# BackLED RGBW Plus G2

LED modules for light advertising and backlighting



## Product family features

- Connected with flexible cables
- Type of protection (modules): IP66/IP68
- Special robust encapsulation
- CE marked
- Dimmable by pulse width modulation (PWM)

## Product family benefits

- Simple fixing with M3 screws
- Broad color mixing palette (in connection with light management systems)
- Uniform backlighting of large surfaces thanks to extremely wide angle optics
- Simple connection with open cable ends
- Consistent white light (Standard Deviation of Color Matching SDCM: < 5)
- 5 year guarantee



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## Areas of application

- Special-purpose and decorative lighting applications
- Dynamic color backlighting
- Dynamic mood lighting
- Spas
- Shops
- Restaurants
- Trade fair lighting
- Permanent outdoor use in enclosed light boxes or channel letters


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## Technical data

### Electrical data

| Product description | Nominal voltage | Nominal wattage per LED module | Accidental reverse input voltage protection up to | Input voltage range | Type of current |
|---|---|---|---|---|---|
| BA-RGBW-PL G2 | 24.0 V | 2.84 W | 24 V | 23…25 V | DC |
| BA-RGBW-PL G2 [1)] | 24.0 V | 3.7 W | 24 V | 23.5…24.5 V | DC |

1) See product remark

### Photometrical data

| Product description | Light color (designation) | Light color LED | Luminous flux per module chain | Luminous efficacy | Standard deviation of color matching |
|---|---|---|---|---|---|
| BA-RGBW-PL G2 | RGBW | RGB, 6500 K | 2310 lm | 54 lm/W | ≤5 sdcm |
| BA-RGBW-PL G2 [1)] | RGBW | RGB, white | 2310 lm | 42 lm/W | |

1) See product remark

### LED module information

| Product description | Number of LEDs per module | Number of LED modules per chain | Minimum operable number of LED modules |
|---|---|---|---|
| BA-RGBW-PL G2 | 8 | 15 | 3 |
| BA-RGBW-PL G2 [1)] | 8 | 15 | 3 |

1) See product remark

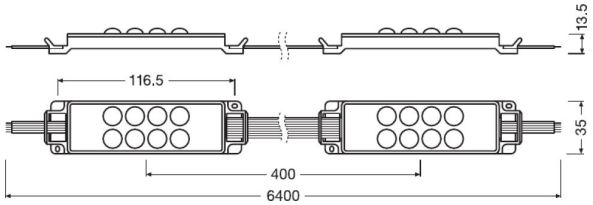
### Dimensions & weight

| Product description | Product weight |
|---|---|
| BA-RGBW-PL G2 | 900.00 g |
| BA-RGBW-PL G2 [1)] | 900.00 g |

1) See product remark


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### Product line drawing




BA-RGBW-PL G2, BA-RGBW-PL G2

### Temperatures & operating conditions

| Product description | Temperature range in operation at Tc point | Temperature range at storage |
|---|---|---|
| BA-RGBW-PL G2 | -25…75 °C | -25…65 °C |
| BA-RGBW-PL G2 [1)] | -25…55 °C | -25…65 °C |

[1)] See product remark

### Additional product data

| Product description | Predecessor EAN | Successor EAN |
|---|---|---|
| BA-RGBW-PL G2 | 4052899452930 | |
| BA-RGBW-PL G2 [1)] | | 4062172030168 |

[1)] See product remark


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### Capabilities

| Product description | Dimming range |
|---|---|
| BA-RGBW-PL G2 | 5...100 % |
| BA-RGBW-PL G2 [1)] | 5...100 % |

[1)] See product remark

### Certificates & standards

| Product description | Type of protection | Standards |
|---|---|---|
| BA-RGBW-PL G2 | IP66 | CE |
| BA-RGBW-PL G2 [1)] | IP66 | CE |

[1)] See product remark

### Logistical data

| Product description | Commodity code |
|---|---|
| BA-RGBW-PL G2 | 85395100000 |
| BA-RGBW-PL G2 [1)] | 940540399000 |

[1)] 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-RGBW-PL G2 | 16-06-2023 | 4062172030168 | No declarable substances contained |
| BA-RGBW-PL G2 [1)] | 18-04-2022 | 4052899452930 | |

| Product description | Declaration No. in SCIP database |
|---|---|
| BA-RGBW-PL G2 | No declarable substances contained |
| BA-RGBW-PL G2 [1)] | In work |

[1)] 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


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## Equipment / Accessories

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

## 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
- 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.

## Sales and Technical Support


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## Download Data

| | File |
|---|---|
| | User instruction<br>UI BackLED TW and RGBW Plus G2 |
| | Brochures<br>Technical application guide BackLED and BoxLED portfolio (EN) |
| | Declarations of conformity<br>BACKLED PLUS G15 CE 3320783 06 260723 |
| | Declarations of conformity<br>727532_Manufacturer´s Declaration BackLED PLUS |
| | CAD data<br>728616_CAD_BackLED RGBW Plus G2_dwg |
| | CAD data<br>728617_CAD_BackLED RGBW Plus G2_isg |
| | CAD data 3-dim<br>728618_CAD_BackLED RGBW Plus G2_step |
| | CAD data PDF<br>728615_CAD BackLED RGBW Plus G2_pdf |
| | Eulumdat<br>728621_BackLED RBGW Plus G2 BA-RGBW-PL_Blue_4052899452930 |
| | Eulumdat<br>728622_BackLED RBGW Plus G2 BA-RGBW-PL_Green_4052899452930 |
| | Eulumdat<br>728623_BackLED RBGW Plus G2 BA-RGBW-PL_RGBW_4052899452930 |
| | Eulumdat<br>728624_BackLED RBGW Plus G2 BA-RGBW-PL_Red_4052899452930 |
| | Eulumdat<br>728625_BackLED RBGW Plus G2 BA-RGBW-PL_White_4052899452930 |
| | IES data<br>IES_BackLED RBGW Plus G2 |
| | IES data<br>IES_BackLED RBGW Plus G2 |
| | IES data<br>IES_BackLED RBGW Plus G2 |
| | IES data<br>IES_BackLED RBGW Plus G2 |
| | IES data<br>IES_BackLED RBGW Plus G2 |


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## 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 |
|---|---|---|---|---|---|
| 4062172030168 | BA-RGBW-PL G2 | Shipping carton box<br>5 | 473 mm x 328 mm x 292 mm | 45.30 $dm^3$ | 7277.00 g |
| 4052899452930 | BA-RGBW-PL G2 | Shipping carton box<br>5 | 473 mm x 328 mm x 292 mm | 45.30 $dm^3$ | 7277.00 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-RGBW-PL G2 | BX -MP | 4008321981110 |
| BA-RGBW-PL G2 | BX -MP | 4008321981110 |

## 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.


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