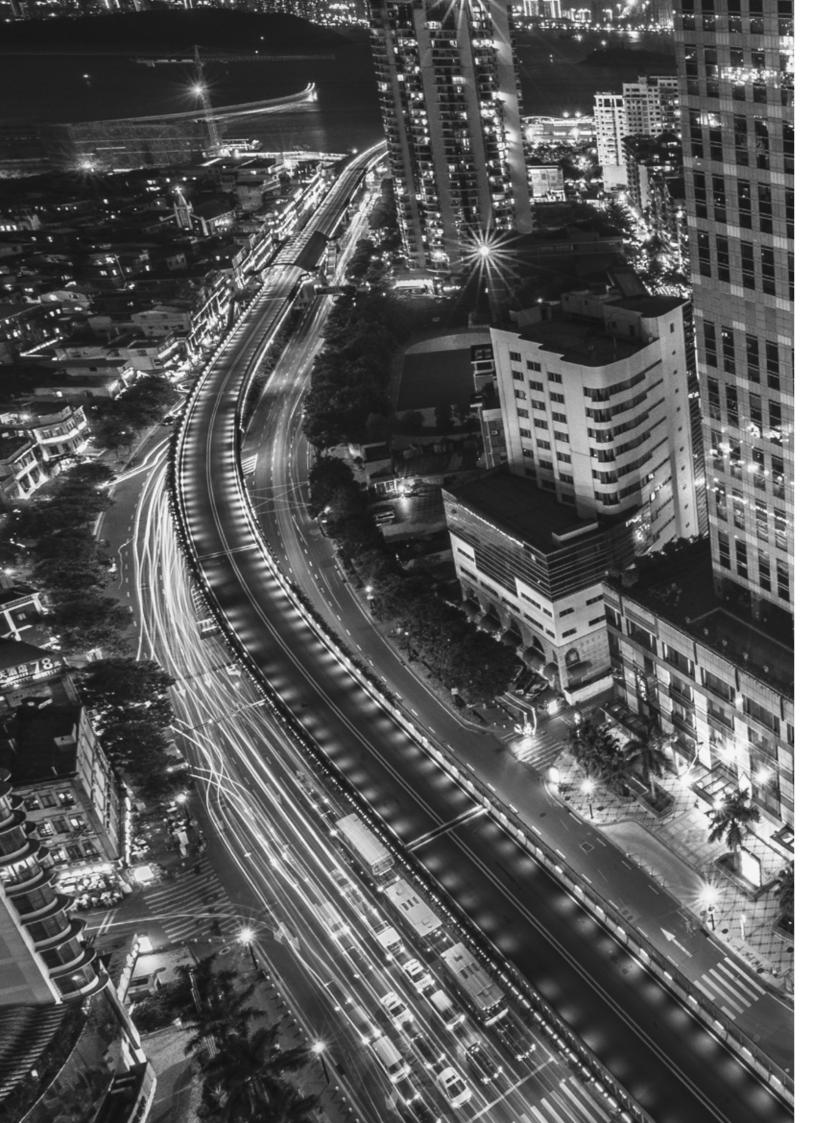


OUTDOOR LIGHTING 2020



# ELBA | Lighting technology

ELBA was founded in 1921, in the first European city that benefited from electric lighting. Nearly a century after its founding, ELBA is the most important manufacturer of lighting products in Romania.

# Innovation with every step

ELBA offers professional lighting solutions with state-of-the-art technology.

Our luminaires are designed for energy efficiency, longer lifespan, and can be used in high-quality professional lighting applications.

The company's success is based on a focus for product innovation, high standards in quality control, reliability and the high-quality services provided to people, communities, institutions, and companies.

## **ELBA LIGHT MANAGER - SMART CITY LIGHTING SOLUTION**

ELBA Light Management (ELM) is a smart city platform for the outdoor lighting infrastructure, allowing to supervise and control in real time the performance and efficiency of the whole system. ELM can deliver up to 35% in terms of costs through energy savings, together with reduced maintenance costs and increased life for the luminaires.

The application allows the integration of ELBA and other compatible products; the application HUD gives the option to monitor the luminaires, individually or in groups – depending on the solution chosen, purposefully maximizing a series of benefits:

## 1. Saves money by saving energy

Using our LED luminaires, you can get a significant reduction in energy consumption compared to more traditional solutions.

The authorized user can manage city lighting in real-time through a single dashboard – he can turn on and off or dim the lights. Another advantage is that ELM remotely adapts city lighting to the length of the day – this will eliminate unnecessary use of lighting and thus adjusting the on/off moment on a daily basis.

By targeted dimming of sectors of the city, roads or individual luminaires, the unnecessary lighting can be prevented and this will amount to additional energy savings – up to 50%, depending on the traffic specifics.

## 2. Reduces operational costs

With ELM you get real-time identification of malfunctions as well as remote energy and performance monitoring.

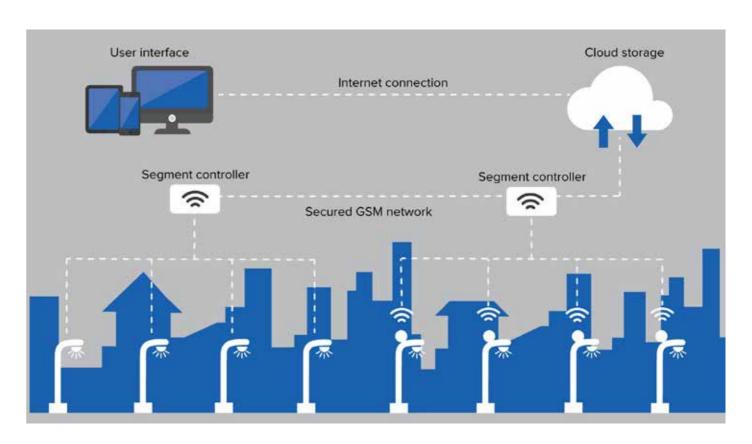
The system's automatic incident detection lets users know where an outage has occurred so that maintenance crews can be dispatched efficiently, reducing downtime and minimizing impact to citizens.

The data collected is used to optimize maintenance planning and avoid downtime, also improving safety on the roads. Additionally, this data can be used to gain insights into the city's lighting infrastructure and can help the public authorities save money, budget and plan more accurately, based on the collected data.

## 3. ELM has an impact on reducing CO2 emissions and protecting the environment

Our connected LED lighting system is meant to improve efficiency, reduce the carbon footprint and provide better light. By using LED luminaires and by having full control of your city lighting the authorities can reduce CO2 emissions, while lowering the energy usage and costs, allowing them to reinvest the savings in other areas of the city's infrastructure.

### This is how ELBA LIGHT MANAGER works:



## To put it briefly, by choosing ELM, you will be able to:



Remote command, turn lighting on and off



An automated mode of functioning that allows repetition in accordance to the position of the sun



Monitoring the networks electric parameters



Real-time visualization of the Greyd's condition



Quick response time for interventions in case of malfunctions



4



For all manufacturing errors, ELBA offers up to 5 years warranty.

All power sources, cables and accessories used for installing a product must be original or company approved. All lighting fixtures are designed and manufactured in accordance with European directives:

- The Low Voltage Directive;
- The Electromagnetic Compatibility Directive;
- The RoHS Directive;
- The DEEE Directive.

More than 90% of our LED circuits for outdoor technical lighting are manufactured in house.

We have a passion for the best quality light output and we have been developing methods to reach those goals.

Our products are fitted with high-quality LEDst, all of them manufactured by world leaders in LED lighting.

For more information, please visit our website: www.elbalighting.com



ELBA lighting fixtures are designed by using economical LED light sources, both modern and green, with high efficiency in a consumption-performance assessment.

Starting from 2020, ELBA will design and produce solely "green" lighting fixtures, using LED technology.

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### PEDESTRIAN LIGHTING



### ARCHITECTURAL LIGHTING



Aria 01	Aria 02	PowerFlex 01	Luxor Plus	Fix Light 03
	8	2	**************************************	5200 5000 5000 5000 5000 5000 5000 5000
142	146	150	154	158 <u>NEW</u>



# CRIOTEK

Road, street and residential luminaires

The CRIOTEK LED range of high performance street lighting luminaires combines a distinct design with high-quality lighting, being perfectly integrable in the roads, with ME2, ME3, ME4, ME5, ME6, S1÷S6 modern urban landscape.

The high-performance optical system allows HID solutions to be replaced without compromising distances, mounting height, or light quality. Arm fitting

### FIELD OF USE:

Road and street lighting for major, local, secondary lighting class according to SR EN 13201. Residential lighting including alleys, sidewalks, parks, pedestrian crossings car parks, railway stations, bus terminals.





# Performance. Innovation. Efficiency

It is a range of modern luminaires destined for street lighting, with state-of-theart light sources with prolonged lifespan, equipped with the highest efficiency LED modules. It is energy efficient and has a positive impact on the environment.





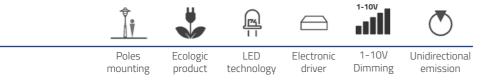


CRIOTEK 03

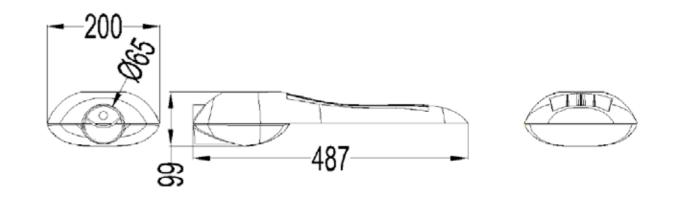
# CRIOTEK 01

Street and residential luminaire CRIOTEK-01 LED HP









### **CRIOTEK 01** | Street lighting | Technical Sheet

TECHNICAL FEATURES:		
Rated voltage:	230V/50Hz	
Active power:	26,2W 30,7W	
Degrees of protection:	IP 66	
Mechanical impact resistance:	IK10	
Ambient temperature range:	-30°C ÷ +45°C	
Relative humidity:	Up to 80% at the temperature of + 20°C	

DESCRIPTION AND PERFORMANCES:			
Materials:	High-pressure die-cast aluminium housing painted in electrostatic field. The optical system is made of polycarbonate.		
Equipment:	The optical system designed to meet the requirements of the street lighting standard EN 13201.		
	Power LEDs with specialized system for the orientation of the luminous flux		
	for road lighting.		
Electronic driver:	Included in the product and manufactured according to the specific standards		
	(SR EN 60598-1, SR EN 60598-2-3).		
Flux dimming (DIM):	Analogical 0-10V		
Colour:	Grey		
LIGHT SOURCES:			

Power LEDs with specialized optics for road and residential lighting, with colour temperature neutral-white 4000K, CRI≥70, with a long lifetime L80B50 of minimum 163.000 hours at Ta=25°C.

## COMPLIANCE WITH THE EUROPEAN DIRECTIVES:

Low Voltage Directive Electromagnetic Compatibility Directive RoHS Directive, WEEE Directive



### **CRIOTEK 01** | Street lighting | Variants

Product type	Product code	Active power [W]	Power factor [cos φ]	Total initial luminaire flux [Lm]	Total luminous system efficiency [Im/W]
CRIOTEK-01 PR 16LED 4048LM 4K	35617282	26,2	≥0,97	4048	155
CRIOTEK-01 PR 16LED 4770LM 4K	35617283	30,7	≥0,98	4650	151

DIM = driver with dimming possibility 0-10V

DIM\* = the products could be used in dimming mode (DIM) according to the Mounting Instructions

# MOUNTING:

- The mounting system, from the end of the High-pressure mercury lamps HME 80W, luminaire body, allows the mounting on console on • High-pressure sodium lamps HST 50W. pipe ø60-65mm and with stripe(s) 48-60mm;
- Wind surface max. = 0,048 m<sup>2</sup>;
- Recommended mounting height: 5-6m.

## VARIANTS ON REQUEST:

- Could be equipped with LEDs with colour temperature cool-white 5700K CRI≥70.
- Aluminium connecting piece for tilting 0÷90° for fastening on console or top pole (M000024008)
- With straps for pipe ø48 60mm.
- The product could be equipped with connector with ingress protection – power supply 230V – power supply of LED module.
- With dimmable driver protocol DALI.

# $_{\mbox{\tiny II}}$ SUBSTITUTE OR IT IS EQUIVALENT TO:

- SR EN 60598-1
- SR EN 60598-2-3

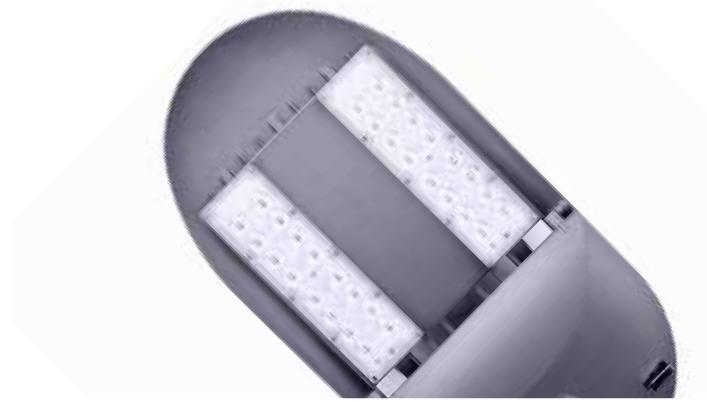
# CRIOTEK 02

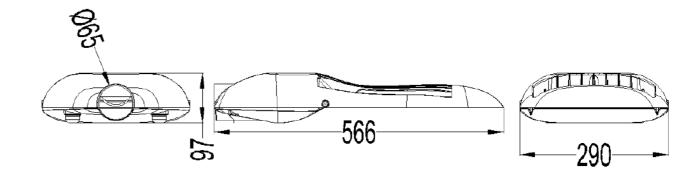
Street and residential luminaire CRIOTEK-02 LED HP











### **CRIOTEK 02** | Street lighting | Technical Sheet

TECHNICAL FEATURES:	
Rated voltage:	230V/50Hz
Active power:	41W 50W 52,3W 71,6W 75W
Degrees of protection:	IP 66
Mechanical impact resistance:	IK10
Ambient temperature range:	-30°C ÷ +45°C
Relative humidity:	Up to 80% at the temperature of + 20°C
DESCRIPTION AND PERFORMAN	CES:
Materials:	High-pressure die-cast aluminium housing painted in electrostatic field.  The optical system is made of polycarbonate.
Equipment:	The optical system designed to meet the requirements of the street lighting
	standard EN 13201.
	Power LEDs with specialized system for the orientation of the luminous flux
	for road lighting.
Electronic driver:	Included in the product and manufactured according to the specific standards
Liectionic unver.	(SR EN 60598-1, SR EN 60598-2-3).
Flux dimming (DIM):	Analogical 0-10V
Colour:	Grey
LIGHT SOURCES:	
	Power LEDs with specialized optics for road and residential lighting, with
	colour temperature neutral-white 4000K, CRI≥70, with a long lifetime L80B50
	of minimum 162,000 hours at Ta 2000

of minimum 163.000 hours at Ta=25°C.

## COMPLIANCE WITH THE EUROPEAN DIRECTIVES:

Low Voltage Directive Electromagnetic Compatibility Directive RoHS Directive, WEEE Directive



### **CRIOTEK 02** | Street lighting | Variants

Product type	Product code	Active power [W]	Power factor [cos φ]	Total initial Iuminaire flux [Lm]	Total luminous system efficiency [lm/W]
CRIOTEK-02 HP 32LED 6232LM 4K DIM	35617284	41	≥0,96	6232	152
CRIOTEK-02 HP 32LED 8000LM 4K DIM	35617285	52,3	≥0,95	8000	153
CRIOTEK-02 HP 32LED 10839LM 4K DIM	35617286	71,6	≥0,98	10839	151
CRIOTEK-02 HP 32LED 10839LM 4K DA	23418251	71,6	≥0,96	10839	151
CRIOTEK-02 HP 32LED 7800LM 4K DA	23418252	50	≥0,95	7800	156
CRIOTEK-02 HP 32LED 11800LM 4K DA	23418253	75	≥0,98	11800	157

DIM = driver with dimming possibility 0-10V

DIM\* = the products could be used in dimming mode (DIM) according to the Mounting InstructionsV

DA = cu driver dimmabil protocol DALI

# MOUNTING:

- luminaire body, allows the mounting on console on pipe ø60-65mm and with stripe(s) ø48-60mm;
- Wind surface max. = 0,054 m²;
- Recommended mounting height: 6-8m.

## **VARIANTS ON REQUEST:**

- Could be equipped with LEDs with colour temperature cool-white 5700K CRI≥70;
- Aluminium connecting piece for tilting 0÷90° for fastening on console or top pole (M000024008);
- With straps for pipe Ø48 60mm;
- The product could be equipped with connector with ingress protection – power supply 230V – power supply of LED module;
- With dimmable driver protocol DALI.

# SUBSTITUTE OR IT IS EQUIVALENT TO:

- The mounting system, from the end of the Metal halide lamps HIT 50W, high-pressure sodium lamps HSE 70W;
  - High-pressure mercury lamps HME 250W, metal halide lamps HIT 100W, high-pressure sodium lamps HST 100W.

## COMPLIANCE WITH THE LUMINAIRES STANDARDS:

21

- SR EN 60598-1
- SR EN 60598-2-3

# CRIOTEK 03

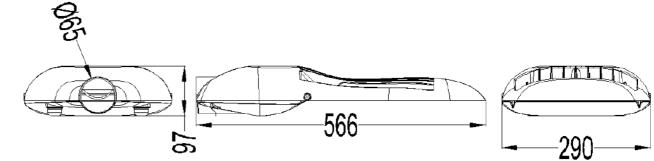
Street and residential luminaire CRIOTEK-03 LED HP











### **CRIOTEK 03** | Street lighting | Technical Sheet

TECHNICAL FEATURES:	
Rated voltage:	230V/50Hz
Active power:	80,7W 118,8W 105W 139W 142,3W
Degrees of protection:	IP 66
Mechanical impact resistance:	IK10
Ambient temperature range:	-30°C ÷ +45°C
Relative humidity:	Up to 80% at the temperature of + 20°C
DESCRIPTION AND PERFORMANC	ES:
Materials:	High-pressure die-cast aluminium housing painted in electrostatic field.

Materials:	High-pressure die-cast aluminium housing painted in electrostatic field.  The optical system is made of polycarbonate.
Equipment:	The optical system designed to meet the requirements of the street lighting standard EN 13201.  Power LEDs with specialized system for the orientation of the luminous flux for road lighting.
Electronic driver:	Included in the product and manufactured according to the specific standards
Flux dimming (DIM):	Analogical 0-10V
Colour:	Grey

## LIGHT SOURCES:

Power LEDs with specialized optics for road and residential lighting, with colour temperature neutral-white 4000K, CRI≥70, with a long lifetime L80B50 of minimum 163.000 hours at Ta=25°C.

## COMPLIANCE WITH THE EUROPEAN DIRECTIVES:

Low Voltage Directive Electromagnetic Compatibility Directive RoHS Directive, WEEE Directive



### **CRIOTEK 03** | Street lighting | Variants

Product type	Product code	Active power [W]	Power factor [cos φ]	Total initial Iuminaire flux [Lm]	Total luminous system efficiency [lm/W]
CRIOTEK-03 HP 48LED 12537LM 4K DIM	35617287	80,7	≥0,97	12537	155
CRIOTEK-03 HP 48LED 18020LM 4K DIM	35617288	118,8	≥0,97	18020	152
CRIOTEK-03 HP 48LED 21500LM 4K DIM	35617289	139	≥0,97	21500	155
CRIOTEK-03 HP 48LED 16000LM 4K DA	23418254	105	≥0,97	16000	152
CRIOTEK-03 HP 48LED 21350LM 4K DA	23418255	142,3	≥0,97	21350	150

DIM = driver with dimming possibility 0-10V

DIM\* = the products could be used in dimming mode (DIM) according to the Mounting Instructions

DA = cu driver dimmabil protocol DALI



- luminaire body, allows the mounting on console on pipe ø60-65mm and with stripe(s) 48-60mm;
- Wind surface max. = 0,054 m²;
- Recommended mounting height: 9-10m.

