

BA-RGBW865 -CP G3 DMX

BackLED RGBW Plus G2 | LED modules for light advertising and backlighting



Product family features

- Connected with flexible cables
- Type of protection (modules): IP68
- Special robust encapsulation
- CE, ENEC, UL, BIS marks
- Dimmable by pulse width modulation (PWM) or DMX

Product family benefits

- Single module cuttability and operation
- 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: < 3)
- 5 year guarantee

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

Technical data

Electrical data

Nominal voltage	24.0 V
Rated wattage	58.00 W
Input voltage range	23...25 V
Nominal wattage per chain	58.00 W
Nominal wattage per LED module	2,9 W ¹⁾
Nominal wattage per LED module REM	0,73 W for each channel

1) 0,73 W for each channel

Photometrical data

Color rendering index Ra	80 (white channel)
Luminous efficacy	87.6 lm/W
Color Temperature	6500
Luminous flux per LED module	254 lm ¹⁾
Luminous flux per LED module REM	RED: 32 lm GREEN: 88 lm BLUE: 21 lm WHITE: 113 lm
Standard deviation of color matc	<=3 sdcn

1) RED: 32 lm
GREEN: 88 lm
BLUE: 21 lm
WHITE: 113 lm

Light technical data

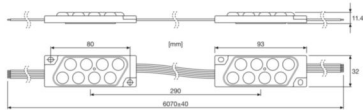
Beam angle	160 °
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LED module information

Number of LEDs per module	8 ¹⁾
Minimum operable number of LED modules	1
Number of LED modules per chain	20

1) 2x RED, GREEN, BLUE, WHITE

Dimensions & weight



Length	6070 mm
Width	32.0 mm
Height	11.4 mm
Product weight	850.00 g
Module pitch	290 mm
Module length	93 mm

Temperatures & operating conditions

Ambient temperature range	-25...+60 °C
Temperature range at storage	-40...+85 °C

Lifespan

Rated lamp life time	50000 h
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Capabilities

Self-adhesive	Yes
Dimming range	1...100 %

Certificates & standards

Standards	IEC/TR 62778 / IEC/EN 61347-1 / IEC/EN 60529 / IEC/EN 62031 / IEC/EN 60598-1 / EN 55015 / EN 61547
Type of protection	IP68
Approval marks – approval	CE / ENEC / UL / BIS

Environmental information

Information according Art. 33 of EU Regulation (EC) 1907/2006 (REACH)	
Date of Declaration	18-03-2026
Primary Article Identifier	6977078997645
Candidate List Substance 1	no declarable substance contained
CAS No. of substance 1	no declarable substance contained
Declaration No. in SCIP database	In work
SCIP_ID	

Equipment / Accessories

- Several types of OPTOTRONIC® 24 V power supplies available

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.

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 Inventronics 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 Inventronics 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 Inventronics 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, Inventronics assumes no liability and provides no guarantee for a permanent adherence of the modules to the surface. Inventronics 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.

Download Data

File		
IES data	Compressed	▶ BackLED RGBW865-CP G3 & DMX B IES 201024
IES data	Compressed	▶ BackLED RGBW865-CP G3 & DMX G IES 201024
IES data	Compressed	▶ BackLED RGBW865-CP G3 & DMX R IES 201024
IES data	Compressed	▶ BackLED RGBW865-CP G3 & DMX RGBW IES 201024
IES data	Compressed	▶ BackLED RGBW865-CP G3 & DMX W IES 201024
Product Datasheet	PDF	▶ BA-RGBW-CP G3 spec sheet
Eulumdat	Compressed	▶ BackLED RGBW865-CP G3 & DMX RGBW LDT 221024
Eulumdat	Compressed	▶ BackLED RGBW865-CP G3 & DMX W LDT 221024
Eulumdat	Compressed	▶ BackLED RGBW865-CP G3 & DMX R LDT 221024
Eulumdat	Compressed	▶ BackLED RGBW865-CP G3 & DMX G LDT 221024
Eulumdat	Compressed	▶ BackLED RGBW865-CP G3 & DMX B LDT 221024
User instruction	PDF	▶ UI BackLED RGBW CP G3 15130451 250725

Logistical Data

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
6977078997645 INVENTRONICS	BA-RGBW865 -CP G3 DMX	Shipping carton box 10 Pieces	360 x 260 x 240 mm	22.46 dm ³	915.20 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>

Accessories Optional

Product description	Accessory name	Accessory code
BA-RGBW865 -CP G3 DMX	BA -MP-RGBW-G3-2M	▶ 6977770439450