

PrevaLED® COIN 50 G2

Technical Information



Benefits

- Fits in most existing MR16 traditional luminaires
- Easy & fast design-in for luminaire manufacturers
- Narrow beam angles, 24° and 40°
- High lumen output for HID-mini replacement
- Flexibility through 3 lumen packages and 3 CCTs

Applications

- Shop
 - Cabinet & Shelf
- Hospitality
 - Restaurant & Hotel
 - Corridors & Elevator

Technical Operating Data

Product ** (made to order)	Current [mA]	Power [W]	Radiance Angle [°]	Color Temp. [K]	Lum. Flux [lm]	Lum. Intensity [cd]	Typ. CRI [Ra]	Efficacy [lm/W]
PL-CN50-G2-900-927-24D **	350	10.7	24	2700	830	3320	92	77
PL-CN50-G2-900-930-24D	350	10.7	24	3000	830	3320	92	77
PL-CN50-G2-900-940-24D	350	10.7	24	4000	900	3600	92	84
PL-CN50-G2-900-927-40D **	350	10.7	40	2700	830	1660	92	77
PL-CN50-G2-900-930-40D	350	10.7	40	3000	830	1660	92	77
PL-CN50-G2-900-940-40D	350	10.7	40	4000	900	1800	92	84
PL-CN50-G2-1200-827-24D **	350	10.7	24	2700	1010	4040	83	94
PL-CN50-G2-1200-830-24D	350	10.7	24	3000	1100	4400	83	102
PL-CN50-G2-1200-840-24D	350	10.7	24	4000	1200	4800	83	112
PL-CN50-G2-1200-827-40D **	350	10.7	40	2700	1010	2020	83	94
PL-CN50-G2-1200-830-40D	350	10.7	40	3000	1100	2200	83	102
PL-CN50-G2-1200-840-40D	350	10.7	40	4000	1200	2400	83	112
PL-CN50-G2-1400-827-24D **	350	12.8	24	2700	1180	4720	83	92
PL-CN50-G2-1400-830-24D	350	12.8	24	3000	1280	5120	83	100
PL-CN50-G2-1400-840-24D	350	12.8	24	4000	1400	5600	83	109
PL-CN50-G2-1400-827-40D **	350	12.8	40	2700	1180	2360	83	92
PL-CN50-G2-1400-830-40D	350	12.8	40	3000	1280	2560	83	100
PL-CN50-G2-1400-840-40D	350	12.8	40	4000	1400	2800	83	109

All Data are related to the entire module (Testing at steady status. Ta=25°C ± 5°C. Testing current tolerance: ±5%)

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 Features

- Module ready to use with two cables:
 - red cable (+ pole)
 - black cable (- pole)
- Cable length 500 mm, cable Ø 1.6 mm/AWG 22
- Color Rendering index CRI (Ra) typ. 92 for PL-CN50-G2-900 and typ. 83 for PL-CN50-G2-1200 & PL-CN50-G2-1400
- Modul efficacy up to 112 lm/W
- Color tolerance: <MacAdam 4 SDCM
- tp temperature of 75°C (see IEC/PAS 62717)
- Max. tc temperature of 95°C (see IEC/PAS 62717)
- L70B50 >=50,000 hours at tp=75°C
- Best efficacy in combination with OSRAM OPTOTRONIC® constant current control gears

