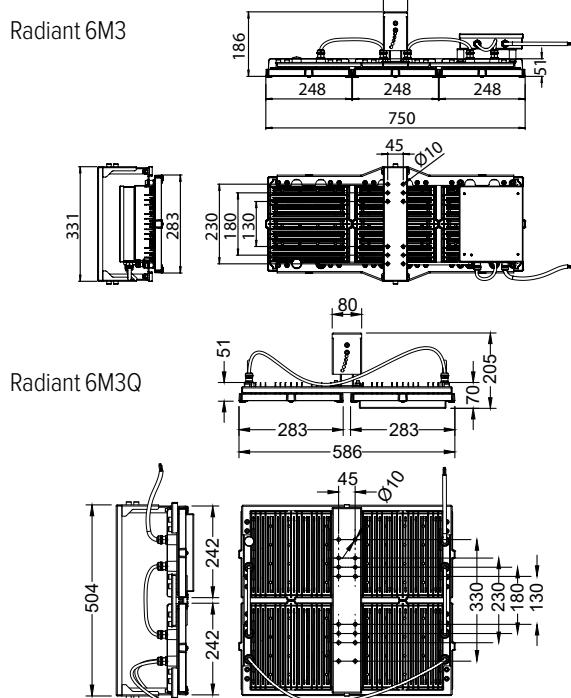
## Available control systems

- 1-10V.
- DALI.
- Wireless (Zhaga Book 18).
- Powerline.

## TECHNICAL DATA

LED type	Deltas by Lumileds
Step Mac-Adam	3
LED driver	Philips - Tridonic
Nominal Input voltage [V]	220-230V~ 50/60Hz
Surge protection	10kV
Efficiency up to	167lm/W (D) - 188lm/W (P)
Rated abrupt failure value T <sub>p,Tc</sub>	F10 @ 100.000h, <0,02% @ 1000h
Rated median useful life [hrs] @T <sub>c</sub>	L90B10 >100.000h
Power factor	>0,95
Housing material	LM6 Aluminum
Protective glass type	Tempered
Glass thickness [mm]	4
Colour temperature	2200K - 3000K - 4000K - 5700K
Colour rendering index (CRI)	>70
Degree of protection (EN 60529)	IP66
IK code (EN 62262)	IK08
Insulation class	I & II
Operating temperature [°C]	-25 ÷ 40
Wind-exposed surface [m <sup>2</sup> ]	Side: 0.06m <sup>2</sup> / Top: 0.25m <sup>2</sup>
Housing colour	RAL9005 Jet black
Weight [Kg]	10

## DIMENSIONS



## OPTICS

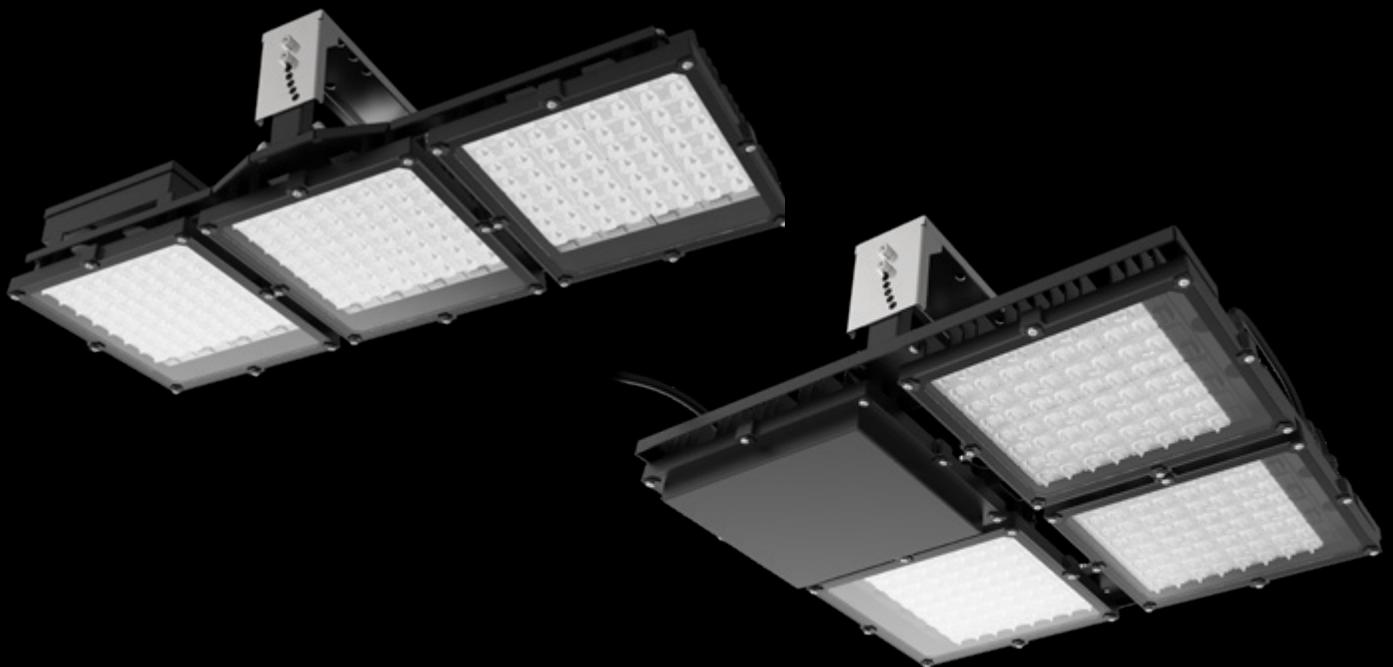
201A	206A	218A	229A	244A	244S
247A	247S	249A	279A	-	-

Other optics available on the website

## MODELS

	Total power [W]	Overall flux [lm]	Optical flux [lm]
192P440	244	45989	48801
192P530	297	55065	59324
192P600	338	61770	67649
192P650	368	65925	73552
192P700	398	70771	79639
192P730	416	73305	83201

Reference configuration: Optic 247A - 4000 K



RADIANT 6M3 - 6M3Q



# RADIANT 8S



The Radiant 8S light fixture is mainly used for interior zone of tunnel lighting and for the tunnel terminal part. Made entirely of A4 stainless steel (AISI 316L), it resists the corrosive agents normally found in these environments. Available with a selection of counter-flow optics or with classic asymmetric/symmetric solutions.

## FEATURES

- Body and brackets made entirely of A4 stainless steel (AISI 316L).
- Tempered glass to protect the optics and LEDs.
- System efficiency up to 198 lm/W.
- Low glare.
- Wide choice of optics suitable for different placements within the gallery.
- Allows for both lateral and counter-flow inclinations.

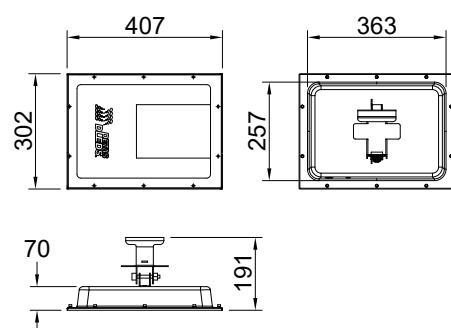
## Available control systems

- 1-10V.
- DALI.
- Wireless (Zhaga Book 18).
- Powerline.

## TECHNICAL DATA

LED type	Custom
Step Mac-Adam	3
LED driver	Philips - Tridonic
Nominal Input voltage [V]	220-230V~ 50/60Hz
Surge protection	10kV
Efficiency up to	178lm/W (D) - 198lm/W (P)
Rated abrupt failure value T <sub>p,Tc</sub>	F10 @ 100.000h, <0,02% @ 1000h
Rated median useful life [hrs] @T <sub>c</sub>	L90B10 >100.000h
Power factor	>0,95
Housing material	AISI 316L Stainless steel
Protective glass type	Tempered
Glass thickness [mm]	4
Colour temperature	2200K - 3000K - 4000K - 5700K
Colour rendering index (CRI)	>70
Degree of protection (EN 60529)	IP66
IK code (EN 62262)	IK08
Insulation class	I & II
Operating temperature [°C]	-25 ÷ 40
Wind-exposed surface [m <sup>2</sup> ]	Side: 0.03m <sup>2</sup> / Top: 0.12m <sup>2</sup>
Housing colour	AISI 316L Stainless steel
Weight [Kg]	6

## DIMENSIONS



## MODELS

	Total power [W]	Overall flux [lm]	Optical flux [lm]
16P350	16	3177	3211
16P440	20	3671	4067
16P530	25	4437	4944
16P600	28	4960	5637
16P700	33	5646	6637
24P425	29	5341	5892
24P440	31	5515	6100
24P470	33	5813	6540
24P510	36	6312	7123
24P530	37	6371	7415
24P550	39	6673	7709
24P580	41	6995	8159
24P600	42	7276	8456
24P625	44	7610	8824
24P650	46	7838	9194
24P700	50	8380	9955
24P750	54	8915	10704
32P350	32	5922	6422
32P440	41	7228	8133
32P530	49	8627	9887
32P600	56	9382	11275

## OPTICS

201A	206A	218A	229A	244A	244S
247A	247S	249A	279A	-	-

Other optics available on the website

Reference configuration: Optic 247A - 4000 K



RADIANT 8S



# RADIANT 8BS



The Radiant 8BS light fixture is mainly used for tunnel internal lighting and for the terminal part of tunnel. Made entirely of A4 stainless steel (AISI 316L), it resists the corrosive agents typical of these environments. Available with a selection of counterflow optics or with classic asymmetric/symmetric solutions.

## FEATURES

- Body and brackets made entirely of A4 stainless steel (AISI 316L).
- Tempered glass to protect the optics and LEDs.
- System efficiency up to 182 lm/W.
- Low glare.
- Wide choice of optics suitable for different placements within the gallery.

