



Industrial light fittings

Products catalogue

LED

...

2016/2017



REMONTOWA / **MEMBER OF**
LIGHTING TECHNOLOGIES / **REMONTOWA**
HOLDING S.A.

Dear Customers,

For nearly 50 years the manufacturer from Gdansk - now operating under the name of **Remontowa Lighting Technologies SA**, provides the advanced lighting products.

Developing the production potential and expanding the offer are the main goals of our business. Our extensive experience is invaluable when it comes to creating the product and determining the needs of the end customer. We are constantly working on functionality, efficiency and luminaires technology to make the final products competitive in every aspect.

In this brochure we present modern and technologically advanced industrial lighting fixtures powered by energy-efficient LED light sources. I encourage you to check the offer and the benefits of using this technology.

Ewa Jarosińska
Chairman of the Board

Production facilities: yesterday and today



The evolution of the corporate identity system



P O L A M
FABRYKA SPRZĘTU OŚWIETLENIOWEGO „POLAM-GDAŃSK”



PolamRem

REMONTOWA / MEMBER OF
LIGHTING TECHNOLOGIES REMONTOWA
HOLDING S.A.

Remontowa Lighting Technologies S.A.

(formerly known as Polam- Rem) is an industrial lighting fixtures manufacturer based in Gdansk, Poland. The Polam-Rem brand has been in the market since 1992, but its experience in the production of lighting fixtures stretches back to 1955. **The company is a member of Remontowa Holding S.A.** which consists of companies operating within the maritime and manufacturing industries. The whole group of companies employs about 6000 people, there are also dozens of cooperating companies with their own staff. Two of the most successful in Poland privately owned shipyards are also the members of the group.


The strength of the company lies in **its ability to alter product offerings** by concentrating the entire production process in Gdansk.

The production plant is equipped with complete and constantly modernized **machinery facilities**. The production process starts with the machining of metal sheets on the eccentric presses, digital turret punch presses (FINNPOWER), press brakes (Safan, Amada). **Our state of the art digital guillotine is able to handle metal sheets of all thicknesses** used in the luminaires production. In the past few years our section of production tools has been expanded with the Wire EDM, which provided even greater opportunities in terms of quality, design and housing ergonomics. The metal materials are protected with a powder paint coating on our automated highly efficient painting line.

When designing luminaires **we care about what is the most important - the right light output and economy**. Each product thoroughly tested in our on-site photometric laboratory has a documented light distribution curve for each of its type (in accordance with PN-E-04040-00: 1989 and BS EN 13032-1: 2010 norms). It is an essential work tool for our lighting designers, who are considered to be the main pillar of our trade policy.

Luminaires manufactured by our company are suitable for all currently used **light sources**: energy saving, maintenance-free and efficient LED panels, high-pressure discharge lamps, linear fluorescent and compact lamps, incandescent lamps, halogen and LED replacements for all of them.

For more information about the company on the website:

 www.rlt.rh.pl/company/history-of-company

Experience

Certificates



Declaration of Conformity EC



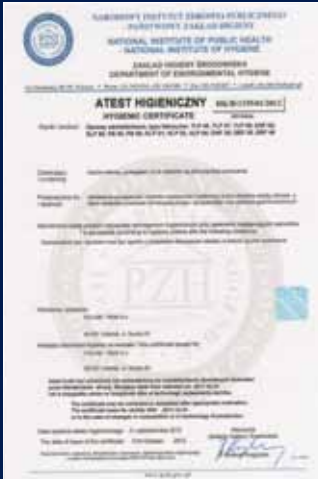
ATEX



IECEX



CNBOP



Hygienic Certificate



Bureau Veritas



RMRS



GOST


Quality management

The high quality of delivered products is a priority in our business activities and constantly emphasized asset of our luminaires. The procedures that guide us every day are in line with the latest and most restrictive standards for the quality policy. The company has implemented Quality Management System which complies with **PN- EN 13980: 2004** and **PN- EN ISO 9001: 2009** and which is confirmed annually by the Certifying Body (Central Mining Institute) audit.

Additionally, our demanding and strictly standardized production process of explosion-proof luminaires is consistent with **the Directive 2014/34/EU** (quality assurance confirmed by the Central Mining Institute). Our selected fixtures are ATEX- and IECEX-certified.

For each product we issue a CE declaration of conformity with the European standards. Selected products have additional certifications and approvals, e.g.: CNBOP, HYGIENIC CERTIFICATE, RMRS, GOST, BV, and others.