Minimum and Maximum Ratings

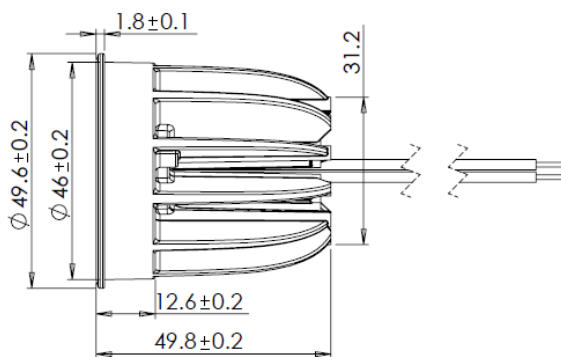
Product	Operating Temperature At tc-Point [C°]*	Storage Temperature [C°]*	Max. Current [mA]*
PL-CN50-G2-900-927-24D	-20 ... 95	-40 ... 80	370
PL-CN50-G2-900-930-24D	-20 ... 95	-40 ... 80	370
PL-CN50-G2-900-940-24D	-20 ... 95	-40 ... 80	370
PL-CN50-G2-900-927-40D	-20 ... 95	-40 ... 80	370
PL-CN50-G2-900-930-40D	-20 ... 95	-40 ... 80	370
PL-CN50-G2-900-940-40D	-20 ... 95	-40 ... 80	370
PL-CN50-G2-1200-827-24D	-20 ... 95	-40 ... 80	370
PL-CN50-G2-1200-830-24D	-20 ... 95	-40 ... 80	370
PL-CN50-G2-1200-840-24D	-20 ... 95	-40 ... 80	370
PL-CN50-G2-1200-827-40D	-20 ... 95	-40 ... 80	370
PL-CN50-G2-1200-830-40D	-20 ... 95	-40 ... 80	370
PL-CN50-G2-1200-840-40D	-20 ... 95	-40 ... 80	370
PL-CN50-G2-1400-827-24D	-20 ... 95	-40 ... 80	370
PL-CN50-G2-1400-830-24D	-20 ... 95	-40 ... 80	370
PL-CN50-G2-1400-840-24D	-20 ... 95	-40 ... 80	370
PL-CN50-G2-1400-827-40D	-20 ... 95	-40 ... 80	370
PL-CN50-G2-1400-830-40D	-20 ... 95	-40 ... 80	370
PL-CN50-G2-1400-840-40D	-20 ... 95	-40 ... 80	370

*) Exceeding maximum ratings for operating and storage temperature will reduce expected life time or destroy the LED Module.

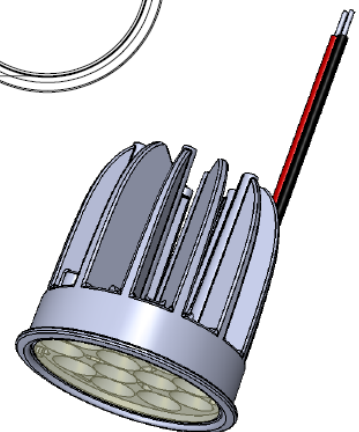
Exceeding maximum ratings for operating current will cause hazardous overload and will likely destroy the LED Module.

The temperature of the LED module 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. For exact location of the tc-point see drawing below.

Dimensions & Mechanical data



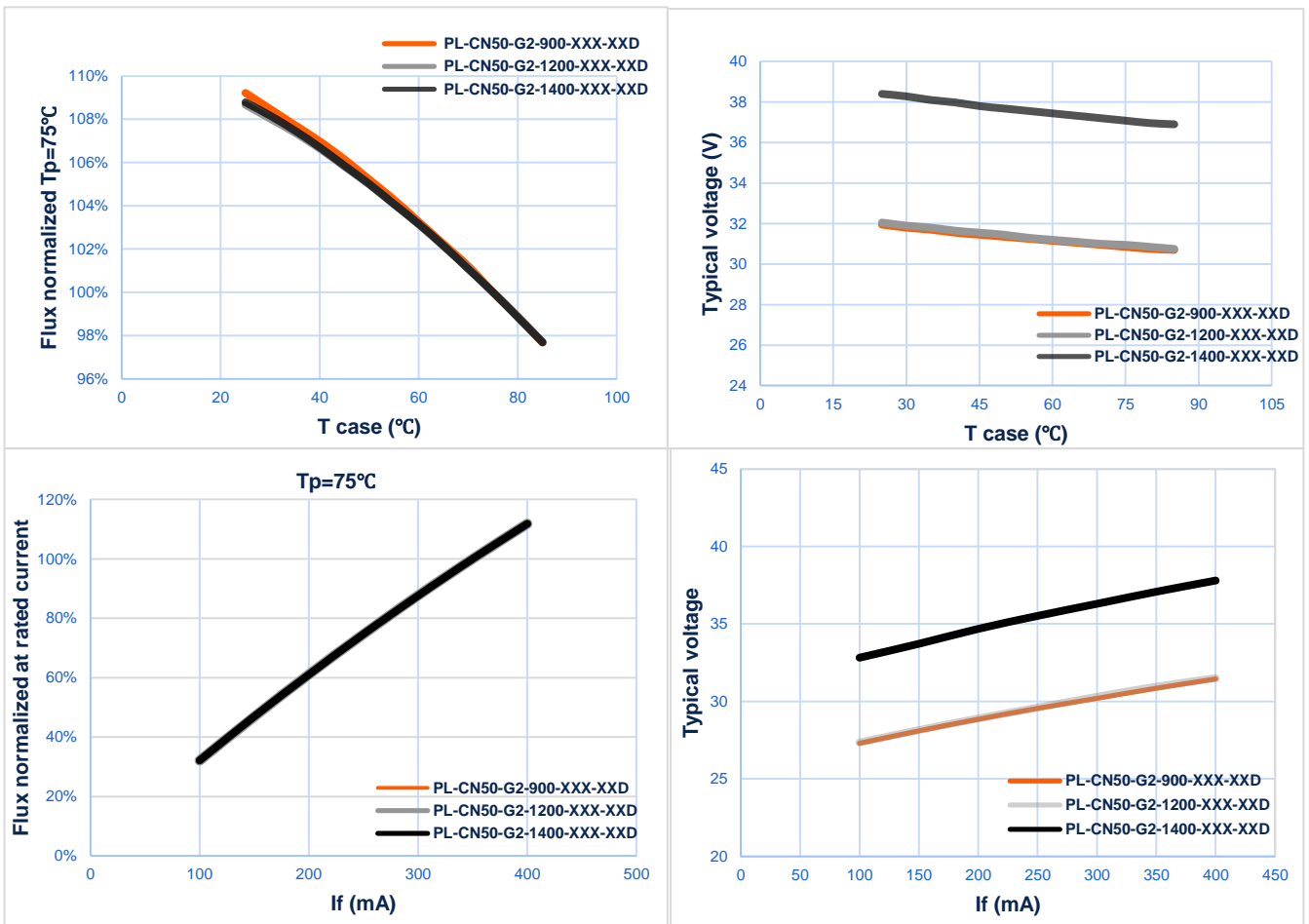
Dimension (mm)	Ø50 x 50 (H)
Mounting	MR16 similar
Optics	PC lens
Weight	80 grams



