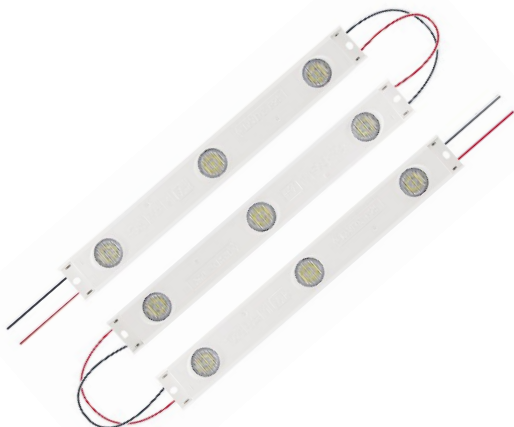


# Technical datasheet

## BoxLED L Plus G3



### Highlights

- Elliptical Optics (close beam angle to deliver perfect light reflection inside a lightbox)
- PCB and LEDs are protected inside a complete potted housing
- Mounting profile for faster installation available
- 3 SDCM for high color consistency

### Application

- Sidelighting of medium and large light boxes

### Technical data

Product	Color	No. of LED-modules per chain	No. of LEDs per module	Voltage [V DC]*	Power chain / module [W]*	Radiance Angle [°]*	Color Temp [K]*	Hot Lum. Flux Chain / module [lm]*
BX-L-PL 765 G3	Cool Daylight	10	3	12	60 / 6,0	11x53.5	6500 K	6200 / 620
BX-L-PL 840 G3	Neutral white	10	3	12	60 / 6,0	11x53.5	4000 K	5300 / 530

<sup>1)</sup> 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..

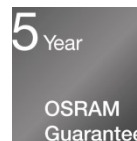
### Technical concept

- LED chain comprising 10 LED modules connected by flexible cables
- Each LED module contains 3 LEDs
- LED-module distance is variable between 350- 450mm
- Full encapsulation of the LED modules with ingress protection IP66 / IP68\*
- Optimal homogenous backlighting through sidelighting with installation depth (distance between back plane of lightbox and surface) at 120 mm
- Optimal operation on OPTOTRONIC® 12V power supplies (15W, 30W, 60W, 120W)
- Dimmable operation with OT DIM, OT DALI DIM, OT DALI DIM LI
- Module is compatible with Mounting Profile BX-MP
- 50.000 hrs lifespan (L70/B50) at Tc 60°C
- Module contains no PVC material

\*) Modules not suitable for submerged applications.



IP66  
IP68<sup>1</sup>



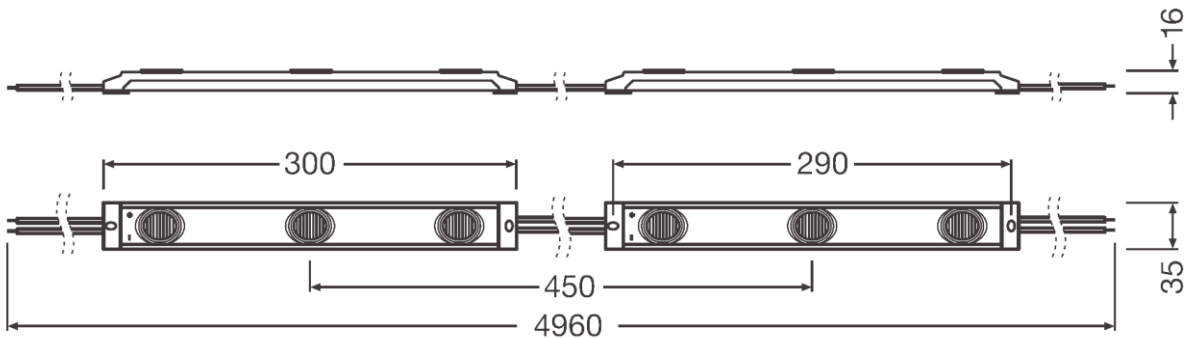
<sup>1</sup>: IP66 / IP68 ratings provide protection for outdoor and wet applications. Do not mount in a submerged application.