More information about the quality management on the website:

 www.rlt.rh.pl/company/quality-management



Quality

References

Sante – healthy food manufacturer



Elektrownia Ostroleka (Power plant)



Elektrownia Stalowa Wola (Power plant)



Wojskowe Zakłady Lotnicze WZL1 w Dęblinie (Military Aviation Plant)



Use of LED lighting fixtures



Facilities and outdoor spaces with explosion endangered zones
Oil refineries, petrochemical plants, chemical plants, bulk material reloading bases, paint shops



Production plants of all industries
Automotive, machinery, repair, service, clothing, paper, military, wood, furniture, workshops, production, assembly, stores, warehouses



Food processing plants
Food production and processing plants, animal farms



Heavy industry and difficult working conditions
Power plants, CHP plants, steel mills, mines, foundries, solid and liquid fuels distribution centres



High or low ambient temperature
Facilities and industrial spaces with extremely low or high operating temperature



Road infrastructure
Road tunnels, underpasses, passageways, roads, highways



Public facilities
Schools, fire stations, penitentiary institutions, hospitals, entertainment venues, bus stops

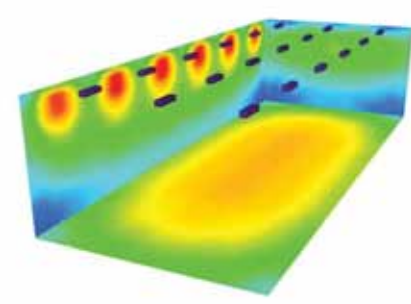
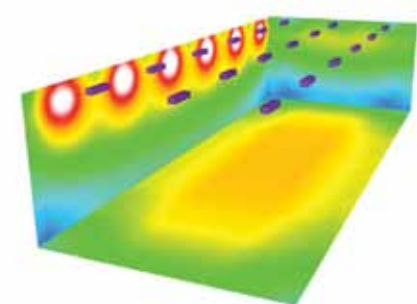


Vessels and port/ shipyard infrastructure
Ships, drilling and oil process platforms, lighting of docks, storage yards, workshops, offshore industry

Project example: a hall, dimensions: 6 x 15 x 3,5 m
Assumption: the average illumination of 200 lux

Graphical presentation of results:
Oprawa EXP 02-2180

EXP 02 MLED 220/115/840

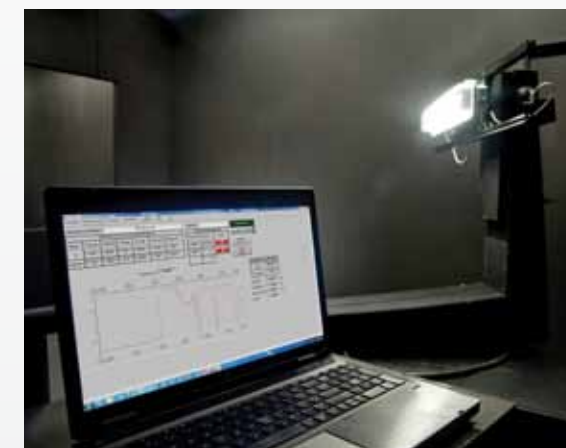


Luminaire type	EXP 02-2180	EXP 02 MLED 220/115/840
Quantity	18 pieces	18 pieces
Average illumination	213 lux	210 lux
Luminance uniformity	0,6	0,6
1 luminaire power consumption	40 W	17,5 W
Whole installation power consumption	720 W	315 W

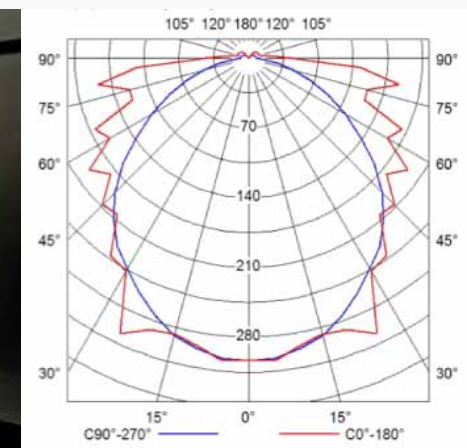
Power consumption
saving is approx. 56%

LED technology gives an enormous advantage to its users. Industrial luminaires with this solution enabled more powerful lighting (more light with the same housing size) and big savings on energy costs.

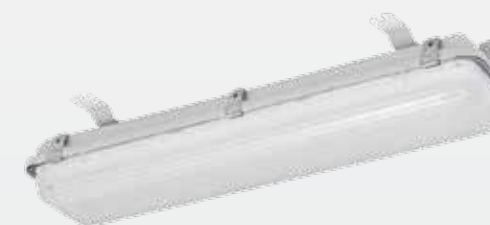
Each of our luminaire has been designed on the basis of thorough photometric tests conducted in our in-house laboratory in order to obtain optimal lighting curve light and illuminance for the reference objects. High efficiency of the luminaire are primarily the savings from reduced number of lighting points and a power consumption decrease . The payback period is optimized with the preserved life span of the device.



Photometric laboratory



EXP 02 MLED 15 W version:
photometric curve



EXP 02 MLED compared to a fluorescent lamp version, generates approx. **50% more light** using the same power, which is directly reflected in the presented results.

Saving



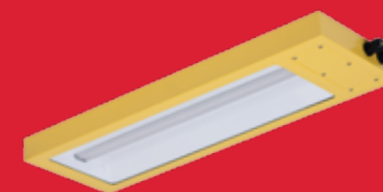
Explosion proof luminaires

Explosion proof luminaires are destined to light industrial premises and outdoor spaces endangered by explosion of mix of: gases, vapours, and fogs flammable with air, as well as mix of: dust or fibres flammable with air. Explosion endangered zones: 1, 21; 2, 22.



