

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_a: > 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 К
Color rendering index Ra	≥80
Light color LED	White
Light color (designation)	Warm White
Standard deviation of color matching	≤3 sdcm

Light technical data

Beam angle	150 °
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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 ¹⁾
Width	35.00 mm
Height	17.00 mm
Product weight	1792.00 g

1) LED pitch 500 mm

Temperatures & operating conditions

Ambient temperature range	-20+85 °C
Temperature range in operation	-20+85 °C ¹⁾

1) At the T_c point

Lifespan

Nominal lamp life t	me	50000 h

Additional product data

	Modules perfectly matched to OSRAM OPTOTRONIC [®] LED drivers (see
	relevant table) / For current photometric data and important safety,
	installation and application information, see www.osram.com/led-
	systems. / All the technical parameters apply to the entire module. In
Product remark	view of the complex manufacturing process for light emitting diodes,
	the typical values given above 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

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	A

LOGISTICAL DATA

Temperature range at storage -2085 °C

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
PDF	User instruction
PDF	Addon Technical Information

	Documents and certificates
POF	Declarations Of Conformity CE
	Photometric and lighting design files
1	IES file (IES)
	LDT file (Eulumdat)
	LDC typ polar
	CAD/BIM files
PDF	CAD data 3D 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 ³
4052899972599	Shipping box 5	502 mm x 428 mm x 276 mm	12050.00 g	59.30 dm³

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.