# VARIANTS ON REQUEST:

- Could be equipped with LEDs with colour temperature cool-white 5700K CRI≥70;
- Aluminium connecting piece for tilting 0÷90° for fastening on console or top pole (M000024008);
- With straps for pipe 48 60mm;
- The product could be equipped with connector with ingress protection – power supply 230V – power supply of LED module;
- With dimmable driver protocol DALI.

# SUBSTITUTE OR IT IS EQUIVALENT TO:

■ The mounting system, from the end of the ■ High-pressure mercury lamps HME 250W, metal halide lamps HIT 250W, high-pressure sodium lamps HST 150W, HSE 250W.

- SR EN 60598-1
- SR EN 60598-2-3

2020 | Outdoor lighting

# MATRIX

Road, street and residential luminaires

MATRIX range of luminaries represents the solution **FIELD OF USE:** for the challenges that the authorities are confronted – to ensure the people security, saving at the same time energy, and decreasing the maintenances costs.

MATRIX is efficient from an energy standpoint and has a positive impact on the environment. With uniform distribution, our effective optic system allows for the replacement of HID solutions without compromising distances, the installation height or the quality of light.

Road and street lighting for major, local, secondary roads, with ME4, ME5, ME6, S1÷S6, lighting class according to EN 13201, residential lighting including alleys, sidewalks, parks, pedestrian crossings car parks, railway stations, bus terminals.



MATRIX 2.5

# Modern design. Superior quality lighting

Fitted with high-performance LED modules, MATRIX is a blend of distinct design and the functionality of superior quality lighting, and is a perfect fit in urban architecture.



MATRIX 03

MATRIX 2.5

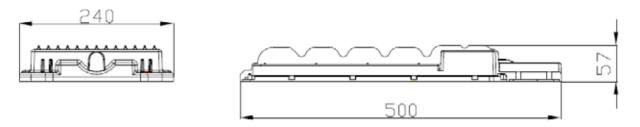
Road, street and residential luminaires MATRIX-2.5 10 LED / MATRIX-2.5 15 LED











### MATRIX 2.5 | Street lighting | Technical Sheet

TECHNICAL FEATURES:	
Rated voltage:	230V/50Hz
Active power:	81W 97W
Degrees of protection:	IP 66
Mechanical impact resistance:	IK08
Ambient temperature range:	-30°C÷+45°C
Relative humidity:	Up to 80% at the temperature of + 20°C

DESCRIPTION AND PERFORMANCES:	
Materials:	Aluminium housing painted.  Transparent diffuser made from tempered secured glass.
Equipment:	The optical system designed to meet the requirements of the street lighting standard EN 13201, contains the power LEDs with specialized optics for road lighting.
Electronic driver:	Included in the product and manufactured according to the specific standards.
Flux dimming (DIM):	Analogical 0-10V
Colour:	Grey

## LIGHT SOURCES:

Power LEDs with specialized optics for road and residential lighting, with colour temperature 5700K,CRI≥70, or neutral-white 4000K, or warm-white 3000K, CRI≥70, with a long lifetime L70B50 of minimum 50.000 hours at Ta=25°C.

## COMPLIANCE WITH THE EUROPEAN DIRECTIVES:

Low Voltage Directive Electromagnetic Compatibility Directive RoHS Directive, WEEE Directive



### **MATRIX 2.5** | Street lighting | Variants

Product type	Product code	Active power [W]	Power factor [cos φ]	Total initial luminaire flux [Lm]	Total luminous system efficiency [lm/W]
MATRIX-2.5 10 LED/ 600 XHP50 5700K DIM	35617232	81	≥0,96	7756	96
MATRIX-2.5 15 LED/ 600 XHP50 5700K DIM	35617231	97	≥0,96	9940	102
MATRIX-2.5 10 LED/ 600 XHP50 4000K DIM	35617235	81	≥0,96	7756	96
MATRIX-2.5 15 LED/ 600 XHP50 4000K DIM	35617234	97	≥0,96	9940	102

DIM = dimmable analogical 0-10V

# MOUNTING:

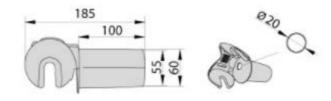
- body, allows the mounting on console on pipe is equivalent with: ø50mm - 60mm;
- Wind-surface(frontal)=0,120 m²;
- Wind-surface(lateral)=0,029 m²;
- Recommended mounting height: 7-10m.

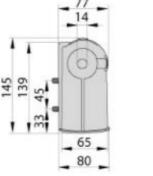
# SUBSTITUTE OR IT IS EQUIVALENT TO:

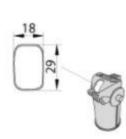
• Mounting system, from the end of the luminaire The system with LEDs included in the product could replace or

- MATRIX-2.5 10LED: high-pressure sodium lamps HST 100W: metal halide lamps HIT 100W.
- MATRIX-2.5 15LED: high-pressure mercury lamps HME 250W high-pressure sodium lamps HSE 150W, metal halide lamps HIT 150W.

### Optional accessory Connecting piece with index (M000024008)







# VARIANTS ON REQUEST:

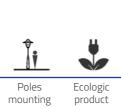
- Flux dimming DALI protocol;
- The product could be equipped with transparent polycarbonate diffuser vandal resistant IK10;
- Accessories aluminium connecting piece with index for fixing on console or on top of the pole (M000024008).

- SR EN 6T0598-1
- SR EN 60598-2-3
- SR EN 62031



Road, street and residential luminaires MATRIX-03 1x4LED XHP MATRIX-03 24LED G2/ MATRIX-03 48LED G2 MATRIX-03 2x4LED XHP









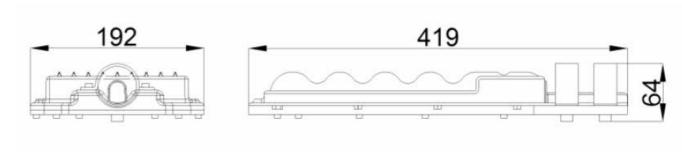




Electronic Unidirectional driver emission







### MATRIX 03 | Street lighting | Technical Sheet

TECHNICAL FEATURES:	
Rated voltage:	230V/50Hz
Active power:	24W 38W 55W
Degrees of protection:	IP 66
Mechanical impact resistance:	IK08
Ambient temperature range:	-30°C ÷ +40°C / -20°C ÷ +35°C (G2 variants)
Relative humidity:	Up to 80% at the temperature of + 20°C
DESCRIPTION AND PERFORMANCES	5:
Materials:	Aluminium housing painted.
	Transparent diffuser made from tempered secured glass.
Equipment:	The optical system designed to meet the requirements of the street
	lighting standard EN 13201, contains the power LEDs with specialized
	optics for road lighting.
Overheating protection:	The output current through the LEDs will be reduced or the product will
	operate pulsating when the operating temperature of the driver is exceeded.
Electronic driver:	Included in the product and manufactured according to the specific standards.

### LIGHT SOURCES:

Colour:

Behaviour on short-circuit:

Power LEDs or mid-power LEDs (G2 variants) with specialized optics for road and residential lighting, with colour temperature 5700K, CRI≥70, colour temperature neutral-white 4000K, CRI≥70, with a long lifetime at Ta=25°C.

In case of short-circuit on the LED module, the driver will turn off. After the

elimination of the cause of short-circuits, the driver will turn on again and will

	B10			B50	
L70	L80	L90	L70	L80	L90
>181.000 hours	>144.190 hours	>70.380 hours	181.000 hours	>145.270 hours	>70.950 hours

operate on normal parameters.

Grey

## COMPLIANCE WITH THE EUROPEAN DIRECTIVES:

Low Voltage Directive Electromagnetic Compatibility Directive RoHS Directive, WEEE Directive



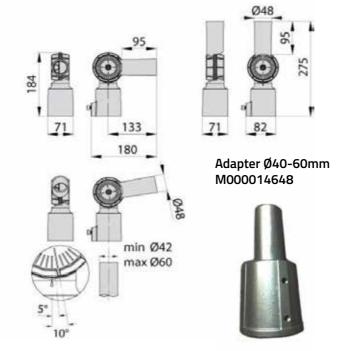
### **MATRIX 03** | Street lighting | Variants

Product type	Product code	Active Iuminaire power [W]	Power factor [cos φ]	Total initial luminaire flux [Lm]	Total luminous system efficiency [lm/W]
MATRIX-03 1x4 LED/ 700 XHP 5700K	35617223	38	≥0,95	3626	95
MATRIX-03 2x4 LED/ 900 XHP 4000K	35617154	47	≥0,95	4751	101
MATRIX-03 2x4 LED/ 1050 XHP 4000K	35617224	55	≥0,95	5500	100
MATRIX-03 2x4 LED/ 900 XHP 5700K	35617220	47	≥0,95	5117	109
MATRIX-03 24 LED G2 4000K	35617279	24	≥0,95	2841	118.4
MATRIX-03 48 LED G2 4000K	35617280	38	≥0,95	4256	112

# MOUNTING:

- The mounting system, from the end of the luminaire body, allows the mounting on console on pipe (ø35-40mm);
- For mounting on console ø48mm there must be mounted on product the screws, delivered as accessories on the product box;
- On request on console or on top of the pole with the connecting piece with index, with tilting angle adjustable vertically 0°±90° (step 5°/10°);
- Adapter for ø40-60mm console mounting M000014648;
- On request on console Ø42-60mm with adapter;
- Wind surface (frontal)=0,080 m²;
- Wind surface (lateral)=0,026 m²;
- Recommended mounting height: 5-8m.

## Optional accessory Connecting piece with index P03116678 (M000014015)



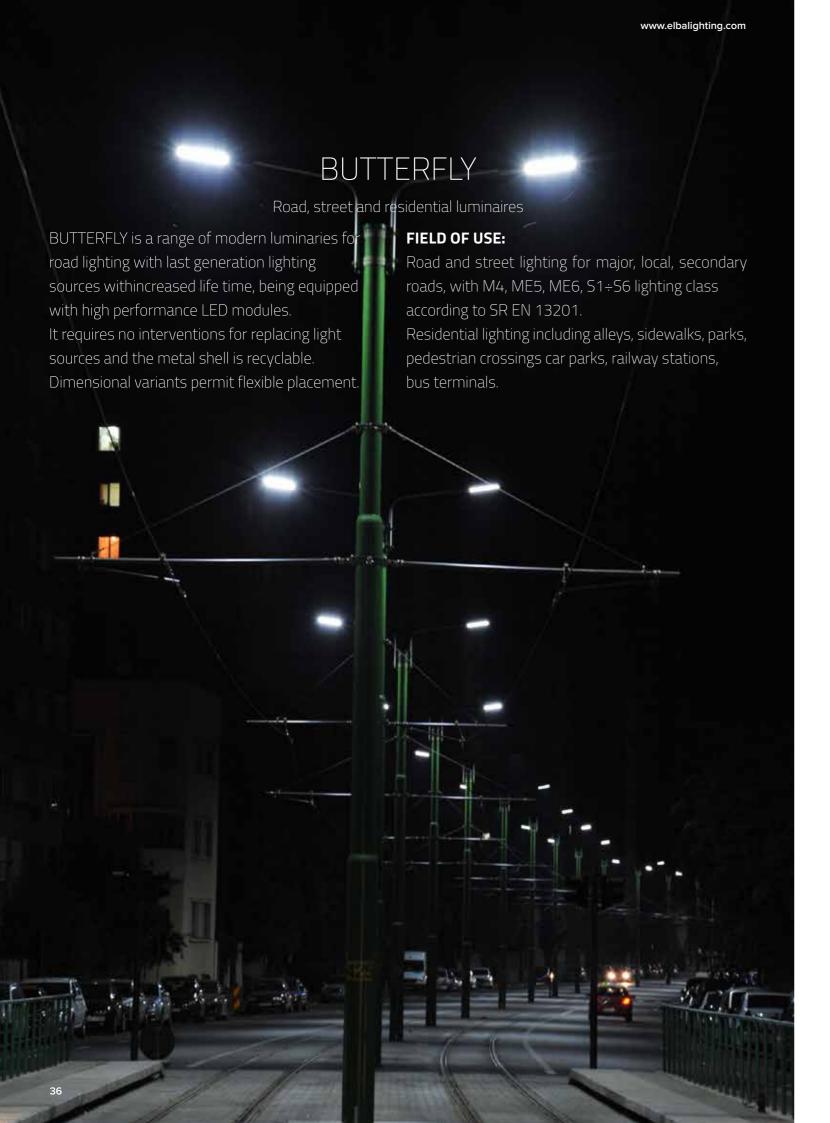
## SUBSTITUTE OR IT IS EQUIVALENT TO:

The system with LEDs included in the product could replace or is equivalent with: high-pressure sodium lamps HST, HSE 50W, 70W, metal halide lamps HIT 70W, high-pressure mercury lamps HME 125W.

## VARIANTS ON REQUEST:

- The product could be equipped with transparent polycarbonate diffuser vandal resistant IK10.
- On request the product could be equipped with LEDs with colour temperature warm-white 3000K, CRI≥70, or colour temperature neutral-white 4000K, CRI≥70, CRI≥80 for the G2 variants.

- SR EN 60598-1
- SR EN 60598-2-3
- SR EN 62031





# Distinct design. High-quality lighting

The BUTTERFLY luminaires combine a distinct design with high-quality lighting, and fits perfectly in the urbane architecture.



BUTTERFLY 02

# BUTTERFLY 01

Road, street and residential luminaires BUTTERFLY-01 18LED







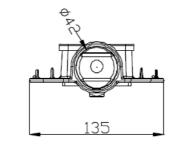


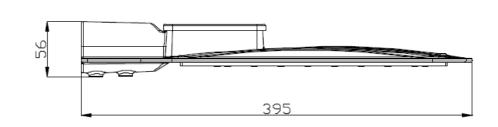


Electronic driver









### **BUTTERFLY 01** | Street lighting | Technical Sheet

TECHNICAL FEATURES:				
Rated voltage:	230V/50Hz			
Active power:	14,4W 20W			
Degrees of protection:	IP 66			
Mechanical impact resistance:	IK09			
Ambient temperature range:	-20°C ÷ +35°C			
Relative humidity:	Up to 80% at the temperature of + 20°C			
DESCRIPTION AND PERFORMANCE	ES:			
Materials:	Aluminium housing (painted).			
	The optical system is made of polycarbonate.			
Equipment:	The optical system designed to meet the requirements of the street lighting standard EN 13201, contains the power LEDs with specialize optics for road lighting.			
	Power LEDs with specialized optics for road and residential lighting			
Overheating protection:	If the operating temperature for the driver is exceeded the product will turn of until the temperature decreases till the normal value.			
Electronic driver:	Included in the product and manufactured according to the specific standards			
Behaviour on short-circuit:	<ul> <li>In case of short-circuit on the LED module, the driver will turn off. After the elimination of the cause of short-circuits, the driver will turn on again and will operate on normal parameters.</li> <li>Surge protection 10kV LNG.</li> <li>Overload Protection.</li> <li>Under Voltage Protection.</li> </ul>			
Colour:	Grey			

## LIGHT SOURCES:

Power LEDs with specialized optics for road and residential lighting, with colour temperature neutralwhite

4000K CRI≥70 or CRI≥80 with a long lifetime, at Ta=25°C:

B10			B50		
L70	L80	L90	L70	L80	L90
121.000 hours	>75.000 hours	>35.000 hours	> 140.000 hours	>87.000 hours	>40.000 hours

## COMPLIANCE WITH THE EUROPEAN DIRECTIVES:

Low Voltage Directive Electromagnetic Compatibility Directive RoHS Directive, WEEE Directive



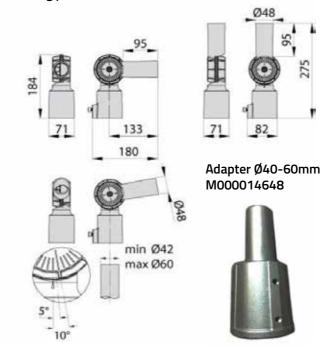
### **BUTTERFLY 01** | Street lighting | Variants

Product type	Product code	Active power [W]	Power factor [cos φ]	Total initial net flux [Lm]	Total luminous system efficiency [Im/W]
BUTTERFLY-01 18LED/350 1876LM	35617326	14,4	≥0,9	1876	130
BUTTERFLY-01 18LED/500 2480LM	35617334	20	≥0,9	2480	124

# MOUNTING:

- The mounting system, from the end of the luminaire body, allows the mounting on console on pipe ø35– ø42mm;
- Frontal wind surface=0.053 m<sup>2</sup>;
- Lateral wind surface=0.022 m²;
- Recommended mounting height: 4-8m.

### Optional accessory Connecting piece with index P03116678 (M000014015)



# SUBSTITUTE OR IT IS EQUIVALENT TO:

High-pressure mercury lamps HME 80W, compact fluorescent lamps TC-L 24W.

# VARIANTS ON REQUEST:

### Accessories:

- Aluminium connecting piece with index for fixing on console or on top of the pole (console imension ø42ø60mm). P03116678 (M000014015);
- Adapter Ø40-60mm for fixing on console M000014648.



- SR EN 60598-1
- SR EN 60598-2-3

# BUTTERFLY 02

Road, street and residential luminaires BUTTERFLY-02 48LED





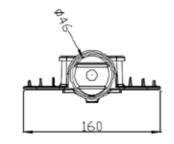


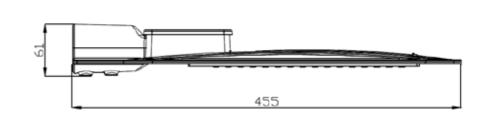


LED Elect









### **BUTTERFLY 02** | Street lighting | Technical Sheet

TECHNICAL FEATURES:	
Rated voltage:	230V/50Hz
Active power:	19,3W 24W
Degrees of protection:	IP 66
Mechanical impact resistance:	IK09
Ambient temperature range:	-20°C ÷ +35°C
Relative humidity:	Up to 80% at the temperature of + 20°C
DESCRIPTION AND PERFORMAN	CES:
Materials:	Aluminium housing (painted).
	The optical system is made of polycarbonate.
Equipment:	The optical system designed to meet the requirements of the street
	lighting standard EN 13201, contains the power LEDs with specialized
	optics for road lighting.
	Power LEDs with specialized optics for road and residential lighting
Overheating protection:	If the operating temperature for the driver is exceeded the product will turn off
	until the temperature decreases till the normal value.
Electronic driver:	Included in the product and manufactured according to the specific standards.
Behaviour on short-circuit:	<ul> <li>In case of short-circuit on the LED module, the driver will turn off. After</li> </ul>
	the elimination of the cause of short-circuits, the driver will turn on again
	and will operate on normal parameters.
	<ul> <li>Surge protection 10kV LNG.</li> </ul>
	<ul> <li>Overload Protection.</li> </ul>
	<ul> <li>Under Voltage Protection.</li> </ul>
Colour:	Grey
LIGHT SOURCES:	

Power LEDs with specialized optics for road and residential lighting, with colour temperature neutralwhite

4000K CRI≥70 or CRI≥80 with a long lifetime, at Ta=25°C:

	B10			B50	
L70	L80	L90	L70	L80	L90
121.000 hours	>75.000 hours	>35.000 hours	> 140.000 hours	>87.000 hours	>40.000 hours

## COMPLIANCE WITH THE EUROPEAN DIRECTIVES:

Low Voltage Directive

Electromagnetic Compatibility Directive

RoHS Directive, WEEE Directive



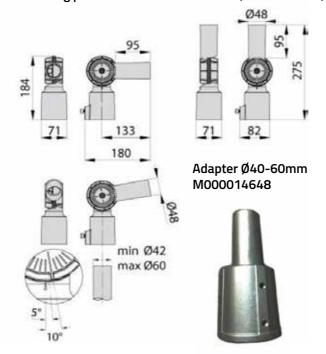
### **BUTTERFLY 02** | Street lighting | Variants

Product type	Product code	Active power [W]	Power factor [cos φ]	Total initial net flux [Lm]	Total luminous system efficiency [lm/W]
BUTTERFLY-02 48LED/500 2911LM	35617327	19,3	≥0,9	2911	151
BUTTERFLY-02 48LED/500 R3MA 3878LM	35617328	24	≥0,9	3615	151

# MOUNTING:

- The mounting system, from the end of the luminaire body, allows the mounting on console on pipe ø35-46mm;
- Frontal wind surface= 0.073 m²;
- Lateral wind surface= 0.027 m<sup>2</sup>;
- Recommended mounting height: 4-8m.

