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# About PXM

PXM company was established by a group of electronics engineers in 1991 under a name of PROXIMA. Our goal was to design and produce the high-tech lighting controllers. At the beginning PROXIMA was targeted at the German market. For Bavarian DLC company we created the LMS lighting control system that was successfully produced and developed during next few years. With the rise of demand for technologically advanced products in Poland, the makes with a distinctive "X" started to spread over our domestic market as well.

By dint of numerous foreign connections PROXIMA became in the '90s an exclusive distributor of such companies as FAL, JEM, STANTON or MA LIGHTING. By broadening our offer we also started to do the comprehensive light and sound installations.

Since 1999 PROXIMA has been systematically changing its profile. At first we gave up doing the installations and soon after distributing other companies' products. From 2001 PROXIMA designs and produces its own lighting control systems. By focusing on one activity profile, we managed to design and put into production a whole range of lighting controllers and dimmers.

Seeking for breakthrough technologies and new applications for our devices, in 2004, as a first Polish company, PROXIMA introduced a LEDs' control system by means of DMX-512 protocol.

In connection with registration of following companies under the name of PROXIMA, at the beginning of 2008 our brand was changed to PXM and reserved in the Republic of Poland Patent Office.

Today PXM is a development department, where new devices are elaborated, measurement stations (i.a. EMC), 24-hrs service and, first of all, production. PXM offer includes 16 types of dimmers (output loads from 600 to 5500 watts per channel), disco and theatre lighting controllers, equipment for DMX-512 protocol maintenance and a wide range of LED drivers, modules and controllers.

### PX333 Mini DMX Controller

64 output

channels

8

inputs

8

programms



Small driver designed for simple applications. It sends 64 channels in DMX-512 standard.

32

scenes

In addition, it has 3 OC outputs with load carrying capacity of 1500mA



each, allowing for direct control, e.g.
 EED strips.

It is equipped with 8 integrated ON/OFF inputs, to which you can assign the specified actions and LAN connector, which allows you to communicate with your computer or mobile devices.

> Device management is available on PCs with running Windows (XP or



later), Linux (Debian and Ubuntu) and OS X and for smartphones with Android and iPhones. The applications have an intuitive interface and allow for complete configuration and control of the device.

In the configuration, you can create 16 zones, 32 scenes, 8 programs and 16 lists of elements. It is also possible to activate the users' accounts with restricted access level to the device.

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# PX145+ DMX Controller

10240 24 512 64 output inputs scenes programms



The advanced architectural lighting driver allows you to control the complex system. It sends 64 channels in DMX-512 standard.

It is equipped with 24 ON/OFF inputs, IR pilot input, and USB connector.

It is programmable using the application on the Windows platform, and after setting up, it works completely on its own.

It is possible to define 10240 scenes, 512 programs, 128 sequences, 256 masks, events from the inputs, and 1024 timers. The device has an integrated real-time clock and an astronomical clock.



# PX140+ DMX Controller

512 output

channels

channels

10240 24 inputs

scenes

programms

512





The most advanced driver in the PXM offer. It sends 512 channels in DMX-512 standard.

It is equipped with 24 ON/OFF inputs, IR pilot input, USB connector, 1 DMX input line, and RS-485 port for communication with touch panels.



It is programmable with the use of the application on the Windows platform, and after setting up, it works completely on its own.

It is possible to define 10240 scenes, 512 programs, 128 sequences, 256 masks, events from the inputs, and 1024 timers. The device has an integrated real-time clock and an astronomical clock. Up to 14 PX181 touch panels can be connected to the driver.

# PX181 TouchPanel

The touch panel dedicated to cooperation with PX140+ controller. It has a colour screen with a diagonal of 5". It allows you to create multiple desktops and deploy buttons, sliders and controls on them. It is possible to protect the device with access password.

In order to create the configuration, the application for the Windows platform is necessary.



# PX357 GATE 4 DMX

Ethernet network gate converts Art-Net<sup>™</sup> signal to four DMX-512 ports. The device has a solid, metal housing protecting against mechanical damage. DMX ports have optical insulation and protection against short circuits and surges. The device is equipped with a LAN connector working in 10/100BaseTX standard. In addition, there are four LED diodes



on the housing of the device, indicating the device operating mode. The gate is powered with a voltage of 230VAC.