## Available control systems

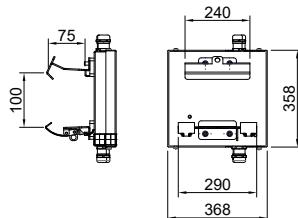
- 1-10V.
- DALI.
- Wireless (Zhaga Book 18).
- Powerline.

## TECHNICAL DATA

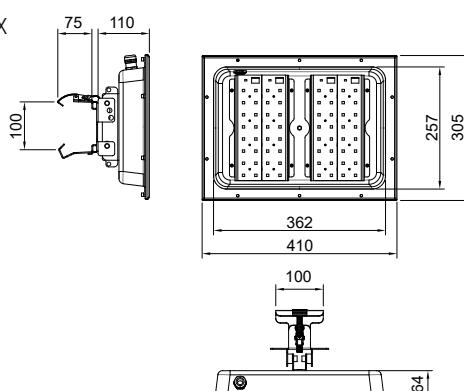
LED type	Custom
Step Mac-Adam	3
LED driver	Philips - Tridonic
Nominal Input voltage [V]	220-230V~ 50/60Hz
Surge protection	10kV
Efficiency up to	161lm/W (D) - 182lm/W (P)
Rated abrupt failure value T <sub>p,Tc</sub>	F10 @ 100.000h, <0,02% @ 1000h
Rated median useful life [hrs] @ T <sub>c</sub>	L90B10 >100.000h
Power factor	>0,95
Housing material	AISI 316L Stainless steel
Protective glass type	Tempered
Glass thickness [mm]	4
Colour temperature	2200K - 3000K - 4000K - 5700K
Colour rendering index (CRI)	>70
Degree of protection (EN 60529)	IP66
IK code (EN 62262)	IK08
Insulation class	I & II
Operating temperature [°C]	-25 ÷ 40
Wind-exposed surface [m <sup>2</sup> ]	Side: 0.03m <sup>2</sup> / Top: 0.12m <sup>2</sup>
Housing colour	AISI 316L Stainless steel
Weight [Kg]	11

## DIMENSIONS

Power supply BOX



LED BOX



## OPTICS

201A	206A	218A	229A	244A	244S
247A	247S	249A	279A	-	-

Other optics available on the website

## MODELS

	Total power [W]	Overall flux [lm]	Optical flux [lm]
64P350	65	11844	13011
64P400	74	13246	14734
64P440	81	14455	16267
64P480	89	15665	17844
64P500	93	16141	18621
64P540	101	17102	20185

Reference configuration: Optic 247A - 4000 K



RADIANT 8BS



# RADIANT 8L

The Radiant 8L lighting fixture, made entirely of AISI 316L stainless steel, is used mainly for the entrance part of the tunnel lighting and at the end of tunnels. Thanks to the materials used, it is resistant to the corrosive agents normally present in these environments. The construction of the internal parts and the mechanical design are designed to maximize luminous flux, making higher installation spacing possible than traditional designs.



## FEATURES

- Body and brackets made entirely of AISI 316L stainless steel.
- Tempered glass to protect the optics and LEDs.
- System efficiency up to 169 lm/W.
- Low glare.
- Wide choice of photometries for counterflow/symmetrical mounting.

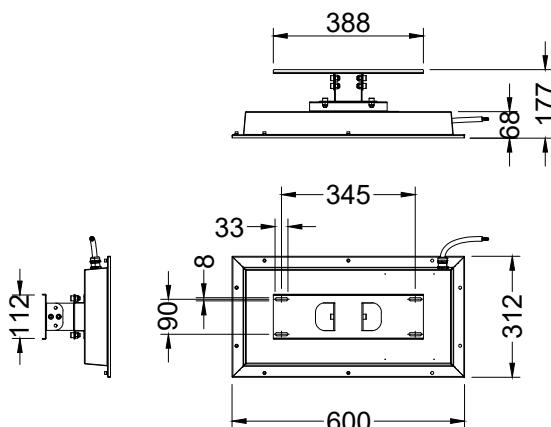
## Available control systems

- 1-10V.
- DALI.
- Wireless (Zhaga Book 18).
- Powerline.

## TECHNICAL DATA

LED type	Deltas by Lumileds
Step Mac-Adam	3
LED driver	Philips - OSRAM - Tridonic
Nominal Input voltage [V]	220-230V~ 50/60Hz
Surge protection	10kV
Efficiency up to	150lm/W (D) - 169lm/W (P)
Rated abrupt failure value T <sub>p,Tc</sub>	F10 @ 100.000h, <0,02% @ 1000h
Rated median useful life [hrs] @T <sub>c</sub>	L90B10 >100.000h
Power factor	>0,95
Housing material	AISI 316L Stainless steel
Protective glass type	Tempered
Glass thickness [mm]	4
Colour temperature	2200K - 3000K - 4000K - 5700K
Colour rendering index (CRI)	>70
Degree of protection (EN 60529)	IP66
IK code (EN 62262)	IK08
Insulation class	I & II
Operating temperature [°C]	-25 ÷ 40
Wind-exposed surface [m <sup>2</sup> ]	Side: 0.04m <sup>2</sup> / Top: 0.18m <sup>2</sup>
Housing colour	AISI 316L Stainless steel
Weight [Kg]	9

## DIMENSIONS



## MODELS

	Total power [W]	Overall flux [lm]	Optical flux [lm]
32P700	66	10804	13273
48P440	61	10336	12200
48P530	74	12418	14831
48P600	85	13935	16912
48P700	100	16073	19910
48P750	107	17181	21409
48P800	115	18179	22958

## OPTICS

201A	206A	218A	229A	244A	244S
247A	247S	249A	279A	-	-

Other optics available on the website

Reference configuration: Optic 247A - 4000 K



RADIANT 8L



# RADIANT 8XL



The Radiant 8XL light fixture is used mainly for the entrance part of the tunnel lighting. Made entirely of A4 stainless steel (AISI 316L), it resists the corrosive agents normally found in these environments. Available with a selection of counterflow optics or with classic asymmetric/symmetric solutions.

## FEATURES

- Body and brackets made entirely of A4 stainless steel (AISI 316L).
- Tempered glass to protect the optics and LEDs.
- System efficiency up to 176 lm/W.
- Low glare.
- Wide choice of photometries for counterflow/symmetrical mounting.
- Allows for both lateral and counterflow.

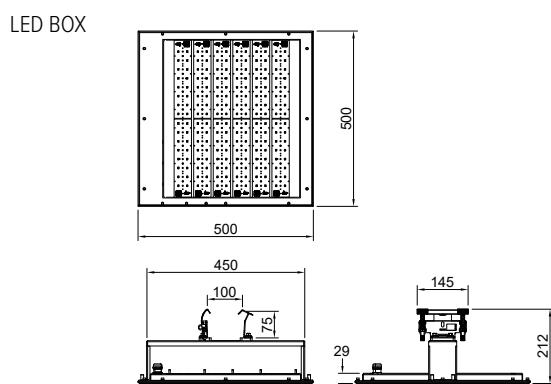
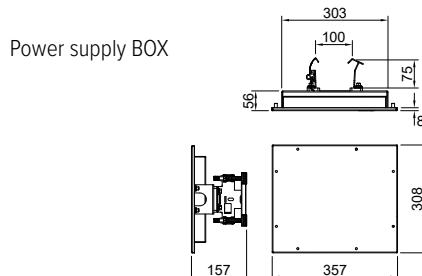
## Available control systems

- 1-10V.
- DALI.
- Wireless (Zhaga Book 18).
- Powerline.

## TECHNICAL DATA

LED type	Deltas by Lumileds
Step Mac-Adam	3
LED driver	Philips - OSRAM - Tridonic
Nominal Input voltage [V]	220-230V~ 50/60Hz
Surge protection	10kV
Efficiency up to	153lm/W (D) - 176lm/W (P)
Rated abrupt failure value T <sub>p,Tc</sub>	F10 @ 100.000h, <0,02% @ 1000h
Rated median useful life [hrs] @ T <sub>c</sub>	L90B10 >100.000h
Power factor	>0,95
Housing material	AISI 316L Stainless steel
Protective glass type	Tempered
Glass thickness [mm]	4
Colour temperature	2200K - 3000K - 4000K - 5700K
Colour rendering index (CRI)	>70
Degree of protection (EN 60529)	IP66
IK code (EN 62262)	IK08
Insulation class	I & II
Operating temperature [°C]	-25 ÷ 40
Wind-exposed surface [m <sup>2</sup> ]	Side: 0.06m <sup>2</sup> / Top: 0.25m <sup>2</sup>
Housing colour	AISI 316L Stainless steel
Weight [Kg]	15+6

## DIMENSIONS



## OPTICS

201A	206A	218A	229A	244A	244S
247A	247S	249A	279A	-	-

Other optics available on the website

## MODELS

	Total power [W]	Overall flux [lm]	Optical flux [lm]
48P530	74	12600	14831
48P600	85	14421	16912
48P700	100	17068	19910
48P800	115	18164	22958
64P530	99	16801	19775
64P600	113	18623	22550
64P700	133	21699	26546
64P750	143	23094	28545
64P830	159	24901	31815
80P440	102	17562	20334
80P530	124	21000	24718
80P600	141	24034	28187
80P700	166	27122	33183
80P750	178	28769	35681
96P350	96	16926	19266
96P440	122	21108	24400
96P530	148	25201	29662
96P600	169	28675	33825
96P650	184	30963	36776

Reference configuration: Optic 247A - 4000 K



RADIANT 8XL



# RADIANT 8XXL



The Radiant 8XXL light fixture is used mainly for the entrance part of the tunnel lighting. Made entirely of A4 stainless steel (AISI 316L), it resists the corrosive agents normally found in these environments. Available either with a selection of counterflow optics, or with classic asymmetric/symmetric solutions.

## FEATURES

- Body and brackets made entirely of A4 stainless steel (AISI 316L).
- Tempered glass to protect the optics and LEDs.
- System efficiency up to 176 lm/W.
- Low glare.
- Wide choice of photometries for counterflow/symmetrical mounting.