EXP 02 MLED

- The luminaire for Zone 2, 22
- IP 67
- State of the art LED light sources with heat distribution system
- Robust housing made of glass fibre reinforced polyester
- Flexible diffuser made of UV - stabilized polycarbonate (protection against the harmful effects of the sun)
- Lightweight design and maintenance-free operation makes the fixture an ideal replacement for heavy high-bays
- Emergency version powered by its own power supply (3 hour system), or central battery
- Optional diffuser material depending on the aggressiveness of the chemical working environment



EXP 38 MLED

- The luminaire for Zone 2, 22
- High efficient and economical LED light source
- Compact, durable and easy to install housing
- Specially designed reflector and panel cover to achieve the best lighting performance and glare reduction
- Two diffuser options depending on the installation needs: safe tempered glass or UV stabilized polycarbonate
- Safe and quick power connection: no need to disassemble the casing
- Available with 3 hours emergency module



EXP 83 MLED

- The luminaire for Zone 1, 21; 2, 22
- IP 66/67
- LED panel with opal cover for optimal lighting performance and glare reduction
- Robust housing made of galvanized steel
- Optional: stainless steel version with increased resistance to the most demanding environment
- Reinforced transparent hard diffuser made of UV stabilized polycarbonate
- 3 hour emergency power supply self-test system

Product features

- Robust housing made of glass fibre reinforced polyester
- Flexible diffuser made of UV - stabilized polycarbonate, protection against the harmful effects of the sun
- State of the art LED light sources with heat distribution system
- Easy installation with a dedicated bracket
- Lightweight design and maintenance-free operation makes the fixture an ideal replacement for heavy high-bays
- Emergency version powered by its own power supply (3 hour system), or central battery
- Alternative diffuser depending on the aggressiveness of the chemical working environment

Type	Light source power	Colour temperature	Luminous flux	Options
EXP 02 MLED220/115/840	15 W	4000 K	2210 lm	- 3 hours emergency unit - Three- phase through power supply - 3000K colour temperature
EXP 02 MLED240/129/840	29 W	4000 K	4420 lm	
EXP 02 MLED260/137/840	37 W	4000 K	5525 lm	

Accessories

- Dedicated mounting brackets
- We also provide the adaptive mounting brackets according to the customer's indication

Recommended use



Examples of the EXP 02 MLED use – battery rooms

The manufacturer reserves their right to change the technical specification. Full technical specification is available on the website.

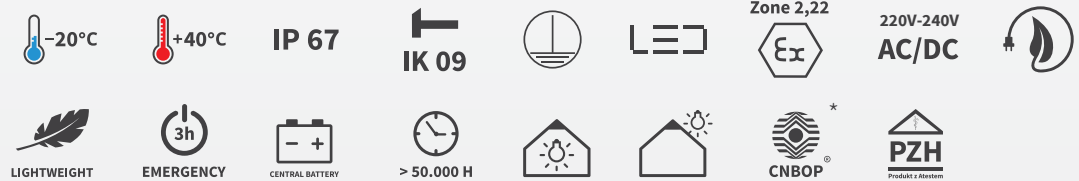
EXP 02 MLED



Explosion proof luminaire with energy efficient LED light source

II 3G Ex nA IIC T4 Gc

II 3D Ex tc IIC T65°C IP67 Dc



* during certification

Description

The luminaire is designed for lighting industrial areas with the explosion - hazard zones 2 or 22, halls and workshops, warehouses, coal conveyor belts, transshipment silo terminals, battery rooms, etc.

Sealed casing IP 67 makes it perfect for the highly dusty interiors and outdoor spaces partially protected against weather conditions, i.e. sheds, roofing, etc.

Three lengths of the housing and a range of power provide a wide choice of applications, depending on the height of the illuminated site, brightness requirements, and the installation possibilities.



Click

Explosion proof

Product features

- Compact, durable and easy to install housing
- Specially designed reflector and panel cover to achieve the best lighting performance and to reduce glare
- Two diffuser options depending on the installation needs: **safe tempered glass or UV stabilized polycarbonate**
- **Safe and quick power connection:** no need to disassemble the casing, even after mounting on a ceiling (terminal hidden behind the easy accessible flap on the housing top)
- Available with 3 hours **emergency module**
- **Direct mounting** on a wall or a ceiling

Type	Light source power	Colour temperature	Luminous flux	Options
EXP 38 MLED220/115/840	15 W	4000 K	2210 lm	- 3 hours emergency unit - Opal cover - 3000K colour temperature
EXP 38 MLED240/129/840	29 W	4000 K	4420 lm	

Accessories

- Dedicated mounting brackets
- We also provide the adaptive mounting brackets according to the customer's indication