### Optional accessory Connecting piece with index P03116678 (M000014015)



# $\stackrel{\text{\tiny \mbox{\scriptsize M}}}{_{11}}$ SUBSTITUTE OR IT IS EQUIVALENT TO:

High-pressure mercury lamps HME 125W, highpressure sodium lamps HST 50W/70W HSE 50/70W, metal halide lamps HIT 50W, compact fluorescent lamps TC-L 36W/40W.



# VARIANTS ON REQUEST:

### Accessories:

- Aluminium connecting piece with index for fixing on console or on top of the pole (console imension ø42-ø60mm) - P03116678 (M000014015);
- Adapter Ø40-60mm for fixing on console M000014648.



- SR EN 60598-1
- SR EN 60598-2-3

MARKANT

Street and residential luminaire. Pedestrian crossing luminaire
MARKANT-01 12LED XPL2 / MARKANT-01 24LED XPL2

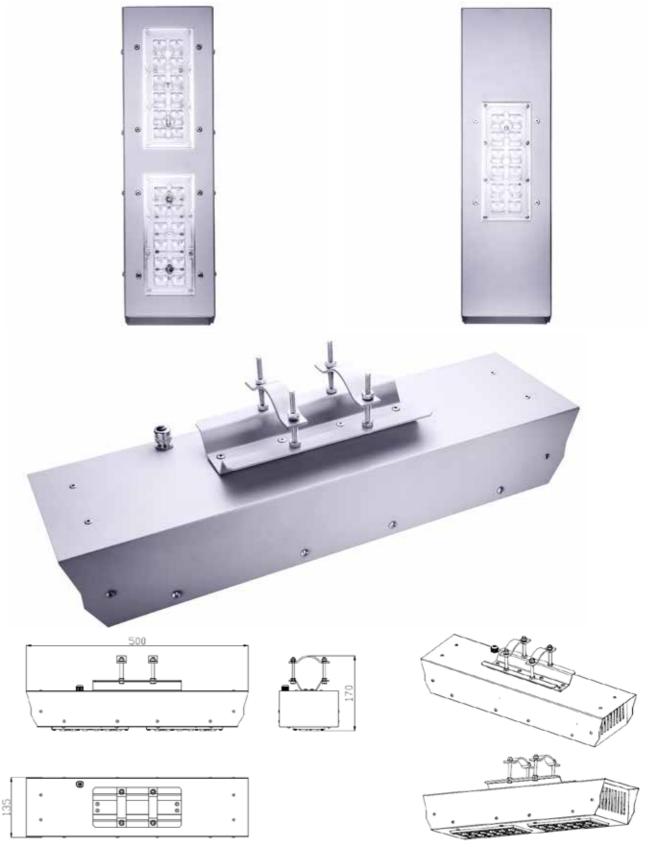




MARKANT LED is the optimum variant from the category of street luminaires, equipped with the most recent generation LED modules - with high performance, that makes it to have high energy efficiency, and a very good light distribution due to the innovative compact lenses system.

## FIELD OF USE:

Road lighting for pedestrian crossings.



### MARKANT | Street lighting | Technical sheet

TECHNICAL FEATURES:	
Rated voltage:	230V/50Hz
Active power:	41,7W 52,4W
Degrees of protection:	IP 65
Mechanical impact resistance:	IK08
Ambient temperature range:	-30°C ÷ +35°C
Relative humidity:	Up to 80% at the temperature of + 20°C
DESCRIPTION AND PERFORMANCE	S:
Materials:	Body made of zincked steel sheet (painted). Passive aluminium cooler.  The optical system is made of polycarbonate.
Equipment:	Overvoltage protection 6kV LNG, 4kV LN.  The optical system designed to meet the requirements of the street lighting standard EN 13201, contains the power LEDs with specialized optics for road lighting.
Electronic driver:	Included in the product and manufactured according to the specific standards
Colour:	Grey
LIGHT SOURCES:	

## LIGHT SOURCES:

Power LEDs with specialized optics for pedestrian crossing, with colour temperature neutral-white 4000K, CRI≥70, with a long lifetime, at Ta=25°C:

B10		B50		
L80 L90		L50	L70	
>81.650 hours	>33.210 hours	>280.000 hours	>115.000 hours	

### COMPLIANCE WITH THE EUROPEAN DIRECTIVES:

Low Voltage Directive

Electromagnetic Compatibility Directive

RoHS Directive, WEEE Directive



### MARKANT | Street lighting | Variants

Product type	Product code	Active Iuminaire power [W]	Power factor	Total initial luminaire flux [Lm]	Total luminous efficiency [lm/W]
MARKANT-01 12 LED/1000 XPL2 4000K	35617335	41,7	≥0,96	3592	130
MARKANT-01 24 LED/700 XPL2 4000K	35617336	52,4	≥0,98	1902	140

# MOUNTING:

- The mounting system, from the end of the luminaire body, allows the mounting on console on pipe (ø45 -ø60mm);
- Mounting on pole;
- Possibility for rapid change of the gear and optical module without special tools;
- Frontal wind surface =0.067 m<sup>2</sup>;
- Lateral wind surface = 0.085 m²;
- Recommended mounting height: 5-7m.

## SUBSTITUTE OR IT IS EQUIVALENT TO:

High-pressure mercury lamps HME 125W, high-pressure sodium lamps HST 50W, HSE 50W, metal halide lamps HIE 70W, compact fluorescent lamps 2xTC-L 24W.

# VARIANTS ON REQUEST:

- Possibility for overvoltage protection till 10kV.
- Delivered with 3m power supply cable.



- SR EN 60598-1
- SR EN 60598-2-3



48

# APOLLO

Road, street and residential luminaires

APOLLO combines innovative technology with an attractive design that blends perfectly into the architectural surroundings.

Thanks to the state-of-the-art LED modules, it illuminates the road section efficiently and reliably. One of its main advantages is that it can be used in smart lighting applications, being one of the best solutions for your Smart City.

### FIELD OF USE:

Road and street lighting for: major, local, secondary roads, with ME2, ME3, ME4, ME5, ME6, S1÷S6, lighting class according to SR EN 13201.

Residential lighting including alleys, sidewalks, parks, pedestrian crossings/passages, parking areas, railway stations, bus terminals, large public areas.



# Efficiency. Performance. Innovative technology

APOLLO is a range of modern luminaries with a contemporary design that blends perfectly into the architectural surroundings of our modern cities while ensuring efficient street lighting and energy savings.



2020 | Outdoor lighting

# AVIS

## Pedestrian and residential lighting

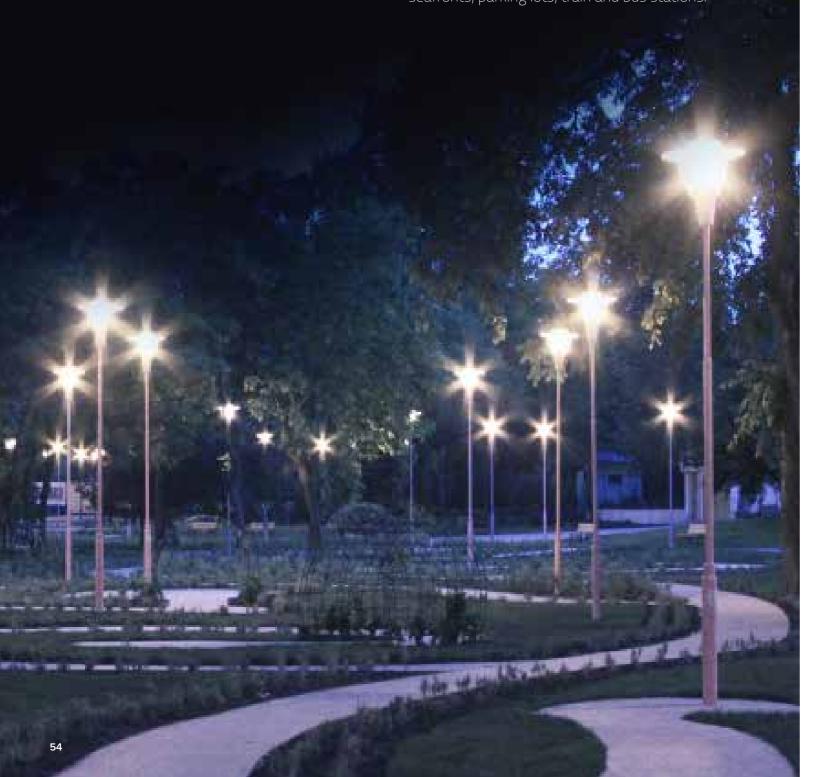
Fitted with the latest LED technology, AVIS includes lighting fixtures that are efficient and the ideal solution for replacing lighting fixtures fitted with compact fluorescent lamps or discharge lamps.

AVIS light fixtures are ideal for residential and pedestrian areas, creating a visual balance and a relaxing ambiance.

It's a very efficient lighting fixture and it provides excellent, environment-friendly lighting. It has a reduced consumption of energy and a long life span.

### FIELD OF USE:

Ornamental exterior lighting - commercial spaces entryways, stores, buildings, alleys, parks, seafronts, parking lots, train and bus stations.





AVIS 02

# Visual balance. High-quality lighting. Optimization.

AVIS lighting fixtures can be used to customize exterior spaces, both from an aesthetic and an efficiency standpoint.



AVIS 02M



Outdoor decorative pedestrian luminaire AVIS-02 10LED/66LED AVIS-02-30LED









DALI control



### **AVIS 02** | Pedestrian traffic lighting | Technical Sheet

TECHNICAL FEATURES:	
Rated voltage:	230V/50Hz
Active power:	37,8W 41,3W 61,4W 69,5W
Degrees of protection:	IP66
Mechanical impact resistance:	IK10 diffuser PC, IK06 product.
Ambient temperature range:	-20°C÷+35°C 30LED / -30°C÷+45°C 10/66LED
Relative humidity:	Up to 80% at the temperature of + 20°C
DESCRIPTION AND PERFORMANCES:	
Materials:	Body, disc and brackets in grey or black polycarbonate UV and solar radiation
	resistant.
	Top cover made of aluminium, painted.
	Diffuser in transparent/opal polycarbonate UV and solar radiation resistant.
	Reflector made of white painted steel sheet.

Equipment:	The product has a thermic management system, made of a passive radiator, to ensure the long lifetime.

Gear (electronic driver):	Included in the product and manufactured according to the specific standards.
Flux dimming:	Analogue control 1-10V for the DIM variant.

Colour: Grey

## LIGHT SOURCES:

Power LEDs, or mid-power LEDs (66LED) with colour temperature neutral-white 4000K CRI≥80, with a long lifetime L70B50 of minimum 50.000 hours at Ta=25°C. With optical system, made for pedestrian traffic and decorative lighting.

## COMPLIANCE WITH THE EUROPEAN DIRECTIVES:

Low Voltage Directive Electromagnetic Compatibility Directive RoHS Directive, WEEE Directive



### **AVIS 02** | Pedestrian traffic lighting | Variants

Product type	Product code	Active Iuminaire power [W]	Power factor [cos φ]	Luminaire luminous flux net [Lm]	Luminaire efficacy [lm/W]
AVIS-02 - 10LED/480 4000K DIM	34431099	61,4	≥0,96	7284	119
AVIS-02 - 66LED/400 4000K	on request	37,8	≥0,96	3211	85
AVIS-02 - 30 LED HE 6500K	34431081	69,5	≥0,96	5526	80
AVIS-02 - 30 LED 6500K	34431073	41,3	≥0,96	2982	72

DIM = analogue dimming control 1-10V HE = High efficiency



# MOUNTING:

• The product could be mounted fastened on top of the pole Ø60mm (Øexterior: max.60mm, Øinterior: min.50mm).



# SUBSTITUTE OR IT IS EQUIVALENT TO:

Compact fluorescent lamp TC-TEL 80W, high-pressure mercury lamps HME 125W, high-pressure sodium lamps HSE 70W, metal halide lamps HIT 70W.



# COMPLIANCE WITH THE LUMINAIRES STANDARDS:

- SR EN 60598-1
- SR EN 60598-2-3
- SR EN 62031



### **VARIANTS ON REQUEST:**

- With dimming (DIM) analogic 0-10V or DALI.
- With white opal diffuser.
- With optical system for a different light distribution (10LED).
- LEDs with colour temperature cool-white day-light 5700K, CRI≥70 or warm-white 3000K, CRI≥90.

# AVIS 02M

Outdoor decorative pedestrian luminaire AVIS-02M-30LED AVIS-02M-8LED













DALI control

Poles mounting

LED Electronic technology driver

1-10V Dimming

AVIS 02M | Pedestrian traffic lighting | General Information



### **AVIS 02M** | Pedestrian traffic lighting | Technical Sheet

TECHNICAL FEATURES:	
Rated voltage:	230V/50Hz
Active power:	41,3W 49W 69,5W
Degrees of protection:	IP 66
Mechanical impact resistance:	IK10 diffuser, IK08 product
Ambient temperature range:	-20°C ÷ +35°C
Relative humidity:	Up to 80% at the temperature of + 20°C
Level of radio electric disturbances:	Does not exceed the admissible limits in SR EN 55015
DESCRIPTION AND PERFORMANCES:	
Materials:	Black polycarbonate upper cover resistant to UV and solar radiations.
	Diffuser made of opal polycarbonate resistant to UV and solar radiations.

Grey, black

## LIGHT SOURCES:

Gear (electronic driver):

Equipment:

Colour:

Power LEDs, with colour temperature 5700K-6350K and lifetime L70B50 of 50.000 hours at Ta=25°C (that means 14 years with 10 hours a day working time).

The optical unit containing white LEDs or on request different colours.

Included in the product and manufactured according to the specific standards.

## COMPLIANCE WITH THE EUROPEAN DIRECTIVES:

Low Voltage Directive Electromagnetic Compatibility Directive RoHS Directive, WEEE Directive



### **AVIS 02M** | Pedestrian traffic lighting | Variants

Product type	Product code	Active Iuminaire power [W]	Power factor [cos φ]	Luminaire luminous flux net [Lm]	Luminaire efficacy [lm/W]
AVIS-02M 30 LED HE 6500K	34431080	69,5	≥0,96	6455	93
AVIS-02M 30 LED 6500K	34431074	41,3	≥0,96	3420	83
AVIS-02M 8 LED 49W 4000K	34431101	49	≥0,98	6750	138
AVIS-02M 8 LED 49W 4000K DALI	34431100	49	≥0,98	6750	138
AVIS-02M 8 LED 49W 4000K BLACK	34431102	49	≥0,98	6750	138

# MOUNTING:

- The product could be mounted fastened on top of the pole Ø60mm (Øexterior: max.60mm, Øinterior: min.50mm).
- To connect the product to the mains power supply there is not necessary to dismantle the product.



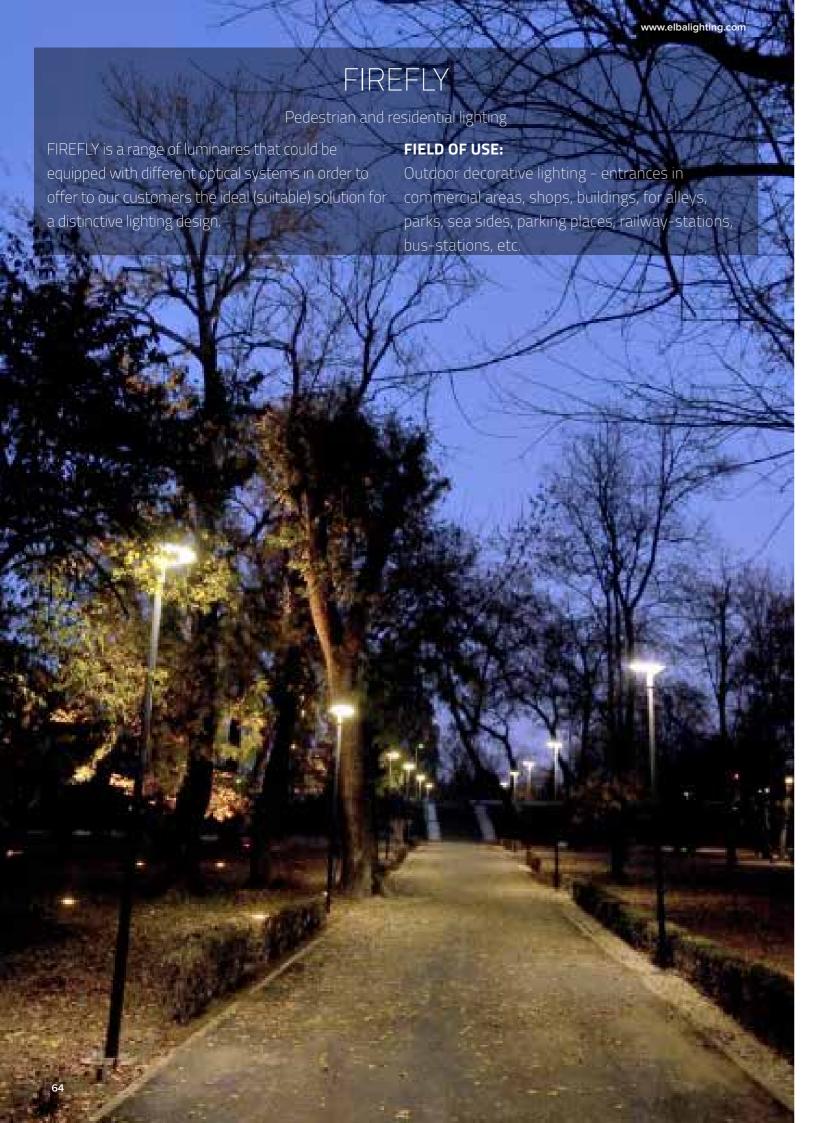
# SUBSTITUTE OR IT IS EQUIVALENT TO:

Fluorescent lamps TC-TEL 80W, high pressure mercury lamps HME 50W, 80W, high pressure sodium lamps HSE 70W.



- SR EN 60598-1
- SR EN 60598-2-3
- SR EN 62031







FIREFLY 01

# Innovation. Attractive design. Elegance

Chose a luminaire with an attractive design, without losing the visual balance and the atmosphere created by the previous solutions.





FIREFLY 02

FIREFLY 03



Outdoor decorative pedestrian luminaire FIREFLY-01 LED





mounting



product



technology

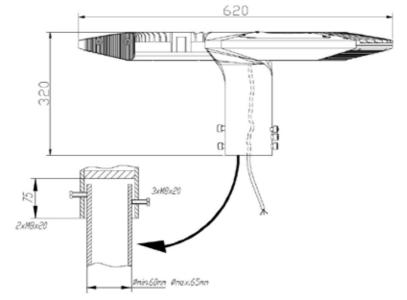












### **FIREFLY 01** | Pedestrian traffic lighting | Technical Sheet

TECHNICAL FEATURES:	
Rated voltage:	230V/50Hz
Active power:	32W 42W 64W
Degrees of protection:	IP 65
Mechanical impact resistance:	IK06
Ambient temperature range:	-25°C ÷ +35°C
Relative humidity:	Up to 80% at the temperature of + 20°C
Level of radio electric disturbances:	Does not exceed the admissible limits in SR EN 55015/A1
DESCRIPTION AND PERFORMANCES:	
Materials:	The body is made of aluminium.
	Diffuser in transparent polycarbonate, UV and solar radiation resistant.
Equipment:	The product has a thermic management system, made of a passive radiator,
equipment.	to ensure the long lifetime.
Gear (electronic driver):	Included in the product and manufactured according to the specific standards
Colour:	Grey

## LIGHT SOURCES:

Power LEDs, with colour temperature cool-white 4000K, CRI ≥70, with a long lifetime:

B50				
L70	L80	L90		
>60.000 hours	>60.000 hours	>60.000 hours		

## COMPLIANCE WITH THE EUROPEAN DIRECTIVES:

Low Voltage Directive Electromagnetic Compatibility Directive RoHS Directive, WEEE Directive



### FIREFLY 01 | Pedestrian traffic lighting | Variants

Product type	Product code	Active power [W]	Power factor [cos φ]	Total initial flux luminaire [Lm]	Total efficiency system [Im/W]
FIREFLY-01 3600LM 32W LED 4000K	34431116	32	≥0,94	3600	113
FIREFLY-01 5245LM 42W LED 4000K	34431117	42	≥0,94	5246	125
FIREFLY-01 7315LM 64W LED 4000K	34431118	64	≥0,94	7315	114

# MOUNTING:

• The product could be mounted fastened on top of the pole Ø min. 60 mm, Ø max. 65 mm.