## Minimum / Maximum Ratings

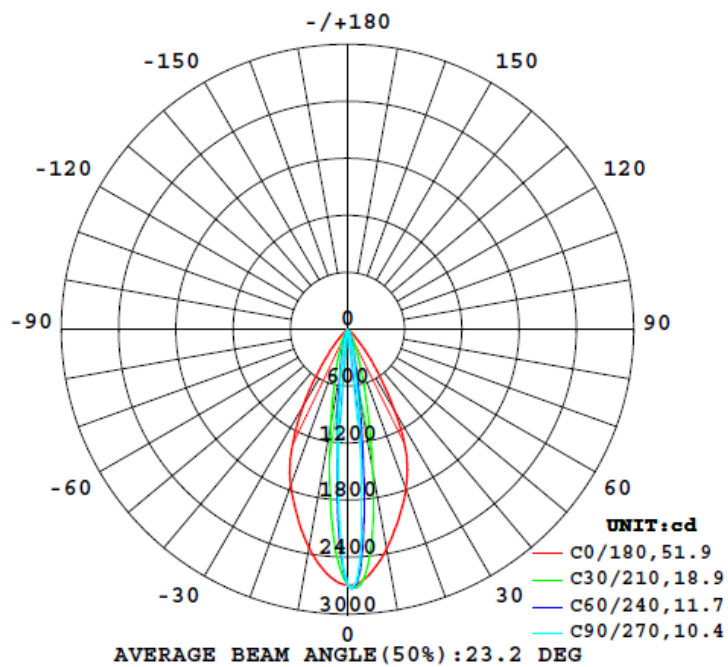
Product	Operating Temperature at Tc-Point [°C]*	Storage Temperature [°C]*	Voltage Range [V dc]*	Reverse Voltage [V dc]*
BX-L-PL 765 G3	-25 ... 60	-25 ... 85	12 ... 13	13
BX-L-PL 840 G3	-25 ... 60	-25 ... 85	12 ... 13	13

\*) 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.

## Dimensions



## 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.**

**To also ease the luminaire/installation approval,**

**electronic control gear for LED or LED modules must carry the CE mark.**

**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
- 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. A maximum 20 modules (two full chains) can be operated on one OPTOTRONIC® 12V 120W. A maximum of 10 modules (one full chain) can be operated on one OPTOTRONIC® 12V 60W.
- If more than 20 LED-Module (two full chains) on one OPTOTRONIC® 120W are connected, then a new separated electronic feeding is necessary.
- Cutting within the chain is only allowed between the wiring of the modules.
- If IP68 is necessary, then suitable connectors (IP68) are needed at the beginning and at the end of the module chain, to prevent water and moisture coming into the cables.
- Pay attention to ESD steps when mounting the module.
- When using power supplies other than OSRAM OPTOTRONIC®, in order to ensure continuous safe operation, the output voltage has to be 12.0V +1.0V
- LED modules are dimmable by means of PWM (pulse width modulation). It is recommended using the following OSRAM control gears: OPTOTRONIC® OT DIM, OT DALI DIM, OT DALI DIM LI
- 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 adherends 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.
- To ensure uniform illumination, a reflective matt white surface is generally recommended for all internal frame walls and back panels of light boxes.

## Ordering Guide

Productgroup	Product	EAN	Sales Unit
BoxLED L Plus G3	BX-L-PL-765 G3	4052899990081*	5
BoxLED L Plus G3	BX-L-PL-840 G3	4052899990760*	5

\*) EAN: Ordering number per single chain

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



Productgroup	Product	EAN	Sales Unit
Accessory Mounting Profile	BX-MP	4008321981110*	24

\*) EAN: Ordering number per single Mounting Profile

## 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.