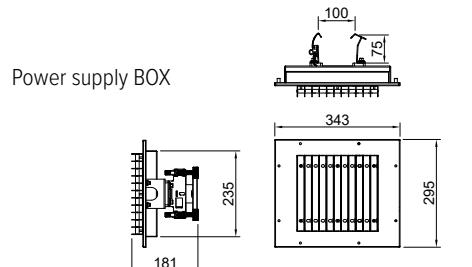
## Available control systems

- 1-10V.
- DALI.
- Wireless (Zhaga Book 18).
- Powerline.

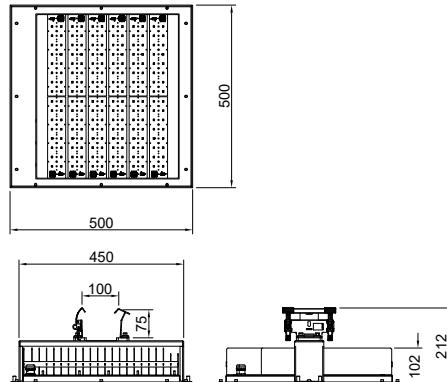
## TECHNICAL DATA

LED type	Deltas by Lumileds
Step Mac-Adam	3
LED driver	Philips - OSRAM - Tridonic
Nominal Input voltage [V]	220-230V~ 50/60Hz
Surge protection	10kV
Efficiency up to	155lm/W (D) - 176lm/W (P)
Rated abrupt failure value T <sub>p,Tc</sub>	F10 @ 100.000h, <0,02% @ 1000h
Rated median useful life [hrs] @T <sub>c</sub>	L90B10 >100.000h
Power factor	>0,95
Housing material	AISI 316L Stainless steel
Protective glass type	Tempered
Glass thickness [mm]	4
Colour temperature	2200K - 3000K - 4000K - 5700K
Colour rendering index (CRI)	>70
Degree of protection (EN 60529)	IP66
IK code (EN 62262)	IK08
Insulation class	I & II
Operating temperature [°C]	-25 ÷ 40
Wind-exposed surface [m <sup>2</sup> ]	Side: 0.06m <sup>2</sup> / Top: 0.25m <sup>2</sup>
Housing colour	AISI 316L Stainless steel
Weight [Kg]	18+7

## DIMENSIONS



LED BOX



## OPTICS

201A	206A	218A	229A	244A	244S
247A	247S	249A	279A	-	-

Other optics available on the website

## MODELS

	Total power [W]	Overall flux [lm]	Optical flux [lm]
96P700	199	34617	39820
96P830	239	39134	47723
128P530	198	34873	39549
128P600	225	38995	45100
128P650	245	41450	49035
128P700	265	44513	53093
128P830	318	51241	63631
128P850	326	52062	65280
128P900	347	54767	69365
192P400	221	38416	44201
192P420	232	40176	46497
192P430	238	41189	47692
192P510	285	48614	56981
192P530	297	51815	59324
192P610	344	60569	68777
192P650	368	64364	73552

Reference configuration: Optic 247A - 4000 K



RADIANT 8XXL



# RADIANT 8QL



The Radiant 8QL lighting fixture is made entirely of AISI 316L stainless steel and is used in access areas of tunnel lighting. It is designed to offer a footprint in height extremely small. Thanks to the materials used, it is extremely resistant to the corrosive agents normally present in these environments.

## FEATURES

- Body and brackets made entirely of AISI 316L stainless steel.
- Tempered glass to protect the optics and LEDs.
- System efficiency up to 175 lm/W.
- Low glare.
- Wide choice of photometries for counterflow/symmetric/asymmetric mounting.

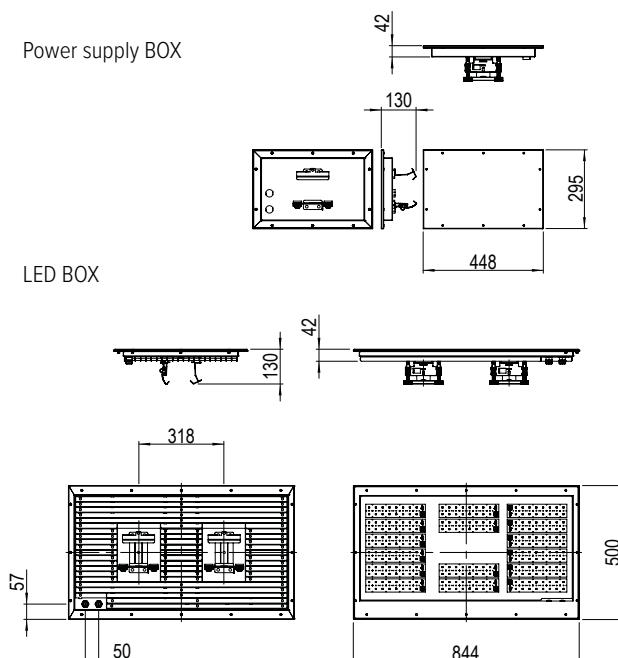
## Available control systems

- 1-10V.
- DALI.
- Wireless (Zhaga Book 18).
- Powerline.

## TECHNICAL DATA

LED type	Deltas by Lumileds
Step Mac-Adam	3
LED driver	Philips - Tridonic
Nominal Input voltage [V]	220-230V~ 50/60Hz
Surge protection	10kV
Efficiency up to	154lm/W (D) - 175lm/W (P)
Rated abrupt failure value T <sub>p,Tc</sub>	F10 @ 100.000h, <0,02% @ 1000h
Rated median useful life [hrs] @T <sub>c</sub>	L90B10 >100.000h
Power factor	>0,95
Housing material	AISI 316L Stainless steel
Protective glass type	Tempered
Glass thickness [mm]	5
Colour temperature	2200K - 3000K - 4000K - 5700K
Colour rendering index (CRI)	>70
Degree of protection (EN 60529)	IP66
IK code (EN 62262)	IK10
Insulation class	I & II
Operating temperature [°C]	-25 ÷ 40
Housing colour	AISI 316L Stainless steel
Weight [Kg]	29

## DIMENSIONS



## OPTICS

201A	206A	218A	229A	244A	244S
247A	247S	249A	279A	-	-

Other optics available on the website

## MODELS

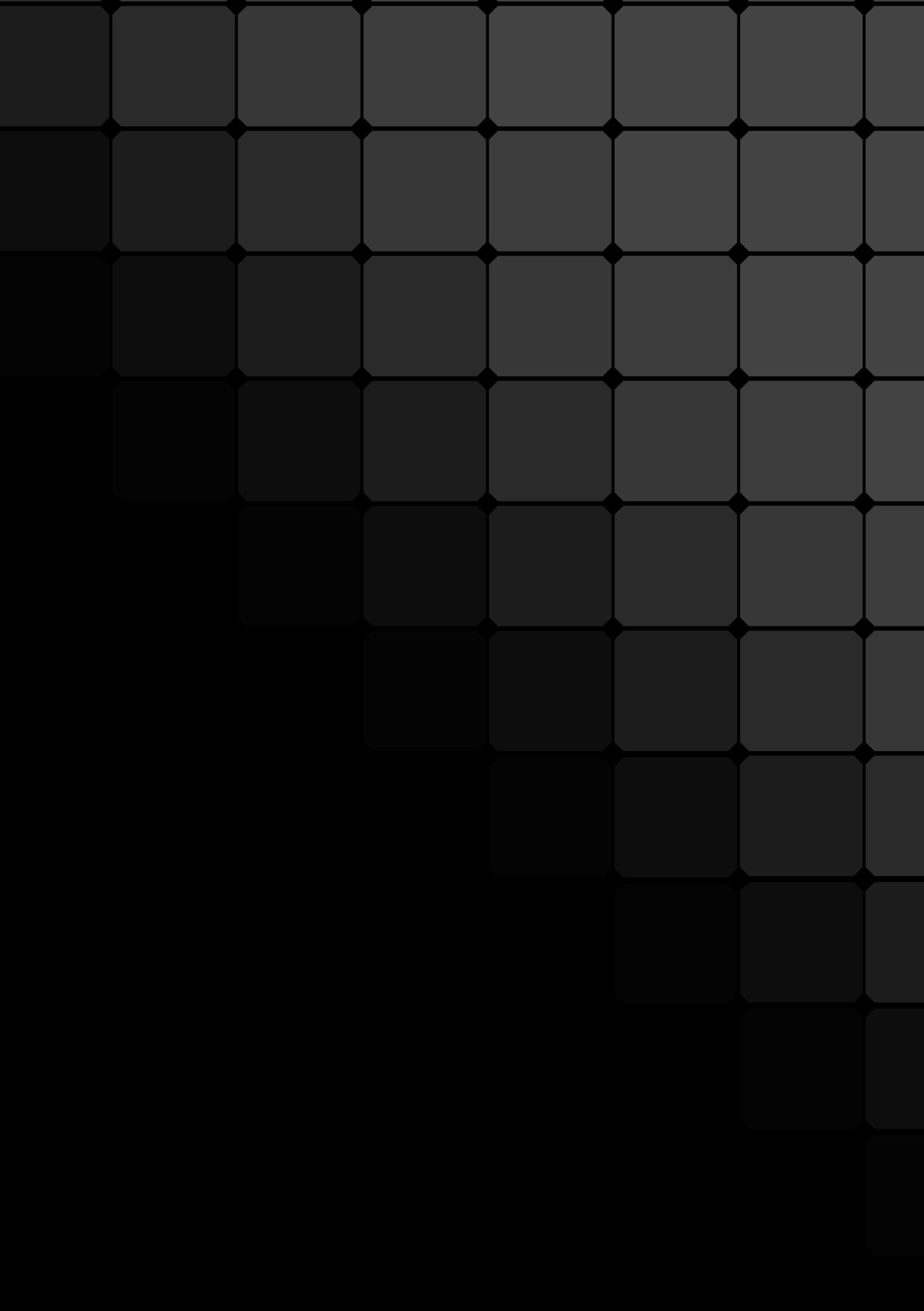
	Total power [W]	Overall flux [lm]	Optical flux [lm]
96P830	239	39134	47723
128P650	245	42835	49035
128P700	265	44513	53093
128P750	285	47207	57089
128P830	318	51241	63631
128P850	326	52062	65280
128P900	347	54767	69365
192P530	297	51870	59324
192P650	368	64364	73552
192P700	398	65976	79639
192P750	428	69380	85634
256P510	380	65551	75975
256P530	395	68290	79099
256P560	419	71732	83881
256P580	435	74621	87035