# VARIANTS ON REQUEST:

- The product could be painted white or black;
- On request the product could be equipped with LEDs with colour temperature cool-white 5000K, CRI ≥70.



## SUBSTITUTE OR IT IS EQUIVALENT TO:

- compact fluorescent lamp TC-TEL 60W, high-pressure mercury lamps HME 80W, high-pressure sodium lamps HST 50W;
- high-pressure mercury lamps HME 125W, high-pressure sodium lamps HST 70W, metal halide lamps HIT 70W;
- high-pressure sodium lamps HST 100W.

- SR EN 60598-1
- SR EN 60598-2-3



Outdoor decorative pedestrian luminaire FIREFLY-02 LED





Poles

mounting



Ecologic product



LED

technology





Electronic Unidirectional driver emission





### FIREFLY 02 | Pedestrian traffic lighting | Technical Sheet

TECHNICAL FEATURES:	
Rated voltage:	230V/50Hz
Active power:	64W
Degrees of protection:	IP 65
Mechanical impact resistance:	IK06
Ambient temperature range:	-25°C ÷ +45°C
Relative humidity:	Up to 80% at the temperature of + 20°C
Level of radio electric disturbances:	Does not exceed the admissible limits in SR EN 55015/A1.

DESCRIPTION AND PERFORMANCES:	
Materials:	The body is made of aluminium.
	Diffuser in transparent polycarbonate, UV and solar radiation resistant.
Equipment:	The product has a thermic management system, made of a passive radiator,
	to ensure the long lifetime.
Gear (electronic driver):	Included in the product and manufactured according to the specific standards.
Colour:	Painted grey

### LIGHT SOURCES:

Power LEDs, with colour temperature cool-white 4000K, CRI ≥70, with a long lifetime:

	B50		
L70 L80 L90			
>60.000 hours	>60.000 hours	>60.000 hours	

### COMPLIANCE WITH THE EUROPEAN DIRECTIVES:

Low Voltage Directive Electromagnetic Compatibility Directive RoHS Directive, WEEE Directive



### FIREFLY 02 | Pedestrian traffic lighting | Variants

Product type	Product code	Active power [W]	Power factor [cos φ]	Total initial flux luminaire [Lm]	Total efficiency system [Im/W]
FIREFLY -02 LED 7633LM 64W 4000K	34431121	64	≥0,95	7633	119



# MOUNTING:

The product could be mounted fastened on top of the pole Ø min. 60,3 mm, Ø max. 76,1 mm



# SUBSTITUTE OR IT IS EQUIVALENT TO:

High-pressure sodium lamps HST 100W, metal halide lamps HIT 100W.



### VARIANTS ON REQUEST:

• On request the product could be equipped with LEDs with colour temperature cool-white 5000K, CRI ≥70



# COMPLIANCE WITH THE LUMINAIRES STANDARDS:

- SR EN 60598-1
- SR EN 60598-2-3

# FIREFLY 03

Outdoor decorative luminaire FIREFLY-03 LED





Poles mounting



Ecologic product



LED

technology

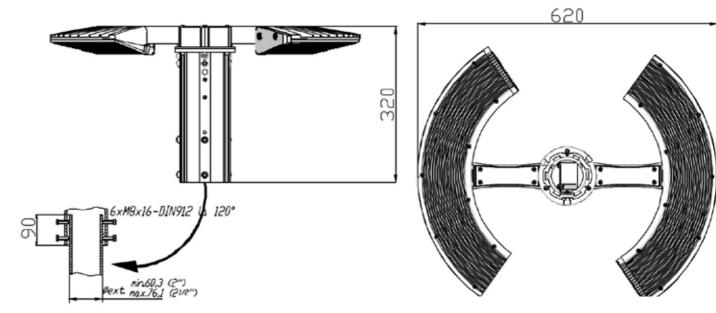




Electronic Unidirectional driver emission







#### **FIREFLY 03** | Pedestrian traffic lighting | Technical Sheet

TECHNICAL FEATURES:	
Rated voltage:	230V/50Hz
Active power:	62W
Degrees of protection:	IP 65
Mechanical impact resistance:	IK06
Ambient temperature range:	-25°C ÷ +45°C
Relative humidity:	Up to 80% at the temperature of + 20°C
Level of radio electric disturbances:	Does not exceed the admissible limits in SR EN 55015/A1.

DESCRIPTION AND PERFORMANCES:	
Materials:	The body is made of aluminium.
	Diffuser in transparent polycarbonate, UV and solar radiation resistant.
Equipment:	The product has a thermic management system, made of a passive radiator,
Ефиртиеть.	to ensure the long lifetime.
Gear (electronic driver):	Included in the product and manufactured according to the specific standards.
Colour:	Grey

### LIGHT SOURCES:

Power LEDs, with colour temperature cool-white 4000K, CRI ≥70, with a long lifetime:

	B50	
L70	L80	L90
>60.000 hours	>60.000 hours	>60.000 hours

### COMPLIANCE WITH THE EUROPEAN DIRECTIVES:

Low Voltage Directive Electromagnetic Compatibility Directive RoHS Directive, WEEE Directive



#### **FIREFLY 03** | Pedestrian traffic lighting | Variants

Product type	Product code	Active power [W]	Power factor [cos φ]	Total initial flux luminaire [Lm]	Total efficiency system [lm/W]
FIREFLY 03 62W 740 7000LM	34431134	62	≥0,95	6797	110

740 = 4000K, CRI 70



- The product could be mounted fastened on top of the high-pressure sodium lamps HST 100W, metal halide pole Ø min. 60,3 mm, Ø max. 76,1 mm;
- Wind surface = 0,04 m²;
- Recommended mounting height: 5-7m.

# VARIANTS ON REQUEST:

- On request the product could be equipped with LEDs with colour temperature cool-white 5000K, CRI ≥70;
- The product could be painted white/black.

# SUBSTITUTE OR IT IS EQUIVALENT TO:

lamps HIT 100W.



# COMPLIANCE WITH THE LUMINAIRES STANDARDS:

- SR EN 60598-1
- SR EN 60598-2-3

# VISTA

Pedestrian and residential lighting

VISTA LED has a retro look that glamorizes our cities and creates a distinctive atmosphere, not only in the historical architectural settings but also in more modern urban areas.

### FIELD OF USE:

Outdoor decorative and residential lighting - squares, pedestrian areas, parks, urban streets, residential areas, entrances in commercial areas, parking places, alleys, sea sides, bicycles lines, railway-stations, etc.





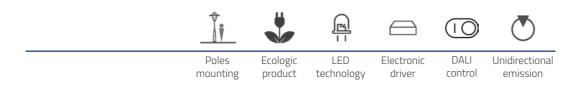
# Vintage design. Visual balance. Innovation

VISTA can be used in historic areas or old city centres, pedestrian streets, residential districts, in order to offer to our customers the proper lighting solution for a distinctive lighting design.

VISTA

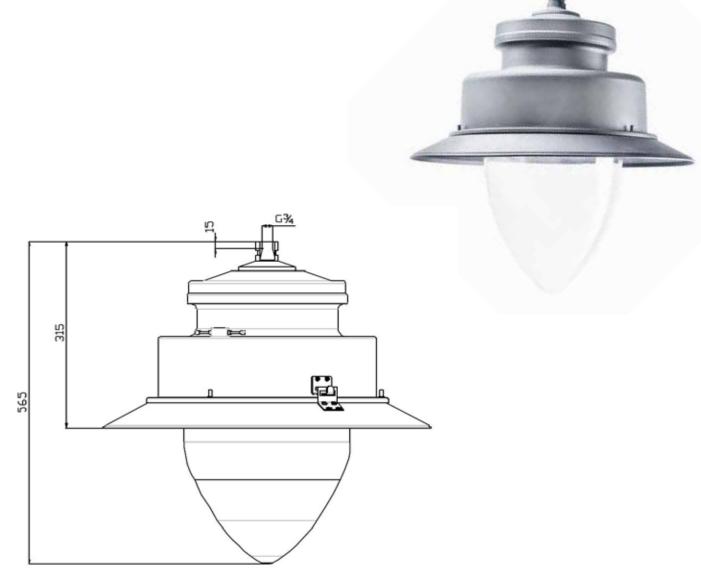
Outdoor decorative pedestrian luminaire VISTA-02 16LED / 24LED / 32LED / 48LED





VISTA | Pedestrian traffic lighting | General Information





#### **VISTA** | Pedestrian traffic lighting | Technical Sheet

TECHNICAL FEATURES:	
Rated voltage:	230V/50Hz
Active power:	19W ÷ 78W
Degrees of protection:	IP 65
Mechanical impact resistance:	IK06
Ambient temperature range:	-30°C ÷ +35°C
Relative humidity:	Up to 80% at the temperature of + 20°C
Level of radio electric disturbances:	Does not exceed the admissible limits in SR EN 55015/A1.
DESCRIPTION AND PERFORMANCES:	
Materials:	The body is made of aluminium.
	Diffuser in transparent polycarbonate, UV and solar radiation resistant.
Equipment:	The product has a thermic management system, made of a passive radiator,
	to ensure the long lifetime.
	Optical system with street type distributions in more variants.
Gear (electronic driver):	Included in the product and manufactured according to the specific standards.
Colour:	Black

### LIGHT SOURCES:

Powerfull LEDs, with colour temperature cool-white 4000K, CRI ≥70, with a long lifetime:

	B50	
L70	L80	L90
>84.700 ore	>84.700 ore	>84.700 ore

Low Voltage Directive Electromagnetic Compatibility Directive RoHS Directive, WEEE Directive



#### **VISTA** | Pedestrian traffic lighting | Variants

Product type	Product code	Active power [W]	Power factor [cos φ]	Total initial flux luminaire [Lm]	Total efficiency system [Im/W]
VISTA 02 16LED			[cos y]	Lemi	[1111/ 44]
VISTA 02 16LED/350 2400LM 19W 740 CAT DA	34431137	19	≥0,9	2400	126
VISTA 02 16LED/350 2400LM 19W 740 DNW DA	34431139	19	≥0,9	2400	126
VISTA 02 16LED/350 2400LM 19W 740 FW DA	34431140	19	≥0,9	2400	126
VISTA 02 24LED					
VISTA 02 24LED/350 3600LM 28W 740 CAT DA	34431147	28	≥0,9	3600	129
VISTA 02 24LED/350 3600LM 28W 740 DNW DA	34431148	28	≥0,9	3600	129
VISTA 02 24LED/350 3600LM 28W 740 FW DA	34431149	28	≥0,9	3600	129
VISTA 02 32 LED					
VISTA 02 32LED/350 4800LM 37W 740 DNW DA	34431156	37	≥0,9	4800	130
VISTA 02 32LED/350 4800LM 37W 740 FW DA	34431157	37	≥0,9	4800	130
VISTA 02 32LED/350 4800LM 37W 740 CAT DA	34431158	37	≥0,9	4800	130
VISTA 02 48 LED					
VISTA 02 48LED/350 7200LM 54W 740 DNW DA	34431165	54	≥0,9	7200	133
VISTA 02 48LED/350 7200LM 54W 740 FW DA	34431166	54	≥0,9	7200	133
VISTA 02 48LED/350 7200LM 54W 740 CAT DA	34431167	54	≥0,9	7200	133

CAT/DNW/FW optical system type for different light distributions DA = with dimmable driver protocol DALI



• The product could be mounted fastened on pipe 20mm (G¾").

# SUBSTITUTE OR IT IS EQUIVALENT TO:

High-pressure mercury lamps HME 125W, high pressure sodium lamps HST 70W, metal halide lamps HIT 70W.



## VARIANTS ON REQUEST:

- The product could be equipped with LEDs with colour temperature cool-white 5000K, CRI ≥70;
- The product could be equipped with an optical system in order to obtain different light distributions: street type, symmetrical, oval, double-sided, large, medium;
- The product could be painted white.

- COMPLIANCE WITH THE LUMINAIRES STANDARDS:
  - SR EN 60598-1
  - SR EN 60598-2-3



# RONDO

Pedestrian and residential lighting

Our RONDO products consist of projectors designed They're distinguishable through low energy for architectural lighting. It's the LED solution that allows for the display of decorative lighting effects, both impactful and easily customizable.

Since they are fitted with the latest technology of LED modules, the RONDO projectors are highly

consumption, a prolonged life span, easy installing and low maintenance costs. There is no need to replace the light sources.





RONDO 01

# Customization. Efficiency. Aesthetics

RONDO allow for decorative lighting effects, unique and highly customizable. These will make any project shine.



RONDO 03

# RONDO 01

Outdoor architectural projector RONDO-01 9x1W LED RGB RONDO-01 9x1W LED monocrom









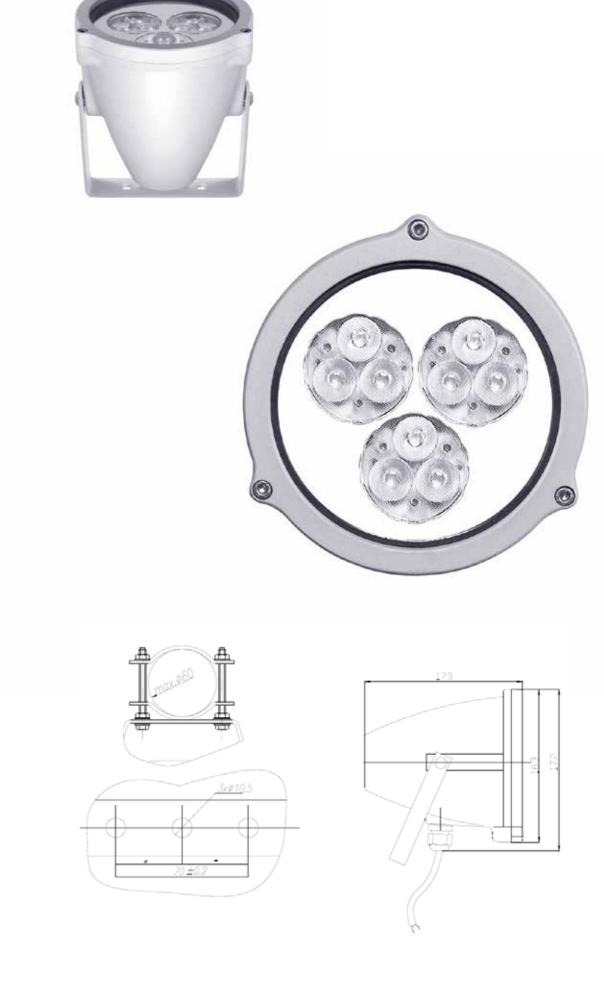


driver



emission

Architectural Cable LED RGB projector included technology



#### RONDO 01 | Architectural lighting | Technical Sheet

230V/50Hz
9W 10,3W
IP66
IK06
-20°C ÷ +35°C
Up to 80% at the temperature of + 20°C
Does not exceed the limits of the standard SR EN 55015.
The housing made of pressure cast aluminium alloy.
Pressure cast aluminium alloy frame.
Diffuser made of plane secured glass.
The unit LEDs-board contains both the LEDs and the specialised lenses
and the gear (the power source and the controller).
Nipple for electric cables that allows the use of a cable with a maximum
10 mm diameter.
Included in the product and manufactured according to the specific standards
Grey
Through the lighting scenario memorized by the manufacturer there are obtained tens of pure and intense colour nuances that changes automatically – Power LEDs in colour red, green and blue for the variant RGB with dynamic lighting.  – Power LEDs in colour white or different colours for the variant static monochrome, with the following available light distributions: 12°, 19°, 34°, 58°.  – The use of LEDs ensures both a long lifetime L70B50: 50,000 hours at Ta=25°C and reduced power consumption.

### COMPLIANCE WITH THE EUROPEAN DIRECTIVES:

Low Voltage Directive

Electromagnetic Compatibility Directive

RoHS Directive, WEEE Directive



#### RONDO 01 | Architectural lighting | Variants

Product code	Active Iuminaire power [W]	Luminaire luminous flux net [Lm]	Luminaire efficacy [Im/W]
35617011	9x1	dinamic	dinamic
35617026	10,3	350 (distr.10 °)	34 (distr.10°)
	<b>code</b> 35617011	Product code luminaire power [W]  35617011 9x1	Product code luminaire power luminous flux net [W]  35617011 9x1 dinamic

Luminous flux distributions available on request: 12°, 19°, 34°, 58°.

# MOUNTING:

- Function of the requested constructive variant, the projector could be mounted on a certain surface, through the mounting frame (using two M10 screws), or on a bracket, with the diameter of maximum 60mm, through a fastening system delivered with the product.
- The body of the projector could be tilted on the vertical planebyunscrewingthefasteningscrewswhich fastens the frame on the body (M8). That realises the aiming of the luminous flux to the area that must be illuminated.

### VARIANTS ON REQUEST:

 The product could be manufactured both in the monochrome variant (all LEDs have the same colour) with static lighting and in the RGB variant with dynamic lighting.

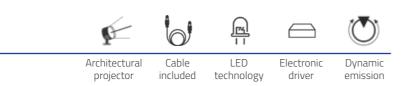
### COMPLIANCE WITH THE LUMINAIRES STANDARDS:

- SR EN 60598-1
- SR EN 60598-2-5

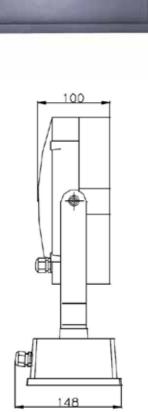
# RONDO 03

Outdoor architectural projector RONDO-03 21 LED 12°









#### **RONDO 03** | Architectural lighting | Technical Sheet

ROIL	Architectulal ighting   rechincal Sheet
TECHNICAL FEATURES:	
Rated voltage:	230V/50Hz
Active power:	23,9W
Degrees of protection:	IP65
Mechanical impact resistance:	IK07
Ambient temperature range:	-20°C ÷ +35°C
Relative humidity:	Up to 80% at the temperature of + 20°C
Level of radio electric disturbances:	Does not exceed the limits of the standard SR EN 55015:2001/A1.
DESCRIPTION AND PERFORMANCE	S:
Materials:	Aluminium housing.
	Diffuser made of clear secured glass.
Equipment:	The optical system contains the power LEDs and a system for the orientation of the luminous flux that complies with the requirements of the architectural lighting. Types of luminous distribution on request: 12°, 19°, 34°, 58°.  Mounting system with facilities for easy tilting and orientation of the luminous flux.
Gear (electronic driver):	Included in the product and manufactured according to the specific standards
Colour:	Black
LIGHT SOURCES:	
	Power LEDs with colour temperature cool-white 6500K, CRI≥70, with specialized optics that ensures light distributions type: 12°, 19°, 34°, 58°.
	The use of LEDs ensures both a long lifetime L70B50 of minimum 50.000 hours at Ta=25°C and reduced power consumption.
COMPLIANCE WITH THE EUROPEAN	N DIRECTIVES:

Low Voltage Directive Electromagnetic Compatibility Directive RoHS Directive, WEEE Directive



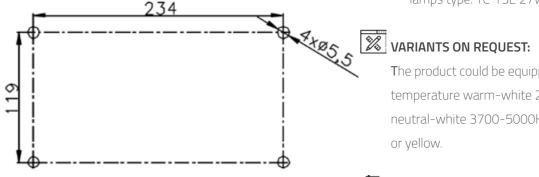
#### **RONDO 03** | Architectural lighting | Variants

Product type	Product code	Active Iuminaire power [W]	Power factor [cos φ]	Total initial brut LEDs flux [lm]	Total luminous efficiency [lm/W]
RONDO-03 21 LED 12°	35617042	23,9	≥0.83	1915	80

<sup>\*\*</sup>Luminous flux distributions available on request: 12°, 19°, 34°, 58°.