Standard Compliance

Safety	EN 62031, IEC 60598-1, UL 8750
EMC	EN 55015, EN 61547
Eye Security	EN 62471
Ingress Protection	Dry Location, IP 20
Environment	RoHS

Electrical Operating Conditions



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 to the connecting cables, the module 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 stabilised power supply protecting against short circuits, overload and overheating.

To also ease the luminaire/installation approval, electronic control gear for LED or LED modules should carry the CE mark and be ENEC certified. The declarations of conformity must include the following standards:

CE: EC 61347-2-13, EN 55015, IEC 61547 and IEC 61000-3-2 - ENEC: 61347-2-13 and IEC/EN 62384.

Also check for the mark of an independent authorized certification institute.

Please see the relevant brochure for more detailed information (see "Related and Further 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.
- Correct electrical polarity needs to be observed. **Wrong polarity will destroy the module** and will result in no light emission.
- Pay attention to standard ESD precautions when installing the module.
- The module, as manufactured, has no conformal coating and therefore offers no inherent protection against corrosion.
- Damage by corrosion will not be honored as a materials defect claim. It is the user's responsibility to provide suitable protection against corrosive agents such as moisture and condensation and other harmful elements.
- If the IP rating of the fixture should be higher than IP20, the design of the housing should be according to the IP standards in the application.
- Pay attention not to exceed the maximum operation temperature at tc point when the modules are used in enclosed environment.