Recommended use



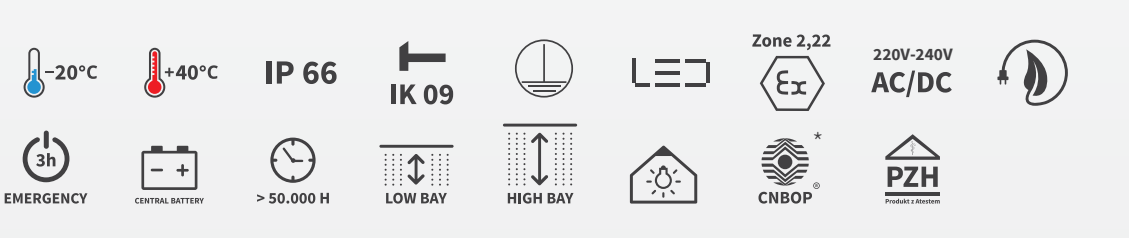
Examples of the EXP 38 MLED use – paint rooms

The manufacturer reserves their right to change the technical specification. Full technical specification is available on the website.

EXP 38 MLED

Explosion proof luminaire with energy efficient LED light source

II 3G Ex nA IIC T4 Gc
II 3D Ex tc IIIC T65°C IP67 Dc



* during certification

Description

An innovative luminaire designed for lighting industrial areas with the explosion- hazard zones 2 or 22 - halls and workshops, warehouses, coal conveyor belts, transshipment silo terminals, battery rooms, paint rooms, etc. Powered by energy efficient LED light source.



Click

An ergonomic housing and a range of power provide a wide choice of applications, depending on the height of the illuminated site, brightness requirements, and the installation possibilities.

Explosion proof

Product features

- Robust housing made of galvanized steel
- Optional: stainless steel version with increased resistance to the most demanding environment
- Reinforced (IK 09) transparent hard diffuser made of UV stabilized polycarbonate (protection against the harmful effects of the sun)
- 3 hour emergency power supply self-test system
- Stainless steel diffuser clips
- Direct mounting on a wall or a ceiling
- LED panel with opal cover for optimal lighting performance and glare reduction
- Design assessed and recommended our customers' positive feedback

Type	Light source power	Colour temperature	Luminous flux	Options
EXP 83 MLED220/125/840/D	25 W	4000 K	2500 lm	- 3 hours emergency unit - Stainless steel housing - Cable glands for shielded cables
EXP 83 MLED240/150/840/D	50 W	4000 K	5000 lm	

Accessories

- Dedicated mounting brackets
- Cable glands for shielded cables

Recommended use



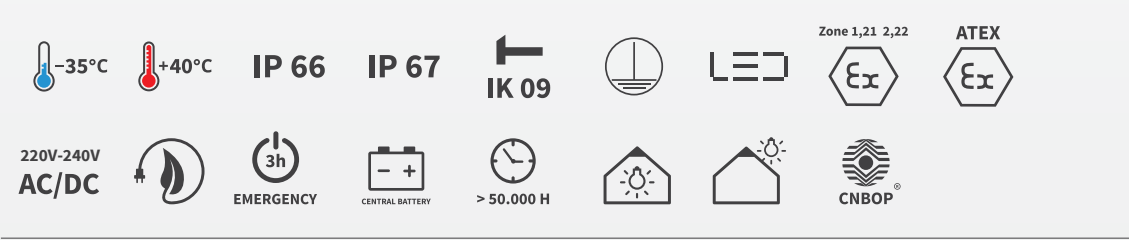
Examples of the EXP 83 MLED use – oil refineries

The manufacturer reserves their right to change the technical specification. Full technical specification is available on the website.

EXP 83 MLED

Explosion proof luminaire with energy efficient LED light source

II 2G Ex db eb mb IIC T4 Gb
II 2D Ex tb IIIC T60°C lub T65°C IP66/67 Db



Description

Explosion proof luminaire with energy efficient LED light source. Designed for lighting industrial areas with the explosion- hazard zones 1,2 or 21, 22- oil and oil derivatives processing plants, tank bases and distribution centres for liquid fuel and other inflammable liquids (chemical industry), halls and workshops, warehouses, conveyor belts, etc.

Fully dustproof and waterproof (IP66 / 67) housing can be used in premises with high dust or high humidity. The luminaire is also suitable for outdoor use.



Click

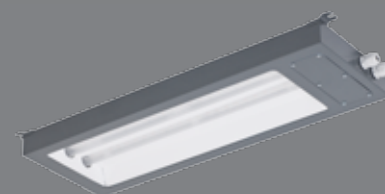


Explosion proof



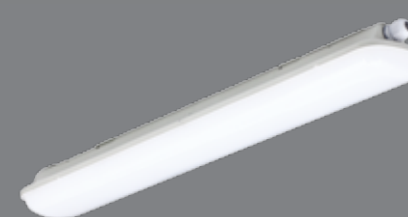
Industrial luminaires

Luminaires for various use in heavy industry, manufacturing, processing, food production plants, assembling halls and workshops.