# MOUNTING:

• Visible. The product will be mounted with 4xM5 Gr 5.8 screws and MN5 washers that are not included in the product;



# SUBSTITUTE OR IT IS EQUIVALENT TO:

• The system with LEDs included in the product could replace or is equivalent to projector with high-pressure mercury lamps HME 50W or compact fluorescent lamps type: TC-TSE 27W, TC-TEL 26W, TC-L 24W.

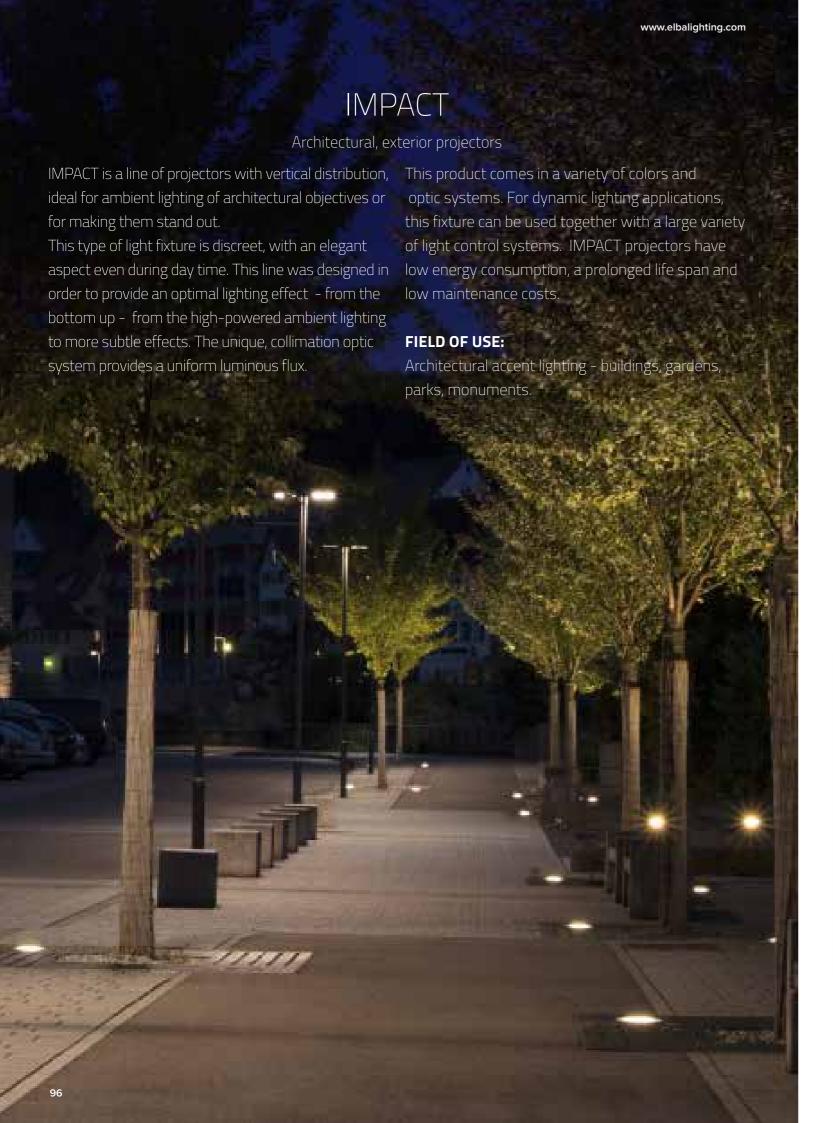


The product could be equipped with LEDs with colour temperature warm-white 2700-3000K CRI: 80, neutral-white 3700-5000K CRI: 75, blue, green, red or yellow.



### COMPLIANCE WITH THE LUMINAIRES STANDARDS:

- SR EN 60598-1
- SR EN 60598-2-5
- SR EN 62031





IMPACT 01

# Aesthetics. Optimization. Dynamism

IMPACT lighting fixtures represent the architectural lighting solution that provides both high-powered effects and subtler ones.





IMPACT 03 IMPACT 04

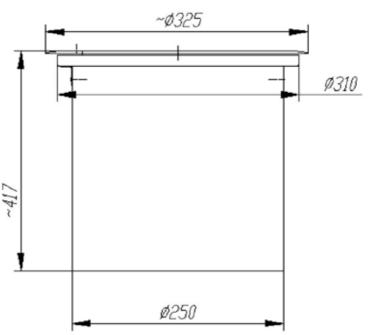
# IMPACT 01

Outdoor ground recessed projector IMPACT-01 21LED









#### **IMPACT 01** | Architectural lighting | Technical Sheet

W/50Hz W 25,8W 21W C ÷ +35°C O 95% at the temperature of + 25°C. S not exceed the admitted limits of the standard SR EN 55015/A1 C Okg, according to SR EN 60598-2-13
°C ÷ +35°C o 95% at the temperature of + 25°C. s not exceed the admitted limits of the standard SR EN 55015/A1
°C ÷ +35°C o 95% at the temperature of + 25°C. s not exceed the admitted limits of the standard SR EN 55015/A1
°C ÷ +35°C o 95% at the temperature of + 25°C. s not exceed the admitted limits of the standard SR EN 55015/A1
o 95% at the temperature of + 25°C. s not exceed the admitted limits of the standard SR EN 55015/A1
s not exceed the admitted limits of the standard SR EN 55015/A1
Okg, according to SR EN 60598-2-13
sing made of pressed stainless steel sheet.
ge made of stainless steel.
user made of plane secured glass.
unit PVC tube. Sealing silicone rubber gasket.
unit LED board contains the LEDs, the specialized optic and the gear
ver supply and the RGB controller).
optical unit could be tilted with ± 15° from the vertical axis.
ole for the electric cable that allows the use of a cable with a minimum
neter of 9 mm and maximum of 12 mm. On request could be equipped two nipples.
product is equipped with a condense-proof valve.
ided in the product and manufactured according to the specific standards
k

Power LEDs colour: white, warm-white for the monochrome variant with static lighting, lifetime L70B50: 30,000 hours at Ta=25°C.

### COMPLIANCE WITH THE EUROPEAN DIRECTIVES:

Low Voltage Directive

Electromagnetic Compatibility Directive

RoHS Directive, WEEE Directive



#### **IMPACT 01** | Architectural lighting | Variants

Product type	Product code	Active luminaire power [W]	Power factor	Total initial flux [lm]	Total luminous efficiency [lm/W]
IMPACT-01 21LED 26.2W 1 NIPPLE 4000K 16gr	34611016	26,2	≥0,90	2997	114
IIMPACT-01 21LED 26.2W 1 NIPPLE 3000K 16gr	34611018	26,2	≥0,90	2997	114
IMPACT-01 21LED 26.2W 1 NIPPLE 4000K 34gr	34611019	26,2	≥0,90	2997	114
IMPACT-01 21LED 1 NIPPLE 5700K 16gr	34611015	26,2	≥0,90	3165	123
IMPACT-01 21LED 2 NIPPLES RGB	34611014	max.21	≥0,94	696	33
IMPACT-01 21LED 2 NIPPLES GREEN (528nm)	34611005	25,8	≥0,95	580	22 (green)
IMPACT-01 21LED 1 NIPPLE GREEN (528nm)	34611004	25,8	≥0,95	580	22 (green)

<sup>\*\*</sup>Luminous flux distributions available on request: 12°, 19°, 34°, 58°.



- Recessed in ground according to the mounting and installation instructions.
- Resistance to the static loading: 1500 kg, according to SR EN 60598-2-13.
- The temperature on the glass surface: 45°C.



- The product could be equipped with two nipples for electric cables.
- For the RGB variant there are obtained tens of pure and intense colour nuances that change automatically.
- Power LEDs in colour red, green and blue for the variant RGB with dynamic lighting, with lifetime L70B50: 30,000 hours at Ta=25°.

## COMPLIANCE WTH THE LUMINAIRES STANDARDS:

- SR EN 60598-1
- SR EN 60598-2-13
- SR EN 62031



Outdoor ground recessed projector IMPACT-03 3LED 12V÷24V cc IMPACT-03 3LED 230V ac











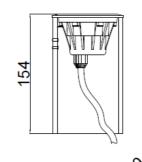


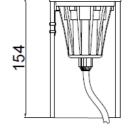
Recessed Bottom up mounting in the ground

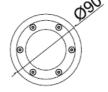
Resistance LED RGB to static technology charge

GB Cable ogy included











#### **IMPACT 03** | Architectural lighting | Technical Sheet

TECHNICAL FEATURES:	
Rated voltage:	230V/50Hz sau 12V÷24V
Active power:	3,5W 5W
Degrees of protection:	IP67
Mechanical impact resistance:	IK09
Ambient temperature range:	-25°C ÷ +35°C
Relative humidity:	Up to 80% at the temperature of + 20°C
Level of radio electric disturbances:	Does not exceed the limits of the standard SR EN 55015.
The temperature on the glass surface:	45°C
Resistance to the static loading:	350kg, according to SR EN 60598-2-13
DESCRIPTION AND PERFORMANCES	:
Materials:	Aluminium body.
	Secured glass diffuser.
	Stainless steel flanges.
Equipment:	Function of the lenses system there could be obtained narrow or wide luminous flux distribution:
	<ul> <li>for the variant with 1 lens 12°, 19°, 34°, 58°,</li> </ul>
	• for the variant with 3 lenses 16°, 24°, 41°, 46°, 84°, 18°x48°, 48°x18°
Gear (electronic driver):	Included in the product and manufactured according to the specific standards
Colour:	Grey, metallic (stainless steel flange)
LIGHT SOURCES:	
	Power LEDs, colour temperature cool-white day-light 6500K, CRI: 70, lifetim 50,000 hours at Ta=25°C.

### COMPLIANCE WITH THE EUROPEAN DIRECTIVES:

Low Voltage Directive Electromagnetic Compatibility Directive RoHS Directive, WEEE Directive



#### **IMPACT 03** | Architectural lighting | Variants

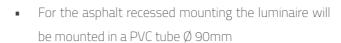
Product type	Product code	Active luminaire power [W]	Power factor [cos φ]	Luminaire Iuminous flux net [Lm]	Luminaire efficacy [lm/W]
VARIANT 1 12÷24V small housing					
IMPACT-03 LED 12°	78351113	3,5	n.a.	262	75
IMPACT-03 LED 16°	78350009	3,5	n.a.	262	75
IMPACT-03 LED 12° with light dimming	78350010	3,5	n.a.	262	75
IMPACT-03 LED 16° with light dimming	78350014	3,5	n.a.	262	75
IMPACT-03 LED 12° RGB	78350015	3,5	n.a.	dinamic RGB	dinamic RGB
IMPACT-03 LED 16° RGB	78350016	3,5	n.a.	dinamic RGB	dinamic RGB
Power supply 230V AC / 24V DC for 6 products or 12 products	ucts that must be	demanded separately.			
VARIANT 2 230V big housing					
IMPACT-03 LED 12° 230V	78350017	5	≥0.72	340	75
IMPACT-03 LED 16° 230V	78350018	5	≥0.72	340	75

250V/50Hz driver included in the product.





Ground recessed.



### COMPLIANCE WTH THE LUMINAIRES STANDARDS:

- SR EN 60598-1
- SR EN 60598-2-5
- SR EN 62031

### VARIANTS ON REQUEST:

- For the variant 12V÷24V: Power supply 230V AC/24V DC for 6 products or 12 products that must be demanded separately.
- Power LEDs colours: red, green, blue for the RGB variant with dynamic lighting.
- On request the product could be equipped with LEDs with colour temperature warm-white 2700-3000K CRI: 80, neutral-white 3700-5000K CRI: 75, blue, green, red or yellow.

# IMPACT 04

Outdoor ground recessed projector IMPACT-04 18LED











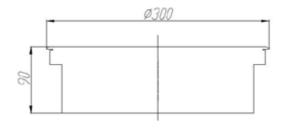


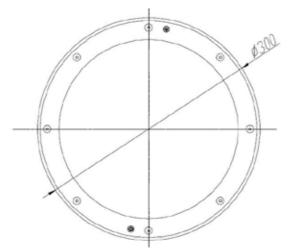
Resistance LED RGB to static technology charge Recessed Bottom up mounting in lighting the ground

Cable included













#### IMPACT 04 | Architectural lighting | Technical Sheet

TECHNICAL FEATURES:	
Rated voltage:	230V/50Hz sau 12V÷24V
Active power:	35W
Degrees of protection:	IP67
Mechanical impact resistance:	IK08
Ambient temperature range:	-25°C ÷ +35°C
Relative humidity:	Up to 93% at the temperature of +25℃
Level of radio electric disturbances:	Does not exceed the limits of the standard SR EN 55015
The temperature on the glass surface:	45°€

DESCRIPTION AND PERFORMAN	ICES:
Materials:	High-pressure die-cast aluminium housing. Sealing silicon rubber gasket.
	Secured glass diffuser.
	Stainless steel flanges.
Equipment:	The unit LED board contains the LEDs, the specialized optic and the gear
	(power supply and controller).
	Nipple for electric cable that allows the use of a cable with diameter of 6-8
	mm. (3x1.5mm² H07RN-F).
	The construction of the projector is with fixed optical unit.
	The protection degree IP67 is ensured using a sealing silicon rubber gasket.
	The closure of the product is realised by fastening the stainless steel flange on
	the PVC tube unit, through 8 stainless steel screws M5x12.
Gear (electronic driver):	Included in the product and manufactured according to the specific standards.
Colour:	Black

### LIGHT SOURCES:

Power LEDs with colour temperature neutral-white 4000K, CRI70, with a long lifetime, at Ta=25°C:

B10		B50		
L80	L90	L50	L70	
>81,650 hours	>33,210 hours	>280,000 hours	>115,000 hours	

### COMPLIANCE WITH THE EUROPEAN DIRECTIVES:

Low Voltage Directive

Electromagnetic Compatibility Directive

RoHS Directive, WEEE Directive



#### IMPACT 04 | Architectural lighting | Variants

Product type	Product code	Active Iuminaire power [W]	Power factor [cos φ]	Luminaire luminous flux net [Lm]	Luminaire efficacy [lm/W]
IMPACT-04 18LED 34W 4000K 12°	34611017	35	≥0,95	3328	95
IMPACT-04 18LED 34W 4000K 19°	on request	35	≥0,95	3328	95

Luminous flux distributions on request: 12°, 19°, 34°, 58.



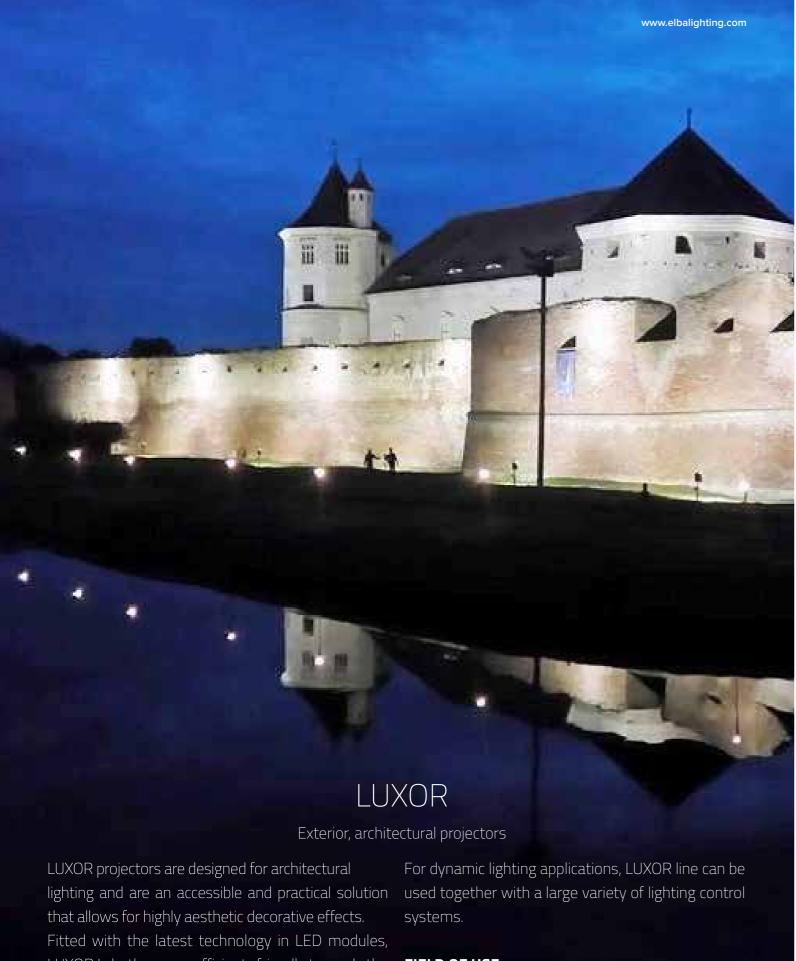


- Recessed in ground according to the mounting and installation instructions;
- The unit PVC tube ensures the recessed mounting of the product in soil.



- SR EN 60598-1
- SR EN 60598-2-13
- SR EN 60068-2-29

- LEDs colours: red, green, blue for the RGB variant with dynamic lighting;
- LEDs with colour: red, green, blue, monochrome variant with static light, with lifetime L70B50 of 30.000 hours at Ta=25°C;
- Luminous flux distributions:12°, 19°, 34°, 58.



LUXOR Is both energy efficient, friendly towards the **FIELD OF USE:** 

and optic systems.

environment and comes in a large variety of colors Architectural exterior lighting - building exteriors, gardens, parks, monuments.



**LUXOR 02 - 18LED** 

# Accent. Style. Urbanistic

The architectural lighting solution that provides special, customizable lighting effects that positively influence urban architecture



**LUXOR 02 - 24LED** 

# LUXOR 02

Outdoor architectural projector LUXOR-02-18 LED HP IK06/IK08 LUXOR-02-24 LED HP







included







projector

technology

driver



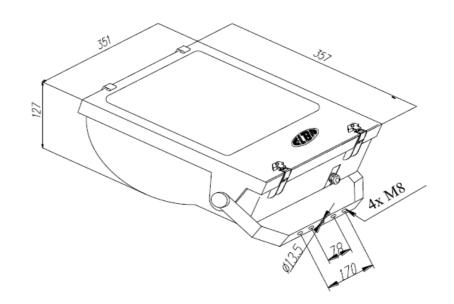
emission

**LUXOR 02** | Architectural lighting | General Information



LUXOR 02 - 24LED

LUXOR 02 - 18LED



#### ILIXOR 02 | Architectural lighting | Technical Sheet

LUXC	OR 02   Architectural lighting   Technical Sheet
TECHNICAL FEATURES:	
Rated voltage:	230V/50Hz
Active power:	20,7W 51,3W
Degrees of protection:	IP66
Mechanical impact resistance:	IK06 (on request IK08)
Ambient temperature range:	-25°C ÷ +35°C (Luxor 02 18LED)
	-30°C ÷ +35°C (Luxor 02 24LED)
Relative humidity:	Up to 80% at the temperature of + 20°C
Level of radio electric disturbances:	Does not exceed the admitted limits of the standard SR EN 55015/A1
DESCRIPTION AND PERFORMANCES	5:
Materials:	Housing made from plastic material.
	Protection glass is thermally hardened.
	Fastening elements are protected through polyester painting.
	The plastic material in black colour, UV radiation stabilised, from the projector construction, is resistant both to the temperatures which could appear during operating, and to the mechanical shocks to which the product could be exposed.
Equipment:	The compact construction includes, in a single compartment, both the optical unit for the orientation of the luminous flux, and the product gear.  Function of the optical system there could be obtained narrow or wide luminous flux distributions:  LUXOR-02 18LED HP: 7°, 13°, 58°  LUXOR-02 24LED HP: 13°, 15°, 18°, 28°, 40°, 44°, 58°, 74°, 38° x 16°
Gear (electronic driver):	Included in the product and manufactured according to the specific standards
Colour:	Black (or grey on request)
LIGHT SOURCES:	

#### LIGHT SOURCES:

Power LEDs with colour temperature cool-white 6500K, CRI≥70, with long lifetime L70B50 of 50.000 hours at Ta=25°C, and economical power consumption.

