

BoxLED ECO M Plus G3

LED modules for light advertising and backlighting



Areas of application

- Signage and illuminated advertising
- Illumination of single and double-sided light boxes
- Permanent outdoor use in enclosed light boxes

Product benefits

- Modules are compatible with the BoxLED mounting profile
- Uniform illumination thanks to optimized elliptical lenses
- Several options for quick and simple mounting: bolting or snap-in
- Excellent module efficacy
- Cost-effective solution with reliable performance
- 5 year guarantee

Product features

- Chain of 32 linear LED modules
- Connected with flexible cables
- Type of protection (modules): IP66
- Fully integrated heat sink



Product family datasheet

Technical data

Electrical data

Product description	Nominal voltage	Nominal wattage per LED module	Rated wattage	Reverse Voltage	Input voltage range	Type of current
BX-ECO-M-PL 830 ¹⁾	24.0 V	3.1 W	99.80 W	24 V	23...25 V	DC
BX-ECO-M-PL 840 ¹⁾	24.0 V	3.1 W	99.80 W	24 V	23...25 V	DC
BX-ECO-M-PL 865 ¹⁾	24.0 V	3.1 W	99.80 W	24 V	23...25 V	DC

¹⁾ See product remark

Photometrical data

Product description	Color temperature	Color rendering index Ra	Light color (designation)	Light color LED	Total useful luminous flux	Luminous flux per module chain
BX-ECO-M-PL 830 ¹⁾	3000 K	80	Warm White	White	9427 lm	10474 lm
BX-ECO-M-PL 840 ¹⁾	4000 K	80	Neutral White	White	9427 lm	10474 lm
BX-ECO-M-PL 865 ¹⁾	6500 K	80	Daylight	White	9085 lm	10094 lm

Product description	Luminous efficacy
BX-ECO-M-PL 830 ¹⁾	105 lm/W
BX-ECO-M-PL 840 ¹⁾	105 lm/W
BX-ECO-M-PL 865 ¹⁾	101 lm/W

¹⁾ See product remark

Light technical data

Product description	Beam angle
BX-ECO-M-PL 830 ¹⁾	12 ° x 60 °
BX-ECO-M-PL 840 ¹⁾	12 ° x 60 °
BX-ECO-M-PL 865 ¹⁾	12 ° x 60 °

¹⁾ See product remark

Product family datasheet

LED module information

Product description	Number of LEDs per module	Number of LED modules per chain	Minimum operable number of LED modules
BX-ECO-M-PL 830 ¹⁾	6	32	1
BX-ECO-M-PL 840 ¹⁾	6	32	1
BX-ECO-M-PL 865 ¹⁾	6	32	1

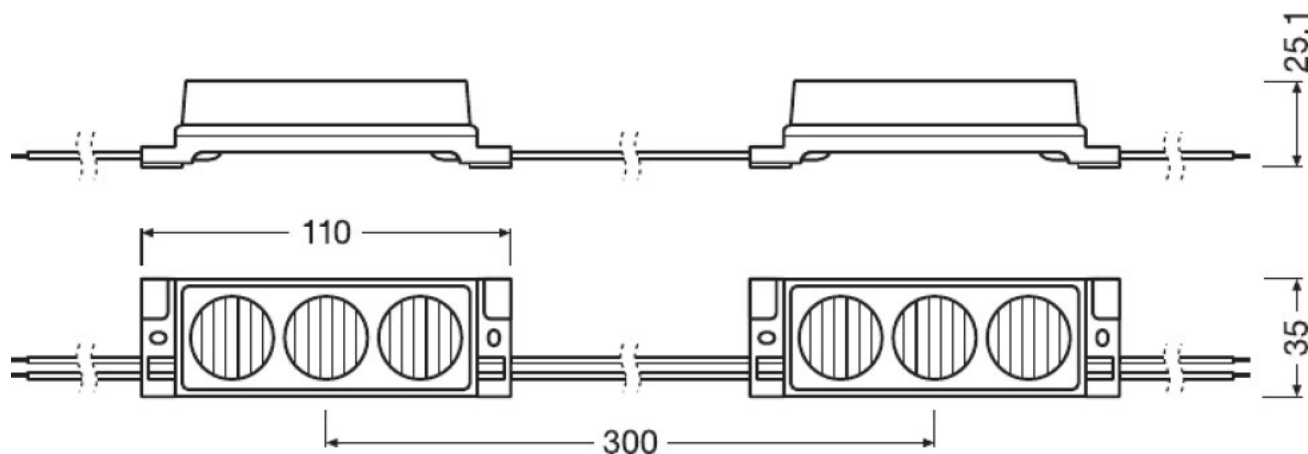
¹⁾ See product remark

Dimensions & weight

Product description	Construction length	Rated width	Rated height	Product weight
BX-ECO-M-PL 830 ¹⁾	9880.0 mm	35.0 mm	25.00 mm	1906.00 g
BX-ECO-M-PL 840 ¹⁾	9880.0 mm	35.0 mm	25.00 mm	1906.00 g
BX-ECO-M-PL 865 ¹⁾	9880.0 mm	35.0 mm	25.00 mm	1906.00 g