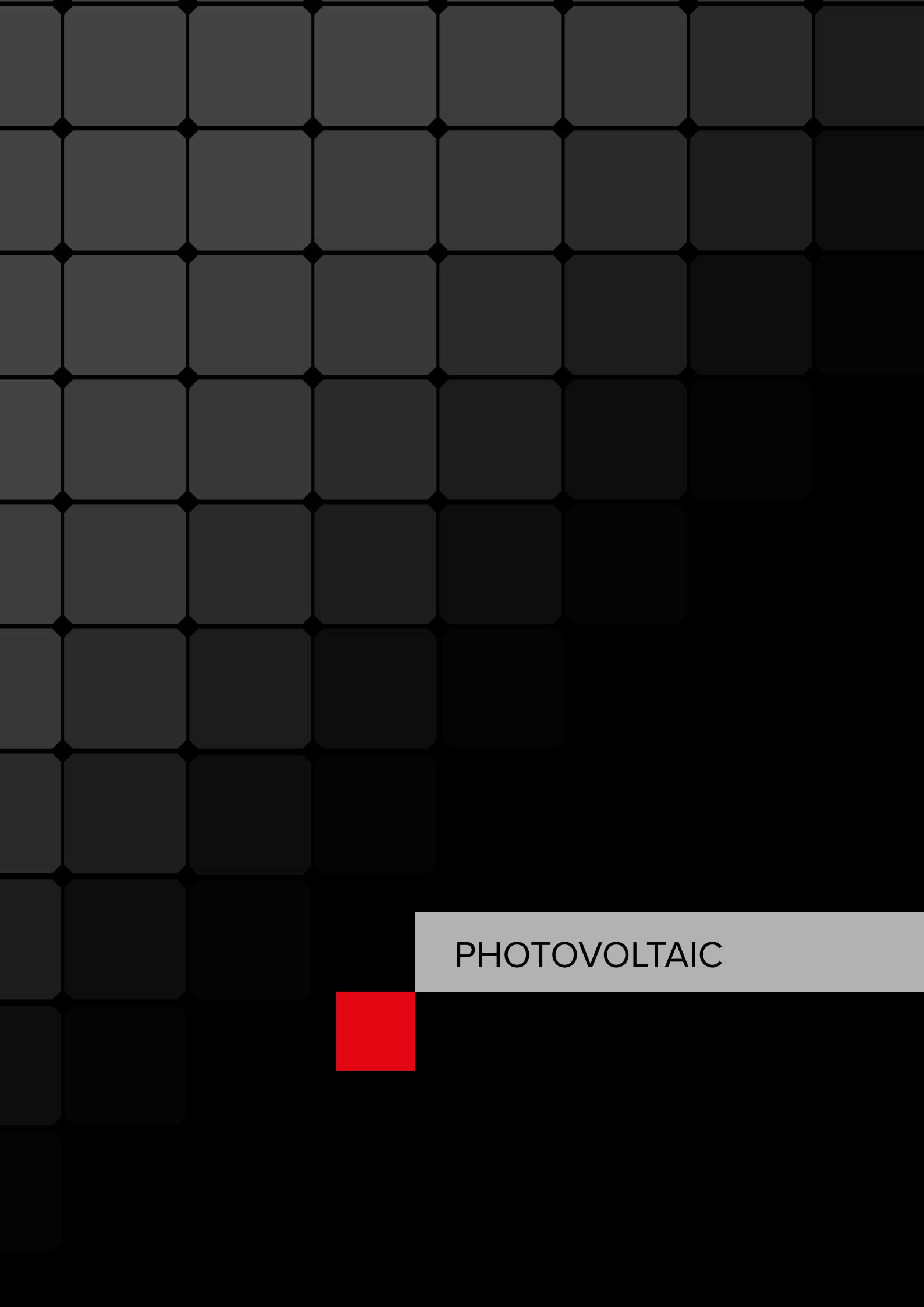
Reference configuration: Optic 247A - 4000 K



RADIANT 8QL







PHOTOVOLTAIC

# TALOS N FV



The Talos N FV light fixture is a LED kit equipped with a battery and photovoltaic panel external to the lighting body. Optimized to operate even in the less solar irradiations months, it is the solution that provides more autonomy and power among those proposed, thanks to the intelligent dimmer.

## FEATURES

- Charge controller to ensure at least 3 to 4 days of autonomy in the event of sun absence.
- Available with higher wattages for locations with more irradiation.
- Wide choice of optics for street use/ parking lots.
- Degree of protection: IP66.

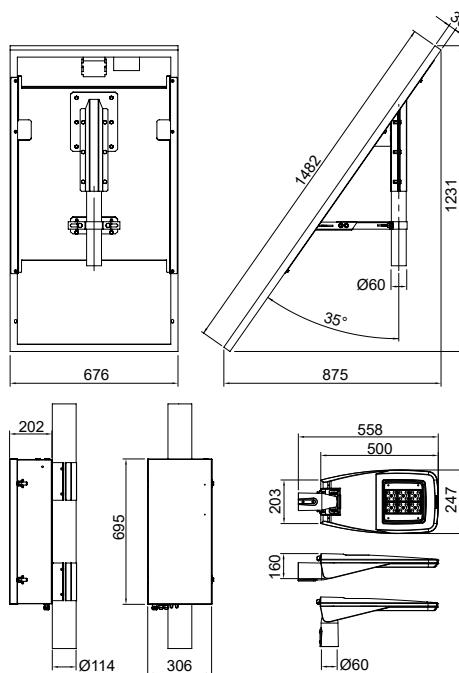
## PHOTOVOLTAIC KIT - TECHNICAL DATA

Photovoltaic kit	<b>LiFePo battery (Photovoltaic kit – Ta=25°C)</b>
Panel	<b>Mono/poly</b>
Peak power [W]	<b>160</b>
Voltage [V] / Capacity [Ah]	<b>12V / 90Ah</b>
Battery average life span (50%)	<b>4 [years]</b>
Autonomy (Ta=25°C)	<b>3 [days] (without sun)</b>

## TECHNICAL DATA

LED type	<b>Datas by Lumileds</b>
Step Mac-Adam	<b>3</b>
LED driver	<b>Philips - Tridonic</b>
Nominal Input voltage [V]	<b>220-230V~ 50/60Hz</b>
Surge protection	<b>2kV</b>
Efficiency up to	<b>180lm/w</b>
Rated abrupt failure value Tp,Tc	<b>F10 @ 100.000h, &lt;0,02% @ 1000h</b>
Rated median useful life [hrs] @Tc	<b>L90B10 &gt;100.000h</b>
Power factor	<b>&gt;0,95</b>
Housing material	<b>Supercast® die-cast aluminum</b>
Protective glass type	<b>Tempered</b>
Glass thickness [mm]	<b>4</b>
Colour temperature	<b>2200K - 3000K - 4000K - 5700K</b>
Colour rendering index (CRI)	<b>&gt;70</b>
Degree of protection (EN 60529)	<b>IP66</b>
IK code (EN 62262)	<b>IK09</b>
Insulation class	<b>I &amp; II</b>
Operating temperature [°C]	<b>-20 ÷ +45</b>
Wind-exposed surface [m <sup>2</sup> ]	<b>Side: 0.03m<sup>2</sup> / Top: 0.11m<sup>2</sup></b>
Housing colour	<b>RAL9023 Pearl dark grey</b>
Weight [Kg]	<b>5.2 (Talos) – 26 (Kit FV)</b>

## DIMENSIONS



## MODELS

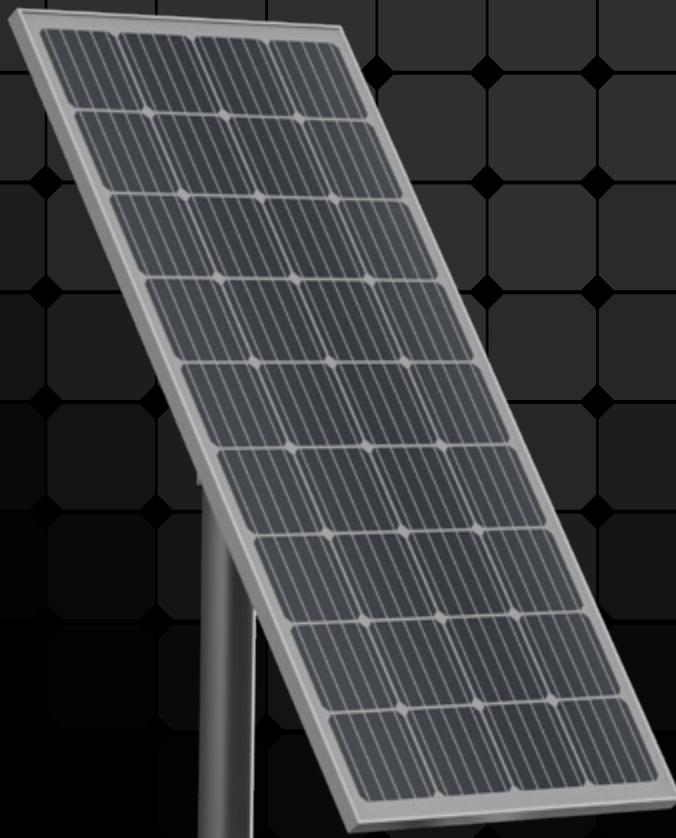
	Total power [W]	Overall flux [lm]	Optical flux [lm]
12D300	10	1785	1850
12D400	15	2380	2775
12D530	19	3150	3515
12D700	26	3988	4810
16D600	30	4722	5550
16D700	35	5490	6475

