

PrevaLED Cube G3

Spot-, Down- and Wallmount Light Engines and Modules



Areas of application

- Suitable for diffuser and reflector luminaires
- Hospitality, hotels, restaurants
- Public and commercial buildings
- Offices
- Secondary rooms, garages, storerooms, cellars

Product family benefits

- Low height for compact luminaire designs
- Near Lambertian light distribution at 110° beam angle for high quality of light
- Robust design for easy thermal management and long lifetime



Product family datasheet

Product family features

- Consistent white light: < 3 SDCM
- Temperature at t_p point (according to IEC/PAS 62717): 75 °C
- Diameter of light emitting surface: 61 mm
- Lifetime (L70/B50): 50,000 h (temperature at $T_c = 75$ °C)
- Common mechanic and optical connection for standard heat sinks and reflectors
- LEDset2 interface for operation with OTi DALI drivers
- Current setting and thermal shutdown via LEDset2 interface
- LED module is basic isolated to mounting surface
- Photobiological safety according to IEC/TR 62778, risk group RG1
- Max. working voltage: 60 V (to be operated only on SELV LED control gear)

Product family datasheet

Technical data

Electrical data

Product description	Nominal wattage	Rated wattage	Nominal current	Nominal voltage	Type of current
PL-CUBE -3000-840-G3	23.30 W	23.30 W	0.698 A	33.0 V	DC
PL-CUBE -2000-830-G3	14.90 W	14.90 W	0.453 A	33.0 V	DC
PL-CUBE -2000-840-G3	14.90 W	39.48 W	0.453 A	33.0 V	DC
PL-CUBE -1100-830-G3	8.30 W	8.30 W	0.375 A	22.0 V	DC
PL-CUBE -1100-840-G3	8.30 W	29.61 W	0.375 A	22.0 V	DC
PL-CUBE -3000-830-G3	23.30 W	23.30 W	0.698 A	33.0 V	DC
PL-CUBE -5000-830-G3	43.10 W	43.10 W	1.035 A	42.0 V	DC
PL-CUBE -5000-840-G3	43.10 W	43.10 W	1.035 A	42.0 V	DC

Photometrical data

Product description	Total useful luminous flux	Luminous efficacy	Standard deviation of color matching	Rated useful luminous flux 120°
PL-CUBE -3000-840-G3	3000 lm	129 lm/W	≤3 sdc	2396 lm
PL-CUBE -2000-830-G3	2000 lm	134 lm/W	≤3 sdc	1597 lm
PL-CUBE -2000-840-G3	2000 lm	134 lm/W	≤3 sdc	1597 lm
PL-CUBE -1100-830-G3	1100 lm	133 lm/W	≤3 sdc	879 lm
PL-CUBE -1100-840-G3	1100 lm	133 lm/W	≤3 sdc	879 lm
PL-CUBE -3000-830-G3	3000 lm	129 lm/W	≤3 sdc	2396 lm
PL-CUBE -5000-830-G3	5000 lm	116 lm/W	≤3 sdc	3994 lm
PL-CUBE -5000-840-G3	5000 lm	116 lm/W	≤3 sdc	3994 lm

Light technical data

Product description	Rated beam angle (half peak value)	Starting time	Warm-up time (60 %)
PL-CUBE -3000-840-G3	110.00 °	0.5 s	< 2.00 s
PL-CUBE -2000-830-G3	110.00 °	0.5 s	< 2.00 s
PL-CUBE -2000-840-G3	110.00 °	0.5 s	< 2.00 s
PL-CUBE -1100-830-G3	110.00 °	0.5 s	< 2.00 s
PL-CUBE -1100-840-G3	110.00 °	0.5 s	< 2.00 s
PL-CUBE -3000-830-G3	110.00 °	0.5 s	< 2.00 s
PL-CUBE -5000-830-G3	110.00 °	0.5 s	< 2.00 s
PL-CUBE -5000-840-G3	110.00 °	0.5 s	< 2.00 s

