

# 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<sub>a</sub>: > 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



#### Technical data

#### **Electrical data**

Product description	Nominal voltage	Nominal wattage per chain	Nominal wattage per LED module	Accidental reverse input voltage protection up to	Input voltage range	Type of current
BA-S-PL BL D <sup>1)</sup>	12.0 V	16.90 W	0.38 W	13 V	1213 V	DC
BA-S-PL GN D <sup>1)</sup>	12.0 V	16.90 W	0.38 W	13 V	1213 V	DC
BA-S-PL RD D <sup>1)</sup>	12.0 V	33.80 W	0.38 W	13 V	1213 V	DC

<sup>1)</sup> See product remark

#### Photometrical data

Product description	Nominal dominant wavelength	Light color LED	Lumi- nous flux per module chain	Lumi- nous flux per LED module	Luminous efficacy
BA-S-PL BL D <sup>1)</sup>	466 nm	Blue	255 lm	5.7 lm	15.1 lm/W <sup>2)</sup>
BA-S-PL GN D <sup>1)</sup>	523 nm	Green	1110 lm	24.7 lm	65.7 lm/W <sup>2)</sup>
BA-S-PL RD D <sup>1)</sup>	625 nm	Red	1215 lm	13.5 lm	35.9 lm/W <sup>2)</sup>

 $<sup>^{1)}\,\</sup>mathrm{See}\,\,\mathrm{product}\,\,\mathrm{remark}$ 

## **LED** module information

Product description	Number of LEDs per module	Number of LED modules per chain	Minimum operable number of LED modules
BA-S-PL BL D <sup>1)</sup>	3	45	1
BA-S-PL GN D <sup>1)</sup>	3	45	1
BA-S-PL RD D <sup>1)</sup>	3	90	1

 $<sup>^{1)}</sup>$  See product remark

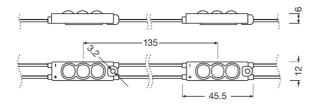
## Dimensions & weight

Product description	Length	Width	Height	Product
				weight
BA-S-PL BL D <sup>1)</sup>	6280 mm	12.0 mm	6.0 mm	250.00 g
BA-S-PL GN D <sup>1)</sup>	6280 mm	12.0 mm	6.0 mm	250.00 g
BA-S-PL RD D <sup>1)</sup>	12454 mm	12.0 mm	6.0 mm	495.00 g

 $<sup>^{2)}</sup>$  Cool conditions (Tc = 25 °C) / Steady state (Ta = 25 °C)

 $^{1)}$  See product remark

## **Product line drawing**



 $\mathsf{BA}\text{-}\mathsf{S}\text{-}\mathsf{PL}\;\mathsf{BL}\;\mathsf{D},\;\mathsf{BA}\text{-}\mathsf{S}\text{-}\mathsf{PL}\;\mathsf{GN}\;\mathsf{D},\;\mathsf{BA}\text{-}\mathsf{S}\text{-}\mathsf{PL}\;\mathsf{RD}\;\mathsf{D}$ 

## Temperatures & operating conditions

Product description	Temperature range in operation at Tc point	Temperature range at storage
BA-S-PL BL D <sup>1)</sup>	-2565 °C <sup>2)</sup>	-2585 °C
BA-S-PL GN D <sup>1)</sup>	-2565 °C <sup>2)</sup>	-2585 °C
BA-S-PL RD D <sup>1)</sup>	-2565 °C <sup>2)</sup>	-2585 °C

<sup>1)</sup> See product remark

## Lifespan

Product description	Lifespan	
BA-S-PL BL D <sup>1)</sup>	30000 h	
BA-S-PL GN D <sup>1)</sup>	30000 h	
BA-S-PL RD D <sup>1)</sup>	30000 h	

<sup>1)</sup> See product remark

 $<sup>^{2)}</sup>$  At the T point

## Additional product data

Product description	Successor EAN
BA-S-PL BL D <sup>1)</sup>	
BA-S-PL GN D <sup>1)</sup>	
BA-S-PL RD D <sup>1)</sup>	4062172166614