In the gate, there are two modes of merging signals: HTP and LTP. The device comes with the application that allows for viewing the network settings and setting up the output signal parameters, such as: Brake, MAB, MBF, WAIT and the number of transmitted DMX channels.

# PX235 0-10V/DMX Interface 8ch



The advanced converter allows you to receive data with 8 analogue inputs of 0-10V and DMX input signal and their conversion to DMX output signal. The device allows you to select DMX channel, to which the processed signal will be sent.

The colour display makes it easy to operate the device and monitor its status. In addition, the device has the integrated module to operate the wind sensor. It allows you to convert the impulse signal to DMX.

The device also has the output of OC type (Open Collector), which allows you to signal the certain statuses in the form of alarms.

The device has an integrated output of 10V, which can power the analogue sensors such as e.g. potentiometers or photometers. USB connector allows you to communicate with your computer and update PX235 software.

### DMX/0-10V Interface



PXM also offers 7 devices to convert DMX signal to the analogue signal of 0-10V.



PX060 and PX071 are the devices sold without housing, which can drive 8 and 16 channels, respectively.

PX114, PX105 and PX106 are the devices with the standard housing of 19", which operate 32, 64 and 128 channels, respectively.

PX227 is closed in the plastic housing for mounting on DIN T-35 rail and it drives 8 channels.

PX385 is the device in the metal housing, which drives 1 channel.

Apart from simple DMX signal decoding, the device provides the possibility to select the drive characteristics and program the response to the disappearance of DMX signal.



# PX292 DMX/4-20mA Interface

PX292 is used to process DMX-512 signal to 4-20mA current drive. The devices are produced in the housing for mounting on DIN T-35 rail.

The converter allows for programming the response to the disappearance of DMX signal and setting the individual parameters for each of the eight channels.



# PX232 DMX/Relay Interface 1ch



The relay is driven with DMX-512 signal. It is used to include the effects of stage or architectural illumination with DMX-512 signal. The module has integrated hysteresis, which eliminates the phenomenon of vibration of the relay contacts. The device is produced in the housing for mounting on DIN T-35 rails, and is powered directly from the network of 230V AC.

# PX257-RE DMX/Relay Interface 8ch PX257-OC DMX/OC Interface 8ch

The set of 8 relays for controlling ON/OFF outputs. It is produced in two versions: OC and RE. The OC version of the device has digital electronic connectors of DC with a maximum voltage of 24V DC and load of switching one circuit of 1.3A. The RE version of the device has mechanical relays. The device's menu allows you to program DMX address for all output channels. The devices are produced for mounting on DIN T-35 rail.



## PX175 DMX/DALI Interface



DMX signal converter to DALI. It allows you to connect, in accordance with the standards, up to 64 DALI devices.

The converter's menu allows for any addressing of individual lamps or groups of devices. In addition, you can define a number of parameters for each of the lamps. Through PX175, you can also select the response to the disappearance of DMX signal. The devices are produced for mounting on DIN T-35 rail.

# PX255 DMX/DALI/DMX Interface

The advanced converter of DMX signal to DALI and DALI to DMX. In accordance with the DALI standard, up to 64 DALI devices (e.g. ballasts) can be connected to PX255. The device can also convert the controll signal in the opposite direction: from DALI driver to DMX receiving devices. The converter's menu allows for any addressing of individual lamps or groups of the devices (maximum 16). In addition, you can define a number of individual parameters for each of the lamps.



The devices are produced for mounting on DIN T-35 rail.

### DMX SPLITTER



DMX splitter allows you to create branches in the large-scale systems. By using the splitter, you can split DMX input signal into 6 independent branches. Individual output tracks are galvanically and optically isolated both from input and each other, and properly strengthened to guarantee the correct operation of the entire system.

The device is produced in 2 versions:

- PX165 for mounting on DIN T-35 rail,
- PX094 in the housing of 19".