Low Voltage Directive Electromagnetic Compatibility Directive

RoHS Directive, WEEE Directive



#### **LUXOR 02** | Architectural lighting | Variants

Product type	Product code	Active Iuminaire power [W]	Power factor [cos φ]	Luminaire Iuminous flux net [Lm]	Luminaire efficacy [lm/W]
LUXOR-02-18LED HP 12°	35317035	20,7	≥0,99	1902	96
LUXOR-02-18LED HP 12° IK08	on request	20,7	≥0,99	1902	96
LUXOR-02-24LED HP 30° 6500K	35317034	51,3	≥0,93	3631	71

HP = High Performance



• Visible / on surface. The facilities for the projector mounting allow an easy focus of the light beam toward the target.

### SUBSTITUTE OR IT IS EQUIVALENT TO:

- LUXOR-02 18LED HP could replace projectors with halogen lamps LHL 150W, with metal halide lamps CDM-T 35W or with compact fluorescent lamps TC-L 36W.
- LUXOR-02 24LED HP could replace projectors with high-pressure mercury lamps HME 80W, with compact fluorescent lamps TC-TE 57W, or with sodium lamps HST 50W, HSE-I 50W

## COMPLIANCE WTH THE LUMINAIRES STANDARDS:

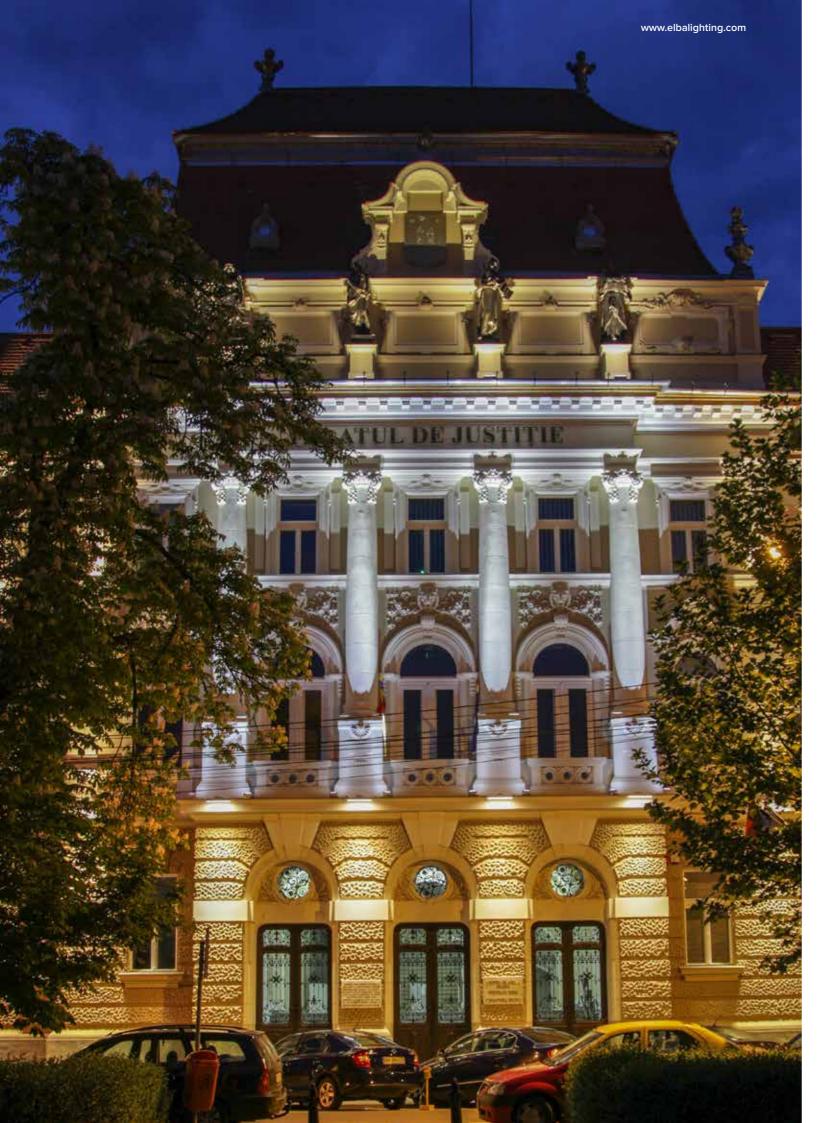
- SR EN 60598-1
- SR EN 60598-2-5
- SR EN 60068-2-11
- SR EN 60068-2-29

## X VARIANTS ON REQUEST:

- On the client request the product could be equipped with LEDs with other colours.
- Grey colour.

Types of light distributions available on request: LUXOR-02 18LED HP: 7°, 13°, 58°, LUXOR-02 24LED HP: 13°, 15°, 18°, 28°, 40°, 44°, 58°, 74°, 38° x 16°.

WALL WASHER-02 48LED



# WALLWASHER

Architectural, exterior projectors

WALLWASHER is a linear lighting fixture, of high performance, designed to create decorative effects of wall washing on different surfaces, but also to underline certain architectural details through a high-quality luminous flux.

The 95mm and 150mm WALLWASHER products provide a flexible luminous flux for accent lighting. It's fixtures with a broad transversal distribution are ideal for creating wall lighting effects.

**FIELD OF USE:** Exterior architectural lighting - building exteriors, gardens, parks, statues.



# WALL WASHER

Outdoor architectural projector

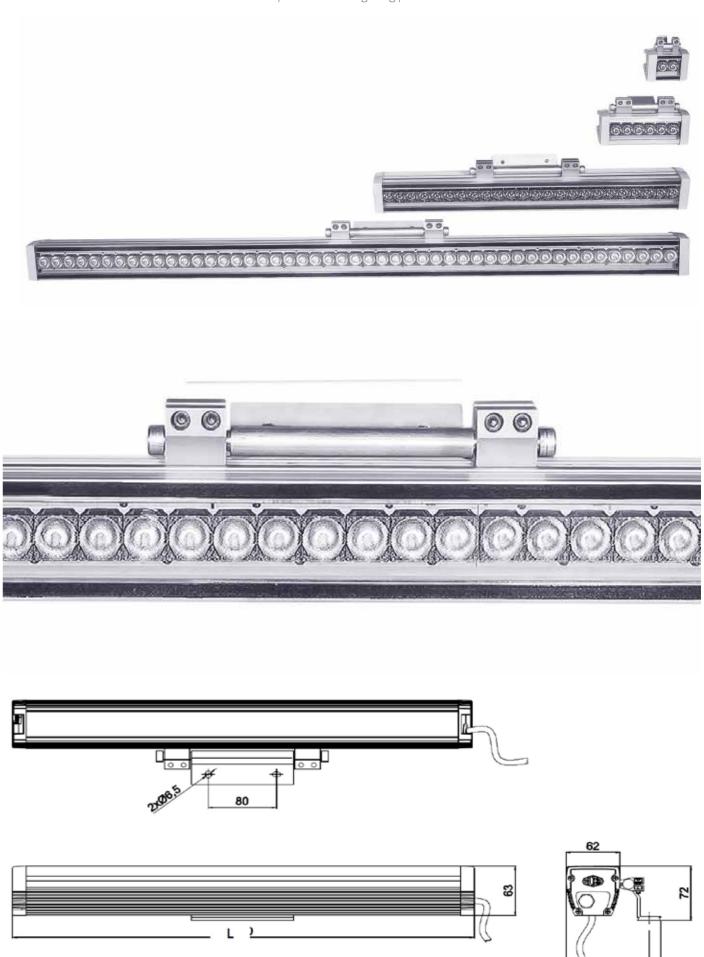
WALL WASHER-02 2LED (95mm) / WALL WASHER-02 6LED (150mm)
WALL WASHER-02 12LED (300mm) / WALL WASHER-02 24LED (600mm)
WALL WASHER-02 36LED (900mm) / WALL WASHER-02 48LED (1200mm)







### **WALLWASHER** | Architectural lighting | General Information



110

#### **WALLWASHER** | Architectural lighting | Technical Sheet

TECHNICAL FEATURES:	
Rated voltage:	230V/50Hz
Active power:	2.1W ÷ 55W
Degrees of protection:	IP65
Mechanical impact resistance:	IK07
Ambient temperature range:	-15°C ÷ +35°C
Relative humidity:	Up to 80% at the temperature of + 20°C
DESCRIPTION AND PERFORMANO	CES:
Materials:	Body made of aluminium.
	Diffuser made of transparent polycarbonate.
	Lids made of UV resistant PC. Anti-condense filter.
Equipment:	The optical unit contains the LEDs equipped with an optical system that ensures a uniform light distribution.
	Function of the optical system there could be obtained narrow or wide
	luminous flux distribution: 7°, 13°, 15°, 30°, 57°, 63°, 74°, 11° x 45°, 14° x 46°
	The product has two fixing supports that allow the tilt adjustment o
	the product with 0 ÷ 220°.
Gear (electronic driver):	Included in the product and manufactured according to the specific standards
Colour:	Grey
LIGHT SOURCES:	
	Power LEDs colour: cool-white 6500K CRI:70, with lifetime L70B50 50,000 hours at Ta=25°C.
	On request the product could be equipped with LEDs with other colour tem-
	perature: warm-white 2700-3700K CRI:80, neutral-white 3700-5000k
	CRI:75, blue, green, red, yellow or RGB variant.
COMPLIANCE WITH THE EUROPE	AN DIRECTIVES:
	Low Voltage Directive

Electromagnetic Compatibility Directive

RoHS Directive, WEEE Directive



#### WALLWASHER | Architectural lighting | Technical Sheet

Tip produs	L [mm]	m [mm]	l [mm]	H [mm]
WALL WASHER-02 2LED	95	80	62	72
WALL WASHER-02 6LED	170	80	62	72
WALL WASHER-02 12LED	320	80	62	72
WALL WASHER-02 24LED	560	80	62	72
WALL WASHER-02 36LED	825	80	62	72
WALL WASHER-02 48LED	1100	80	62	72

### $\begin{tabular}{ll} \blacksquare \\ \hline \blacksquare \\ \hline \end{bmatrix}$ SUBSTITUTE OR IT IS EQUIVALENT TO:

Could replace function of the variant luminaries with the following lamp types: halogen LHL, MR16 (12V), metal halide HIE, high-pressure sodium HST, HSE-I, high-pressure mercury HME, compact fluorescent TC, TC-TE, TC-TEL, incandescent.

The LED system included in the product could replace or is equivalent to:

- 48LED halogen lamps LHL300W, metal halide lamps
   HIE 70W, high-pressure sodium lamps 70W.
- 36LED high-pressure mercury lamps HME 80W, metal halide lamps HIE 70W, high-pressure sodium lamps HST, HSE-I 50W, compact fluorescent TC-TE 57W
- 24LED halogen lamps LHL 150W, high-pressure sodium lamps 35W.
- 12LED high-pressure mercury lamps HME 50W, compact fluorescent TC-TEL 26W.
- 6LED incandescent lamps 60W, halogen lamps
   MR16 (12V) 35W, compact fluorescent TC 9W.
- 2LED incandescent lamps 25W, halogen lamps
   MR16 (12V) 20W, compact fluorescent TC 5W.

### VARIANTS ON REQUEST:

- The luminous flux could be constant, or dimmable between 5÷100% using the control system DALI PWM – for the variant with flux dimming.
- With DMX converter for flux dimming for the dimmable variant, or for lighting scenery setting for the RGB variant. The gear box RGB DMX contains: DMX controller, connectors.
- With rapid connectors IP68.
- LEDs with colour temperature warm-white 2700-3700K CRI:80, neutral-white 3700-5000K CRI:75, blue, green, red, yellow or RGB variant
   Note: The options could be combined

#### MOUNTING:

 Visible, on surface. The product could be mounted visible with 2 anchor-screw + dowel-pins Ø8 or 2 M6 dowels.

### COMPLIANCE WTH THE LUMINAIRES STANDARDS:

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- SR EN 60598-1
- SR EN 60598-2-29
- SR EN 60598-5

### **WALLWASHER** | Architectural lighting | Variants

Product type	Product code	Active luminaire power [W]	Power factor [cos φ]	Luminaire luminous flux net [Im]	Luminaire efficacy [Im/W]
WALL WASHER-02 2 LED (95mm)					
2 LED cool-white 6° (95mm)	23417244	2,8	≥0,50	221	79
2 LED cool-white 30° (95mm)	23417245	2,8	≥0,50	206	74
2 LED cool-white 14x46° (95mm)	23417246	2,8	≥0,50	236	84
2 LED warm-white 6° (95mm)	23417247	2,8	≥0,50	152	54
2 LED warm-white 30° (95mm)	23417248	2,8	≥0,50	139	50
2 LED warm-white 14x46° (95mm)	23417249	2,8	≥0,50	159	57
2 LED yellow 6° (95mm)	23417261	2,1	≥0,50	103	49
2 LED yellow 30° (95mm)	23417262	2,1	≥0,50	96	46
2 LED yellow 14x46° (95mm)	23417263	2,1	≥0,50	110	52
WALL WASHER-02 6 LED (150mm)					
6 LED cool-white 6° (150mm)	23417229	7,5	≥0,50	645	86
6 LED cool-white 30° (150mm)	23417230	7,5	≥0,50	558	74
6 LED cool-white 14x46° (150mm)	23417231	7,5	≥0,50	657	88
6 LED warm-white 6° (150mm)	23417232	7,5	≥0,50	434	58
6 LED warm-white 30° (150mm)	23417233	7,5	≥0,50	376	50
6 LED warm-white 14x46° (150mm)	23417234	7,5	≥0,50	434	58
6 LED yellow 6° (150mm)	23417235	5,6	≥0,50	300	54
6 LED yellow 30° (150mm)	23417236	5,6	≥0,50	259	46
6 LED yellow 14x46° (150mm)	23417237	5,6	≥0,50	306	55
WALL WASHER-02 12 LED (300mm)					
12 LED cool-white 30° (300mm)	23417194	15	≥0,50	1115	74
12 LED cool-white 6° (300mm)	23417195	15	≥0,50	1290	86
12 LED cool-white 14x46° (300mm)	23417199	15	≥0,50	1315	88
12 LED warm-white 6° (300mm)	23417205	15	≥0,50	869	58
12 LED warm-white 15° (300mm)	23418039	15	≥0,50	910	61
12 LED warm-white 30° (300mm)	23417209	15	≥0,50	751	50
12 LED warm-white 14x46° (300mm)	23417213	15	≥0,50	886	59
12 LED yellow 6° (300mm)	23417217	11	≥0,50	600	55
12 LED yellow 15° (300mm)	23418041	11	≥0,50	628	57
12 LED yellow 30° (300mm)	23417221	11	≥0,50	519	47
12 LED yellow 14x46° (300mm)	23417225	11	≥0,50	612	56
12 LED neutral-white 6° (300mm)	23417381	15	≥0,50	869	58
12 LED neutral-white 30° (300mm)	23417402	15	≥0,50	751	50
WALL WASHER-02 24 LED (600mm)					
24 LED cool-white 30° (600mm)	23417175	30	≥0,50	2230	74

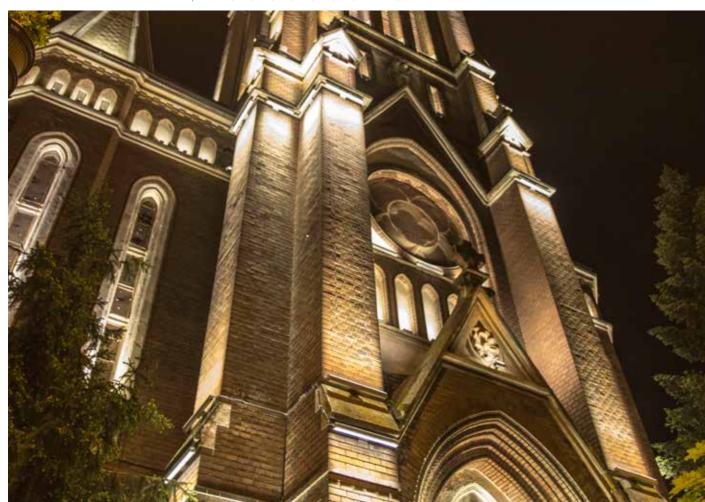
#### WALLWASHER | Architectural lighting | Variants

Product type	Product code	Active Iuminaire power [W]	Power factor [cos φ]	Luminaire Iuminous flux net [Im]	Luminaire efficacy [lm/W]
24 LED cool-white 6° (600mm)	23417196	30	≥0,50	2580	86
24 LED cool-white 14x46° (600mm)	23417200	30	≥0,50	2629	88
24 LED warm-white 6° (600mm)	23417206	30	≥0,50	1738	58
24 LED warm-white 15° (600mm)	23418040	30	≥0,50	1820	61
24 LED warm-white 30° (600mm)	23417210	30	≥0,50	1502	50
24 LED warm-white 14x46° (600mm)	23417214	30	≥0,50	1771	59
24 LED yellow 6°(600mm)	23417218	30	≥0,50	1200	55
24 LED yellow 15° 600mm)	23418042	30	≥0,50	1257	55
24 LED yellow 30° (600mm)	23417222	30	≥0,50	1038	55
24 LED yellow 14x46° (600mm)	23417226	22	≥0,50	1223	55
24 LED neutral-white 6° (600mm)	23417382	30	≥0,50	1738	58
24 LED cool-white 60° (600mm)	23417405	30	≥0,50	2661	89
24 LED neutral-white 30° (600mm)	23417437	30	≥0,50	1502	50
WALL WASHER-02 36 LED/18 LED (900mm)					
36 LED cool-white 30° (900mm)	23417176	45	≥0,90	3356	75
36 LED cool-white 6° (900mm)	23417197	45	≥0,90	3881	86
36 LED cool-white 14x46° (900mm)	23417201	45	≥0,90	3956	88
36 LED warm-white 6° (900mm)	23417207	45	≥0,90	2612	58
36 LED warm-white 30° (900mm)	23417211	45	≥0,90	2259	50
36 LED warm-white 14x46° (900mm)	23417215	45	≥0,90	2663	59
36 LED yellow 6° (900mm)	23417219	33,2	≥0,90	1791	54
36 LED yellow 30° (900mm)	23417223	33,2	≥0,90	1549	47
36 LED yellow 14x46° (900mm)	23417227	33,2	≥0,90	1826	55
36 LED neutral-white 60° (900mm)	23417383	45	≥0,90	2890	64
36 LED neutral-white 30° (900mm)	23417403	45	≥0,90	2259	50
36 LED neutral-white 30° (900mm)	23417404	45	≥0,90	2612	58
36 LED cool-white 60° (900mm)	23417406	45	≥0,90	4308	96
36 LED blue 30° (900mm)	23418246	44	≥0,90	903	21
18 LED warm-white 60° (900mm)	23418362	22,5	≥0,90	1450	64
WALL WASHER-02 48/24 LED (1200mm)					
48 LED cool-white 30° (1200mm)	23417177	55	≥0,90	4453	81
48 LED cool-white 6° (1200mm)	23417198	55	≥0,90	5150	94
48 LED cool-white 14x46° (1200mm)	23417202	55	≥0,90	5249	95
48 LED warm-white 6° (1200mm)	23417208	55	≥0,90	3433	62
48 LED warm-white 30° (1200mm)	23417212	55	≥0,90	2969	54
48 LED warm-white 14x46° (1200mm)	23417216	55	≥0,90	3500	64

