

## BackLED S Plus G15

LED modules for light advertising and backlighting



### 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

### Product 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

### 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	Type of current
BA-S-PL -830	12.0 V	34.00 W	0.38 W	13 V	12...13 V	DC
BA-S-PL -840	12.0 V	34.00 W	0.38 W	13 V	12...13 V	DC
BA-S-PL -865	12.0 V	34.00 W	0.38 W	13 V	12...13 V	DC
BA-S-PL BL	12.0 V	17.00 W	0.38 W	13 V	12...13 V	DC
BA-S-PL GN	12.0 V	17.00 W	0.38 W	13 V	12...13 V	DC
BA-S-PL RD	12.0 V	34.00 W	0.38 W	13 V	12...13 V	DC

### 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-S-PL -830	3000 K	>80	Warm White	White	2880 lm	32 lm
BA-S-PL -840	4000 K	>80	Daylight	White	2880 lm	32 lm
BA-S-PL -865	6500 K	>80	Cold White	White	2880 lm	32 lm
BA-S-PL BL			Blue	Blue	256 lm	5.7 lm
BA-S-PL GN			Green	Green	1110 lm	24.7 lm
BA-S-PL RD			Red	Red	1230 lm	13.7 lm

Product description	Luminous efficacy	Standard deviation of color matching	Nominal dominant wavelength
BA-S-PL -830	84 lm/W	≤3 sdcM	
BA-S-PL -840	84 lm/W	≤3 sdcM	
BA-S-PL -865	84 lm/W	≤3 sdcM	
BA-S-PL BL	18 lm/W	≤3 sdcM	466 nm
BA-S-PL GN	77 lm/W	≤3 sdcM	520 nm
BA-S-PL RD	45 lm/W	≤3 sdcM	625 nm

## Product family datasheet

### Light technical data

Product description	Beam angle
BA-S-PL -830	150 °
BA-S-PL -840	150 °
BA-S-PL -865	150 °
BA-S-PL BL	155.00 °
BA-S-PL GN	155.00 °
BA-S-PL RD	155.00 °

### LED module information

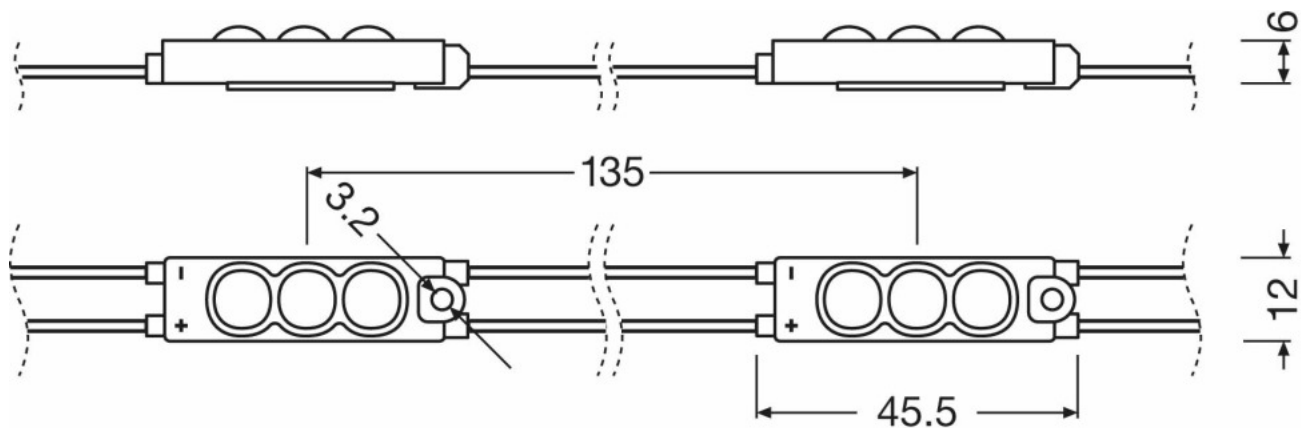
Product description	Number of LEDs per module	Number of LED modules per chain	Minimum operable number of LED modules
BA-S-PL -830	3	90	1
BA-S-PL -840	3	90	1
BA-S-PL -865	3	90	1
BA-S-PL BL	3	45	1
BA-S-PL GN	3	45	1
BA-S-PL RD	3	90	1

### Dimensions & weight

Product description	Length	Width	Height	Product weight
BA-S-PL -830	12454 mm	12.0 mm	6.0 mm	495.00 g
BA-S-PL -840	12454 mm	12.0 mm	6.0 mm	495.00 g
BA-S-PL -865	12454 mm	12.0 mm	6.0 mm	495.00 g
BA-S-PL BL	6280 mm	12.0 mm	6.0 mm	250.00 g
BA-S-PL GN	6280 mm	12.0 mm	6.0 mm	250.00 g
BA-S-PL RD	12454 mm	12.0 mm	6.0 mm	495.00 g

# Product family datasheet

## Product line drawing



BA-S-PL -830, BA-S-PL -840, BA-S-PL -865, BA-S-PL BL, BA-S-PL GN, BA-S-PL RD

## Temperatures & operating conditions

Product description	Temperature range in operation
BA-S-PL -830	-25...55 °C <sup>1)</sup>
BA-S-PL -840	-25...55 °C <sup>1)</sup>
BA-S-PL -865	-25...55 °C <sup>1)</sup>
BA-S-PL BL	-25...55 °C <sup>1)</sup>
BA-S-PL GN	-25...55 °C <sup>1)</sup>
BA-S-PL RD	-25...55 °C <sup>1)</sup>