### PX173 DMX MERGER



Merger is the device that enables the aggregation of 2 DMX lines. It allows you to select the start address and the amount of collected channels from each input, independently and in the way of the aggregation of the lines. The devices are produced in the housing for mounting on DIN T-35 rail.

### PX097 DMX REPEATER



The amplifier and the splitter of DMX signal. It allows you to attach further 32 receivers and increase the length of the line. It has optical isolation between input and two outputs.

# PX218 RDM CONTROLLER

It allows you to monitor the status and change the settings of the devices equipped with support of the RDM protocol, connected to the DMX system.

The RDM protocol (Remote Device Management) is the extension of the DMX512 protocol, which allows you to send information in both directions. Input and output in DMX-512 standard are used to connect to DMX network. PX218 operation management is done using the applications on the Windows platform via a USB port. The application allows you to search for RDM devices in DMX network, view the status and set the parameters of the selected device. PX218 is closed in a damage-resistant, metal housing and powered from the computer via a USB port.



# PX245 SOUND TO LIGHT

The audio signal converter to DMX-512 is designed to synchronize music with the lighting control. The device is equipped with a colour display, which makes programming and control activities intuitive.

PX245 can be driven via DMX signals, through ON/OFF outputs or operate by itself. The user has access to 16 fully programmable configurations, to which it can also freely change the parameters of the audio signal processing.

The software for configuration setting on the device from the computer is attached to the device.

The converter is closed in the plastic housing for mounting on a DIN T-35 rail.

## PX151 DMX/RS-232 Interface



The converter of DMX-512 driving signal to the RS232 protocol. It allows for driving the multimedia devices by converting DMX-512 input signal to the RS232 protocol. The final product is prepared according to the individual customer requirements to properly cooperate with the final device.

# PX300 CT SENSOR

CT Sensor is used to measure brightness and colour temperature in the range from 2500K to 6000K. The measured values can be sent by using the DMX-512 or RS-485 protocols to other devices.

The device allows to adaptively drive the lamps equipped with adjustment of colour temperature of the emitted light depending on the ambient light. The device is closed in the hermetic IP65 housing.



### PX313 USB/RS-485 Interface



USB converter to RS-485, used to update and set up the devices not equipped with USB connector. The dedicated application for the Windows platform is attached to the product.



# LED drivers

### Drivers



The PXM offer includes a wide range of LED drivers, both current and voltage. The devices differ in the number, load capacity of outputs and supply voltage. There are also two types of housing:

- plastic for DIN T-35 rail to be used in the switchboards,
- metal to be integrated.

Comparison of all drivers is presented in the tables on the next page.





All drivers equipped with the display have an intuitive menu that allows you to set the parameters for the entire device, or the individual parameters of each channel.

In addition, the offer includes PX265 MX System driver, which is supplied in the OEM version to allow further building-in to the end user.

The driver consists of the modules, which, if properly combined, create the current or voltage driver, or both. Integated DMX receiver allows you to drive 12 channels directly with the DMX protocol.







### PX271 Splitter LED 12

It is used to create complex systems containing PX167 and PX203 lamps. Due to its application to a single driver, you can comfortably connect up to 12 lamps by using RJ-45 connectors.



# current

catalog number	outputs	load capacity	power supply	housing
PX215	3	350mA	12-48V	for DIN T-35 rail
PX305	3	350mA	12-24V	metal
PX184	3	700mA	12-48V	for DIN T-35 rail
PX307	3	700mA	12-24V	metal
PX308	3	350mA	24-48V	metal
PX241	4	350mA	12-48V	for DIN T-35 rail
PX211	4	700mA	12-48V	for DIN T-35 rail
PX252	6	350mA	12-48V	for DIN T-35 rail
PX186	6	700mA	12-48V	for DIN T-35 rail
PX268	12	350mA	12V	for DIN T-35 rail
PX319	1	1,5A	42V	metal

# voltage

catalog number	outputs	load capacity	power supply	housing
PX178	6	7,5A	12-24V	for DIN T-35 rail
PX254	3	6A	7-24V	metal
PX282	3	6A	12-24V	for DIN T-35 rail
PX163	48	700mA	12-24V	metal
PX342	1	10A	12-24V	for DIN T-35 rail
PX370	4	5A	7-24V	metal

### PX314 AC+ DIMMER 24 x 3600 W

New in the PXM offer. Professional dimmer of AC class, equipped with a colour touch-screen and LAN interface. The device allows you to control 24 independent channels with a power of 3,6 kW each. The dimmer allows you to control input signals from 6 different sources simultaneously, including:

- DMX-512 lines,
- Art-Net<sup>™</sup> address ports,
- 4 analogue inputs (optional on request).

