BackLED TW Plus G2

Benefits

- Flexible programmable lighting moods (in connection with light management systems)
- Uniform backlighting of large surfaces thanks to extremely wide angle optics
- PCB and LEDs are protected inside a complete over-molded housing
- UV- and IR-free light
- Dimmable by pulse width modulation (PWM)
- Simple fixing with screws (or using the BX-MP mounting profile)

Applications

- Biodynamic backlighting
- Dynamic mood lighting
- Wellness areas / Hospitals
- Hotels / Restaurants
- Offices

Technical Operating Data

Product	Color	No. of LED-modules per chain	Voltage [V DC]*	Power /module [W]*	Radiance angle [°]*	Color Temp [K]*	Lum. Flux Chain/ module [lm]*
BA-TW-PL 827-865 G2	2700-6500	20	24	96 / 4.8	150	2700K - 6500K	9200 / 460 (2700K: 4400 / 220) (6500K: 4800 / 240)

*) Due to the special conditions of the manufacturing processes of LED the typical data of technical parameters can only reflect statistical figures and do not necessarily correspond to the actual parameters of each single product which could differ from the typical data;
All values are tested at Ta 25 °C;

Technical Features

- LED chain comprising 20 LED modules connected by flexible cables
- Each LED module contains 8 LEDs
- Full encapsulation of the LED modules with ingress protection IP66 / IP68**
- Optimal operation on OPTOTRONIC® 24V power supplies
- Module is compatible with mounting profile BX-MP
- Module contains no PVC material
- Lifespan 50000 h

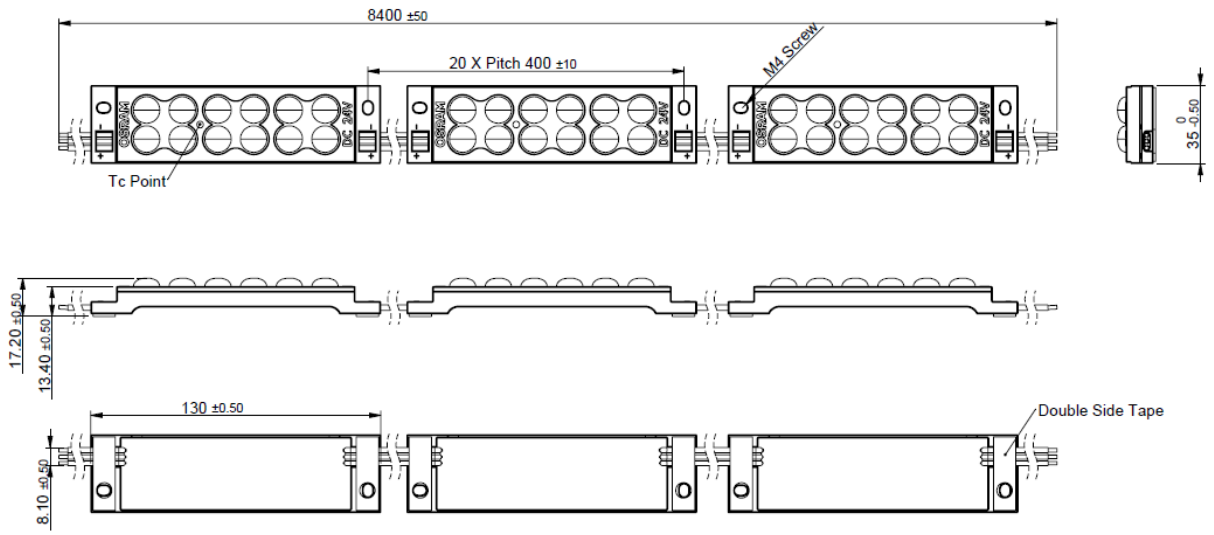
**) Modules not suitable for submersed applications.