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

## Product family datasheet

### Lifespan

Product description	Lifespan
BA-S-PL -830	50000 h
BA-S-PL -840	50000 h
BA-S-PL -865	50000 h
BA-S-PL BL	30000 h
BA-S-PL GN	30000 h
BA-S-PL RD	30000 h

### Capabilities

Product description	Dimmable	Dimming range
BA-S-PL -830	Yes	5...100 %
BA-S-PL -840	Yes	5...100 %
BA-S-PL -865	Yes	5...100 %
BA-S-PL BL	Yes	5...100 %
BA-S-PL GN	Yes	5...100 %
BA-S-PL RD	Yes	5...100 %

### Certificates & standards

Product description	Energy consumption	Energy efficiency class	Type of protection
BA-S-PL -830	2 kWh/1000h	A++	IP66
BA-S-PL -840	2 kWh/1000h	A++	IP66
BA-S-PL -865	2 kWh/1000h	A++	IP66
BA-S-PL BL	2 kWh/1000h	A	IP66
BA-S-PL GN	2 kWh/1000h	A+	IP66
BA-S-PL RD	2 kWh/1000h	B	IP66

Product description	Standards
BA-S-PL -830	Acc. to IEC 62031/Acc. to IEC 62471/Acc. to CISPR 15/Acc. to IEC 61547/Acc. to EN 60529
BA-S-PL -840	Acc. to IEC 62031/Acc. to IEC 62471/Acc. to CISPR 15/Acc. to IEC 61547/Acc. to EN 60529
BA-S-PL -865	Acc. to IEC 62031/Acc. to IEC 62471/Acc. to CISPR 15/Acc. to IEC 61547/Acc. to EN 60529
BA-S-PL BL	Acc. to IEC 62031/Acc. to IEC 62471/Acc. to CISPR 15/Acc. to IEC 61547/Acc. to EN 60529
BA-S-PL GN	Acc. to IEC 62031/Acc. to IEC 62471/Acc. to CISPR 15/Acc. to IEC 61547/Acc. to EN 60529
BA-S-PL RD	Acc. to IEC 62031/Acc. to IEC 62471/Acc. to CISPR 15/Acc. to IEC 61547/Acc. to EN 60529

# Product family datasheet

## Logistical data

Product description	Temperature range at storage
BA-S-PL -830	-25...85 °C
BA-S-PL -840	-25...85 °C
BA-S-PL -865	-25...85 °C
BA-S-PL BL	-25...85 °C
BA-S-PL GN	-25...85 °C
BA-S-PL RD	-25...85 °C

## 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 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.
- 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

## Product family datasheet

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.











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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 Impressive backlighting for signage and presentation (GB)
	Brochures Technical application guide BackLED PlusBasic G15 and BoxLED Plus G15 (GB)
	Certificates MD-DoC BackLED SM Plus G15
	Declarations of conformity EC-DoC BackLED SM Plus G15
	Installation/Operation notice Instruction guide BackLED S M L Plus G15 G10569011
	Installation guide Instruction Manual BackLED SML Plus G15
	CAD data CAD Daten BA-S-PL G15_STEP
	CAD data CAD Daten BA-S-PL G15_IGS
	CAD data CAD Daten BA-S-PL G15_pdf

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### Logistical Data

## Product family datasheet

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
4052899300613	BA-S-PL -830	Shipping carton box 5	428 mm x 254 mm x 298 mm	32.40 dm <sup>3</sup>	4567.00 g
4052899300590	BA-S-PL -840	Shipping carton box 5	428 mm x 254 mm x 298 mm	32.40 dm <sup>3</sup>	4567.00 g
4052899300576	BA-S-PL -865	Shipping carton box 5	428 mm x 254 mm x 298 mm	32.40 dm <sup>3</sup>	4567.00 g
4052899300675	BA-S-PL BL	Shipping carton box 5	428 mm x 254 mm x 298 mm	32.40 dm <sup>3</sup>	3282.00 g
4052899300651	BA-S-PL GN	Shipping carton box 5	428 mm x 254 mm x 298 mm	32.40 dm <sup>3</sup>	3282.00 g
4052899300637	BA-S-PL RD	Shipping carton box 5	428 mm x 254 mm x 298 mm	32.40 dm <sup>3</sup>	4567.00 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.

### Accessories Optional

Product description	Accessory name	Accessory code
BA-S-PL 830 G15	BackLED, -SM-MP	▶ 4052899264557
BA-S-PL 840 G15	BackLED, -SM-MP	▶ 4052899264557
BA-S-PL 865 G15	BackLED, -SM-MP	▶ 4052899264557
BA-S-PL BLUE G15	BackLED, -SM-MP	▶ 4052899264557
BA-S-PL GRN G15	BackLED, -SM-MP	▶ 4052899264557
BA-S-PL-RED G15	BackLED, -SM-MP	▶ 4052899264557

### References / Links

For more information on the multi-level guarantee and the terms and conditions of the guarantee visit

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

### Disclaimer

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