# BA-S-PL BL D

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



## Product family features

- Connected with flexible cables
- Type of protection (modules): IP66
- Color rendering index $R_a$: > 80
- CE marked and UL listed

## Product family benefits

- Uniform illumination at high LED pitches thanks to Square Lens technology
- Modules are compatible with BackLED mounting profile
- Significantly better application efficiency compared to systems without lenses
- Several options for quick and simple mounting: bolting or snap-in
- Excellent module efficacy
- Very long lifetime
- 5 year guarantee

## Areas of application

- Signage and illuminated advertising
- Backlighting of small and/or flat channel letters
- Backlighting of single and double-sided light boxes
- Permanent outdoor use in enclosed light boxes or channel letters


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Technical data

## Electrical data

| | |
|---|---|
| **Nominal voltage** | 12.0 V |
| **Nominal wattage per chain** | 16.90 W |
| **Nominal wattage per LED module** | 0.38 W |
| **Accidental reverse input voltage protection up to** | 13 V |
| **Input voltage range** | 12…13 V |
| **Type of current** | DC |

## Photometrical data

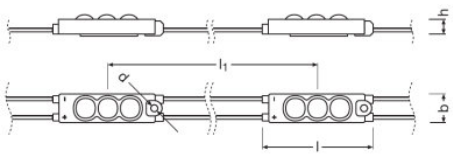
| | |
|---|---|
| **Nominal dominant wavelength** | 466 nm |
| **Light color LED** | Blue |
| **Luminous flux per module chain** | 255 lm |
| **Luminous flux per LED module** | 5.7 lm |
| **Luminous efficacy** | 15.1 lm/W [1)] |

[1)] Cool conditions (Tc = 25 °C) / Steady state (Ta = 25 °C)

## LED module information

| | |
|---|---|
| **Number of LEDs per module** | 3 |
| **Number of LED modules per chain** | 45 |
| **Minimum operable number of LED modules** | 1 |

## Dimensions & weight




| | |
|---|---|
| **Length** | 6280 mm |
| **Width** | 12.0 mm |
| **Height** | 6.0 mm |
| **Product weight** | 250.00 g |
| **Module length** | 45.5 mm |


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| | |
|---|---|
| **Module pitch** | 135 mm |

## Temperatures & operating conditions

| | |
|---|---|
| **Temperature range in operation at Tc point** | -25…65 °C [1] |
| **Temperature range at storage** | -25…85 °C |

[1] At the $T_c$ point

## Lifespan

| | |
|---|---|
| **Lifespan** | 30000 h |

## Additional product data

| | |
|---|---|
| **Product remark** | 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 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 |
| **Dimming range** | 1…100 % |

## Certificates & standards

| | |
|---|---|
| **Energy consumption** | 19 kWh/1000h |
| **Type of protection** | IP66 |
| **Standards** | Acc. to IEC 62031/Acc. to IEC 62471/Acc. to CISPR 15/Acc. to IEC 61547/Acc. to EN 60529 |
| **Approval marks – approval** | CE / UL listed |

## Logistical data

| | |
|---|---|
| **Commodity code** | 85395100000 |

## Environmental information

| **Information according Art. 33 of EU Regulation (EC) 1907/2006 (REACh)** | |
|---|---|
| **Date of Declaration** | 23-05-2022 |
| **Primary Article Identifier** | 4052899300675 |
| **Candidate List Substance 1** | No declarable substances contained |


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| | |
|---|---|
| **Declaration No. in SCIP database** | No declarable substances contained |




484525_5 Year Osram Guarante
(GB)

## Equipment / Accessories

- BackLED mounting profile BA-SM-MP
- Several types of OPTOTRONIC 12 V power supplies available


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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
- 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.
- 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.
- 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

| | File |
|---|---|
| | User instruction<br>730347_User instruction BackLED L M S Plus |
| | Brochures<br>Technical application guide BackLED and BoxLED portfolio (EN) |
| | Certificates<br>647683_MD-DoC BackLED SM Plus G15 |


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| | |
|---|---|
| | Declarations of conformity<br>BACKLED S M family CE 325040 11 240723 |
| | CAD data<br>652642_CAD Daten BA-S-PL G15_STEP |
| | CAD data<br>652643_CAD Daten BA-S-PL G15_IGS |
| | CAD data<br>652653_CAD Daten BA-S-PL G15_pdf |
| | Eulumdat<br>655225_BA-S-PL BLUE G15_IES |
| | Eulumdat<br>655226_BA-S-PL BLUE G15_LTD |

## Ecodesign regulation information:

- This product is considered to be a "containing product" in the sense of Regulations (EU) 2019/2020 and (EU) 2019/2015.
- Tolerances of the reported values, are according to LED Modules Performance standard IEC/EN 62717.
- In general, the replacement of the contained light sources without permanent damage to the product with the use of common available tools is possible in the final application when they can be dismantled from the installation environment and substituted for the necessary number of light sources restoring its full electrical/mechanical/thermal/optical functionality by means of a professional installer.
- Dismantling of light sources from containing products at end of life: Containing products with light sources which are scalable in length can be cut to the length of the contained light source and if applicable mechanically detached from protective and/or optical covers. Containing products shall be separated from building material and/or from other additional mounting accessories by means of a professional installer.Separate control gear and light sources must be disposed of at certified disposal companies in accordance with Directive 2012/19/EU (WEEE) in the EU and with Waste Electrical and Electronic Equipment (WEEE) Regulations 2013 in the UK. For this purpose, collection points for recycling centres and take-back systems (CRSO) are available from retailers or private disposal companies, which accept separate control gear and light sources free of charge. In this way, raw materials are conserved and materials are recycled.

## Logistical Data

| Product code | Product description | Packaging unit (Pieces/Unit) | Dimensions (length x width x height) | Volume | Gross weight |
|---|---|---|---|---|---|
| 4052899300675 | BA-S-PL BL D | Shipping carton box<br>5 | 428 mm x 254 mm x 298 mm | 32.40 $dm^3$ | 3437.00 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 more information on the multi-level guarantee and the terms and conditions of the guarantee visit https://

- www.inventronics-light.com/multilevel-guarantees


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