

## BoxLED 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
- Consistent white light (Standard Deviation of Color Matching SDCM: < 3)
- Very long lifetime
- ENEC certified
- 5 year guarantee

### Product features

- Chain of 32 linear LED modules
- Connected with flexible cables
- Maximum length of one chain: 9.60 m
- Type of protection (modules): IP66 and IP68
- Type of protection: IP65
- Special robust encapsulation



## Product family datasheet

- Fully integrated heat sink

## Product family datasheet

### Technical data

#### Electrical data

Product description	Nominal voltage	Nominal wattage per chain	Nominal wattage per LED module	Rated wattage	Reverse Voltage	Input voltage range
BX-M-PL 865 <sup>1)</sup>	24.0 V	96.00 W	3.0 W	96.00 W	25 V	23...25 V
BX-M-PL 840 <sup>1)</sup>	24.0 V	96.00 W	3.0 W	96.00 W	25 V	23...25 V
BX-M-PL 830 <sup>1)</sup>	24.0 V	96.00 W	3.0 W	96.00 W	25 V	23...25 V

Product description	Type of current
BX-M-PL 865 <sup>1)</sup>	DC
BX-M-PL 840 <sup>1)</sup>	DC
BX-M-PL 830 <sup>1)</sup>	DC

<sup>1)</sup> 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/](http://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

#### 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	Luminous flux per LED module
BX-M-PL 865 <sup>1)</sup>	3000 K	>80	Warm White	White	8419 lm	9760 lm	305 lm
BX-M-PL 840 <sup>1)</sup>	4000 K	>80	Neutral White	White	8947 lm	10200 lm	318.75 lm
BX-M-PL 830 <sup>1)</sup>	6500 K	>80	Cool Daylight	White	8850 lm	10200 lm	318.75 lm

Product description	Nominal useful luminous flux 90°	Rated useful luminous flux 90°	Luminous efficacy	Rated peak intensity	Standard deviation of color matching
BX-M-PL 865 <sup>1)</sup>	6311 lm	6311 lm	102 lm/W	461 cd	≤3 sdc
BX-M-PL 840 <sup>1)</sup>	6691 lm	6691 lm	106 lm/W	485 cd	≤3 sdc
BX-M-PL 830 <sup>1)</sup>	6641 lm	6641 lm	106 lm/W	499 cd	≤3 sdc

<sup>1)</sup> 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/](http://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

## Product family datasheet

### Light technical data

Product description	Starting time	Warm-up time (60 %)	Beam angle
BX-M-PL 865 <sup>1)</sup>	0.0 s	0.10 s	12 ° x 70 °
BX-M-PL 840 <sup>1)</sup>	0.0 s	0.10 s	12 ° x 70 °
BX-M-PL 830 <sup>1)</sup>	0.0 s	0.10 s	12 ° x 70 °

<sup>1)</sup> 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/](http://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

### LED module information

Product description	Number of LEDs per module	Number of LED modules per chain	Minimum operable number of LED modules
BX-M-PL 865 <sup>1)</sup>	12	32	1
BX-M-PL 840 <sup>1)</sup>	12	32	1
BX-M-PL 830 <sup>1)</sup>	12	32	1

<sup>1)</sup> 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/](http://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