### **WALLWASHER** | Architectural lighting | Variants

Product type	Product code	Active luminaire power [W]	Power factor [cos φ]	Luminaire luminous flux net [lm]	Luminaire efficacy [lm/W]
48 LED yellow 6° (1200mm)	23417220	40.5	≥0,90	2065	51
48 LED yellow 30° (1200mm)	23417224	40.5	≥0,90	2065	51
48 LED yellow 14x46° (1200mm)	23417228	40.5	≥0,90	2434	60
48 LED neutral-white 6° (1200mm)	23417384	55	≥0,90	3433	62
48 LED neutral-white 30° (1200mm)	23417401	55	≥0,90	2969	54
48 LED alb neutru 6° (1200mm) with 2 nipples	23417416	55	≥0,90	3433	62
24 LED yellow 68° (1200mm) with rapid connector	23417752	30	≥0,50	1232	4,4
RGB					
24 LED RGB 6° DMX (600mm) C1 (intermediate)	23417899	28	≥0,94	variable	variable
24 LED RGB 6° DMX (600mm) C2 (final)	23417900	28	≥0,94	variable	variable
KIT WALL WASHER RGB DMX (Gear box + Controller + Connectors)	23418104	-	_	-	-

Luminous flux distributions available on request: 7°, 13°, 15°, 30°, 57°, 63°, 74°, 11° x 45°, 14° x 46°







DELFI Outdoor architectural projector (submersible) DELFI 9LED RGB, DELFI 9LED











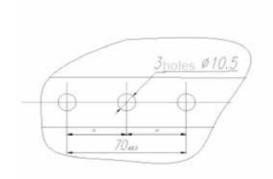


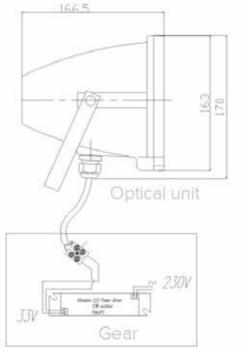


**DELFI**| Architectural lighting | General Information









emission

#### **DELFI** | Architectural lighting | Technical Sheet

TECHNICAL FEATURES:	
Rated voltage:	230V/50Hz
Rated voltage optical unit:	33V /350mA for the variant monochrome with static lighting;
	12V/1.05A for the variant RGB with dynamic lighting.
Active power:	10W 11,8W
Degrees of protection:	IP68 (power supply source has a protection degree IP66)
Mechanical impact resistance:	IK06
Ambient temperature range:	-20°C ÷ +35°C
Relative humidity:	Up to 95% at the temperature of + 25°C.
Level of radio electric disturbances:	Does not exceed the admitted limits of the standard SR EN 55015:2001/A1
Application	Outdoor decorative lighting, under water - till 3 m.
DESCRIPTION AND PERFORMANCES:	
Materials:	Housing made of pressure cast aluminium. M5 stainless steel screws.
	Pressure cast aluminium frame.
	Diffuser made of plane secured glass.
	Nitryl rubber sealing gasket.
Equipment:	The product is available both in the monochrome variant with static, and
	the RGB variant with dynamic lighting, in a range varied range of colours ar
	optical systems. For the RGB variant with dynamic lighting, through a lighting
	scenario memorized by the manufacturer, there could be obtained a great le
	of pure and intense colours nuances that change automatically.
	Multiple light distributions: 12°, 19°, 34°, 58°.
Gear (electronic driver):	Included in the product and manufactured according to the specific standard
Colour:	Grey
LIGHT SOURCES:	
	Power LEDs in colour red, green and blue for the variant RGB with dynam
	lighting. Power LEDs colour white or different colours for the variant state
	monochrome, with the following available light distributions: 12°, 19°, 34°, 58
	The use of LED's ensures both a long lifetime L70B50: 50,000 hours
	Ta=25°C, and reduced power consumption.
COMPLIANCE WITH THE ELDODEAN D	
COMPLIANCE WITH THE EUROPEAN D	IRECTIVES:
	Low Voltage Directive
	Electromagnetic Compatibility Directive
	RoHS Directive, WEEE Directive

#### **DELFI** | Architectural lighting | Variants

Product code	Active Iuminaire power [W]	Rated voltage / optical unit	Luminaire Iuminous flux net [Lm]	Luminaire efficacy [lm/W]
35611719	max. 10	max. 12	dynamic RGB	dynamic
35611720	max. 10	max. 12	dynamic RGB	dynamic
35617016	11,8	max. 33	1026	87
35617015	11,8	max. 33	405	34
	35611719 35611720 35617016	Iuminaire power [W]	Product code         luminaire power [W]         voltage / optical unit           35611719         max. 10         max. 12           35611720         max. 10         max. 12           35617016         11,8         max. 33	Product code luminaire power voltage / optical unit luminous flux net [W]  35611719 max. 10 max. 12 dynamic RGB  35611720 max. 10 max. 12 dynamic RGB  35617016 11,8 max. 33 1026

<sup>\*</sup>Luminous flux distributions available on request: 12°, 19°, 34°, 58°.

# MOUNTING:

- The body of the projector could be tilted (oriented) on the vertical plane by unscrewing the fastening screws that fasten the frame on the body (M8).
- The luminaire is composed of optical unit and the power supply source. The cable between the projector and the LED driver must have the length of maximum 3m.

## COMPLIANCE WTH THE LUMINAIRES STANDARDS:

- SR EN 60598-1
- SR EN 60598-2-5
- SR EN 60068-2-11
- SR EN 60068-2-29
- SR EN 62031

⊕ (€ RoHS

# FIX LIGHT

Outdoor architectural projector

FIX-LIGHT LED is a range of projectors equipped with **FIELD OF USE:** state-of-the-art LEDs and efficient optical systems Architectural exterior lighting - buildings, gardens, that guarantees significant energy savings.

This range has been designed to deliver an optimal light effect - from accentuating shapes to intense ambient lighting.

parks, monuments.





FIX LIGHT 01

# Performance. Modern design. Versatile

FIX LIGHT represent the architectural lighting solution that provides both high-powered effects and subtler ones.



FIX LIGHT 02





Architectural

projector





Easy

product maintenance technology



LED



driver



Electronic





#### **FIX LIGHT 01** | Architectural lighting | Technical Sheet

TECHNICAL FEATURES:	
Rated voltage:	230V/50Hz
Active power:	12,8W
Degrees of protection:	IP65
Mechanical impact resistance:	IK07
Ambient temperature range:	-30°C ÷ +40°C
Relative humidity:	80% at the temperature of + 20°C.
Vibration resistance:	Amplitude -1,5mm; frequency 4÷10Hz; duration -2 hours; duration of
	scavenging: 30 seconds.
DESCRIPTION AND PERFORMANCES:	
Materials:	Aluminium body painted.
	Transparent thermally secured glass diffuser.
Equipment:	The optical system contains the power LEDs and the specialized lenses that
	meet the requirements for architectural lighting.
	Function of the optical system there could be obtained narrow or wide
	luminous flux distributions:
	small 10°, medium 25°, large 60°.
	Surge Protection: 10KV.
Gear (electronic driver):	Included in the product and manufactured according to the specific standards
Colour:	White

#### LIGHT SOURCES:

Power LEDs with colour temperature neutral-white 4000K, CRI≥70, with a long lifetime, at Ta=25°C:

B50				
L70	L90			
>60.000 hours	>60.000 hours	>60.000 hours		

### COMPLIANCE WITH THE EUROPEAN DIRECTIVES:

Low Voltage Directive Electromagnetic Compatibility Directive

RoHS Directive, WEEE Directive



#### **FIX LIGHT 01** | Architectural lighting | Variants

Product type	Product code	Active Iuminaire power [W]	Power factor [cos φ]	Total initial flux Iuminaire [Im]	Total luminous luminaire efficiency [lm/W]
FIX LIGHT 01 12LED 13W 2020LM 10° 730	47606013	12,8	≥0,87	2026	158
FIX LIGHT 01 12LED 13W 2020LM 10° 730 NE	47606057	12,8	≥0,87	2026	158
FIX LIGHT 01 12LED 13W 2020LM 25° 730	47606029	12,8	≥0,87	2026	158
FIX LIGHT 01 12LED 13W 2020LM 60° 730	47606030	12,8	≥0,87	2026	158
FIX LIGHT 01 12LED 13W 2020LM 10° 740	47606031	12,8	≥0,87	2026	158
FIX LIGHT 01 12LED 13W 2020LM 25° 740	47606032	12,8	≥0,87	2026	158
FIX LIGHT 01 12LED 13W 2020LM 60° 740	47606033	12,8	≥0,87	2026	158
FIX LIGHT 01 12LED 13W 2020LM 10° 750	47606034	12,8	≥0,87	2026	158
FIX LIGHT 01 12LED 13W 2020LM 25° 750	47606035	12,8	≥0,87	2026	158
FIX LIGHT 01 12LED 13W 2020LM 60° 750	47606036	12,8	≥0,87	2026	158
FIX LIGHT 01 12LED 13W 2020LM 10° 757	47606037	12,8	≥0,87	2026	158
FIX LIGHT 01 12LED 13W 2020LM 25° 757	47606038	12,8	≥0,87	2026	158
FIX LIGHT 01 12LED 13W 2020LM 60° 757	47606039	12,8	≥0,87	2026	158
FIX LIGHT 01 12LED 13W 2020LM 10° 765	47606040	12,8	≥0,87	2026	158
FIX LIGHT 01 12LED 13W 2020LM 25° 765	47606041	12,8	≥0,87	2026	158
FIX LIGHT 01 12LED 13W 2020LM 60° 765	47606042	12,8	≥0,87	2026	158
with coloured light					
FIX LIGHT 01 12LED 10W 550LM 10° RED	47606053	10	≥0,87	550	55
FIX LIGHT 01 12LED 13W 630LM 10° YELLOW	47606054	13	≥0,87	630	48
FIX LIGHT 01 12LED 16W 1100LM 10° GREEN	47606055	16	≥0,87	1100	69
FIX LIGHT 01 12LED 14W 400LM 10° BLUE	47606056	14	≥0,87	400	29

Function of the optical system there could be obtained narrow or wide luminous flux distributions: projector type: small 10°, medium 25°, large 60°. 730 = 3000K 70CRI, 740 = 4000K 70CRI, 750 = 5000K 70CRI, 757 = 5700K 70CRI, 765 = 6500K 70CRI.

RED, YELLOW, GREEN, BLUE = LEDs with coloured light, DALI = with dimmable driver protocol DALI, DIM = with dimmable driver



#### MOUNTING:

Visible / on surface. The facilities for the projector mounting allow an easy focus of the light beam toward the target.



#### SUBSTITUTE OR IT IS EQUIVALENT TO:

Could replace projectors with halogen lamps LHL 150W, high-pressure mercury lamps HME 50W, metal halide lamps HIT 35W, high-pressure sodium lamps HST 50W.



#### COMPLIANCE WTH THE LUMINAIRES STANDARDS:

- SR EN 60598-1
- SR EN 60598-2-5
- SR EN 60068-2-29



### VARIANTS ON REQUEST:

- Function of the optical system there could be obtained narrow or wide luminous flux distributions: projector type light distribution: small 10°, medium 25°, large 60°, without optical system (without lenses);
- Equipped with LEDs with colour temperature
- warm-white 727=2700K 70CRI, 730 = 3000K 70CRI,
- neutral-white 740 = 4000K 70CRI,
- cold white 750 = 5000K 70CRI, 757 = 5700K 70CRI, 765 = 6500K 70CRI;,
- Equipped with LEDs coloured light: red, yellow, green, blue - RED, YELLOW, GREEN, BLUE
- Housing painted black;
- With dimmable driver protocol DALI;
- With dimmable driver.

FIX LIGHT 02

Outdoor architectural projector FIX-LIGHT-02 LED





projector





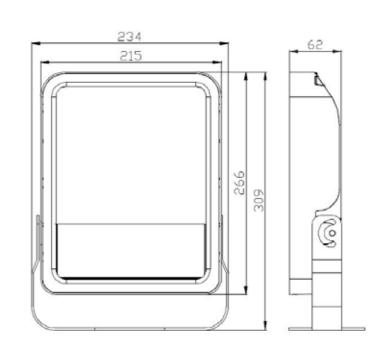






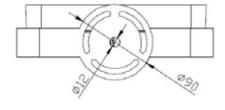












#### **FIX LIGHT 02** | Architectural lighting | Technical Sheet

TECHNICAL FEATURES:	
Rated voltage:	230V/50Hz
Active power:	52W
Degrees of protection:	IP65
Mechanical impact resistance:	IK07
Ambient temperature range:	-30°C ÷ +40°C
Relative humidity:	80% at the temperature of + 20°C.
Vibration resistance:	Amplitude -1,5mm; frequency 4÷10Hz; duration -2 hours; duration of scav-
	enging: 30 seconds.
DESCRIPTION AND PERFORMANCES:	
Materials:	Aluminium body painted.
	Transparent thermally secured glass diffuser.
Equipment:	The optical system contains the power LEDs and the specialized lenses that
	meet the requirements for architectural lighting.
	Function of the optical system there could be obtained narrow or wide
	luminous flux distributions:
	small 10°, medium 25°, large 60°.
	Surge Protection: 10KV.
Gear (electronic driver):	Included in the product and manufactured according to the specific standards.
Colour:	White

#### LIGHT SOURCES:

Power LEDs with colour temperature neutral-white 4000K, CRI≥70, with a long lifetime, at Ta=25°C:

	L70	L80	L90
ı	>60.000 hours	>60.000 hours	>60.000 hours

### COMPLIANCE WITH THE EUROPEAN DIRECTIVES:

Low Voltage Directive Electromagnetic Compatibility Directive RoHS Directive, WEEE Directive



#### **FIX LIGHT 02** | Architectural lighting | Variants

Product type	Product code	Active Iuminaire power [W]	Power factor [cos φ]	Total initial flux luminaire [lm]	Total luminous luminaire efficiency [lm/W]
FIX LIGHT 02 48LED 52W 7000LM 10° 740	47606014	52	≥0,97	7000	135
FIX LIGHT 02 48LED 52W 7000LM 25° 740	47606015	52	≥0,97	7000	135
FIX LIGHT 02 48LED 52W 7000LM 60° 740	47606016	52	≥0,97	7000	135
FIX LIGHT 02 48LED 52W 7000LM 10° 730	47606017	52	≥0,97	7000	135
FIX LIGHT 02 48LED 52W 7000LM 25° 730	47606018	52	≥0,97	7000	135
FIX LIGHT 02 48LED 52W 7000LM 60° 730	47606019	52	≥0,97	7000	135
FIX LIGHT 02 48LED 52W 7000LM 10° 750	47606020	52	≥0,97	7000	135
FIX LIGHT 02 48LED 52W 7000LM 25° 750	47606021	52	≥0,97	7000	135
FIX LIGHT 02 48LED 52W 7000LM 60° 750	47606022	52	≥0,97	7000	135
FIX LIGHT 02 48LED 52W 7000LM 10° 757	47606023	52	≥0,97	7000	135
FIX LIGHT 02 48LED 52W 7000LM 25° 757	47606024	52	≥0,97	7000	135
FIX LIGHT 02 48LED 52W 7000LM 60° 757	47606025	52	≥0,97	7000	135
FIX LIGHT 02 48LED 52W 7000LM 10° 765	47606026	52	≥0,97	7000	135
FIX LIGHT 02 48LED 52W 7000LM 25° 765	47606027	52	≥0,97	7000	135
FIX LIGHT 02 48LED 52W 7000LM 60° 765	47606028	52	≥0,97	7000	135
FIX LIGHT 02 48LED 52W 7000LM 60° 730 NE	47606049	52	≥0,97	7000	135
without optics					
FIX LIGHT 02 24LED 12W 2160LM 750 DALI	47606046	12	≥0,91	2160	180
FIX LIGHT 02 24LED 20W 3195LM 750 DALI	47606047	20	≥0,91	3195	160

Function of the optical system there could be obtained narrow or wide luminous flux distributions: projector type: small 10°, medium 25°, large 60°. 730 = 3000K 70CRI, 740 = 4000K 70CRI, 750 = 5000K 70CRI, 757 = 5700K 70CRI, 765 = 6500K 70CRI. NE = housing painted black

RED, YELLOW, GREEN, BLUE = LEDs with coloured light, DALI = with dimmable driver protocol DALI, DIM = with dimmable driver



#### MOUNTING:

Visible / on surface. The facilities for the projector mounting allow an easy focus of the light beam toward the target.



#### SUBSTITUTE OR IT IS EQUIVALENT TO:

Could replace projectors with halogen QT-DE 12 500W, metal halide lamps HIT 100W, high-pressure sodium lamps HST 100W.



#### COMPLIANCE WTH THE LUMINAIRES STANDARDS:

- SR EN 60598-1
- SR EN 60598-2-5
- SR EN 60068-2-29



### X VARIANTS ON REQUEST:

- Function of the optical system there could be obtained narrow or wide luminous flux distributions: projector type light distribution: small 10°, medium 25°, large 60°, without optical system (without lenses);
- Equipped with LEDs with colour temperature
- warm-white 727=2700K 70CRI, 730 = 3000K 70CRI,
- neutral-white 740 = 4000K 70CRI,
- cold white 750 = 5000K 70CRI, 757 = 5700K 70CRI, 765 = 6500K 70CRI;,
- Equipped with LEDs coloured light: red, yellow, green, blue - RED, YELLOW, GREEN, BLUE
- Housing painted black;
- With dimmable driver protocol DALI;
- With dimmable driver.



# ARIA 01

Indoor and outdoor industrial projector ARIA-01 GEN3 96LED/500 840 DA ARIA-01 GEN3 144LED/500 840 DA

















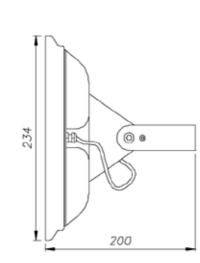


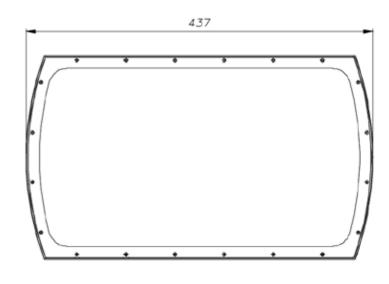
LED Easy mounting product technology maintenance driver

Electronic



Dynamic





#### **ARIA 01** | Other applications | Technical Sheet

TECHNICAL FEATURES:	
Rated voltage:	230V/50Hz
Active power:	49W 73W
Degrees of protection:	IP 66
Mechanical impact resistance:	IK08
Ambient temperature range:	-40°C ÷ +50°C
Relative humidity:	80% at the temperature of + 20°C
DESCRIPTION AND PERFORMANCES:	
Materials:	Carcasă din aluminiu turnat sub presiune, vopsită.
	Dispersor transparent din sticlă securizată termic
Equipment:	Driver pentru alimentarea LED-urilor cu reglaj de flux (dimming) protocol DALI.  Protecție contra descărcărilor atmosferice (Surge protection): Line-Earth 6kV, Line-Line 4kV.
Electronic driver:	Inclus în produs și executat în conformitate cu normativele specifice.
Colour:	Grey
Field of	lluminatul spațiilor ample interioare sau exterioare, halelor industriale, depozitelor
Field of use:	și spațiilor comerciale. Iluminatul terenurilor de sport, parcărilor, iluminat fațade și
	spații largi.
SURSE DE LUMINĂ:	
	LED-uri de ultimă generație de putere, albe, cu temperatura de culoare alb-
	neutru (neutral-white) 4000K CRI=80 cu o durată lungă de viață, la Ta=25°C:

B10			B50		
L70	L70 L80 L90		L70	L80	L90
> 121.000 orle	> 121.000 orle >75.000 ore > 35.000 ore		>140.000 ore	>87.000 ore	>40.000 ore

Directiva de Joasă Tensiune Directiva de Compatibilitate Electromagnetică Directiva RoHS, Directiva DEEE



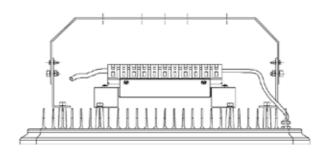
#### **ARIA 01** | Other applications | Variants

Product type	Product code	Active power [W]	Power factor [cos φ]	Total initial flux luminaire [Lm]	Total efficiency system [lm/W]
ARIA-01 GEN3 96 LED /500 840 DA	35617379	49	≥0,95	7943	162
ARIA-01 GEN3 144 LED /500 840 DA	35617376	73	≥0,95	11170	153

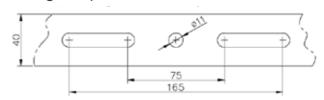
DA = echipat cu driver cu reglaj de flux protocol DALI, 840 = 4000K CRI80



- Aparent prin intermediul a 2 șuruburi M10.
- Suspendat în cârlig (accesoriu la cerere).
- Sistem de montare cu facilități de orientare pentru direcționarea cu usurintă a fluxului luminos (indexare din 20° în 20°).