TLP 38 MLED

- Energy efficient LED light source
- Compact, durable and easy to install housing
- Specially designed reflector and panel cover
- Two diffuser options depending on the installation needs
- Safe and quick power connection
- Available with 3 hours emergency module
- Direct wall or ceiling mounting



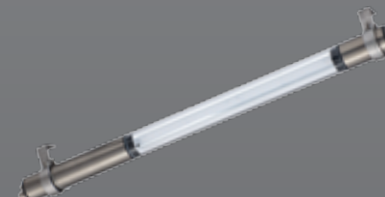
TLP 40 MLED

- Energy efficient LED light source
- Durable PC housing
- Opal UV stabilised diffuser reducing glare and diffusing light
- Easy mounting with a dedicated bracket, possibility to mount on ceiling, wall, or suspend on ropes
- Power connection with no need to open the casing



TLP 44 MLED

- Durable housing assessed and recommended by our customers' positive feedback
- Energy efficient LED light source
- LED panel with opal cover to achieve the best lighting performance and glare reduction
- Reinforced transparent hard diffuser made of UV stabilized 4 mm polycarbonate
- Emergency version powered by its own power supply (3 hour system) or central battery
- Stainless steel diffuser clips
- Optional: stainless steel version with increased resistance to the most demanding environment



TLP 51 MLED

- Luminaire body made of thick transparent PMMA tube
- Energy efficient LED light source
- LED panel with opal cover reducing glare and diffusing light
- Stainless steel mounting bracket
- Slim construction allows to use the luminaire when limited installation possibilities
- Emergency version powered by its own power supply (3 hour system) or central battery



TLP 55 MLED

- Durable housing assessed and recommended by our customers' positive feedback
- Energy efficient LED light source
- LED panel with opal cover to achieve the best lighting performance and glare reduction
- Chemically resistant durable PMMA diffuser
- Emergency version powered by its own power supply (3 hour system) or central battery
- Stainless steel diffuser clips

Product features

- Ergonomic housing resistant to mechanical shock
- Specially designed reflector and panel cover to achieve the best lighting performance and glare reduction
- Safe and quick power connection: no need to disassemble the casing, even after mounting on a ceiling (terminal hidden behind the easy accessible flap on the housing top)
- Direct mounting on a wall or a ceiling

Optional: UV stabilized polycarbonate diffuser or 4mm safety glass

Type	Light source power	Colour temperature	Luminous flux	Options
TLP/TWP 38 MLED220/25/840	25 W	4000 K	3680 lm	- Emergency unit - Opal cover - Dimming/DALI - 3000K colour temperature
TLP/TWP 38 MLED240/50/840	50 W	4000 K	7360 lm	

Accessories

- Dedicated mounting brackets
- Motion detector
- Dusk to dawn detector
- We also provide the adaptive mounting brackets according to the customer's indication

Recommended use



Examples of the TLP 38 MLED use in food processing plant

The manufacturer reserves their right to change the technical specification. Full technical specification is available on the website.

TLP 38 MLED



Industrial luminaire with energy efficient LED light source



* during certification

Description

Dustproof and watertight luminaire powered by energy efficient LED light source. Designed to light industrial facilities such as: heavy industry factories (construction, chemical), fuel and energy (power plants, CHP plants), electrical engineering, defence, metallurgical, mineral, and for the manufacturing, assembling halls, workshops, warehouses, and traffic routes.



Click

Luminaire works well in **clear room**-type and in the food industry premises (the production and processing). Certified by the NIH.

TWP 38 MLED version with a specially designed radiator and electronics is suitable for **high ambient temperatures max 55 ° C**.



Product features

- Excellent lighting performance with efficient LED panels
- Opal UV stabilised diffuser
- Easy mounting with a dedicated bracket, possibility to mount on ceiling, wall, or suspend on ropes
- Power connection with **no need to open the casing**

Type	Light source power	Colour temperature	Luminous flux	Options
TLP 40-MLED220/21/840	21 W	4000 K	2720 lm	3000K colour temperature
TLP 40-MLED240/42/840	42 W	4000 K	5440 lm	
TLP 40-MLED260/46/840	46 W	4000 K	6800 lm	

Recommended use



The manufacturer reserves their right to change the technical specification. Full technical specification is available on the website.

Examples of the TLP 40 MLED use

TLP 40 MLED

Industrial luminaire with energy efficient LED light source



Description

Basic industrial luminaire in a robust housing made of polycarbonate, equipped with energy efficient LED light source. Designed to light industrial facilities such as workshops, production and assembling halls, technical passages, warehouses, etc.



Click

Industrial



Product features

- **Durable housing** assessed and recommended by our customers’ positive feedback
- Excellent lighting performance with **efficient LED panels**
- **LED panel with opal cover** to achieve the best lighting performance and to reduce glare
- **Reinforced (IK 09) transparent hard diffuser** made of UV stabilized 4 mm polycarbonate (protection against the harmful effects of the sun)
- **Direct mounting** on a wall or a ceiling
- **Emergency version** powered by its own power supply (3 hour system) or central battery
- **Stainless steel diffuser clips**
- Optional: **stainless steel version** with increased resistance to the most demanding environment

Type	Light source power	Colour temperature	Luminous flux	Options
TLP 44 MLED 220/22/840	22 W	4000 K	3240 lm	- Emergency unit - Stainless steel housing - 3000K colour temperature
TLP 44 MLED 240/44/840	44 W	4000 K	6480 lm	

Accessories

- Dedicated mounting brackets
- Brass cable glands
- We also provide the adaptive mounting brackets according to the customer’s indication

Recommended use



Examples of the TLP 44 MLED use

The manufacturer reserves their right to change the technical specification. Full technical specification is available on the website.