Ordering Guide

Product Name	Product Code	Product Number (EAN10)	Product Number (EAN40)	Piece per box
PrevaLED® COIN 50 G2	PL-CN50-G2-900-927-24D	4052899324145	4052899324152	20
PrevaLED® COIN 50 G2	PL-CN50-G2-900-930-24D	4052899324169	4052899324176	20
PrevaLED® COIN 50 G2	PL-CN50-G2-900-940-24D	4052899324183	4052899324190	20
PrevaLED® COIN 50 G2	PL-CN50-G2-900-927-40D	4052899324206	4052899324213	20
PrevaLED® COIN 50 G2	PL-CN50-G2-900-930-40D	4052899324220	4052899324237	20
PrevaLED® COIN 50 G2	PL-CN50-G2-900-940-40D	4052899324275	4052899324282	20
PrevaLED® COIN 50 G2	PL-CN50-G2-1200-827-24D	4052899324299	4052899324305	20
PrevaLED® COIN 50 G2	PL-CN50-G2-1200-830-24D	4052899324343	4052899324350	20
PrevaLED® COIN 50 G2	PL-CN50-G2-1200-840-24D	4052899324367	4052899324374	20
PrevaLED® COIN 50 G2	PL-CN50-G2-1200-827-40D	4052899324381	4052899324398	20
PrevaLED® COIN 50 G2	PL-CN50-G2-1200-830-40D	4052899324404	4052899324411	20
PrevaLED® COIN 50 G2	PL-CN50-G2-1200-840-40D	4052899324428	4052899324435	20
PrevaLED® COIN 50 G2	PL-CN50-G2-1400-827-24D	4052899324442	4052899324459	20
PrevaLED® COIN 50 G2	PL-CN50-G2-1400-830-24D	4052899324466	4052899324473	20
PrevaLED® COIN 50 G2	PL-CN50-G2-1400-840-24D	4052899324480	4052899324497	20
PrevaLED® COIN 50 G2	PL-CN50-G2-1400-827-40D	4052899324503	4052899324510	20
PrevaLED® COIN 50 G2	PL-CN50-G2-1400-830-40D	4052899324527	4052899324534	20
PrevaLED® COIN 50 G2	PL-CN50-G2-1400-840-40D	4052899324541	4052899324558	20

Sales and Technical Support

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Sales and technical support is given by the local OSRAM subsidiaries. Complete subsidiaries listing is available at OSRAM homepage.

Application Note

Recommended OPTOTRONIC® devices

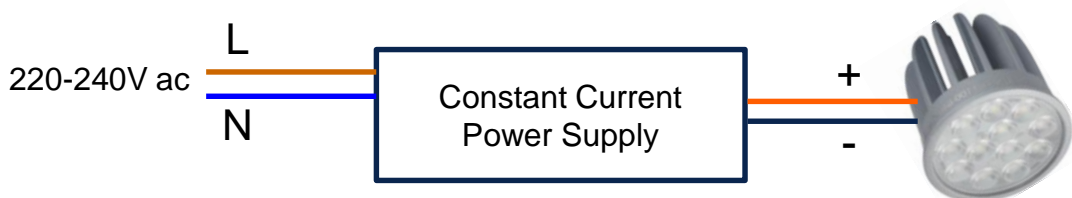
Drivers Modules		Typ. Current [mA]	OTe 15/350 PC	OTe 25 CS	OTe 15 CS	OTe 13 PC	OTe 18 PC
			OTe 15/350 PC	OTe 25 CS	OTe 15 CS	OTe 13 PC	OTe 18 PC
		Dimming	PC	N.A.	N.A.	PC	PC
PL-CN50-G2-900		350	✓	✓	✓	✓	
PL-CN50-G2-1200		350	✓	✓	✓	✓	
PL-CN50-G2-1400		350	✓	✓	✓		✓
Connection Type			B	A	A	B	B
Driver Availability			Yes	Yes	N.A.	Jan 2014	Jan 2014

Reference Connection Diagrams

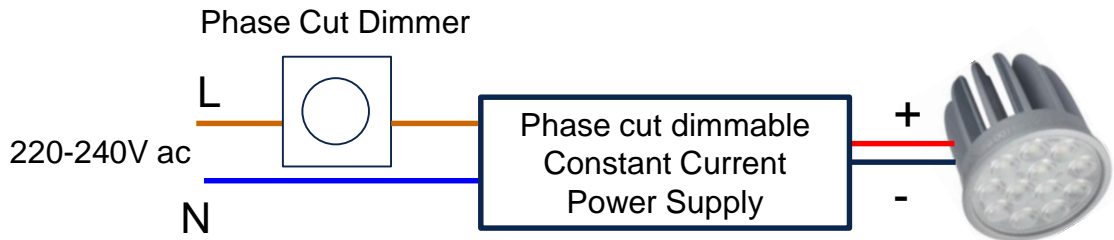
CAUTION

- The following diagrams are for reference only.
- Please refer to Instruction Sheet of power supply/ dimmer/ controller for details.
- **Disconnected from mains supply before wiring work.**
- **Wrong polarity will destroy the module and result in no light emission.**

Type A: 1-to-1 connection



Type B: 1-to-1 connection with Phase Cut dimming



Remark: - 1pc OTe PC driver for 1pc PL-CN50-G2 @350mA
- Dimming by reduce output current