The device has an integrated merger system with a possibility to select one of 13 priorities.





The advanced electronics allow you to address each output channel, select and edit the driving characteristics graphically (5 built-in characteristics, 5 user's characteristics).

The dimmer is powered by three phases, and has an integrated system fully protecting against the effects of reverse phases connection. PX314 also enables the setting of limits for voltage and output

current for each channel individually. The device is equiped with the bulb preheating system (10 levels) and control of the attached fuse and broken circuit/burnt bulb. In addition, the user can define the dimmer response to the lack of the driving signal. In addition to the basic options (ON, OFF, HOLD), 64 stage and the program are available to be defined.



The integrated "PLL", "soft-start", "soft-on" and "even-off" systems assure reliable operation in the most extreme conditions. Direct

detection of zero of the network and optical isolation of DMX input guarantee high resistance to interference.



The colour touch screen and the intuitive menu allow you to configure the parameters and views of the output status. In the fourth quarter of 2015, the application for PC, allowing you to set up and monitor the device over LAN, will be available.

The dimmers in the standard housing of 19'':

- PX046 AC Dimmer 6 x 3500 W
- PX095 AC Dimmer 12 x 2300 W





The dimmers with the housing for grate mounting: PX170 AC Dimmer  $6 \times 1200$  W

PXM offers the dimmers of different numbers and load of the circuits, available in several types of the housing.

All dimmers can be powered by three, two or one phase (not applicable to the series of MultiSystem) and have an integrated system, fully protecting against the effects of reverse phrase connection.

The devices allow individual and group setting of the parameters of individual channels:

- DMX address,
- characteristic (linear, reverse, logarithmic, exponential, ON/OFF),
- ACL, which is programmable reducing the output power.
- It is also possible to set the device's parameters:
- PREHEAT, i.e. heating the bulb fibres, set in the range of 0 10%,
- the way of the dimmer reaction to DMX signal disappearance (off, 100% on, slow switching on, one of three scenes chaser).

All dimmers have constant temperature and supply voltage measurement, and the integrated systems: "PLL""soft-start""soft-on" and "even-off", direct detection of zero of the network, optical isolation of DMX input and individual overcurrent protection of each circuit. In addition, LEDs reflect the status of all outputs, and the detector of break in the load circuit allws you to immediately locate the defective bulb ortube.

#### The dimmers with the housing for wall mounting:

- PX214 AC Dimmer 12 x 2300 W
- PX124AC Dimmer 12 x 5700 W
- PX122 AC Dimmer 24 x 3500 W
- PX091AC Dimmer 12 x 1200 W





#### The dimmers in the housing for DIN T-35 rail:

- PX155 MultiSystem Dimmer 4 x 600 W
- PX156 MultiSystem Dimmer 2 x1200 W
- PX157 MultiSystem Dimmer 1 x 2400 W

# **Exhibition lighting**

PxArt is a complete museum lighting system mounted on the busbars GLOBAL TRAC CONTROL PULSE <sup>®</sup>, driven with a DMX-512 signal. The system includes lamps, audio players, splitter, programmer, busbars and all accessories needed for connection and power supply.

The PXM offer includes 3 LED illuminators with variable colour temperature of emitted light: six-, twelve- and eighteen-led. Due to application of the latest solid-state light sources LED SSL and the advanced driving electronics, the lamps meet very high demands on the museum and exposition lighting.

### PX390 PxArt+ 6



The illuminators are characterized by a total absence of ultraviolet radiation and trace amounts of infrared radiation, as shown in the chart on the next page.

The lamps have very high colour rendering index CRI - min. 90. The colour temperature of the emitted light can be continuously adjustable in the range of 2700-4500K.

