

## 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 (backlighting)
- 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



# Product family datasheet

## Technical data

### Electrical data

Product description	Nominal voltage	Nominal wattage	Nominal wattage per LED module	Reverse Voltage	Input voltage range
BA-XL-PL -865	24.0 V	100.0 W	3.1 W	25 V	23...25 V
BA-XL-PL -840	24.0 V	100.0 W	3.1 W	25 V	23...25 V
BA-XL-PL -830	24.0 V	100.0 W	3.1 W	25 V	23...25 V

### Photometrical data

Product description	Color temperature	Color rendering index Ra	Light color (designation)	Light color LED	Luminous flux per module chain	Luminous flux per LED module
BA-XL-PL -865	6500 K	≥ 80	Cold White	White	9600 lm	300 lm
BA-XL-PL -840	4000 K	≥ 80	Daylight	White	9280 lm	290 lm
BA-XL-PL -830	3000 K	≥ 80	Warm White	White	8640 lm	270 lm

Product description	Luminous efficacy	Standard deviation of color matching
BA-XL-PL -865	97 lm/W	≤3 sdcn
BA-XL-PL -840	94 lm/W	≤3 sdcn
BA-XL-PL -830	87 lm/W	≤3 sdcn

### Light technical data

Product description	Beam angle
BA-XL-PL -865	155 °
BA-XL-PL -840	155 °
BA-XL-PL -830	155 °

### LED module information

Product description	Number of LEDs per module	Number of LED modules per chain	Minimum operable number of LED modules
BA-XL-PL -865	6	32	1
BA-XL-PL -840	6	32	1
BA-XL-PL -830	6	32	1

# Product family datasheet

## Dimensions & weight

Product description	Length	Width	Height	Product weight
BA-XL-PL -865	15820 mm <sup>1)</sup>	35.0 mm	17.0 mm	56.00 g <sup>2)</sup>
BA-XL-PL -840	15820 mm <sup>1)</sup>	35.0 mm	17.0 mm	56.00 g <sup>2)</sup>
BA-XL-PL -830	15820 mm <sup>1)</sup>	35.0 mm	17.0 mm	56.00 g <sup>2)</sup>

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

<sup>2)</sup> Per chain

## Temperatures

Product description	Temperature range in operation	Temperature range at storage
BA-XL-PL -865	-20...85 °C <sup>1)</sup>	-20...85 °C
BA-XL-PL -840	-20...85 °C <sup>1)</sup>	-20...85 °C
BA-XL-PL -830	-20...85 °C <sup>1)</sup>	-20...85 °C

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

## Lifespan

Product description	Lifespan
BA-XL-PL -865	50000 h <sup>1)</sup>
BA-XL-PL -840	50000 h <sup>1)</sup>
BA-XL-PL -830	50000 h <sup>1)</sup>

<sup>1)</sup> L70/B50 at T<sub>c</sub> max. 85 °C

## Capabilities

Product description	Dimmable	Dimming range
BA-XL-PL -865	Yes	5...100 %
BA-XL-PL -840	Yes	5...100 %
BA-XL-PL -830	Yes	5...100 %

## Certificates & standards

Product description	Energy consumption	Energy efficiency class	Type of protection
BA-XL-PL -865	4 kWh/1000h	A	IP66
BA-XL-PL -840	4 kWh/1000h	A	IP66
BA-XL-PL -830	4 kWh/1000h	A	IP66

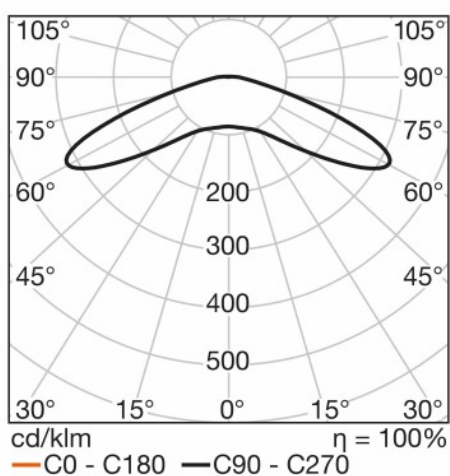
# Product family datasheet

Product description	Standards
BA-XL-PL -865	Acc. to IEC 61347-2-13/Acc. to EN 55015/Acc. to EN 61547/Acc. to EN 61000-3-2/Acc. to EN 62384
BA-XL-PL -840	Acc. to IEC 61347-2-13/Acc. to EN 55015/Acc. to EN 61547/Acc. to EN 61000-3-2/Acc. to EN 62384
BA-XL-PL -830	Acc. to IEC 61347-2-13/Acc. to EN 55015/Acc. to EN 61547/Acc. to EN 61000-3-2/Acc. to EN 62384

