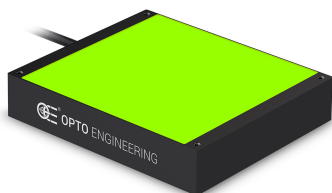




OPTO ENGINEERING

# LT3BC100100-G | DATASHEET

## High-power LED backlights with integrated driver



### SPECIFICATIONS

#### Lighting specifications

Illumination area height	(mm)	100
Illumination area width	(mm)	100
Number of LEDs		144
Light color, peak wavelength	green, 525 nm	
Spectral FWHM	(nm)	35
Illuminance, continuous <sup>1</sup>	(klux)	145
Irradiance, continuous <sup>1</sup>	(W/m <sup>2</sup> )	265
Illuminance, boosted <sup>1</sup>	(klux)	249
Irradiance, boosted <sup>1</sup>	(W/m <sup>2</sup> )	467
Illuminance, strobe <sup>1</sup>	(klux)	533
Irradiance, strobe <sup>1</sup>	(W/m <sup>2</sup> )	1079
Diffuser		yes
Collimation film		optional

#### Mechanical specifications

Height	(mm)	108.0
Width	(mm)	126.0
Thickness	(mm)	24.0
Mass	(g)	350
Clamping system	4x M4 threaded holes	

#### Environment

Operating temperature	(°C)	0-40
Storage temperature	(°C)	0-50
Operating relative humidity	(%)	20-85, non condensing
Installation		Indoor use only
IP rating		IP54

### KEY ADVANTAGES

#### High-power light output

**Built-in driver** for continuous and strobe operations

#### Industry standard 5 PIN M12 Connector

with PNP/NPN/analog dimming input

#### Optional collimating, polarizing and protective filters

**Compact & robust design** with reduced thickness (24 mm) and thin edges

**Automatic shutdown** in case of overheating

**The LT3BC series** features high-performance LED backlights designed to provide high-power light output, excellent uniformity and contrast thanks to high-efficiency LEDs.

#### Electrical specifications

Operating mode		Continuous and strobe
Supply voltage	(V)	24
Current, continuous	(mA)	560
Power consumption, continuous	(W)	13.2
Current, boosted	(mA)	1120
Power consumption, boosted	(W)	26.4
Peak current, strobe	(mA)	3200
Peak power consumption, strobe	(W)	76.8
Min pulse duration	(μs)	3
Max pulse duration	(ms)	10
Max duty cycle	(%)	10
Typical pulse delay	(ns)	300
Typical jitter	(ns)	10

I/O interface	PNP logic input, NPN dimming input , analog dimming input
Connector	1x M12 straight plug male connector
Included cable	not included

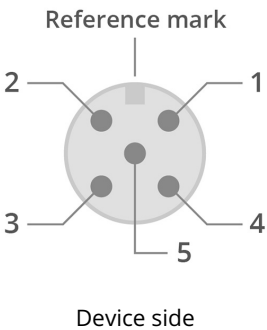
#### Eye safety

Risk group (CEI EN 62471:2010)	Exempt
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<sup>1</sup> At emitting surface.

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CONNECTOR PINOUT



Reference mark

Device side

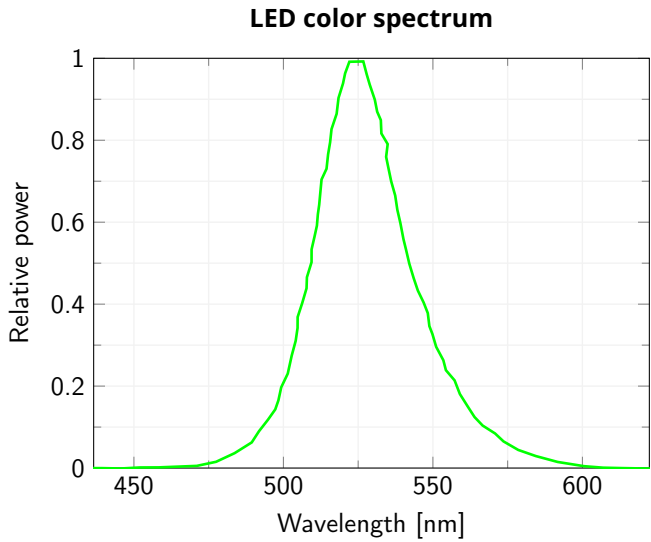
Pin	Function
1	+24Vdc
2	NPN
3	GND
4	PNP
5	Analogue dimming (0-10V)

COMPATIBLE PRODUCTS

Full list of compatible products available [here](#).

OPTICS	LIGHTING	CAMERAS	SOFTWARE	ACCESSORIES
				

A wide selection of innovative machine vision components.



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