<sup>1)</sup> See product remark

## **Capabilities**

Product description	Dimmable	Dimming range
BA-S-PL BL D <sup>1)</sup>	Yes	1100 %
BA-S-PL GN D <sup>1)</sup>	Yes	1100 %
BA-S-PL RD D <sup>1)</sup>	Yes	1100 %

<sup>1)</sup> See product remark

## Certificates & standards

Product description	Energy	Type of	Standards
	consumption	protection	
BA-S-PL BL D <sup>1)</sup>	19 kWh/1000h	IP66	Acc. to IEC 62031/Acc. to
			IEC 62471/Acc. to CISPR
			15/Acc. to IEC 61547/Acc.
			to EN 60529
BA-S-PL GN D <sup>1)</sup>	19 kWh/1000h	IP66	Acc. to IEC 62031/Acc. to
			IEC 62471/Acc. to CISPR
			15/Acc. to IEC 61547/Acc.
			to EN 60529
BA-S-PL RD D <sup>1)</sup>	38 kWh/1000h	IP66	Acc. to IEC 62031/Acc. to
			IEC 62471/Acc. to CISPR
			15/Acc. to IEC 61547/Acc.
			to EN 60529

<sup>1)</sup> See product remark

## Logistical data

Product description	Commodity code
BA-S-PL BL D <sup>1)</sup>	85395100000
BA-S-PL GN D <sup>1)</sup>	85395100000
BA-S-PL RD D <sup>1)</sup>	85395100000

<sup>1)</sup> See product remark

# Environmental information Information according Art. 33 of EU Regulation (EC) 1907/2006 (REACh)

Product description	Date of Declaration	Primary Article Identifier	Candidate List Substance 1
BA-S-PL BL D <sup>1)</sup>	23-05-2022	4052899300675	No declarable substances contained
BA-S-PL GN D <sup>1)</sup>	07-07-2023	4052899300651	Lead
BA-S-PL RD D <sup>1)</sup>	25-07-2022	4052899300637	
Product description	Declaration No. in SCIP database	CAS No. of substance 1	Safe Use Instruction
BA-S-PL BL D <sup>1)</sup>	No declarable substances contained		
BA-S-PL GN D <sup>1)</sup>	e72c16f4-d8f4-40e8- af3b-3dfe327dac26	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.
BA-S-PL RD D <sup>1)</sup>	In work		

<sup>1)</sup> See product remark

#### 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

#### Equipment / Accessories

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

#### Application advice

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

#### 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.

#### Sales and Technical Support

Sales and Technical Support www.osram.com

#### Download Data

#### File



User instruction 730347 User instruction BackLED L M S Plus

<u> </u>	Brochures Technical application guide BackLED and BoxLED portfolio (EN)
<b>大</b>	Certificates 647683_MD-DoC BackLED SM Plus G15
秀	Declarations of conformity BACKLED S M family CE 325040 11 240723
<u> </u>	CAD data 652642_CAD Daten BA-S-PL G15_STEP
i	CAD data 652643_CAD Daten BA-S-PL G15_IGS
<b>Z</b>	CAD data 652653_CAD Daten BA-S-PL G15_pdf
<u> </u>	Eulumdat 655225_BA-S-PL BLUE G15_IES
<u> </u>	Eulumdat 655226_BA-S-PL BLUE G15_LTD
<u> </u>	Eulumdat 655227_BA-S-PL GRN G15_IES
<u> </u>	Eulumdat 655229_BA-S-PL GRN G15_LTD
<u> </u>	Eulumdat 655228_BA-S-PL-RED G15_IES
i	Eulumdat 655230_BA-S-PL-RED 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 5	428 mm x 254 mm x 298 mm	32.40 dm <sup>3</sup>	3437.00 g
4052899300651	BA-S-PL GN D	Shipping carton box 5	428 mm x 254 mm x 298 mm	32.40 dm <sup>3</sup>	4557.00 g
4052899300637	BA-S-PL RD D	Shipping carton box 5	428 mm x 254 mm x 298 mm	32.40 dm <sup>3</sup>	4557.00 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

#### Disclaimer

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