Minimum / Maximum Ratings

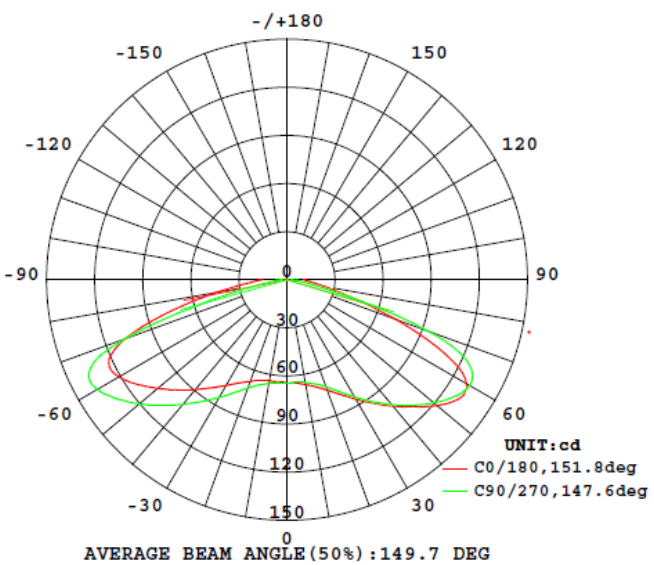
Product	Operating Temperature at Tc-Point [°C]*	Storage Temperature Tc-Point [°C]*	Voltage Range [V dc]*	Reverse Voltage [V dc]*
BA-TW-PL 827-865 G2	-25 … +80	-25 … 85	23 … 25	25

*) Exceeding maximum ratings for operating and storage temperature will reduce expected life time or destroy the LED Modules.
Exceeding maximum ratings for operating voltage will cause hazardous overload and will likely destroy the LED Modules.
The temperature of the LED modules must be measured at the Tc-point according to EN60598-1 in a thermally constant status with a temperature sensor or a temperature sensitive label.

Dimension



Light Distribution



Safety Information

- The LED module itself and all its components must not be mechanically stressed.
- Assembly must not damage or destroy conducting paths on the circuit board.
- To avoid mechanical damage, the LED modules should be attached securely to the intended substrate. Heavy vibration should be avoided.

In order to drive OSRAM LED-Modules safely, it is absolutely necessary to operate them with an electronically stabilized power supply protecting against short circuits, overload and overheating.

For dimming applications attention should be paid to specific references in “OPTOTRONIC ® Technical Guide”.

To also ease the luminaire/installation approval, electronic control gear for LED or LED modules must carry the CE mark.

In Europe the declarations of conformity must include the following standards:

CE: IEC 62471, IEC 60598-1, EN 60529, EN 62031, EN 55015, EN 61547.

Also check for the mark of an independent authorized certification institute.

Please see the relevant application guides for more detailed information.

OSRAM OPTOTRONIC® electronic control gear complies to all relevant standards and guarantees safe operation.

- Installation of LED modules (with power supplies) needs to be made with regard to all applicable electrical and safety standards. Only qualified personnel should be allowed to perform installations.
- Observe correct polarity! Incorrect polarity will lead to no light emission and may cause damage of the LED module.
- Parallel connection is highly recommended as safe electrical operation mode. Serial connection is not recommended. Unbalanced voltage drop can cause hazardous overload and damage the LED module.
- Electrical contact is achieved with the contact cables.
- When using power supplies other than OSRAM OPTOTRONIC®, in order to ensure continuous safe operation, the output voltage has to be 24.0V +/-1.0V
- LED chain can be cut to required length by cutting between any modules.
- Pay attention to ESD steps when mounting the module.
- LED modules are dimmable by means of PWM (pulse width modulation). It is recommended using the following OSRAM control gears: OPTOTRONIC® OTi DALI 1-4 CH, OT DIM, OT DALI DIM.
- The LED modules must not be operated in places which are directly exposed to atmospheric conditions. For outdoor applications, hence the LED module has to be protected by appropriate enclosures or covers. Operation in or under water is prohibited.
- Each LED module is equipped with a pre-mounted double-sided adhesive tape which allows for optional or additional mounting. Due to varying properties of adherents and multiple external influences during the operation of the modules, 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.

Ordering Guide

Product group	Product name	EAN 10*	S-Unit*
BackLED TW Plus 827-865 G2	BA-TW-PL 827-865 G2	4052899452954	5

* EAN 10: Ordering number per single sale unit
* S-Unit: Modules / accessory number per shipping unit

Note: Typical performance data are subject to change without any further notice, particularly as LED technology evolves.

Productgroup	Product	EAN10	Sales Unit
Mounting profile BX-MP	Mounting profile BX-MP	4008321**981110****	24

**) EAN: Ordering number for one Mounting profile

Note: Typical performance data are subject to change without any further notice, particularly as LED technology evolves.

Sales and Technical Support

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Sales and technical support is given by the local OSRAM subsidiaries.

On our world wide homepage all OSRAM subsidiaries are listed with complete address and phone numbers.