¹⁾ See product remark

Product line drawing



BX-ECO-M-PL 830, BX-ECO-M-PL 840, BX-ECO-M-PL 865

Product family datasheet

Temperatures & operating conditions

Product description	Temperature range in operation at Tc point
BX-ECO-M-PL 830 ¹⁾	-25...55 °C
BX-ECO-M-PL 840 ¹⁾	-25...55 °C
BX-ECO-M-PL 865 ¹⁾	-25...55 °C

¹⁾ See product remark

Capabilities

Product description	Dimmable	Dimming range
BX-ECO-M-PL 830 ¹⁾	Yes	1...100 %
BX-ECO-M-PL 840 ¹⁾	Yes	1...100 %
BX-ECO-M-PL 865 ¹⁾	Yes	1...100 %

¹⁾ See product remark

Certificates & standards

Product description	Energy consumption	Energy efficiency class	Type of protection
BX-ECO-M-PL 830 ¹⁾	100 kWh/1000h	A+	IP66
BX-ECO-M-PL 840 ¹⁾	100 kWh/1000h	A+	IP66
BX-ECO-M-PL 865 ¹⁾	100 kWh/1000h	A+	IP66

Product description	Standards
BX-ECO-M-PL 830 ¹⁾	Acc. to IEC 62471/Acc. to IEC 60598-1/Acc. to EN 60529/Acc. to EN 62031/Acc. to EN 55015/Acc. to EN 61547
BX-ECO-M-PL 840 ¹⁾	Acc. to IEC 62471/Acc. to IEC 60598-1/Acc. to EN 60529/Acc. to EN 62031/Acc. to EN 55015/Acc. to EN 61547
BX-ECO-M-PL 865 ¹⁾	Acc. to IEC 62471/Acc. to IEC 60598-1/Acc. to EN 60529/Acc. to EN 62031/Acc. to EN 55015/Acc. to EN 61547

¹⁾ See product remark

Product family datasheet

Logistical data

Product description	Temperature range at storage
BX-ECO-M-PL 830 ¹⁾	-25...85 °C
BX-ECO-M-PL 840 ¹⁾	-25...85 °C
BX-ECO-M-PL 865 ¹⁾	-25...85 °C

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

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.
- 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 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 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.














Product family datasheet

- 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.
- To ensure uniform illumination, a reflective matt white surface is generally recommended for all internal frame walls and back panels of light boxes.
- The insulation is designed for working voltage of 50 VDC.
- Optimal homogeneous backlighting through sidelighting for installation depth (distance between backplane of light box and surface) of 120 mm.

Sales and Technical Support

Sales and Technical Support www.osram.com

Download Data

File	
	User instruction 727001_User instruction BoxLED Eco M Plus G3
	Declarations of conformity 727531_EC BoxLED ECO M PLUS
	Declarations of conformity 727533_Manufacturer's Declaration BoxLED M PLUS
	Declarations of conformity Manufacturer declaration BoxLED M Plus G3
	Declarations of conformity Declaration of conformity BoxLED M Plus G3
	CAD data 729516_BoxLED_Eco_M_Plus_G3_BX-ECO-M-PL G3_IGS
	CAD data 3-dim 729517_BoxLED_Eco_M_Plus_G3_BX-ECO-M-PL G3_STEP
	CAD data PDF 727027_BoxLED ECO M Plus G3
	CAD data PDF 727034_BoxLED Eco M Plus G3 Technical drawing
	Eulumdat 727022_BoxLED Eco M Plus 3000K EULUMDAT
	IES data 727021_BoxLED Eco M Plus 3000K EULUMDAT
	Eulumdat 727024_BoxLED Eco M Plus 4000K EULUMDAT
	IES data 727023_BoxLED Eco M Plus 4000K EULUMDAT

Product family datasheet



Eulumdat
727026_BoxLED Eco M Plus 6500K EULUMDAT



IES data
727025_BoxLED Eco M Plus 6500K EULUMDAT

Logistical Data

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
4052899947030	BX-ECO-M-PL 830	Shipping carton box 5	495 mm x 255 mm x 390 mm	49.23 dm ³	12335.00 g
4052899947016	BX-ECO-M-PL 840	Shipping carton box 5	495 mm x 255 mm x 390 mm	49.23 dm ³	12335.00 g
4052899946996	BX-ECO-M-PL 865	Shipping carton box 5	495 mm x 255 mm x 390 mm	49.23 dm ³	12335.00 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.

References / Links

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

- ▶ www.osram.com/system-guarantee

Disclaimer

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