#### Mounting holes position on the frame



# CORESPUNDE STANDARDELOR:

- SR EN 60598-1
- SR EN 60598-2-5
- SR EN 60068-2-11
- SR EN 60068-2-29

### VARIANTE LA CERERE:

- Echipat cu LED-uri cu alte temperaturi de culoare.
- În funcție de sistemul optic se pot obține distribuții luminoase înguste sau largi ale fluxului luminos:
- tip proiector: îngustă (small) 27°, medie (medium) 60°, largă (large) 90°, ovală/ între rafturi 63°x19°
- tip proiector hale industriale înalte (High Bay): 120°
- Reglaj de flux (dimming / DIM) 1-10V, sau fără reglaj de flux.
- Montaj suspendat cu cârlig (accesoriu la cerere).
- Produsul poate fi echipat cu dispersor din policarbonat transparent rezistent la vandalism IK10.



### POATE ÎNLOCUI SAU ESTE ECHIVALENT CU:

ARIA-01 GEN3 96LED:

- Lămpi cu halogenuri metalice HIT 100W HIE 100W,
- Lămpi cu descărcări în vapori de sodiu HSE 100W. ARIA-01 GEN3 144LED:
- Lămpi cu descărcări în vapori de mercur HME 250W,
- Lămpi cu descărcări în vapori de sodiu HSE 150W,
- Lămpi cu halogenuri metalice HIE 150W.

# ARIA 02

Industrial high bay projector. Indoor and outdoor ARIA-02 GEN3 LED 288LED/700 840 DA ARIA-02 GEN3 LED 288LED/1050 840 DA ARIA-02 GEN3 LED 384 LED/2100 840 DA















Suspended Ecologic LED Easy Electroni mounting product technology maintenance driver

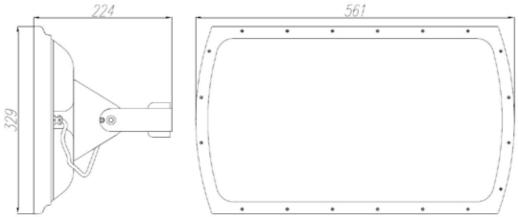
Electronic











#### ARIA 02 | Other applications | Technical Sheet

TECHNICAL FEATURES:	
Rated voltage:	230V/50Hz
Active power:	101W 153W 205W
Degrees of protection:	IP 65
Mechanical impact resistance:	IK08
Ambient temperature range:	-40°C ÷ +50°C
Relative humidity:	80% at the temperature of + 20°C
DESCRIPTION AND PERFORMANCES:	
Materials:	The body is made of aluminium.
	Diffuser from transparent secured glass.
Equipment:	LED driver with dimming protocol DALI. (DA)
	Surge protection: Line-Earth 6kV, Line-Line 4kV.
Gear (LED driver):	Included in the product and manufactured according to the specific standards.
Colour:	Grey
Field of use:	Indoor lighting for large areas: industrial plants, warehouses, commercial spaces. Lighting for sport fields, parking areas, building facades, large spaces.

### LIGHT SOURCES:

Last generation medium-power LEDs, colour temperature neutral-white 4000K CRI=80, CRI=80, with a long lifetime, at Ta=25°C:

	B10			B50	
L70 L80 L90		L70	L80	L90	
> 121.000 hours > 75.000 hours > 35.000 hours		>140.000 hours	>87.000 hours	>40.000 hours	

### COMPLIANCE WITH THE EUROPEAN DIRECTIVES:

Low Voltage Directive

Electromagnetic Compatibility Directive

RoHS Directive, WEEE Directive



#### **ARIA 02** | Other applications | Variants

Product type	Product code	Active power [W]	Power factor [cos φ]	Total initial flux luminaire [Lm]	Total luminous efficiency [lm/W]
ARIA-02 GEN3 288 LED/700 840 DA	35617346	101	≥0,95	17951	178
ARIA-02 GEN3 288 LED/700 840 DA PC	on request	101	≥0,95	17236	171
ARIA-02 GEN3 288 LED/1050 840 DA	35617347	153	≥0,95	25709	168
ARIA-02 GEN3 288 LED/1050 840 DA PC	on request	153	≥0,95	24686	161
ARIA-02 GEN3 384 LED/2100 840 DA	35617348	205	≥0,95	33588	164
ARIA-02 GEN3 384 LED/2100 840 DA PC	on request	205	≥0,95	32251	157

<sup>\*</sup> At ta=25°C, DA = DALI driver, 840=Standard: 4000K, 80CRI, PC= with polycarbonate diffuser Function of the optical system there could be obtained narrow or wide luminous distributions: Projector type distributions: small 27°, medium 60°, large 90°, between racks /oval 63°x19°, type High Bay: 120°

## MOUNTING:

- Visible, on surface, through 2 screws M10.
- Suspended mounting with hook (accessory that must be demanded separately).
- Mounting system with tilting facility for easy orientation of the luminous flux with index with 20° step.

## SUBSTITUTE OR IT IS EQUIVALENT TO:

- V1: high-pressure sodium lamps HST 250W, high-pressure metal halide lamps HIT 250W;
- V2: high-pressure mercury lamps HME 400W, high-pressure sodium lamps HSE 250W, high-pressure metal halide lamps HIT 250W;
- V3: high-pressure sodium lamps HST 150W, HSE 150W, high-pressure metal halide lamps HIE 150W.

## COMPLIANCE WITH THE LUMINAIRES STANDARDS:

- SR EN 60598-1
- SR EN 60598-2-5
- SR EN 60068-2-11
- SR EN 60068-2-29

## VARIANTS ON REQUEST:

- Equipped with LEDs with other colour temperature.
- Equipped with polycarbonate diffuser (PC).
- Function of the optical system there could be obtained narrow or wide luminous distributions:
- Projector type distributions small 27°, medium 60°, large 90°, between racks 63°x19°, high bay distribution of 120°.
- Dimming (DIM) 1–10V).
- Suspended mounting with hook (accessory that must be demanded separately).

# POWER-FLEX 01

Industrial high bay and large areas projector POWER-FLEX-01 72 LED





### **POWER-FLEX 01** | Other applications | General Information



#### **POWER-FLEX 01** | Other applications | Technical Sheet

TECHNICAL FEATURES:	
Rated voltage:	230V/50Hz
Active power:	175W 174,6W 233,3W 236W
Degrees of protection:	IP66
Mechanical impact resistance:	IK08
Ambient temperature range:	-40°C ÷ +50°C
Relative humidity:	80% at the temperature of +20°C.
Level of radio electric disturbances:	Does not exceed the admitted limits of the standard SR EN 55015.
Dimmable driver protocol	1-10V for the variants DIM 1-10V.
Glow wire test	850°
DESCRIPTION AND PERFORMANCE	S:
Materials:	Aluminium profile body.
	Metallic frame, made of steel sheet, in welded construction, painted with
	epoxy-polyestheric powder. Mounting frame with index step 10°.
Equipment:	Optical system made of sealed LED modules, with index 10°, 20° and with
	specific light distribution: 60° (wide), 101° (extra-wide), 36°x101° (between racks), projector type 31°.
	Gear (electronic driver) mounted on the body or on the metallic frame, sealed
	with the protection degree IP67, with active PFC function. Driver protection for
	conditions of: Output over voltage, Short circuit, Over Temperature).
Gear (electronic driver):	Included in the product and manufactured according to the specific standards
Colour:	Grey
LIGHT SOURCES:	
	Power LEDs, white, with the colour temperature cool-white 5700K, CRI≥70,

Power LEDs, white, with the colour temperature cool-white 5700K, CRI≥70, with a long lifetime at Ta=25°C:

B10			B50			
L90	L80	L70	L90	L80	L70	
115,200 hours	>181,000 hours	>181,000 hours	116,520 hours	>181,000 hours	>181,000 hours	

#### COMPLIANCE WITH THE EUROPEAN DIRECTIVES:

Low Voltage Directive

Electromagnetic Compatibility Directive

RoHS Directive, WEEE Directive



#### **POWER-FLEX 01** | Other applications | Variants

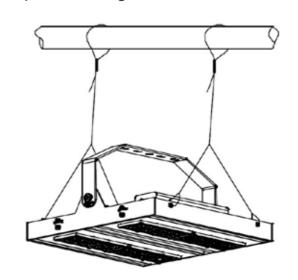
Product type	Product code	Active Iuminaire power [W]	Power factor [cos φ]	Luminaire luminous flux net [Lm]	Luminaire efficacy [lm/W]
Dimmable driver - protocole 1-10V					
POWER-FLEX-01 72 LED/266 757 60° DIM 1-10V	35317091	233,3	≥0,96	35411	152
POWER-FLEX-01 72 LED/266 840 60° DIM 1-10V	35317106	233,3	≥0,96	30184	129
POWER-FLEX-01 72 LED/200 757 60° DIM 1-10V	35317063	175	≥0,96	27336	156
POWER-FLEX-01 72 LED/200840 60° DIM 1-10V	35317105	175	≥0,96	24212	138
Standard driver					
POWER-FLEX-01 72 LED/1600 757 60°	35317102	236	≥0,95	36082	153
POWER-FLEX-01 72 LED/1600 840 60°	35317109	236	≥0,95	31131	132
POWER-FLEX-01 72 LED/1200 757 60°	35317100	174,6	≥0,95	26547	152
POWER-FLEX-01 72 LED/1200 840 60°	35317108	174,6	≥0,95	24185	139

<sup>\*\*</sup> At ta = =25°C, \*\* constant value driver, without dimming, 570 = 5700K 70CRI, 840 = 4000K 80CRI DIM 1-10V = Dimmable drivers protocol 1-10V

### MOUNTING:

- On surface with fixed frame and screws 2xM8, 1xM12.
   The mounting frame is included in the product.
- On request, suspended with Greypple steel cable.

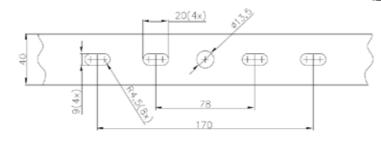
#### Suspended mounting



Suspension cable L = 3m, with Greypple type carabiner (product code: 0311736 4).

In variation of suspended mounting the fixing arm can be removed or can be folded to 90  $^{\circ}.$ 

#### On surface mounting



### VARIANTS ON REQUEST:

- Suspended with Greypple steel cable. Code 03117364.
- Projector type mounting on pole/pipe Ø60÷Ø76mm with fixing support. Code 03113844.
- Dimmable driver DALI.
- PIR sensor (for the variant equipped with DALI driver)
- With movement sensor (for the variant equipped with DALI driver).
- With kit DALI PROXIMITY SENSOR Compact control
  module with ambient light sensor and motion sensor
  for 10 products. The product needs separate wiring. The
  sensor is mounted outside the product. Mounting height
  max.16m (for the variant equipped with DALI driver).

## SUBSTITUTE OR IT IS EQUIVALENT TO:

Could replace high-pressure mercury lamps HME 400W, high-pressure metal halide lamps HIE 250W, HIT 250W, high-pressure sodium lamps HST 250W, HSE 250W.

### COMPLIANCE WTH THE LUMINAIRES STANDARDS:

- SR EN 60598-1
- SR EN 60598-2-5
- SR EN 60068-2-29

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<sup>\*\*\*</sup>Light distribution: 60° (wide), 101° (extra-wide), 36°x101° (between racks), projector 31°.

# LUXOR PLUS

Outdoor architectural projector LUXOR PLUS-01 16 LED HP LUXOR PLUS-01 48 LED HP LUXOR PLUS-01 48 LED RGB

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projector











Electronic included technology driver emission

control



#### **LUXOR PLUS** | Other applications | Technical Sheet

TECHNICAL FEATURES:	
Rated voltage:	230V/50Hz
Active power:	65W 96W 123W
Degrees of protection:	IP65
Mechanical impact resistance:	IK07
Ambient temperature range:	-30°C ÷ + 35°C (16LED & 48LED RGB
	-40°C ÷ + 40°C (48LED HP)
Relative humidity:	Up to 80% at the temperature of + 20°C
Level of radio electric disturbances:	Does not exceed the admitted limits of the standard SR EN 55015.
DESCRIPTION AND PERFORMANCES:	
Materials:	Aluminium body.
	Transparent thermally secured glass diffuser.
Equipment:	The optical system contains the power LEDs and the specialized lenses
	that meet the requirements for architectural lighting. Function of the optical
	system there could be obtained narrow or wide luminous flux distributions.
	7°, 13°, 16°, 30°, 31°, 14° x 46°, 11° x 45°, 68°, 72° .
Gear (electronic driver):	Included in the product and manufactured according to the specific standards.
Colour:	Grey
LIGHT SOURCES:	
	Power LEDs: colour temperature cool-white 6500K, CRI≥70. The use of
	LEDs ensures both a long lifetime L70B50 of 50,000 hours at Ta=25°C, and

economical power consumption.

#### COMPLIANCE WITH THE EUROPEAN DIRECTIVES:

Low Voltage Directive Electromagnetic Compatibility Directive RoHS Directive, WEEE Directive



#### **LUXOR PLUS** | Other applications | Variants

Product type	Product code	Active Iuminaire power [W]	Power factor [cos φ]	Luminaire luminous flux net [Lm]	Luminaire efficacy [lm/W]
LUXOR PLUS-01 16LED HP 30° 6500K	35317023	65.0	≥0,95	3871	60
LUXOR PLUS-01 48 LED HP 30° 6500K*	35317036	96.0	≥0,95	7498	78
LUXOR PLUS-01 48 LED RGB 30° **	la cerere	123.0	≥0,95	dinamic**	dinamic**

HP = High Performance

Light distributions on request: - 7°, 13°, 16°, 30°, 31°, 14° x 46°, 11° x 45°, 68°, 72°

\* The variant LUXOR PLUS-01 48LED HP has an electronic driver that can be programmed on request for: 1-10V dimming, AmpDim, DALI, or Dynadimmer \*\* The variant LUXOR PLUS-01 48LED with DMX converter to establish different lighting scenarios for the RGB variant: red max.2448lm, green max. 2928lm, blue max. 1368lm.



## MOUNTING:

• On surface. The facilities for the projector mounting allow an easy focus of the light beam toward the target.

### COMPLIANCE WTH THE LUMINAIRES STANDARDS:

- SR EN 60598-1
- SR EN 60598-2-5
- SR EN 62031

### SUBSTITUTE OR IT IS EQUIVALENT TO:

- LUXOR PLUS 01 48LED HP could replace projectors with metal halide lamps HIT 150W and high-pressure sodium lamps HST 100W.
- LUXOR PLUS-01 16LED HP could replace projectors with high-pressure mercury lamps HME 125W, metal halide lamps HIE 60W, 70W, high-pressure sodium lamps HSE 70W.



- The variant LUXOR PLUS-01 48LED HP has an electronic driver that can be programmed for: 1-10V dimming, AmpDim, DALI, or Dynadimmer
- The variant LUXOR PLUS-01 48LED with DMX converter to establish different lighting scenarios for the RGB variant.
- On the client request the product could be equipped with LEDs with other colours.



Outdoor architectural projector FIX-LIGHT-03 LED







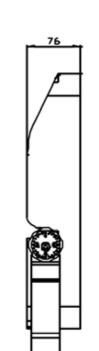






Dynamic emission

330







Architectural







Electronic driver

159 158

#### **FIX LIGHT 03** | Architectural lighting | Technical Sheet

TECHNICAL FEATURES:	
Rated voltage:	230V/50Hz
Active power:	52W
Degrees of protection:	IP65
Mechanical impact resistance:	IK07
Ambient temperature range:	-30°C ÷ +40°C
Relative humidity:	80% at the temperature of + 20°C.
Vibration resistance:	Amplitude -1,5mm; frequency 4÷10Hz; duration -2 hours; duration of
	scavenging: 30 seconds.
DESCRIPTION AND PERFORMANCES:	
Materials:	Aluminium body painted.
	Transparent thermally secured glass diffuser.
Equipment:	The optical system contains the power LEDs and the specialized lenses tha
	meet the requirements for architectural lighting.
	Function of the optical system there could be obtained narrow or wide
	luminous flux distributions:
	■ small 10°, medium 25°, large 60°.
	Surge Protection: 10KV.
Gear (electronic driver):	Included in the product and manufactured according to the specific standards
Colour:	White
LIGHT SOURCES:	
	Power LEDs with colour temperature neutral-white 4000K, CRI≥70, with a
	Land lifetime at Tay 2000

long lifetime, at Ta=25°C:

B50					
	L70	L80	L90		
	>60.000 hours	>60.000 hours	>60.000 hours		

### COMPLIANCE WITH THE EUROPEAN DIRECTIVES:

Low Voltage Directive Electromagnetic Compatibility Directive RoHS Directive, WEEE Directive



#### **FIX LIGHT 03** | Architectural lighting | Variants

Product type	Product code	Active Iuminaire power [W]	Power factor [cos φ]	Total initial flux luminaire [lm]	Total luminous luminaire efficiency [lm/W]
FIX LIGHT 03 96LED 54W 7600LM 60° 740	54	≥0,97	76	500	141
FIX LIGHT 03 96LED 59W 8100LM 60° 740	59	≥0,97	0,97 8100		137

Function of the optical system there could be obtained narrow or wide luminous flux distributions: projector type: small 10°, medium 25°, large 60°. 730 = 3000K 70CRI, 740 = 4000K 70CRI, 750 = 5000K 70CRI, 757 = 5700K 70CRI, 765 = 6500K 70CRI. NE = housing painted black.

RED, YELLOW, GREEN, BLUE = LEDs with coloured light, DALI = with dimmable driver protocol DALI, DIM = with dimmable driver



#### MOUNTING:

Visible / on surface. The facilities for the projector mounting allow an easy focus of the light beam toward the target.



#### SUBSTITUTE OR IT IS EQUIVALENT TO:

Could replace projectors with: halogen QT-DE 12 500W, metal halide lamps HIT 100W, high-pressure sodium lamps HST 100W.



#### COMPLIANCE WTH THE LUMINAIRES STANDARDS:

- SR EN 60598-1
- SR EN 60598-2-5
- SR EN 60068-2-29



### VARIANTS ON REQUEST:

- Function of the optical system there could be obtained narrow or wide luminous flux distributions: projector type light distribution: small 10°, medium 25°, large 60°, without optical system (without lenses);
- Equipped with LEDs with colour temperature
- warm-white 727=2700K 70CRI, 730 = 3000K 70CRI,
- neutral-white 740 = 4000K 70CRI,
- cold white 750 = 5000K 70CRI, 757 = 5700K 70CRI, 765 = 6500K 70CRI;,
- Equipped with LEDs coloured light: red, yellow, green, blue - RED, YELLOW, GREEN, BLUE
- Housing painted black;
- With dimmable driver protocol DALI;
- With dimmable driver.