## OPTICS

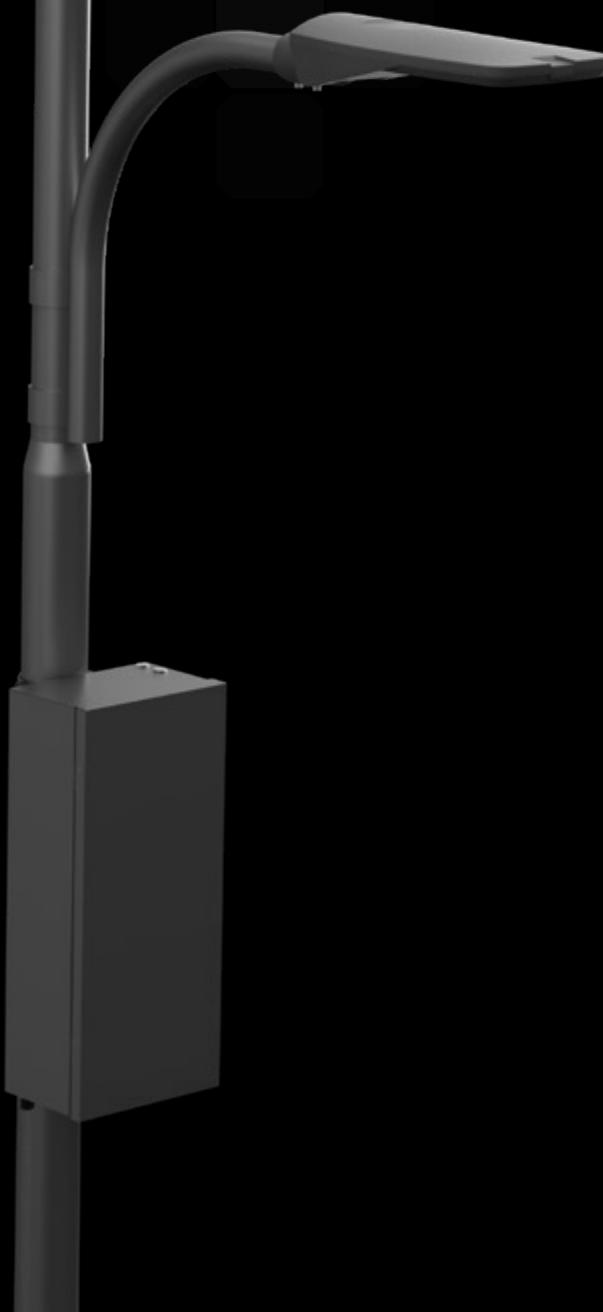
201A	205A	206A	208A	213A	214A
215A	217A	218S	247A	250A	277A

Other optics available on the website

Reference configuration: Optic 206A - 4000 K



TALOS N FV



# SOLAR POLIS FV



The Solar Polis FV is a photovoltaically powered LED luminaire optimized to work even in the months with less solar irradiation, thanks to the intelligent dimmer and the integrated sensor technology that allows, in case of installation in green or pedestrian areas, to manage different operating profiles. Upon request, it is also possible to install an IoT device for status remote control.

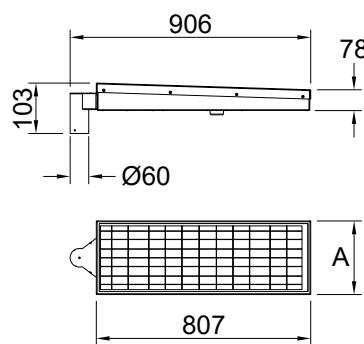
## FEATURES

- Fully integrated photovoltaic panel.
- Color: RAL 9005.
- Suitable for powers from 6 W (max 48° latitude) to 21 W (max 36° latitude).
- System efficiency > 150 lm/W.
- Battery: Lithium LiFePO4 with BMS.
- Autonomy without sunlight: 7 days ( $T_a=25^\circ\text{C}$ ).
- Full cut-off optics for street or yard type installations.
- Degree of protection: IP66.

## TECHNICAL DATA

LED type	<b>Datas by Lumileds</b>
Step Mac-Adam	<b>3</b>
LED driver	<b>Constant Current</b>
Nominal Input voltage [V]	<b>12,8</b>
Surge protection	<b>10kV</b>
Efficiency up to	<b>150lm/w</b>
Rated abrupt failure value $T_p,T_c$	<b>F10 @ 100.000h, &lt;0,02% @ 1000h</b>
Rated median useful life [hrs] @ $T_c$	<b>L90B10 &gt;100.000h</b>
Power factor	<b>&gt;0,95</b>
Housing material	<b>Aluminum</b>
Protective glass type	<b>Tempered</b>
Glass thickness [mm]	<b>4</b>
Colour temperature	<b>2200K - 3000K - 4000K - 5700K</b>
Colour rendering index (CRI)	<b>&gt;70</b>
Degree of protection (EN 60529)	<b>IP66</b>
IK code (EN 62262)	<b>IK09</b>
Insulation class	<b>III</b>
Operating temperature [ $^\circ\text{C}$ ]	<b>-10 ÷ +50</b>
Wind-exposed surface [ $\text{m}^2$ ]	<b>Side: 0.08m<sup>2</sup> / Top: 0.23m<sup>2</sup></b>
Housing colour	<b>RAL9005 Jet black</b>
Weight [Kg]	<b>10</b>

## DIMENSIONS



Model	(A)
SOLAR POLIS	277 mm
SOLAR POLIS 2	554 mm

## MODELS

	Total power [W]	Overall flux [lm]	Optical flux [lm]
8D230	6	900	1110
8D340	9	1332	1665
8D460	12	1764	2220
8D450	11	1617	2035
8D650	16	2272	2960
8D840	21	2919	3885

## OPTICS

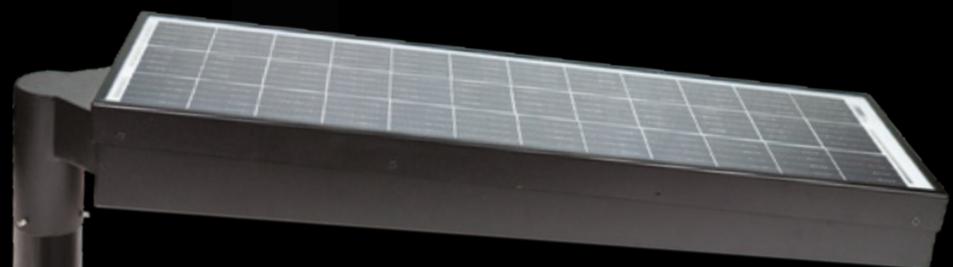
201A	205A	206A	208A	213A	214A
215A	217A	218S	247A	250A	277A

Other optics available on the website

Reference configuration: Optic 206A - 4000 K



SOLAR POLIS FV

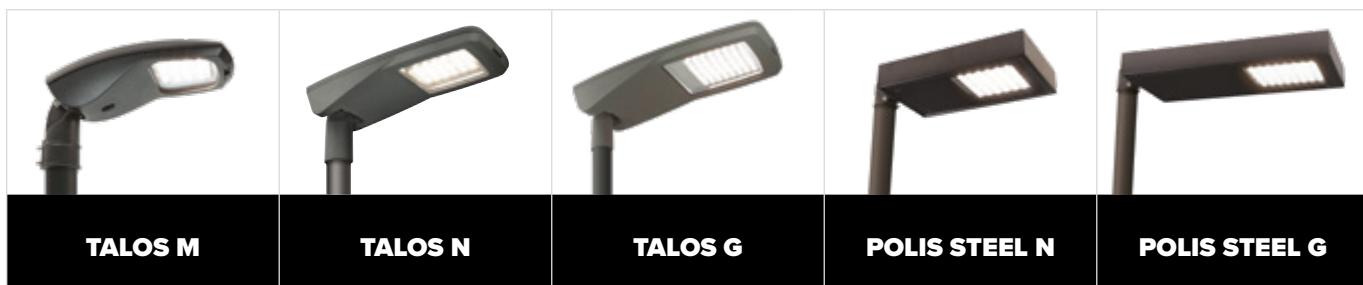




## COMPARATIVE CHARTS



COMPARISON				
MODEL	KRATOS M	KRATOS N	KRATOS G	KRATOS H
DRIVER	Philips - Tridonic			
LED	5050 Lumileds (D) - 5050 Lumileds HE+ (P)			
STANDARD OPERATIVE TEMPERATURE [°C]	-40 ~ +60°C	-40 ~ +50°C	-25 ~ +50°C	-25 ~ +50°C
EFFICACY [lm/W]	173 lm/W (D) 192 lm/W (P)	166 lm/W (D) 185 lm/W (P)	172 lm/W (D) 190 lm/W (P)	160 lm/W (D) 181 lm/W (P)
POWER [W]	8 - 59 W	12 - 86 W	49 - 175 W	124 - 233 W
MATERIAL	Supercast® die-cast aluminum			
INSTALLATION	Adjustable pole head, outreach			
TILT ADJUSTMENT	-15° ÷ +15°			
OPTICS	2xxA / 2xxS			
POLE DIAMETER [mm]	45/60 mm	45/60 mm	45/60 mm	60/76 mm
TUNABLE WHITE	Available on request			
DIMMING	DM / 1-10V / DALI / D4i			
SOCKET ZHAGA BOOK 18	Available on request			
PRESENCE AND ILLUMINANCE SENSORS	D4i PIR sensor ZB18 available			
CONTROL SYSTEMS	DALI, In-out Wireless, ZB18 Nodes			
PRICE	■□□□	■■□□	■■■□	■■■■

