

# PRODUCT DATASHEET BA-XL-PL -830 D

BackLED XL Plus G15 | LED modules for light advertising and backlighting



#### Areas of application

- Signage and illuminated advertising
- Backlighting of single and double-sided light boxes
- Permanent outdoor use in enclosed light boxes
- Decorative applications

#### Product benefits

- Uniform illumination at high LED pitches thanks to Flat Ray technology
- Click and Play: quick and easy click-in of the LED modules, no tools needed
- Excellent module efficacy
- Very long lifetime
- 5 year guarantee

#### **Product features**

- Connected with flexible cables
- Type of protection (modules): IP66
- Color rendering index R<sub>a</sub>: > 80
- Special robust encapsulation



- CE marked and UL listed

## TECHNICAL DATA

## Electrical data

Nominal wattage	100 W
Construction wattage	99.80 W
Nominal wattage per LED module	3,1 W
Nominal voltage	24 V
Input voltage range	2325 V
Reverse Voltage	25 V
Type of current	DC
Nominal current	4160.000 mA

#### Photometrical data

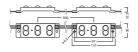
Total useful luminous flux [PICOS]	8697 lm
Luminous efficacy	87 lm/W
Luminous flux	8697 lm
Luminous flux per module chain	8697 lm
Color temperature	3000 K
Color rendering index Ra	≥80
Light color LED	White
Light color (designation)	Warm White
Standard deviation of color matching	≤3 sdcm

## Light technical data

#### LED MODULE INFORMATION

Number of LEDs per module	6
Number of LED modules per chain	32
Minimum operable number of LED modules	1

## Dimensions & Weight



Length	110.0 mm <sup>1)</sup>
Width	35.00 mm
Height	17.00 mm
Product weight	1792.00 g

<sup>1)</sup> LED pitch 500 mm

## Temperatures & operating conditions

Ambient temperature range	-20+85 °C
Temperature range in operation	-20+85 °C <sup>1)</sup>

<sup>1)</sup> At the T<sub>c</sub> point

## Lifespan

Nominal lamp life time	50000 h
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## Additional product data

ules perfectly matched to OSRAM OPTOTRONIC® LED drivers
relevant table) / For current photometric data and important
y, installation and application information, see
osram.com/led-systems. / All the technical parameters apply to
entire module. In view of the complex manufacturing process for
emitting diodes, the typical values given above for the technical
parameters are merely statistical values that do not necessarily
espond to the actual technical parameters of an individual product;
dual products may vary from the typical values
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# Capabilities

Dimmable	Yes
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## Certificates & Standards

Approval marks – approval	CE	
Standards	Acc. to IEC 61347-2-13 / Acc. to EN 55015 / Acc. to EN 61547 / Acc to EN 61000-3-2 / Acc. to EN 62384	
Type of protection	IP66	
Energy consumption	3.40 kWh/1000h	
Energy efficiency class	А	

## LOGISTICAL DATA

Temperature range at storage	-2085 °C

## Accessories Optional

Product image	Product name	EAN
	BX -MP	4008321981110

#### **EQUIPMENT / ACCESSORIES**

- BoxLED mounting profile BX-MP
- Several types of OPTOTRONIC 24 V power supplies available

#### ADDITIONAL PRODUCT INFORMATION

- Installation of LED modules (with power supplies) needs to be made under consideration of all valid regulations and norms.
- Installation by qualified electrician only.
- Please see the relevant application guides and instructions sheets for more detailed safety and mounting information. Additional information is available on request.
- Complies with IEC/EN 61547
- Complies with IEC/EN 61000-3-2
- Complies with EN 55015, CISPR 15
- Complies with IEC/EN 61347-1
- Complies with IEC/EN 61347-2-13
- LED modules are dimmable by means of PWM (pulse width modulation). It is recommended using the following OSRAM control gears:
   OPTOTRONIC OT DIM or OPTOTRONIC 24 V power supplies with integrated 1...10 V dimming interface.
- Parallel connection is mandatory for safe electrical operation. Serial connection of LED modules is stronly discouraged. Unbalanced voltage drop in serial connection can cause hazardous overload and damage the LED module.
- Electrical contact is achieved with the contact cables or the terminals of the module. Please refer to the technical data for maximum number of LED modules that can be operated on one control gear.
- In order to operate OSRAM LED modules safely, it is absolutely necessary to operate them with an electronically stabilized power supply that
  protects against short circuits, overload and overheating.
- In case other power supplies than OSRAM OPTOTRONIC are used, compliance to the neccessary operating parameters (voltage, current, power)
  has to be ensured.
- Pay attention to polarity! Wrong polarity can cause destruction or malfunction of the module.
- Conducting paths on the circuit board must not be damaged or destroyed during installation.
- The LED module itself and all its components must not be stressed mechanically.
- Operation in or under water is prohibited.
- To avoid mechanical damage, the LED modules have to be attached securely to the intended mounting surface. It is recommended to avoid heavy vibration.
- In case that the LED module is equipped with a pre-mounted double-sided adhesive tape, OSRAM assumes no liability and provides no guarantee for a permanent adherence of the modules to the surface. OSRAM recommends fixation of the modules by means of suitable screws.
- Complies with IEC 61347-1 cl. 18.3, cl. 18.4, IEC 60695-2-10, IEC 60695-11-5, IEC 60695-11-10 (classification V-0)
- All the technical parameters apply to the entire module. In view of the complex manufacturing process for light emitting diodes, the specified typical values for the technical LED parameters are merely statistical values that do not necessarily correspond to the actual technical parameters of an individual product; individual products may vary from the typical values.
- Module contains no PVC material.
- To ensure uniform illumination, a reflective matt white surface is generally recommended for all internal frame walls and back panels of light boxes.
- The module may cause noises during dimming. If a dimming operation is required, it is recommended to check the dimming operation for noises before final installation.

#### DOWNLOAD DATA

	Documents and certificates	Document name		
PDF	User instruction / safety instructions	539569_Instruction Manual forBackLED XL Plus G15		
PDF	Addon technical information	Technical application guide BackLED® and BoxLED® portfolio (EN)		
PDF	Declarations of conformity	547375_Manufacturer-DoC BackLED XL Plus G15		
PDF	Declarations of conformity	547363_EC-DoC BackLED XL Plus G15		
	Photometric and lighting design files	Document name		
	IES file (IES)	600954_BackLED XL Plus 830 G15 IES		
	LDT file (Eulumdat)	600963_BackLED XL Plus 830 G15 Eulumdat		
	Light distribution curve type polar	545559_BA-XL-PL 830 G15 LDC		
	CAD/BIM files	Document name		
PDF	CAD data 3D PDF	607397_BackLED XL Plus G15 CAD PDF		

#### LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4052899442696	Folding box 1	482 mm x 411 mm x 48 mm	2193.00 g	9.51 dm <sup>3</sup>
4052899972599	Shipping box 5	502 mm x 428 mm x 276 mm	12050.00 g	59.30 dm <sup>3</sup>

The mentioned product code describes the smallest quantity unit which can be ordered. One shipping unit can contain one or more single products. When placing an order, for the quantity please enter single or multiples of a shipping unit.

# References / Links

- For more information on the multi-level guarantee and the terms and conditions of the guarantee visit www.ledvance.com/system-guarantee

#### **DISCLAIMER**

Subject to change without notice. Errors and omission excepted. Always make sure to use the most recent release.