TLP 44 MLED

Industrial luminaire with energy efficient LED light source



Description

The flagship industrial luminaire with proven quality with new technical solutions. Equipped with energy efficient LED light source. Suitable for lighting industrial and maintenance areas and premises: production halls, workshops, passages and communication routes in factories, squares, stores, warehouses, distribution depots, exhibition halls.

The high degree of tightness and robust design allow the luminaire to be used outdoor.



Click

Industrial

Product features

- Thick transparent PMMA tube
- LED panel with opal cover reducing glare and diffusing light
- Stainless steel mounting bracket
- Slim construction allows to use the luminaire when limited installation possibilities
- Emergency version powered by its own power supply (3 hour system) or central battery

Type	Light source power	Colour temperature	Luminous flux	Options
TLP 51 MLED980/112	12 W	4000 K	1840 lm	- Emergency unit - 3000K colour temperature

Recommended use

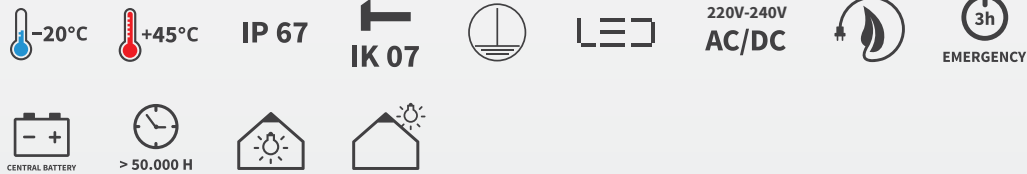


Examples of the TLP 51 MLED use

The manufacturer reserves their right to change the technical specification. Full technical specification is available on the website.

TLP 51 MLED

Industrial luminaire with energy efficient LED light source



Description

Tubular luminaire powered by energy efficient LED light source. Suitable for lighting premises and indoor spots (at the machines, rolling mills, CNC machine tools, presses, guillotines and other industrial equipment with high lighting requirements). With the high tightness degree it is designed to work in high humidity and dust conditions.



Click

Industrial



Product features

- Robust housing assessed and recommended by our customers' positive feedback
- Excellent lighting performance with efficient LED panels
- Chemically resistant transparent PMMA diffuser
- LED panel with opal cover to achieve the best lighting performance and to reduce glare
- Emergency version powered by its own power supply (3 hour system) or central battery
- Stainless steel diffuser clips
- Direct mounting on a wall or a ceiling

Type	Light source power	Colour temperature	Luminous flux	Options
TLP 55 MLED 220/22/840	22 W	4000 K	3240 lm	- Emergency unit - PC prismatic diffuser - 3000K colour temperature
TLP 55 MLED 240/44/840	44 W	4000 K	6480 lm	
TLP 55 MLED 260/66/840	66 W	4000 K	9720 lm	

Accessories

- Dedicated mounting brackets
- Protective grid
- We also provide the adaptive mounting brackets according to the customer's indication

Recommended use



Examples of the TLP 55 MLED use

The manufacturer reserves their right to change the technical specification. Full technical specification is available on the website.

TLP 55 MLED

Industrial luminaire with energy efficient LED light source



Description

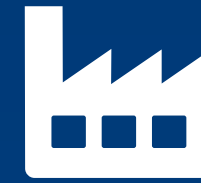
The top luminaire in the reinforced plastic housing. Equipped with energy efficient LED light source. Suitable for lighting industrial premises and areas of any industry: heavy industry (construction, chemical, fuel and energy [power plants, CHP plants], electrical engineering, defence, metallurgical, mineral, etc.) , as well as in manufacturing facilities, workshops, production halls, passageways, assembling plants.



Click

Sealed casing IP 67 makes it perfect for the highly dusty interiors and outdoor spaces partially protected against weather conditions, i.e. sheds, roofing, etc.

Three lengths of the housing and a range of power provide a wide choice of applications, depending on the height of the illuminated site, brightness requirements, and the installation possibilities.



Transformer luminaires

We have created a completely new range of luminaires based on the sectional chambers with the mounted LED panels. With the well thought housing we create products that meet all lighting requirements made by the customers from the industrial sector. An easy expansion of a particular model with the new LED modules and dedicated lens is primarily a perfect adjustment of the light distribution curve and the light beam distribution to the working environment. Each of the modules is equipped with a radiator for heat dissipation and keeping LED panels at the optimum ambient temperature. The chambers, mounting rails and gear trays are powder coated to protect the material against weather conditions.