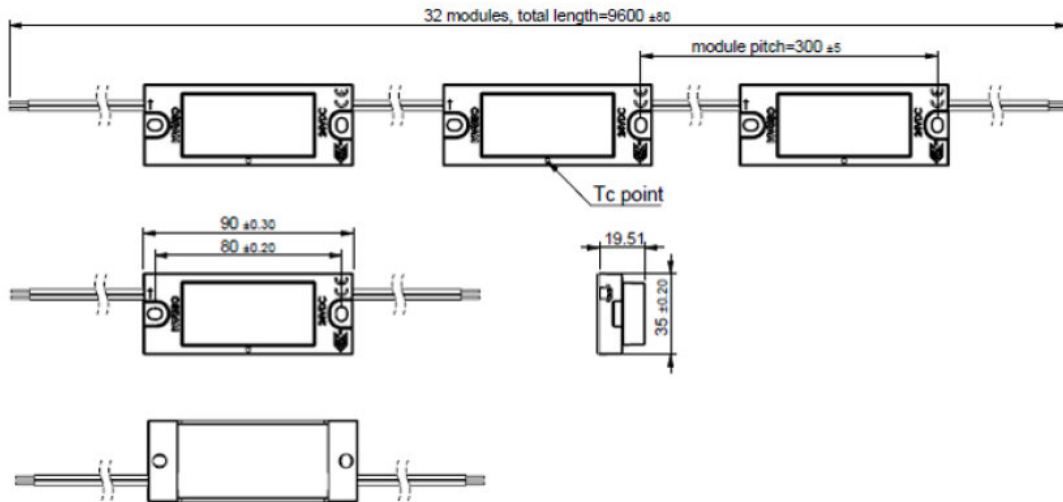
### Dimensions & weight

Product description	Construction length	Rated width	Rated height	Product weight
BX-M-PL 865 <sup>1)</sup>	0.0	35.0 mm	19.50 mm	1600.00 g
BX-M-PL 840 <sup>1)</sup>	0.0	35.0 mm	19.50 mm	1600.00 g
BX-M-PL 830 <sup>1)</sup>	0.0	35.0 mm	19.50 mm	1600.00 g

<sup>1)</sup> 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/](http://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

# Product family datasheet

## Product line drawing



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

## Temperatures & operating conditions

Product description	Temperature range in operation
BX-M-PL 865 <sup>1)</sup>	-25...55 °C
BX-M-PL 840 <sup>1)</sup>	-25...55 °C
BX-M-PL 830 <sup>1)</sup>	-25...55 °C

<sup>1)</sup> 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/](http://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

## Lifespan

Product description	Lumen main. fact. at end of nom. life time	Nominal lamp life time	Rated lamp life time	Number of switching cycles
BX-M-PL 865 <sup>1)</sup>	0.70	50000 h	50000 h	15000
BX-M-PL 840 <sup>1)</sup>	0.70	50000 h	50000 h	15000
BX-M-PL 830 <sup>1)</sup>	0.70	50000 h	50000 h	15000

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## Product family datasheet

the typical values

### Capabilities

Product description	Dimmable	Dimming range
BX-M-PL 865 <sup>1)</sup>	Yes	1...100 %
BX-M-PL 840 <sup>1)</sup>	Yes	1...100 %
BX-M-PL 830 <sup>1)</sup>	Yes	1...100 %

<sup>1)</sup> 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](http://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

### Certificates & standards

Product description	Energy consumption	Energy efficiency class	Type of protection
BX-M-PL 865 <sup>1)</sup>	1 kWh/1000h	A	IP66/IP68
BX-M-PL 840 <sup>1)</sup>	1 kWh/1000h	A	IP66/IP68
BX-M-PL 830 <sup>1)</sup>	1 kWh/1000h	A	IP66/IP68

Product description	Standards
BX-M-PL 865 <sup>1)</sup>	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/ENEC
BX-M-PL 840 <sup>1)</sup>	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/ENEC
BX-M-PL 830 <sup>1)</sup>	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/ENEC

<sup>1)</sup> 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](http://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

### Logistical data

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

<sup>1)</sup> 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](http://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

## Product family datasheet











### Application advice

For more detailed application information and graphics please see product datasheet.

### Sales and Technical Support

Sales and Technical Support [www.osram.com](http://www.osram.com)

### Download Data

File	
	User instruction User Instruction BoxLED M Plus G3
	Certificates ENEC Certificate BoxLED M Plus G3
	Certificates UL Certificate BX-M-PL G3 and BXI-L-PL G3
	Declarations of conformity Manufacturer declaration BoxLED M Plus G3
	Declarations of conformity Declaration of conformity BoxLED M Plus G3
	CAD data CAD Data BoxLED M Plus G3 IGS
	CAD data 3-dim CAD Data BoxLED M Plus G3 STEP
	CAD data PDF CAD PDF BoxLED M Plus G3
	Eulumdat Eulumdat BoxLED M Plus G3 LDT
	IES data Eulumdat BoxLED M Plus G3 IES

### Logistical Data

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
4052899493193	BX-M-PL 865	Shipping carton box 5	423 mm x 260 mm x 353 mm	38.82 dm <sup>3</sup>	10296.00 g
4052899493179	BX-M-PL 840	Shipping carton box 5	423 mm x 260 mm x 353 mm	38.82 dm <sup>3</sup>	10296.00 g
4052899493155	BX-M-PL 830	Shipping carton box 5	423 mm x 260 mm x 353 mm	38.82 dm <sup>3</sup>	10296.00 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.

## Product family datasheet

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### References / Links

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

- ▶ [www.osram.com/system-guarantee](http://www.osram.com/system-guarantee)

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### Disclaimer

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