**TALOS M****TALOS N****TALOS G****POLIS STEEL N****POLIS STEEL G**

Philips - Tridonic

5050 Lumileds (D) - 5050 Lumileds HE+ (P)

-40 ~ +50°C	-40 ~ +50°C	-25 ~ +50°C	-25 ~ +50°C	-25 ~ +50°C
172 lm/W (D) 192 lm/W (P)	170 lm/W (D) 196 lm/W (P)	165 lm/W (D) 185 lm/W (P)	173 lm/W (D) 193 lm/W (P)	150 lm/W (D) 170 lm/W (P)
8 - 49 W	12 - 86 W	32 - 166 W	14 - 63 W	48 - 133 W
Supercast® die-cast aluminum	Supercast® die-cast aluminum	Supercast® die-cast aluminum	INOX AISI 304 / SS316L	INOX AISI 304 / SS316L
Adjustable pole head, outreach	Adjustable pole head, outreach	Adjustable pole head, outreach	Pole head, outreach	Pole head, outreach
-5° ÷ +15°	-15° ÷ +15°	-15° ÷ +15°	0°/90°	0°/90°
2xxA / 2xxS	2xxA / 2xxS	2xxA / 2xxS	2xxA / 2xxS	2xxA / 2xxS

60 mm

Available on request

DM / 1-10V / DALI / D4i

Available on request

D4i PIR sensor ZB18 available

DALI, ZB18 Nodes	DALI, In-out Wireless, ZB18 Nodes			
■□□□	■■□□	■■■□	■■■■□	■■■■■

COMPARISON				
MODEL	TRIO B	TRIO 2B	TRIO ST	TRIO TS
DRIVER	Philips - Tridonic			
LED	5050 Lumileds (D) - 5050 Lumileds HE+ (P)			
STANDARD OPERATIVE TEMPERATURE [°C]	-25 +50°C			
EFFICACY [lm/W]	163 lm/W (D) 189 lm/W (P)	149 lm/W (D) 170 lm/W (P)	176 lm/W (D) 190 lm/W (P)	176 lm/W (D) 190 lm/W (P)
POWER [W]	14 - 133 W	14 - 133 W	24 - 133 W	24 - 133 W
MATERIAL	Die-cast aluminum			
INSTALLATION	Pole head	Pole head	Pole head, outreach	Wire mounting
OPTICS	2xxA / 2xxS			
TUNABLE WHITE	Available on request			
DIMMING	DM / 1-10V / DALI / D4i			
SOCKET ZHAGA BOOK 18	Available on request version ZB18			
PRESENCE AND ILLUMINANCE SENSORS	D4i PIR sensor ZB18 available			
CONTROL SYSTEMS	1-10V, DALI, powerline, wireless Zhaga 18			
PRICE	■■□□	■■□□	■■□□	■■■□
MINIMUM PLATE SIZE [mm]	-	-	-	-

			
<b>MRL IP67</b>	<b>MRL IP67 - ICU</b>	<b>QUINCY 3</b>	<b>QUINCY 4</b>
Philips - Tridonic	OSRAM Inventronics IP67 DALI	Philips - Tridonic	Philips - Tridonic
5050 Lumileds (D) - 5050 Lumileds HE+ (P)			
-40 +50°C	-40 +50°C	-25 +50°C	-25 +50°C
170 lm/W (D) 191 lm/W (P)	176 lm/W (D) 191 lm/W (P)	168 lm/W (D) 187 lm/W (P)	140 lm/W (D) 166 lm/W (P)
12 - 63 W	12 - 63 W	16 - 33 W	12 - 69 W
Aluminum sheet	Aluminum sheet	Die-cast aluminum	Die-cast aluminum
IP67 Retrofit KIT	IP67 Retrofit KIT	Pole head	Pole head
2xxA / 2xxS			
Available on request	–	Available on request	Available on request
DM / 1-10V DALI / D4i	DALI	DM / 1-10V DALI / D4i	DM / 1-10V DALI / D4i
Available on request version ZB18	–	Available on request version ZB18	Available on request version ZB18
D4i PIR sensor ZB18 available	D4i PIR sensor ZB18 available	–	–
1-10V, DALI, powerline, wireless Zhaga 18	DALI	1-10V, DALI, powerline, wireless Zhaga 18	1-10V, DALI, powerline, wireless Zhaga 18
■■□□	■□□□	■■■□	■■■■
270x270x70	270x270x70	–	–

COMPARISON			
MODEL	RADIANT 2	RADIANT 2X2	RADIANT 2X3
DRIVER	Philips - Tridonic		
LED	5050 Lumileds (D) - 5050 Lumileds HE+ (P)		
STANDARD OPERATIVE TEMPERATURE [°C]	-40 ~ +50°C	-25 ~ +50°C	-25 ~ +50°C
EFFICACY [lm/W]	159 lm/W (D) 180 lm/W (P)	159 lm/W (D) 180 lm/W (P)	159 lm/W (D) 180 lm/W (P)
POWER [W]	200 - 358 W	395 - 694 W	593 - 1040 W
MATERIAL	Die-cast aluminum		
INSTALLATION	Adjustable bracket		
TILT ADJUSTMENT	-15° ÷ +15°	-5° ÷ +55°	-5° ÷ +55°
MAIN APPLICATION	10 - 35 m	15 - 35 m	15 - 35 m
DRIVER LOCATION	Separate box		
OPTICS	2xxA / 2xxS		
DIMMING	DM / 1-10V / DALI / D4i		
SOCKET ZHAGA BOOK 18	Available on request		
PRESENCE AND ILLUMINANCE SENSORS	-		
CONTROL SYSTEMS	DALI, In and Out Wireless, nodes ZB18		
PRICE	■■□□□□	■■■■■□	■■■■■■

			
<b>MAYA 8A</b>	<b>MAYA 8B</b>	<b>MAYA 9C</b>	<b>MAYA 9D</b>
Philips - Tridonic			
5050 Lumileds (D) - 5050 Lumileds HE+ (P)			
161 lm/W (D) 190 lm/W (P)	155 lm/W (D) 176 lm/W (P)	162 lm/W (D) 185 lm/W (P)	162 lm/W (D) 186 lm/W (P)
12 - 75 W	75 - 130 W	127 - 236 W	198 - 451 W
Die-cast aluminum			
Adjustable bracket			
3-8 m	5-10 m	8-30 m	10-35 m
Internal			
2xxA / 2xxS			
DM / 1-10V / DALI / D4i			
Available on request			
-	-	D4i PIR sensor ZB18 available	D4i PIR sensor ZB18 available
DALI, nodes ZB18	DALI, nodes ZB18	DALI, In and Out Wireless, nodes ZB18	DALI, In and Out Wireless, nodes ZB18
			

COMPARISON				
MODEL	PAD ECO 3	PAD LLC 3	PAD LLC 3 - ICU	PAD LLC 3 - DCE
DRIVER	MOSO	LIFUD	OSRAM Inventronics	Philips - Tridonic
LED	SMD	5050 Lumileds (D) 5050 Lumileds HE+ (P)	5050 Lumileds (D) 5050 Lumileds HE+ (P)	5050 Lumileds (D) 5050 Lumileds HE+ (P)
STANDARD OPERATIVE TEMPERATURE [°C]	-25 ~ +50°C	-25 ~ +40°C	-25 ~ +40°C	-25 ~ +40°C
EFFICACY [lm/W]	180 lm/W	169 lm/W	169 lm/W (D) 192 lm/W (P)	169 lm/W (D) 192 lm/W (P)
POWER [W]	120 - 150 - 200 W (selectable on driver)	71 - 173 W	71 - 173 W	71 - 173 W
MATERIAL	Die-cast aluminum			
INSTALLATION	Eyebolt	Eyebolt	Eyebolt, Omega bracket	Eyebolt, Omega bracket
DRIVER LOCATION	Top of the housing			
OPTICS	450S	2xxS series	2xxS series	2xxS series
CABLE LENGTH	0,3 m (extension on request, no custom length)	1 m (other length on request)	0,3 m (extension on request, no custom length)	1 m (other length on request)
DIMMING	0-10V	–	DALI	1-10V/DALI/D4i
SOCKET ZHAGA BOOK 18	Included	–	–	Available on request
PRESENCE AND ILLUMINANCE SENSORS	available sensor 1-10V ZB18	–	DALI sensor available	DALI, D4i available sensor
CONTROL SYSTEMS	–	–	DALI	DALI, Algorab, UMPI, nodes ZB18 Wireless
PRICE	■□□□□	■■□□□	■■■□□	■■■■□

				
<b>PAD LLC 3B</b>	<b>PAD LLC 3B - ICU</b>	<b>PAD LLC 3B - DCE</b>	<b>RADIANT 6M1 - ICU</b>	<b>RADIANT 6M1 - DCE</b>
LIFUD	OSRAM Inventronics	Philips - Tridonic	OSRAM Inventronics	Philips - Tridonic
5050 Lumileds (D) - 5050 Lumileds HE+ (P)				
-25 ~ +40°C				
162 lm/W	168 lm/W (D) 192 lm/W (P)	168 lm/W (D) 192 lm/W (P)	167 lm/W (D) 188 lm/W (P)	167 lm/W (D) 188 lm/W (P)
159 - 239 W	118 - 199 W	118 - 239 W	49 - 139 W	49 - 139 W
Die-cast aluminum	Die-cast aluminum	Die-cast aluminum	Die-Cast LM6 aluminum	Die-Cast LM6 aluminum
Eyebolt	Eyebolt, Omega bracket	Eyebolt, Omega bracket	Eyebolt, Omega bracket	Eyebolt, Omega bracket
Top of the housing				
2xxS series				
0,3 m (extension on request, no custom length)	0,3 m (extension on request, no custom length)	1 m (other length on request)	0,3 m (extension on request, no custom length)	1 m (other length on request)
–	DALI	1-10V/DALI/D4i	DALI	1-10V/DALI/D4i
–	–	Available on request	–	Available on request
–	DALI sensor available	DALI, D4i available sensor	DALI sensor available	DALI, D4i available sensor
–	DALI	DALI, Algorab, UMPI, nodes ZB18 Wireless	DALI	DALI, Algorab, UMPI, nodes ZB18 Wireless
■■■□□	■■■■□	■■■■■	■■□□□	■■■■□□

