

BackLED M CP G5 HF

LED modules for light advertising and backlighting



Product family features

- LED chain comprising 40 LED modules connected by flexible cables
- Each LED module contains 2 LEDs
- LED module pitch variable between 60 and ~ 200 mm
- Compatible with OSRAM OPTOTRONIC constant voltage drivers / dimmers
- Color consistency in 3 SDCM
- Patented Square Lens technology
- Wide CCT and color options available
- IP66 rating
- Lifetime (L70/B50): up to 50,000 h (temperature at $T_c = 70$ °C)
- 5-year warranty @ $T_a = 70$ °C

Product family benefits

- High module efficacy: up to 135 lm/W
- Uniform light pattern design for 60-200 mm lightbox depth
- Backside injection technology for high protection level
- Halogen free without gas hazard
- Flammability resistance material selection fit UL-94 V0

Areas of application

- Channel letters
- Signage boxes
- Luminous areas and ceilings



Product family datasheet

Technical data

Electrical data

Product description	Nominal voltage	Nominal wattage per chain	Nominal wattage per LED module	Accidental reverse input voltage protection up to	Input voltage range	Type of current
BA-M-CP-810-24-HF -G5 ¹⁾	24.0 V	24.00 W	0.6 W	25 V	23.4...24.9 V	DC
BA-M-CP-880-24-HF -G5 ¹⁾	24.0 V	24.00 W	0.6 W	25 V	23.4...24.9 V	DC
BA-M-CP-871-24-HF -G5 ¹⁾	24.0 V	24.00 W	0.6 W	25 V	23.4...24.9 V	DC
BA-M-CP-865-24-HF -G5 ¹⁾	24.0 V	24.00 W	0.6 W	25 V	23.4...24.9 V	DC
BA-M-CP-840-24-HF -G5 ¹⁾	24.0 V	24.00 W	0.6 W	25 V	23.4...24.9 V	DC
BA-M-CP-830-24-HF -G5 ¹⁾	24.0 V	24.00 W	0.6 W	25 V	23.4...24.9 V	DC

¹⁾ See product remark

Photometrical data

Product description	Color temperature	Color rendering index Ra	Light color LED	Luminous flux per module chain	Luminous flux per LED module	Luminous efficacy	Standard deviation of color matching
BA-M-CP-810-24-HF -G5 ¹⁾	10000 K	80	Cool white	3067 lm	77 lm	128 lm/W	≤3 sdc
BA-M-CP-880-24-HF -G5 ¹⁾	8000 K	80	Cool white	3067 lm	77 lm	128 lm/W	≤3 sdc
BA-M-CP-871-24-HF -G5 ¹⁾	7100 K	80	Cool white	3067 lm	77 lm	128 lm/W	≤3 sdc
BA-M-CP-865-24-HF -G5 ¹⁾	6500 K	80	Cool white	3333 lm	83 lm	138 lm/W	≤3 sdc
BA-M-CP-840-24-HF -G5 ¹⁾	4000 K	80	Neutral white	3200 lm	80 lm	133 lm/W	≤3 sdc
BA-M-CP-830-24-HF -G5 ¹⁾	3000 K	80	Warm white	3200 lm	80 lm	133 lm/W	≤3 sdc

¹⁾ See product remark

Light technical data

Product description	Beam angle
BA-M-CP-810-24-HF -G5 ¹⁾	155 °
BA-M-CP-880-24-HF -G5 ¹⁾	155 °
BA-M-CP-871-24-HF -G5 ¹⁾	155 °
BA-M-CP-865-24-HF -G5 ¹⁾	155 °
BA-M-CP-840-24-HF -G5 ¹⁾	155 °
BA-M-CP-830-24-HF -G5 ¹⁾	155 °

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
BA-M-CP-810-24-HF -G5 ¹⁾	2	40	1
BA-M-CP-880-24-HF -G5 ¹⁾	2	40	1
BA-M-CP-871-24-HF -G5 ¹⁾	2	40	1
BA-M-CP-865-24-HF -G5 ¹⁾	2	40	1
BA-M-CP-840-24-HF -G5 ¹⁾	2	40	1
BA-M-CP-830-24-HF -G5 ¹⁾	2	40	1

¹⁾ See product remark

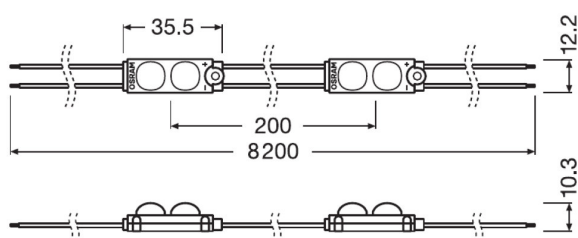
Dimensions & weight

Product description	Length	Width	Height	Product weight
BA-M-CP-810-24-HF -G5 ¹⁾	8200 mm	12.2 mm	10.3 mm	225.00 g
BA-M-CP-880-24-HF -G5 ¹⁾	8200 mm	12.2 mm	10.3 mm	225.00 g
BA-M-CP-871-24-HF -G5 ¹⁾	8200 mm	12.2 mm	10.3 mm	225.00 g
BA-M-CP-865-24-HF -G5 ¹⁾	8200 mm	12.2 mm	10.3 mm	225.00 g
BA-M-CP-840-24-HF -G5 ¹⁾	8200 mm	12.2 mm	10.3 mm	225.00 g
BA-M-CP-830-24-HF -G5 ¹⁾	8200 mm	12.2 mm	10.3 mm	225.00 g