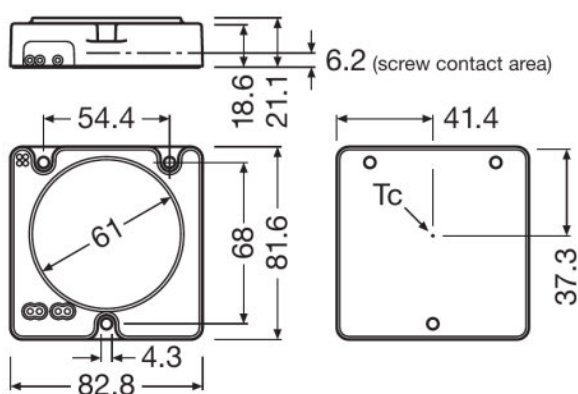
Product family datasheet

Dimensions & weight

Product description	Rated width	Construction length	Rated height	Product weight
PL-CUBE -3000-840-G3	81.6 mm ¹⁾	82.8 mm ¹⁾	21.10 mm ¹⁾	50.00 g
PL-CUBE -2000-830-G3	81.6 mm ¹⁾	82.8 mm ¹⁾	21.10 mm ¹⁾	50.00 g
PL-CUBE -2000-840-G3	130.0 mm ¹⁾	130.0 mm ¹⁾	21.10 mm ¹⁾	50.00 g
PL-CUBE -1100-830-G3	81.6 mm ¹⁾	82.8 mm ¹⁾	21.10 mm ¹⁾	50.00 g
PL-CUBE -1100-840-G3	102.0 mm ¹⁾	102.0 mm ¹⁾	21.10 mm ¹⁾	50.00 g
PL-CUBE -3000-830-G3	81.6 mm ¹⁾	82.8 mm ¹⁾	21.10 mm ¹⁾	50.00 g
PL-CUBE -5000-830-G3	78.7 mm ¹⁾	83.8 mm ¹⁾	20.32 mm ¹⁾	61.69 g
PL-CUBE -5000-840-G3	78.7 mm ¹⁾	83.8 mm ¹⁾	20.32 mm ¹⁾	61.69 g

¹⁾ general tolerances ISO 2768-c

Product line drawing



PL-CUBE -3000-840-G3, PL-CUBE -2000-830-G3, PL-CUBE -2000-840-G3, PL-CUBE -1100-830-G3, PL-CUBE -1100-840-G3, PL-CUBE -3000-830-G3, PL-CUBE -5000-830-G3, PL-CUBE -5000-840-G3

Product family datasheet

Temperatures & operating conditions

Product description	Performance temp. acc. to IEC 62717	Maximum temperature at tc test point	Ambient temperature range	Temperature range at storage
PL-CUBE -3000-840-G3	75 °C	90 °C	-20...+50 °C ¹⁾	
PL-CUBE -2000-830-G3	75 °C	90 °C	-20...+50 °C ¹⁾	
PL-CUBE -2000-840-G3	75 °C	90 °C	-20...+50 °C ¹⁾	
PL-CUBE -1100-830-G3	75 °C	90 °C	-20...+50 °C ¹⁾	
PL-CUBE -1100-840-G3	75 °C	90 °C	-20...+50 °C ¹⁾	
PL-CUBE -3000-830-G3	75 °C	90 °C	-20...+50 °C ¹⁾	
PL-CUBE -5000-830-G3	75 °C	90 °C	-20...+45 °C ¹⁾	-20...85 °C
PL-CUBE -5000-840-G3	75 °C	90 °C	-20...+45 °C ¹⁾	-20...85 °C

¹⁾ $T_a^{(rated)} = 25\text{ °C}$

Lifespan

Product description	Lumen main. fact. at end of nom. life time	Lifespan	Nominal lamp life time	Rated lamp life time	Number of switching cycles
PL-CUBE -3000-840-G3	0.70	50000 h	50000 h	50000 h	100000
PL-CUBE -2000-830-G3	0.70	50000 h	50000 h	50000 h	100000
PL-CUBE -2000-840-G3	0.70	50000 h	50000 h	50000 h	100000
PL-CUBE -1100-830-G3	0.70	50000 h	50000 h	50000 h	100000
PL-CUBE -1100-840-G3	0.70	50000 h	50000 h	50000 h	100000
PL-CUBE -3000-830-G3	0.70	50000 h	50000 h	50000 h	100000
PL-CUBE -5000-830-G3	0.70	50000 h	50000 h	50000 h	100000
PL-CUBE -5000-840-G3	0.70	50000 h	50000 h	50000 h	100000

Capabilities

Product description	Dimmable
PL-CUBE -3000-840-G3	Yes
PL-CUBE -2000-830-G3	Yes
PL-CUBE -2000-840-G3	Yes
PL-CUBE -1100-830-G3	Yes
PL-CUBE -1100-840-G3	Yes
PL-CUBE -3000-830-G3	Yes
PL-CUBE -5000-830-G3	Yes
PL-CUBE -5000-840-G3	Yes

