

LDR173-12H1-12S1P-50W-L146W45-DC72V

PL BRICK HP | LED modules for industry and outdoor applications

LED Street and Outdoor lighting modules with optics

These LED modules are suitable for standard compliant street lighting, paths and squares in accordance with EN 13201. These modules are designed for built-in into luminaire casings. They enable a modular luminaire design. The modules dimensions aligned with Zhaga book 19, Compatible with third party optics, e.g. from DARKOO.

Technical data

Dimensions: 145x 45 mm

On-board push-in terminals (WAGO 2060)

Allowed operating temperature at tc point: -30 to 85 °C
(> 700 mA)

Use of external LED constant-current drivers Efficiency up to 156 lm/W

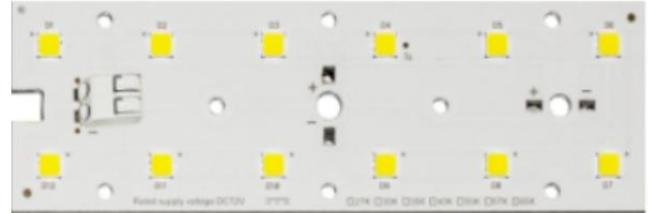
Colour rendering index Ra: > 70

Colour accuracy initially: 5 SDCM;

after 50,000 hrs. operating time: 7 SDCM

Lumen maintenance L80/B10:

50,000 hrs. (If 700 mA)



Product family benefits

- High-performance module for outdoor and street lighting
- Dimensions aligned with Zhaga book 15
- Compatible with third party optics, e.g. from LEDIL
- NTC for on-module temperature observation

Technical data

Electrical data

Nominal voltage	72V
Nominal current	0.7 A
Type of current	DC
On-mode power	49.63 W
Energy consumption in on-mode	18 kWh/1000h
Maximum forward voltage	74.4V
Max. drive current	1500 mA

Photometrical data

Luminous efficacy	201.2 lm/W
Color rendering index Ra	≥70
Correlated color temperature CCT	4200 K
Colour consistency (McAdam ellipses)	5
Useful luminous flux (Φuse)	9983 lm

Light technical data

Beam angle	120 °
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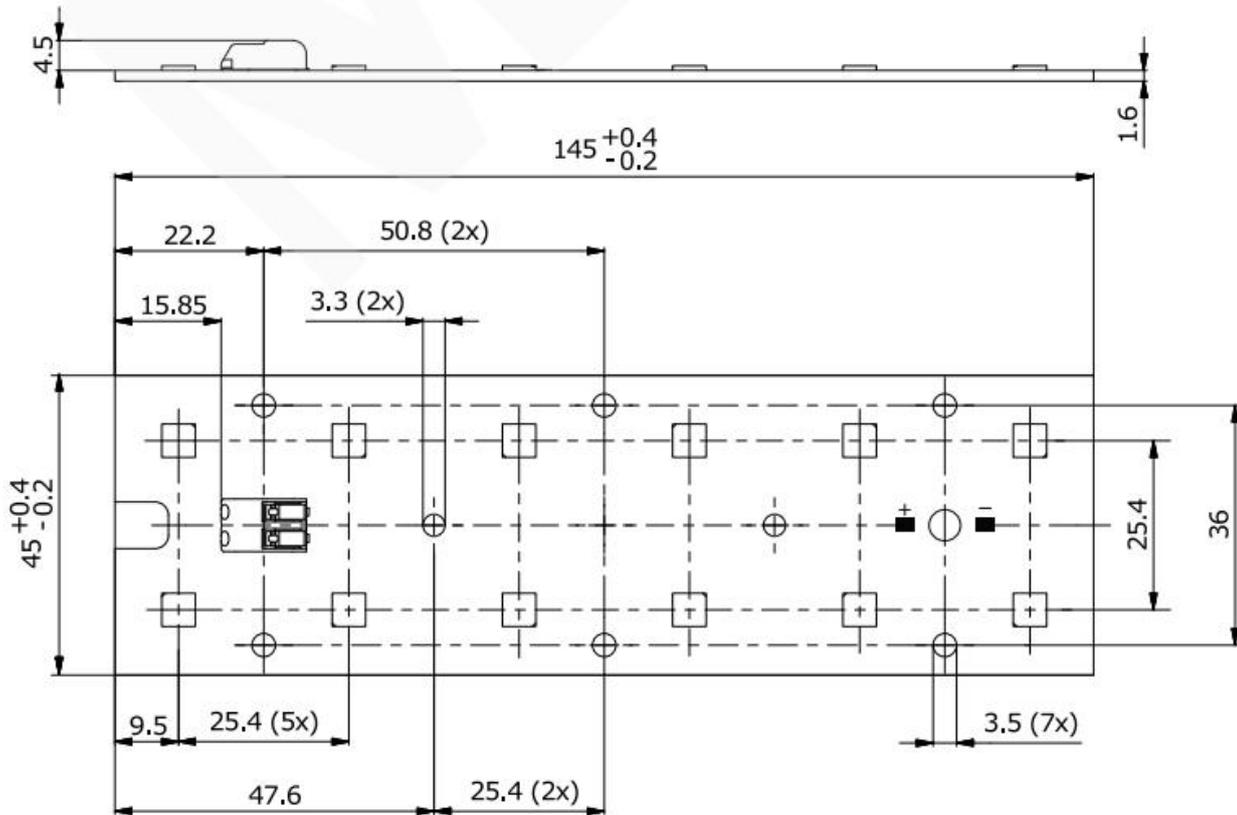
LED module information

Number of LEDs per module	12
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Specific technical data

Type	Typ.luminous flux	Typ.Colour temperature(CCT)	Colour rendering index CRI	min.] forward voltage	Max. forward voltage	Typ. Forward current	Typ.power consumption	Max. Forward current	Efficacy of the module
Outdoor-Z LED-module – L72. 2W49.5H8									
LDR5050	2854Lm	4200K	> 70	67.2V	74.4V	180mA	11.7W	1500mA	244lm/W
	3912Lm					250mA	16.45W		237.8lm/W
	5377Lm					350mA	23.45W		229.3lm/W
	7722Lm					520mA	35.88W		215.2lm/W
	9983Lm					700mA	49.63W		201.2lm/W
	10163Lm					720mA	51.12W		198.8lm/W

The values mentioned above represent only statistical variables on account of the complex manufacturing process of light emitting diodes. The values do not necessarily correspond exactly to the actual parameters of every single product which can vary from the typical specification. ** Production tolerance of voltage and power consumption: +10%/–4%; Measuring tolerance of luminous flux: ±7% *** Measuring tolerance of CRI: ±2 | CRI > 70 on request

DIMENSIONS (All dimensions in mm)


Product weight	40.00 g
Height EPRE	4.5mm
Length EPREL	145mm
Width EPREL	45 mm
Temperatures & operating conditions	
Performance temp. acc. to IEC 62717	55 °C
Maximum temperature at tc test poin	95 °C
Temperature range at storage	-30...85 °
Ambient temperature range	-40...+70 °C

Lifespan

Number of switching cycles	>100000
Lumen maintenance factor LMF	96
L70B50 lifetime	100000 h
Additional product data	
Lighting technology used	LED
Capabilities Dimmable	Yes