### PX391 PxArt+ 12



The devices are also characterized by high brightness and low energy consumption. The lamps have efficient passive cooling, so that they do not disturb silence in museum premises. Each lamp has two individual addresses which allow for independent adjustment of brightness and colour temperature.

Due to the buttons placed on the lamp housing, you can also control it manually.

The devices are available in three housing colours: black, white and grey. They are also produced with different angles of the lenses to select:

- 10°
- 20°
- 30°
- 40°
- eliptical (10°x45°)
- wall washer (50°x110° PX391 i PX392 only)





### PX378 PxArt+ Frame PX393 PxArt+ Mono

# PX389 PxArt+ 3





The offer includes also 3 monochromatic illuminators available in several colour temperatures. The lamps have adjustable brightness.

PxArt+ 3 is the smallest lamp in the series. It has 3 powerful LEDs under a common lens and compact housing.

PxArt+ Mono lamp has a replaceable reflector, with which you can change the lighting angle.

PxArt+ Frame lamp has an advanced optical system enabling a very precise framing of the light.

The table alongside shows the available versions of PX378 and PX393 lamps.

Version	CRI (min.)	CCT (K)	brightness (lm)
-X30	95	3000	1090
-930	90	3000	1850
-950	90	5000	2215
-830	80	3000	2385
-850	80	5000	2420

# PX372 PxArt+ Fluo

PxArt Fluo lamp allows you to use line fluorescent tube

lamps in the exhibition lighting.

It is the only fluorescent lamp in PxArt series. The model

has an integrated DMX-512 signal receiver, which allows you to smoothly adjust brightness of the installed fluorescent lamp (ranging from 5 to 100%) and switch on and off lights.

The device operating parameters can be programmed with an external PX277 configurator.

# PX348 PxArt+ Audio

PxArt Audio is the sound system designed to be mounted on the busbar. The device consists of a speaker, an amplifier and a WAV file player.

PX348 allows you to play audio tracks anywhere in the room equipped with the busbar system without the need for additional system. The system can be driven with any driver operating in DMX-512 standard.

The functions carried out by PX348 by using DMX driver allow you to play records, select a particular record, looping single and many records, smooth volume control.

By using PX277 (PxArt Controller Settings), you can set all parameters of the device.

# PX295 PxArt+ Splitter DMX

DMX splitter allows you to create branches in the large-scale DMX systems. With a large number of receivers, connecting them in series can be difficult; therefore, there is possibility

to create branches. If you use triangle or cross connector to create branches of the busbar, use PX295 splitter.

By using PX295, you can split DMX-512 input signal into 3 independent lines. In order to avoid disruptions in the busbar, use the splitter if there are more than 20 receivers on single DMX line. Individual output tracks are galvanically isolated both from input and each other, and properly strengthened to guarantee the correct operation of the entire system.



The splitter is produced in the metal housing equipped with the adapter allowing for quick installation to the busbar.

# PX277 PxArt+ Settings Controller



The programmer of the devices of PxArt series. It allows you to change DMX address, define the response in case of loss of DMX signal and setting and viewing other parameters, depending on the type of the device.

17

# PX249 Audio DMX Player

Audio player driven with a DMX-512 signal.

On SD/SDHC memory card, you can put the maximum of 85 tracks in WAV format of any length; the capacity of the memory card is the only limit. The functions carried out by PX249 by using DMX driver allow you to play records, select a particular record, looping single and many records, smooth volume control, adjust low and high tones and balance. The player can work with the mode with four or seven DMX channels. The device has the following outputs: balanced, unbalanced, and integrated power amplifier of 2x10W.

In addition, it is possible to connect an external START button. The device is equipped with a colour display, which allows you to view the status, and quickly set up the device. The device's menu allows you to define the behaviour of the player in the absence of DMX signal. PX249 is produced in the housing for mounting on DIN T-35 rails.

## PX376 HD Multimedia Player

HD video player, driven with DMX-512 signal. It allows you to play videos in all popular formats.

The videos are stored on external USB storage media.

Application on the PC is used to set up the device. It is possible to set the address and define the response to no DMX signal.

The device is closed in a damage-resistant, metal housing with a special cover for connectors.