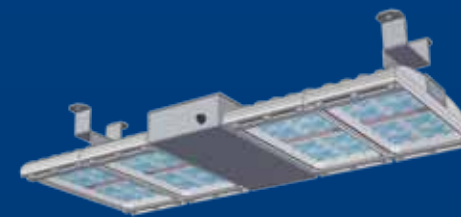
AU 20 MLED

- Indoor luminaire powered by LED light source
- An excellent replacement for , low bay' and 'high bay' luminaires powered by a standard light source
- Emergency mode with a central battery and DALI control system



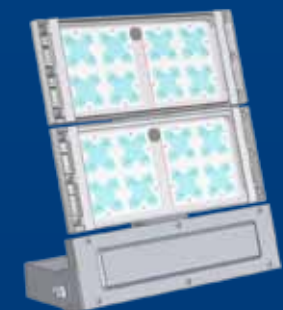
MA 20 MLED

- Road luminaire powered by LED light source
- Mounting on an arm or a pole
- Self-cleaning radiators for optimal operating temperature



PB 20 MLED

- Tunnel luminaire powered by LED light source
- Specially designed lenses for achieving the best performance
- Emergency mode with a central battery and DALI control system



PT 20 MLED

- Floodlight powered by high efficiency LED light source
- Mounting with an adjustable bracket
- Lenses for symmetric or asymmetric shape of the lighting curve

AU 20 MLED

Luminaire powered by an energy efficient LED light source

Product features

- Die-cast powder coated aluminium housing
- Specially designed radiator (self-cleaning cooling chambers for keeping the heat dissipation efficiency)
- Modular design providing various light beams
- Possible replacement for high or low bay luminaires powered by standard high pressure light source
- Lenses providing an optimal beam angle for the certain type of a lit object
- Mounting directly to the ceiling with an angle adjustment possibility

Type	Light source power	Colour temperature	Luminous flux	Options
AU20 MLED2/064/840	64 W	4000 K	7200 lm	- DALI control system - Central battery - Emergency power supply - Colour temperature 3000K
AU20 MLED2/128/840	128 W	4000 K	14400 lm	
AU20 MLED4/128/840	128 W	4000 K	14400 lm	
AU20 MLED4/256/840	256 W	4000 K	28800 lm	

Recommended use



Example of the AU 20 MLED use

The manufacturer reserves their right to change the technical specification. Full technical specification is available on the website.



Description

Modular high bay and low bay type luminaire with an energy efficient LED light source. Designed for lighting industrial buildings: production halls, indoor workshops, warehouses, sports arenas, gyms, etc.



Click

Modular construction allows to use the luminaire in any location depending on the lighting needs, ceiling height and mounting possibilities.

Transformer





Product features

- Die-cast powder coated aluminium housing
- Specially designed radiator (self-cleaning cooling chambersfor keepingthe heat dissipation efficiency)
- Modular design providing various light beams
- Lenses providing an optimal beam angle for a certain type of road/yard
- Mounting on a pipe (two working positions) with an angle adjustment possibility +/- 15 degrees

Type	Light source power	Colour temperature	Luminous flux	Options
MA20 MLED 2/064/840	64 W	4000 K	7200 lm	<ul style="list-style-type: none">- Dedicated lenses- Colour temperature 3000K- DALI control system
MA20 MLED 2/128/840	128 W	4000 K	14400 lm	
MA20 MLED 3/096/840	96 W	4000 K	10800 lm	
MA20 MLED 3/192/840	192W	4000 K	21600 lm	
MA20 MLED 4/128/840	128 W	4000 K	14400 lm	
MA20 MLED 4/256/840	256 W	4000 K	28800 lm	

Options

- Dedicated lenses (F1-F5)

Recommended use



Example of the MA 20 MLED use

The manufacturer reserves their right to change the technical specification. Full technical specification is available on the website.

MA 20 MLED

Luminaire powered by an energy efficient LED light source



Description

Modular road luminaire powered by an energy efficient LED light source. Designed for lighting streets, manoeuvring areas, parking lots, inroads, ramp driveways at distribution centres, marketplaces, etc. Full range of dedicated lenses for customising the light characteristics depending on the use.



Click

Transformer



Product features

- Die-cast powder coated aluminium housing
- Specially designed radiator (self-cleaning cooling chambersfor keepingthe heat dissipation efficiency)
- Modular design providing various light beams
- Lenses providing an optimal beam angle for a certain type of road/yard
- Mounting on a pipe (two working positions) with an angle adjustment possibility +/- 15 degrees

Type	Light source power	Colour temperature	Luminous flux	Options
PB20 MLED2/064/840	64 W	4000 K	7200 lm	- DALI control system - Central battery power supply - Colour temperature 3000K
PB20 MLED2/128/840	128 W	4000 K	14400 lm	
PB20 MLED4/128/840	128 W	4000 K	14400 lm	
PB20 MLED4/256/840	256 W	4000 K	28800 lm	