¹⁾ See product remark

Product family datasheet

Product line drawing



BA-M-CP-810-24-HF -G5, BA-M-CP-880-24-HF -G5, BA-M-CP-871-24-HF -G5, BA-M-CP-865-24-HF -G5, BA-M-CP-840-24-HF -G5, BA-M-CP-830-24-HF -G5

Temperatures & operating conditions

Product description	Temperature range in operation at Tc point	Temperature range at storage
BA-M-CP-810-24-HF -G5 ¹⁾	-25...70 °C	-25...85 °C
BA-M-CP-880-24-HF -G5 ¹⁾	-25...70 °C	-20...85 °C
BA-M-CP-871-24-HF -G5 ¹⁾	-25...70 °C	-20...85 °C
BA-M-CP-865-24-HF -G5 ¹⁾	-25...70 °C	-20...85 °C
BA-M-CP-840-24-HF -G5 ¹⁾	-25...70 °C	-20...85 °C
BA-M-CP-830-24-HF -G5 ¹⁾	-25...70 °C	-25...85 °C

¹⁾ See product remark

Product family datasheet

Lifespan

Product description	Lifespan
BA-M-CP-810-24-HF -G5 ¹⁾	50000 h
BA-M-CP-880-24-HF -G5 ¹⁾	50000 h
BA-M-CP-871-24-HF -G5 ¹⁾	50000 h
BA-M-CP-865-24-HF -G5 ¹⁾	50000 h
BA-M-CP-840-24-HF -G5 ¹⁾	50000 h
BA-M-CP-830-24-HF -G5 ¹⁾	50000 h

¹⁾ See product remark

Additional product data

Product description	ID of contained light source
BA-M-CP-810-24-HF -G5 ¹⁾	LS_SHZ_601001
BA-M-CP-880-24-HF -G5 ¹⁾	LS_SHZ_601006
BA-M-CP-871-24-HF -G5 ¹⁾	LS_SHZ_601005
BA-M-CP-865-24-HF -G5 ¹⁾	LS_SHZ_601004
BA-M-CP-840-24-HF -G5 ¹⁾	LS_SHZ_601003
BA-M-CP-830-24-HF -G5 ¹⁾	LS_SHZ_601002

¹⁾ See product remark

Capabilities

Product description	Dimmable	Dimming range
BA-M-CP-810-24-HF -G5 ¹⁾	Yes	1...100 %
BA-M-CP-880-24-HF -G5 ¹⁾	Yes	1...100 %
BA-M-CP-871-24-HF -G5 ¹⁾	Yes	1...100 %
BA-M-CP-865-24-HF -G5 ¹⁾	Yes	1...100 %
BA-M-CP-840-24-HF -G5 ¹⁾	Yes	1...100 %
BA-M-CP-830-24-HF -G5 ¹⁾	Yes	1...100 %

¹⁾ See product remark

Product family datasheet

Certificates & standards

Product description	Energy consumption	Type of protection	Standards
BA-M-CP-810-24-HF -G5 ¹⁾	24 kWh/1000h	IP66	Acc. to EN 62471:2008/Acc. to IEC 62031/ENEC/CE/UL
BA-M-CP-880-24-HF -G5 ¹⁾	24 kWh/1000h	IP66	Acc. to EN 62471:2008/Acc. to IEC 62031/ENEC/CE/UL
BA-M-CP-871-24-HF -G5 ¹⁾	24 kWh/1000h	IP66	Acc. to EN 62471:2008/Acc. to IEC 62031/ENEC/CE/UL
BA-M-CP-865-24-HF -G5 ¹⁾	24 kWh/1000h	IP66	Acc. to EN 62471:2008/Acc. to IEC 62031/ENEC/CE/UL
BA-M-CP-840-24-HF -G5 ¹⁾	24 kWh/1000h	IP66	Acc. to EN 62471:2008/Acc. to EN 62031/ENEC/CE/UL
BA-M-CP-830-24-HF -G5 ¹⁾	1 kWh/1000h	IP66	Acc. to EN 62471:2008/Acc. to IEC 62031/ENEC/CE/UL

¹⁾ See product remark

Logistical data

Product description	Commodity code
BA-M-CP-810-24-HF -G5 ¹⁾	853951000000
BA-M-CP-880-24-HF -G5 ¹⁾	853951000000
BA-M-CP-871-24-HF -G5 ¹⁾	853951000000
BA-M-CP-865-24-HF -G5 ¹⁾	853951000000
BA-M-CP-840-24-HF -G5 ¹⁾	853951000000
BA-M-CP-830-24-HF -G5 ¹⁾	853951000000

¹⁾ See product remark

Product family datasheet

Environmental information Information according Art. 33 of EU Regulation (EC) 1907/2006 (REACH)