# Architectural lamps

### **PxSpot**

Small lamps for illumination of interiors and architectural details. The devices use 3 powerful LED OSRAM OSLON®.

In order to drive PX167 and PX203 lamps, use current drivers, 350 and 700mA respectively. The cables of the lamps are terminated with RJ-45 connectors and

 $can \, be \, combined \, with {\tt PX271} \, splitter.$ 

In order to drive PX350 and PX351 lamps, use voltage drivers.



- Lenses angles: LEDs color:
  - PX167 and PX203 RGB, monochromatic
  - PX350 and PX351 monochromatic white

### PX298 PxDuo 2x3 12V

 $10^{\circ}$ 

25°

45°

The lamp is designed to light interiors and exterior architectural details, and it uses six high-power LEDs OSRAM Oslon in the following manner: 3 LEDs illuminating down and 3 LEDs illuminating up.

The device is supplied with the junction box and the bracket for wall mounting. In order to drive the lamp, use the voltage drive or AC voltage of 12V DC.

Lenses angles:

10°
25°

• 45°

- LEDs color:
- W-warm white,
  - N-neutral white,
  - C-cold white

## PX318 PxGround 12 SF

The lamp is equipped with 12 high-power LEDs OSRAM Oslon series in 3x4 system. The lamp uses the cover against reflection. The device is able to change the angle of inclination of the LED module inside the lamp without having to move the entire housing, which allows you to direct the light independently (within  $\pm 10^{\circ}$ ) of the mounted housing.

Lenses angles:

- 6°
- 14°
- 28°
- 47°



- RGB

LEDs color:

WNC

18



0

# PxLine

The series of the line lamps:

- PX310 PxLine the basic version,
- PX311 PxLine 230V the version with integrated power supply,
- PX312 PxLine 230V DMX the version with integrated DMX driver,
- PX263 PxLine RGBW the version with RGBW LED under the common lens,

• 6

12

18

24

30

• PX294 PxLine Mini - the mini version - in a small aluminium profile.

The lamps are produced in the aluminium housing with IP40 leakage class adjusted for wall mounting. PX310, PX311 and PX312 are produced upon request, in the selected configuration. Below, the parameters to be selected are presented:

Lenses angles: LEDs count:

- 10°
- 20°
- 30°
- 40°
- eliptyczna: 10°/40°

#### Connectors:

- G gland
- CS socket
- 1 one side (only input)
- 2 both sides (input and output)

- LEDs color:
- W-warm white
- N neutral white
- C-cold white
- R- red
- G green
- B- blue
- A- amber

Place of mounting the cables:

- S side
- B back

PxLine RGBW has 12 lens - under each of them there are 4 LEDs: red, green, blue and white. Due to the applied electronics, PX263 provides 16-bit resolution of colour driving, software selectable refresh rate of 250 Hz to 1 kHz, programmable white colour balance and possibility to operate as MASTER. The lamp has 5 modes of colour driving. It is also possible to program the response of the lamp to the lack of DMX signal. PX263 supports the DMX-RDM protocol.

LEDs color:

- 10°
- 25°
- 35°

PxLine Mini is a LED lamp to illuminate the exposition and architectural details, powered by 12V DC. It is the smallest of the lamps of PxLine series. The model has neither the integrated DMX driver nor the adapter. The maximum power of the entire lamp is 24 W for the version equipped with 18 LEDs.

The lamp is closed in the aluminium housing equipped with a 2m cable. The fixing of the lamp is sold separately and matched according to the customer's requirements.

Lenses angles:

- 16°
- 23°
- 45°
- eliptical (45°x20°)
- LEDs color:
- hito
- W warm white,N neutral white,
- C-cold white
- LEDs count:
- 6
- 12
- 18





## PxAqua

Series of underwater lamps with IP68 leakage class. The devices use high-performance LEDs that produce a high brightness with low power consumption. Lamps in bronze housing, when working under water, can be supplied with current 700mA, allowing you to take full advantage of their brightness. Lamps are produced upon request, in the selected configuration. Below, the parameters to be selected are presented:

LEDs color:

- R red
- G green
- B blue
- A amber
- W warm white
- N neutral white
- C cold white