Recommended use

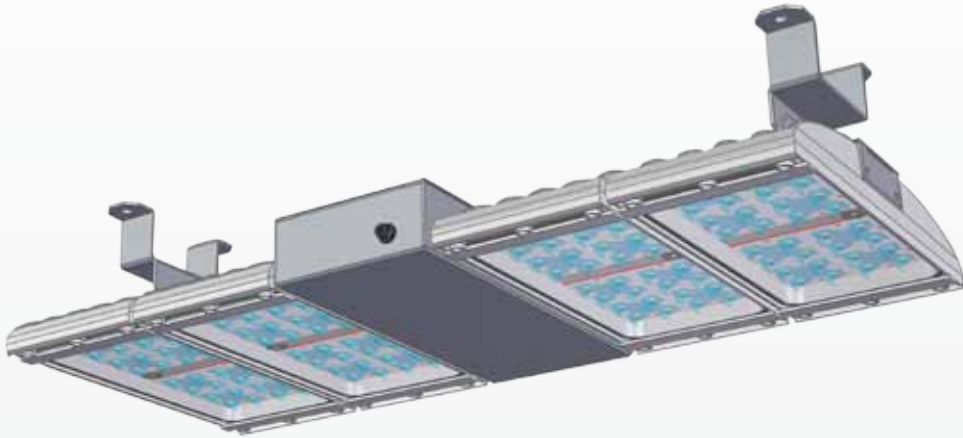


Example of the PB 20 MLED use

The manufacturer reserves their right to change the technical specification. Full technical specification is available on the website.

PB 20 MLED

Luminaire powered by an energy efficient LED light source



Description

Tunnel modular luminaire powered by an energy efficient LED light source. Designed for lighting road tunnels, underground passages, traffic routes, etc.



Transformer



Product features

- Die-cast powder coated aluminium housing
- Specially designed radiator
- Modular design providing various light beams
- The lenses providing an optimal beam angle for a certain object
- Mounting with an adjustable bracket

Type	Light source power	Colour temperature	Luminous flux	Options
PT20 MLED2/064/840	64 W	4000 K	7200 lm	Colour temperature 3000K
PT20 MLED2/128/840	128 W	4000 K	14400 lm	
PT20 MLED3/096/840	96 W	4000 K	10800 lm	
PT20 MLED3/192/840	192 W	4000 K	21600 lm	

Recommended use

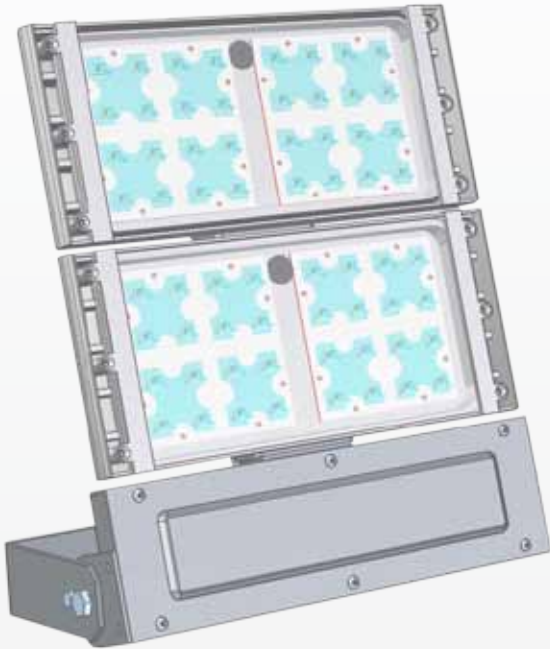


Example of the PT 20 MLED use

The manufacturer reserves their right to change the technical specification. Full technical specification is available on the website.

PT 20 MLED

Luminaire powered by an energy efficient LED light source























Description

Industrial modular floodlight powered by an energy efficient LED light source. Designed for lighting industrial facilities and spaces - squares, ramps, inroads, driveways, warehouses, distribution points, exhibition halls, etc. Modular construction with a number of available power options. Full range of dedicated lenses for customising the light characteristics.






Click

Transformer

 Heavy industry	 Petrol stations	 Ships and offshore	 Chemical industry
 Industry	 Car manufacturer	 Warehouses, halls	 Workshops
 Heating plants	 Roads, parks	 Public utilities	 Paint shops
 Power plants	 Tunels	 Farms, breedings	 Paper factories
 Refinery	 Shipyards, ports	 Greenhouses	 Food industry

Product specification

 -20°C	Min ambient temp.	 > 50.000 H	Lifetime of LED panel	220V-240V AC/DC	Power supply	 CNBOP	CNBOP certificate
 +45°C	Max ambient temp.	 LOW BAY	“Low bay” type of luminaire	AISI 316L	Stainless steel housing	 PZH <small>Produkt z Niemiec</small>	PZH certificate
IP 67	Protection degree	 HIGH BAY	“High bay” type of luminaire		Eco light source		Dimmable version
 IK 07	IK degree	 EMERGENCY	Emergency unit 3h		Low weight	DALI	DALI system
	I protection class	 SAFE GLASS	Diffuser made with safety glass		May be used only indoor		
	LED light source	Zone 1,21 2,22 	Luminaire for Ex zone		May be used outside		
 CENTRAL BATTERY	Suitable for central battery	ATEX 	ATEX certificate		Luminaire for high ambient temp.		