<b>COMPARISON</b>					
<b>MODEL</b>	KES STRIP TN	KES STRIP TN - UGR	KES STRIP TN SENSOR - MS/BS	KES STRIP TI	
<b>DRIVER</b>	TCI - Philips - OSRAM - Tridonic				
<b>LED</b>	SMD				
<b>STANDARD OPERATIVE TEMPERATURE [°C]</b>	-25 ~ +40°C -25 ~ +35°C: 43W - 120cm, 54W - 150cm	-25 ~ +40°C -25 ~ +35°C: 43W - 120cm, 54W - 150cm	-25 ~ +40°C -25 ~ +35°C: 43W - 120cm, 54W - 150cm	-25 ~ +40°C -25 ~ +35°C: 43W - 120cm, 54W - 150cm	-25 ~ +40°C
<b>EFFICACY [lm/W]</b>	162 lm/W				
<b>POWER [W]</b>	10-14 W (60cm) 20-43 W (120cm) 20-54 W (150cm)	10-14 W (60cm) 20-43 W (120cm) 20-54 W (150cm)	10-14 W (60cm) 20-43 W (120cm) 20-54 W (150cm)	20-51 W (120cm) 24-71 W (150cm)	
<b>MATERIAL</b>	PC/ABS	PC	PC/ABS	PC/ABS	
<b>INSTALLATION</b>	Surface / Suspension				
<b>CONNECTION</b>	Gland / Quick connector on request / Wire customized length	Gland / Quick connector on request / Wire customized length	Gland / Quick connector on request / Wire customized length	Quick connector	
<b>OPTICS</b>	SB / NB / WB / TL	UGR	SB / NB / WB / UGR / TL	SB / NB	
<b>DIMMING</b>	On request DALI/D4i	On request DALI/D4i	DALI, on request D4i	On request DALI/D4i	
<b>PRESENCE AND ILLUMINANCE SENSORS</b>	Included with SENSOR (MS/BS)	Included with SENSOR (MS/BS)	Included	Included with SENSOR (MS/BS)	
<b>CONTROL SYSTEMS</b>	DALI, Wireless, Multi-Point Sensors				
<b>PRICE</b>	■□□□□	■□□□□	■■■□□	■■□□□	



<b>KES STRIP TF</b>	<b>KES STRIP TF ICE</b>	<b>KES STEEL HV</b>	<b>KES STEEL HV - D</b>	<b>KES STEEL HV - EX</b>
TCI - Philips - OSRAM - Tridonic	TCI - Philips - OSRAM - Tridonic	Philips - Tridonic	Philips - Tridonic	Philips - Tridonic
SMD	SMD	SMD	5050 Lumileds (D) 5050 Lumileds HE+ (P)	SMD
-25 ~ +40°C -25 ~ +35°C: 84W – 120cm, 104W – 150cm	-40 ~ +25°C	-25 ~ +40°C	-25 ~ +40°C	-25 ~ +40°C
161 lm/W	161 lm/W	145 lm/W	150 lm/W (D) 170 lm/W (P)	145 lm/W
16-27 W (60cm) 31-84 W (120cm) 38-104 W (150cm)	37-50 W (120cm) 44-71 W (150cm)	10-29 W (60cm) 20-55 W (120cm)	10-29 W (60cm), 20-55 W (120cm)	10-29 W (60cm) 20-57 W (120cm)
PC / ABS	ABS	SS 304 / SS 316L	SS 304 / SS 316L	SS 304 / SS 316L

## Surface / Suspension

Gland / Quick connector on request / Wire customized length	Gland / Quick connector on request / Wire customized length	Wire 2m H07RNF	Wire 2m H07RNF	Wire 2m H07RNF
SB / NB	SB	SB, 4xxS	2xxA, 2xxS	SB
On request DALI/D4i	On request DALI/D4i	On request 1-10V/DALI/D4i	On request 1-10V/DALI/D4i	On request 1-10V/DALI/D4i
Included with SENSOR (MS/BS)	Included with SENSOR (MS/BS)	Included with SENSOR (MS/BS)	Included with SENSOR (MS/BS)	–

## DALI, Wireless, Multi-Point Sensors

■■□□□	■■■□□	■■■■□	■■■■■□	■■■■■■
-------	-------	-------	--------	--------

COMPARISON				
MODEL	KES STRIP TF - HT	KES STEEL HV - HT	PAD LLC 3B - DCE HT	RADIANT 2 DCE - HT
DRIVER	TCI - Philips - OSRAM - Tridonic	Philips - Tridonic	Philips - Tridonic	Philips - Tridonic
LED	SMD	SMD	5050 Lumileds (D) 5050 Lumileds HE+ (P)	5050 Lumileds (D) 5050 Lumileds HE+ (P)
STANDARD OPERATIVE TEMPERATURE [°C]	-25 ~ +60°C	-25 ~ +70°C	-40 ~ +70°C	-40 ~ +70°C
EFFICACY [lm/W]	161 lm/W	145 lm/W	165 lm/W (D) 186 lm/W (P)	164 lm/W (D) 188 lm/W (P)
POWER [W]	37-51 W (120cm), 46-71 W (150cm)	10-29 W (60cm), 20-55 W (120cm)	118-154 W	163-225 W
MATERIAL	PC	SS 304 / SS 316L	Die-cast aluminum	Die-cast aluminum
INSTALLATION	Surface / Suspension	Surface / Suspension	Eyebolt, Omega bracket	Eyebolt
DRIVER LOCATION	–	–	Top of the housing	Top of the housing
CONNECTION	Gland / Quick connector on request / Wire customized length	Wire HT 2m	1m cable (other length on request)	1m cable (other length on request)
OPTICS	SB	SB	331S, 332S	331S, 332S
DIMMING	DALI/D4i on request	1-10V/DALI/D4i on request	1-10V/DALI/D4i	1-10V/DALI/D4i
SOCKET ZHAGA BOOK 18	–	–	Available on request	Available on request
PRESENCE AND ILLUMINANCE SENSORS	–	–	Sensor DALI, D4i available	Sensor DALI, D4i available
CONTROL SYSTEMS	DALI, Wireless, Multi-Point Sensors	DALI, Wireless, Multi-Point Sensors	DALI, Wireless Algorab, UMPI (max Ta 65°C) with ZB18, Zigbee	DALI, Wireless Algorab, UMPI (max Ta 65°C) with ZB18, Zigbee
PRICE	■■□□□	■■■□□	■■■■□	■■■■■

<b>COMPARAZIONE</b>				
<b>MODELLO</b>	<b>TALOS N -FV</b>	<b>TALOS N-FV LIFEPO</b>	<b>SOLAR POLIS</b>	<b>SOLAR POLIS 2</b>
<b>DRIVER</b>	12V			
<b>STANDARD OPERATIVE TEMPERATURE [°C]</b>	-20 ~ +45°C	-20 ~ +45°C	-10 ~ +50°C	-10 ~ +50°C
<b>LAMP POWER [W]</b>	10 - 35 W	10 - 35 W	6 - 21 W	6 - 25 W
<b>PANEL POWER [W]</b>	180 W	180 W	35 W	50 W
<b>BATTERY CAPACITY</b>	90Ah Lead acid AGM	80Ah LiFePo	LiFePo 35Ah	LiFePo 35Ah
<b>WEIGHT [Kg]</b>	67Kg (PV kit panel +battery, electronic on the top of the pole)	26 Kg (Battery Box and electronics on pole with collars)	10 Kg	16 Kg
<b>MATERIAL</b>	Aluminum			
<b>INSTALLATION</b>	Outreach	Outreach	Pole head	Pole head
<b>PANNEL POSITION</b>	PV kit and battery on pole head	Head of the pole	Integrated	Integrated
<b>BATTERY POSITION</b>	PV kit and battery on pole head	BOX on pole with collars	Integrated	Integrated
<b>TILT ADJUSTMENT</b>	-15° ÷ +15°	-15° ÷ +15°	0°	0°
<b>OPTICS</b>	2xxA / 2xxS			
<b>POLE DIAMETER [mm]</b>	60 mm			
<b>DIMMING</b>	Integrated, depends on the battery level			
<b>PRESENCE AND ILLUMINANCE SENSORS</b>	—	—	SENSOR version	SENSOR version
<b>PRICE</b>	██████	███████	██████□□	███████□

COMPARISON				
MODEL	RADIANT 6M1	RADIANT 6M2	RADIANT 6M3	RADIANT 8L
DRIVER	Philips - Tridonic			
LED	5050 Lumileds (D) - 5050 Lumileds HE+ (P)			
STANDARD OPERATIVE TEMPERATURE [°C]	-25 ~ +40°C			
EFFICACY [lm/W]	167 lm/W (D) 188 lm/W (P)	167 lm/W (D) 188 lm/W (P)	167 lm/W (D) 188 lm/W (P)	150 lm/W (D) 169 lm/W (P)
POWER [W]	49 - 139 W	163 - 265 W	244 - 416 W	66 - 115 W
MATERIAL	Die-cast LM6 aluminum	Die-cast LM6 aluminum	Die-cast LM6 aluminum	INOX AISI 316L
INSTALLATION	Cable trays adjustable bracket / surface / wall			
ANGLES (STANDARD BRACKETS)	0/2/4/6/8/10° CTR + 0/4° towards center	0/2/4/6/8/10° CTR + 0/4° towards center	0/2/4/6/8/10° CTR + 0/4° towards center	0/4/8° towards center
MAIN APPLICATION	Interior zone (CIE 88) Access zone (11095)	Access zone (CIE 88) Access zone (11095)	Access zone (CIE 88) Access zone (11095)	Interior zone (CIE 88) Access zone (11095)
DRIVER POSITION	External box fixed to the light body	External box fixed to the light body	External box fixed to the light body	In the light body
OPTICS	2xxA / 2xxS			
DIMMING	1-10V / DALI / D4i			
SOCKET ZHAGA BOOK 18	On request ZB18 – D4i			
CONTROL SYSTEMS	Wireless, OC, nodi ZB18			
PRICE	■□□□□□	■■□□□□	■■■□□□	■■■■□□□