Lenses angles:

- 10°
- 25°
- 45°
- eliptical (does not apply to 3-LED lamps)

PxAqua series involves small current and voltage lamps in the stainless steel housing:

assembly	type	LEDs count	name	catalog number
inground	current	3	PxAqua 3SF	PX278
ingroud	voltage	3	PxAqua 3SF 12V	PX291
holder	voltage	3	PxAqua 3SH 12V	PX284
holder/tube	current	3	PxAqua 3SH/SP	PX229
holder	voltage	6	PxAqua 6SH 12V	PX373







The voltage lamps are only available in versions with white LEDs (warm, neutral or cold). Other lamps can be in monochrome in the selected colour or RGB version. PX284 and PX291 lamps are available in the "honeycomb" version. Additional reflection protection is available to PX284 lamps.

PxAqua series involves also large current lamps, which differ in terms of the material of the housing and the number of LEDs:

catalog number	name	LEDs count	housing material	
PX223	PxAqua 6B	6	bronze	
PX174	PxAqua 9P	9	plastic	(2222) N
PX225	PxAqua 12B	12	bronze	
PX224	PxAqua 18B	18	bronze	1 Alexandre
PX226	PxAqua 36B	36	bronze	

# **PxRing**

PxRing series includes the underwater lamps in the housing with a central opening for a nozzle. The models differ in terms of the housing material and the number of diodes.

catalog number	name	LEDs count	housing material
PX238	PxRing 12B	12	brąz
 PX246	PxRing 12S	12	stal nierdzewna
PX201	PxRing 18B	18	brąz

## PX244 PxCombo

The underwater set consisting of 6 RGB lamps, WPS valve and a nozzle.

The device has 18 LEDs in 6x3 system. PX244 lamp is designed for mounting in fountains, in the places requiring high brightness.

High-quality LUXEON<sup>®</sup> Rebel LED provides bright light at low power consumption. The lens angle can be chosen. The lamps are powered by current of 3x350 mA.

The lamp and WPS valve were made in the leakage class of IP68. The faceplate and the housing are made of steel, while the nozzle is made of bronze, which protects against external aggressions and allows for long-term operation in water. Some parts of WPS valve are also made of PVC. The valve itself allows you to set the operation cycle in the range from 0,1 s to several hours.



# **Industrial lamps**

### PxCrop

The series of the lamps for lighting and stimulating plant growth. The lamps used LEDs with specially selected wavelengths.

PX303 PxCrop Mini - 3 LED RB point lamp PX256 PxCrop Line - 9x4 LED RBW line lamp PX382 PxCrop+ Line - 30 LED RB line lamp

The lamps use LEDs with specially selected wavelengths, preferably absorbed by the plants. This allows you to achieve the optimum plant growth effects at extremely low power consumption. Below, there is a graph comparing the wavelength range absorbed by the plants with the wavelength range emitted by RBW lamp.



PX256 has 9 lens - under each of them, there are 4 LEDs (2xR, 1xW, 1xB). This allows you to achieve very accurate mixing of light illuminating the plant. The diodes are connected in four circuits, each comprising nine diodes of the same type. Each circuit can be independently driven, allowing you to

achieve different proportions of the wavelength of the emitted light at different stages of the plant growth. The lamp is closed in the aluminium housing with the leakage class of IP65.

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PX303 is a small point lamp, which has 3 LEDs (2XR and 1XB) placed under the combined lens. This allows you to achieve uniform mixing of light illuminating the plant. The standard lamp is equipped with a cable of 2m length, terminated with 230VAC power supply and mounting foot.

PX382 is the line lamp, which has 30 LEDs (24xR and 6xB). Each colour can be driven independently. The lamp is designed for use in greenhouses. It is closed in the aluminium housing adjusted to be hung over the tables.



The following charts show the spectrum of light emitted by the lamp in the system of R+B+W and R+B.



# PxTech

The series of the lamps designed for lighting warehouses, industrial halls, workplaces, communication and evacuation routes.

Luminaries with modular design, fully customizable to your needs. High brightness of LED luminaries generated by the light source, along with the dedicated optics. Possibility of intelligent driving reduces power consumption.





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