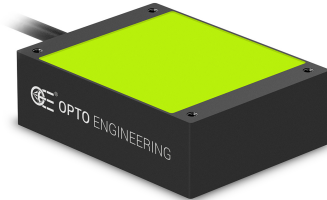


LT3BC050050-G | DATASHEET

OPTO ENGINEERING

High-power LED backlights with integrated driver



SPECIFICATIONS

Lighting specifications

Illumination area height	(mm)	50
Illumination area width	(mm)	50
Number of LEDs		36
Light color, peak wavelength	green, 525 nm	
Spectral FWHM	(nm)	35
Illuminance, continuous ¹	(klux)	145
Irradiance, continuous ¹	(W/m ²)	265
Illuminance, boosted ¹	(klux)	249
Irradiance, boosted ¹	(W/m ²)	467
Illuminance, strobe ¹	(klux)	533
Irradiance, strobe ¹	(W/m ²)	1079
Diffuser		yes
Collimation film		optional

Mechanical specifications

Height	(mm)	58.0
Width	(mm)	76.0
Thickness	(mm)	24.0
Mass	(g)	184
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)	140
Power consumption, continuous	(W)	3.36
Current, boosted	(mA)	280
Power consumption, boosted	(W)	6.72
Peak current, strobe	(mA)	800
Peak power consumption, strobe	(W)	19.2
Min pulse duration	(μs)	3
Max pulse duration	(ms)	10
Max duty cycle	(%)	10
Typical pulse delay	(ns)	300
Typical jitter	(ns)	10

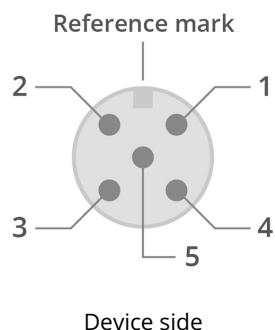
I/O interface	PNP logic input, NPN dimming input , analog dimming input
Connector	1x M12 straight plug male connector
Included cable	not included

Eye safety

Risk group (CEI EN 62471:2010)	Exempt
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¹ At emitting surface.

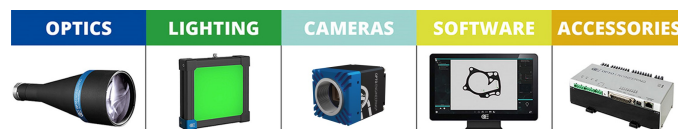
CONNECTOR PINOUT



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

COMPATIBLE PRODUCTS

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



A wide selection of innovative machine vision components.

LED color spectrum