**RADIANT 8S**    **RADIANT 8BS**    **RADIANT 8XL**    **RADIANT 8XXL**    **RADIANT 8QL**

Philips - Tridonic

5050 Lumileds (D) - 5050 Lumileds HE+ (P)

-25 ~ +40°C

178 lm/W (D) 198 lm/W (P)	161 lm/W (D) 182 lm/W (P)	153 lm/W (D) 176 lm/W (P)	155 lm/W (D) 176 lm/W (P)	154 lm/W (D) 175 lm/W (P)
16 - 56 W	65 - 101 W	74 - 184 W	199 - 368 W	239 - 435 W

INOX AISI 316L

Cable trays adjustable bracket / surface / wall

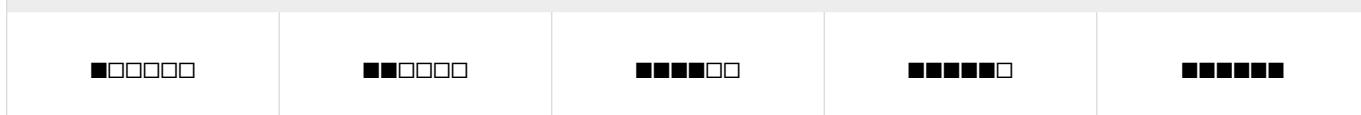
0/2/4/6/8° towards center or 4/8° counterflow	0°			
Interior zone (11095)	Interior zone (CIE 88) Access zone (11095)	Interior zone (CIE 88) Access zone (11095)	Access zone (CIE 88) Access zone (11095)	Access zone (CIE 88) Access zone (11095)
In the light body	External box fixed on the cable tray	External box fixed on the cable tray	External box fixed on the cable tray	External box fixed on the cable tray

2xxA / 2xxS

1-10V / DALI / D4i

On request ZB18 – D4i

Wireless, OC, nodi ZB18





**AT NIGHT AND IN POOR VISIBILITY HOURS, THE PEDESTRIAN CROSSINGS MUST BE PROPERLY ILLUMINATED AND SIGNALLED.**

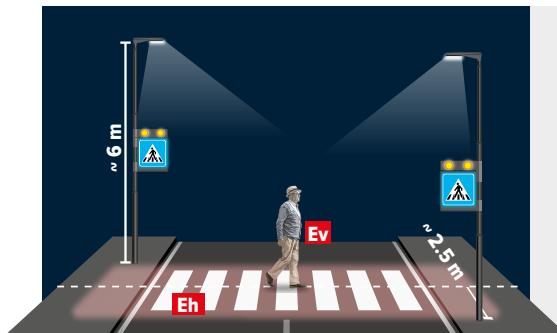
### SIGNAL

using LED flashers certified according to **EN 12352** and LED backlit signs according to **EN 12899**.

### ILLUMINATE

an **horizontal plan**, highlighting the crossing with a minimum recommended light level of 100 lux (average) **and a vertical plan**, lighting perfectly the body of pedestrians making them visible, starting from the waiting area, extremely important factor to prevent accidents on crossings.

The LED luminaires **Talos G** and **Talos N** have been designed with a dedicated optic specifically to illuminate crossings, creating a positive contrast between the pedestrian and the surrounding environment, producing a very **high vertical illumination** level according to **EN 13201**.



### LUMINOUS FLUX [LUMEN]

The luminous flux is measured in lumens and represents the quantity of light produced from a fixture, hence it can't be measured on a point or surface.

It is a task of the optics to distribute this light properly on the crossing. For instance, a light fixture producing 15,000 lm, may provide less light on the crossing of a fixture producing 12,000 lm.

### ILLUMINANCE [LUX]

The illuminance is the quantity of light measurable on a plan of the crossing. It is measured in lux and in most of the cases the determining factor is the average illuminance and the overall uniformity (ratio between min lux and avg lux).

### HORIZONTAL ILLUMINANCE EH [LUX]

Is the quantity of light measured on the horizontal plan [Eh] of the crossing. The high level achievable and the super concentrated beam allow an unmatched visibility and ease of **identification from distance of the crossing**.

### VERTICAL ILLUMINANCE EV [LUX]

Is the quantity of light measured on the vertical plan [Ev] of the crossing. The high level achievable allows the **maximum visibility of pedestrians**, creating a positive contrast with the surrounding environment.

## AVAILABLE APL MODELS



### CLASSIC

APL Classic is the **signalling and lighting system of pedestrian crossings** designed to achieve a high level of safety for pedestrians. The flashers are always active, the LED luminaires and the backlit signs work only during the night.



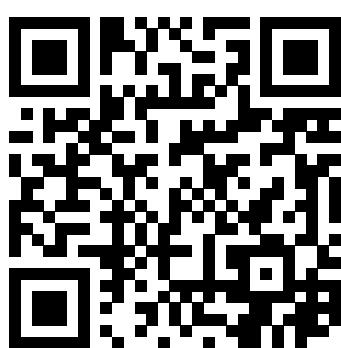
### SMART

APL Smart is the latest evolution of **signalling and lighting of pedestrian crossings** created to make them interactive and safer. The system is activated by button or motion sensor, increasing the lighting level on the crossing from 40% to 100% and turning on the LED flashers.



### SOLAR

APL Solar combines the technological advantages of our APL solutions with the need to install such **systems in areas not covered by the AC grid**.



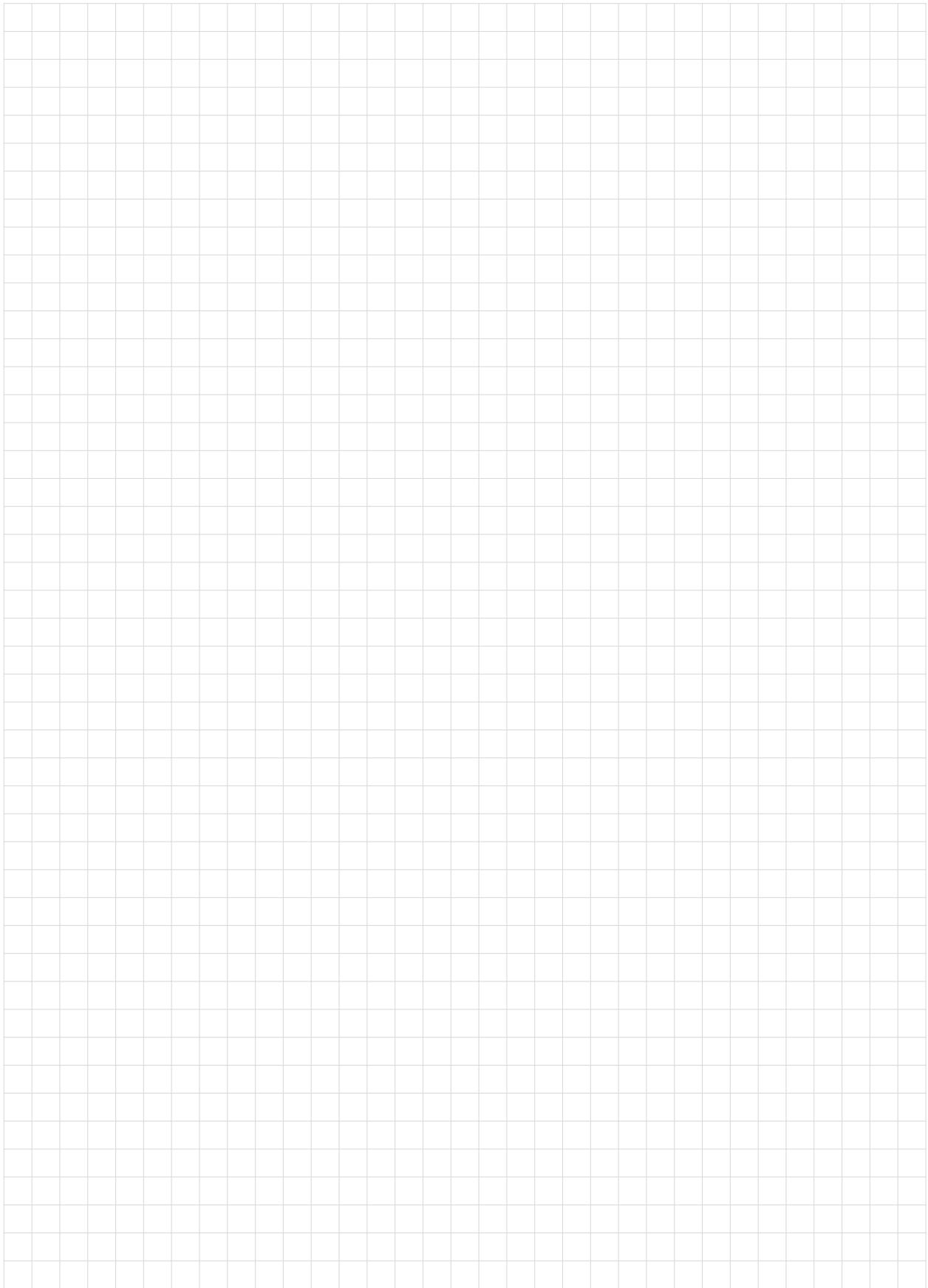
Scan the **QR code** to receive **more informations** about the **APL** pedestrian crossing signalling and lighting system.

Or visit the website [www.ledpedestriancrossing.com](http://www.ledpedestriancrossing.com)

Contact us: **Tel. +39 030 2594120 - info@d-power.com**



# NOTES







DETAS SpA - Dleds Division  
Via Treponi, 29  
25086 Rezzato BS - ITALY  
Tel. +39 030 2594120  
[info@dleds.com](mailto:info@dleds.com)

ISO9001 / ISO14001  
Certified Company

[www.dleds.com](http://www.dleds.com)