Product description	Date of Declaration	Primary Article Identifier	Candidate List Substance 1
BA-M-CP-810-24-HF -G5 ¹⁾	23-05-2022	4052899627888	No declarable substances contained
BA-M-CP-880-24-HF -G5 ¹⁾	23-05-2022	4052899627895	No declarable substances contained
BA-M-CP-871-24-HF -G5 ¹⁾	23-05-2022	4052899627901	No declarable substances contained
BA-M-CP-865-24-HF -G5 ¹⁾	23-05-2022	4052899627918	No declarable substances contained
BA-M-CP-840-24-HF -G5 ¹⁾	23-05-2022	4052899627925	No declarable substances contained
BA-M-CP-830-24-HF -G5 ¹⁾	23-05-2022	4052899627932	No declarable substances contained

Product description	Declaration No. in SCIP database
BA-M-CP-810-24-HF -G5 ¹⁾	No declarable substances contained
BA-M-CP-880-24-HF -G5 ¹⁾	No declarable substances contained
BA-M-CP-871-24-HF -G5 ¹⁾	No declarable substances contained
BA-M-CP-865-24-HF -G5 ¹⁾	No declarable substances contained
BA-M-CP-840-24-HF -G5 ¹⁾	No declarable substances contained
BA-M-CP-830-24-HF -G5 ¹⁾	No declarable substances contained

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)/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

Application advice

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

Product family datasheet













Additional product information

- The expected lifetime may be reduced or the LED modules may be destroyed if the maximum operating and storage temperature ratings are exceeded;
- Exceeding the maximum ratings for the operating voltage causes hazardous overload and will likely destroy the LED module.
- The temperature of the LED modules must be measured at the Tc-point in accordance with EN 60598-1 in a thermally constant status with a temperature sensor or a temperature-sensitive label must be available. For the exact location of the Tc-point see User Instructions of the product;

Sales and Technical Support

Sales and Technical Support www.osram.com

Download Data

File	
	User instruction BackLED CP G5 User Instruction 20210730
	Product Datasheet product datasheet BackLED M CP 24V G5
	Brochures Technical application guide BackLED and BoxLED portfolio (EN)
	Certificates ENEC of BackLED CP G5
	Certificates UL certificate of Compliance BackLED CP G5
	CAD data 3-dim 3D drawing of BackLED CP 24V G5 MHOHFS
	IES data IES file of BA M CP 810 24 G5
	IES data IES file of BA M CP 880 24 G5
	IES data IES file of BA M CP 871 24 G5
	IES data IES file of BA M CP 865 24 G5
	IES data IES file of BA M CP 840 24 G5
	IES data IES file of BA M CP 830 24 G5

Product family datasheet

Logistical Data

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
4052899627888	BA-M-CP-810-24-HF -G5	Shipping carton box 30	355 mm x 255 mm x 240 mm	21.73 dm ³	7490.00 g
4052899627895	BA-M-CP-880-24-HF -G5	Shipping carton box 30	355 mm x 255 mm x 240 mm	21.73 dm ³	7490.00 g
4052899627901	BA-M-CP-871-24-HF -G5	Shipping carton box 30	355 mm x 255 mm x 240 mm	21.73 dm ³	7490.00 g
4052899627918	BA-M-CP-865-24-HF -G5	Shipping carton box 30	355 mm x 255 mm x 240 mm	21.73 dm ³	7490.00 g
4052899627925	BA-M-CP-840-24-HF -G5	Shipping carton box 30	355 mm x 255 mm x 240 mm	21.73 dm ³	7490.00 g
4052899627932	BA-M-CP-830-24-HF -G5	Shipping carton box 30	355 mm x 255 mm x 240 mm	21.73 dm ³	7490.00 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.

Accessories Optional

Product description	Accessory name	Accessory code
BA-M-CP-810-24-HF -G5	BA -MP-SM-G5-2M	▶ 4052899629196
BA-M-CP-810-24-HF -G5	BA -CLIP-SM-G5	▶ 4052899629349
BA-M-CP-880-24-HF -G5	BA -MP-SM-G5-2M	▶ 4052899629196
BA-M-CP-880-24-HF -G5	BA -CLIP-SM-G5	▶ 4052899629349
BA-M-CP-871-24-HF -G5	BA -MP-SM-G5-2M	▶ 4052899629196
BA-M-CP-871-24-HF -G5	BA -CLIP-SM-G5	▶ 4052899629349
BA-M-CP-865-24-HF -G5	BA -MP-SM-G5-2M	▶ 4052899629196
BA-M-CP-865-24-HF -G5	BA -CLIP-SM-G5	▶ 4052899629349
BA-M-CP-840-24-HF -G5	BA -MP-SM-G5-2M	▶ 4052899629196
BA-M-CP-840-24-HF -G5	BA -CLIP-SM-G5	▶ 4052899629349
BA-M-CP-830-24-HF -G5	BA -MP-SM-G5-2M	▶ 4052899629196
BA-M-CP-830-24-HF -G5	BA -CLIP-SM-G5	▶ 4052899629349

Disclaimer

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