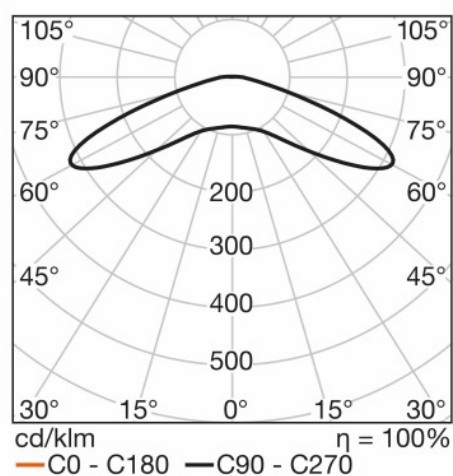
## Logistical data

Product description	Temperature range at storage
BA-XL-PL -865	-20...85 °C
BA-XL-PL -840	-20...85 °C
BA-XL-PL -830	-20...85 °C

## Light Distribution

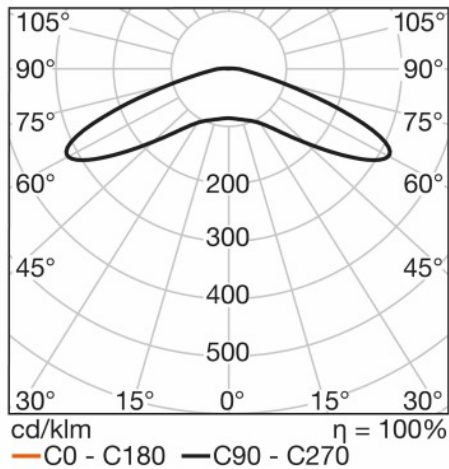


BA-XL-PL -865



BA-XL-PL -840

## Product family datasheet



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BA-XL-PL -830

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### Equipment / Accessories

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

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### Application advice

For more detailed application information and graphics please see product datasheet.

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### 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 strongly 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.

## Product family datasheet

- In case other power supplies than OSRAM OPTOTRONIC are used, compliance to the necessary 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.










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### Sales and Technical Support

Sales and Technical Support [www.osram.com](http://www.osram.com)

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### Download Data

File	
	Brochures Technical application guide - IP codes in accordance with IEC 60529 (GB)
	Brochures Technical Application Guide BackLED PlusBasic G15 and BoxLED Plus G15 (GB)
	Brochures Impressive backlighting for signage and presentation (GB)
	Declarations of conformity EC-DoC BackLED XL Plus G15
	Declarations of conformity Manufacturer-DoC BackLED XL Plus G15
	Installation/Operation notice Instruction Manual for BackLED XL Plus G15
	CAD data 3-dim BA-XL-PL 8XX G15
	CAD data 3-dim BA-XL-PL 8XX G15 IGS
	CAD data PDF BackLED XL Plus G15 CAD PDF

## Product family datasheet



Eulumdat  
BackLED XL Plus 865 G15 Eulumdat



Eulumdat  
BackLED XL Plus 840 G15 Eulumdat



Eulumdat  
BackLED XL Plus 830 G15 Eulumdat

### Logistical Data

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
4052899245815	BA-XL-PL -865	Shipping carton box 5	502 mm x 428 mm x 276 mm	59.30 dm <sup>3</sup>	12351.00 g
4052899245839	BA-XL-PL -840	Shipping carton box 5	502 mm x 428 mm x 276 mm	59.30 dm <sup>3</sup>	11640.00 g
4052899245853	BA-XL-PL -830	Shipping carton box 5	502 mm x 428 mm x 276 mm	59.30 dm <sup>3</sup>	11640.00 g

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 Guarantee see

▶ [www.osram.com/guarantee](http://www.osram.com/guarantee)

### Disclaimer

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