Product family datasheet

Certificates & standards

Product description	Energy consumption	Energy efficiency class	Standards
PL-CUBE -3000-840-G3	24 kWh/1000h	A+	CE/ENEC
PL-CUBE -2000-830-G3	15 kWh/1000h	A++	CE/ENEC
PL-CUBE -2000-840-G3	15 kWh/1000h	A++	CE/ENEC
PL-CUBE -1100-830-G3	9 kWh/1000h	A++	CE/ENEC
PL-CUBE -1100-840-G3	9 kWh/1000h	A++	CE/ENEC
PL-CUBE -3000-830-G3	24 kWh/1000h	A+	CE/ENEC
PL-CUBE -5000-830-G3	44 kWh/1000h	A+	CE/ENEC
PL-CUBE -5000-840-G3	44 kWh/1000h	A+	CE/ENEC

Logistical data

Product description	Commodity code
PL-CUBE -3000-840-G3	854370909900
PL-CUBE -2000-830-G3	854370909900
PL-CUBE -2000-840-G3	854370909900
PL-CUBE -1100-830-G3	854370909900
PL-CUBE -1100-840-G3	854370909900
PL-CUBE -3000-830-G3	854370909900
PL-CUBE -5000-830-G3	854370909900
PL-CUBE -5000-840-G3	854370909900

Application advice

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

Product family datasheet




Additional product information

- 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.
- The module / light engine has to be mounted to a proper heat sink in order to ensure that the maximum rated temperature at the T_c point will not be exceeded.
- Complies with IEC/EN 62031
- Complies with IEC/EN 61547
- Complies with IEC/EN 61000-3-2
- Complies with EN 55015, CISPR 15
- Complies with IEC/EN 62717
- 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.
- Not suitable for operation with line voltage.
- 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.
- Suitable for luminaires of protection class I, grounding is mandatory to comply with safety standards.
- The LED module itself and all its components must not be stressed mechanically.
- For optimal cooling a thermal interface material should be applied between LED module and heat sink.
- It is highly recommended to use a thermal interface material (TIM). The TIM needs to enable adequate heat transfer, during installation it has to be taken care not to create air inclusions between surfaces. For this purpose it is recommended to use a heat sink with even and clean surfaces.
- The module must not be attached to wood or other flammable materials.
- Protect against splashes!
- The module, as manufactured, has no inherent protection against corrosion. It is the user's responsibility to provide suitable protection against corrosive agents, such as moisture, condensation and other harmful elements.






Sales and Technical Support

Sales and Technical Support www.osram.com

Download Data

File	
	User instruction PrevaLED Cube-G3
	Brochures 684162_Technical application guide PrevaLED Cube G3 LED modules (GB)
	Certificates PL BA ENEC 40031612 161219

Product family datasheet

	Declarations of conformity 664154_EC Declaration of Conformity: PL Cube G3
	CAD data 664803_CAD Data STEP: PrevaLED Cube G3
	CAD data 664807_CAD Data PDF: PrevaLED Cube G3
	CAD data 664808_CAD Data IGES: PrevaLED Cube G3
	CAD data 664809_CAD Datei Parasolid: PrevaLED Cube G3

Logistical Data

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
4052899338661	PL-CUBE -3000-840-G3	Shipping carton box 20	481 mm x 393 mm x 51 mm	9.64 dm ³	1278.00 g
4052899338609	PL-CUBE -2000-830-G3	Shipping carton box 20	481 mm x 393 mm x 51 mm	9.64 dm ³	1278.00 g
4052899338623	PL-CUBE -2000-840-G3	Shipping carton box 20	481 mm x 393 mm x 51 mm	9.64 dm ³	1278.00 g
4052899338562	PL-CUBE -1100-830-G3	Shipping carton box 20	481 mm x 392 mm x 51 mm	9.62 dm ³	1278.00 g
4052899338586	PL-CUBE -1100-840-G3	Shipping carton box 20	481 mm x 393 mm x 51 mm	9.64 dm ³	1278.00 g
4052899338647	PL-CUBE -3000-830-G3	Shipping carton box 20	481 mm x 393 mm x 51 mm	9.64 dm ³	1278.00 g
4052899389915	PL-CUBE -5000-830-G3	Shipping carton box 20	481 mm x 393 mm x 51 mm	9.64 dm ³	1512.00 g
4052899389953	PL-CUBE -5000-840-G3	Shipping carton box 20	481 mm x 393 mm x 51 mm	9.64 dm ³	1512.00 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.