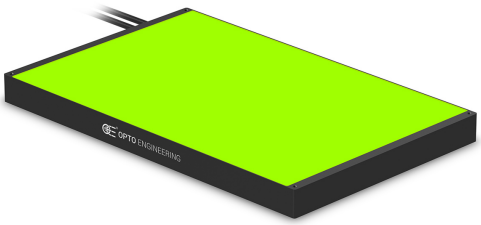
LT3BC200300-G | DATASHEET

OPTO ENGINEERING

High-power LED backlights with integrated driver



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.

SPECIFICATIONS

Lighting specifications

Illumination area height	(mm)	200
Illumination area width	(mm)	300
Number of LEDs		864
Light color, peak wavelength		green, 525 nm
Spectral FWHM	(nm)	35
Illuminance, continuos[1]	(klux)	115
Irradiance, continuos[1]	(W/m^2)	212
Illuminance, boosted[1]	(klux)	179
Irradiance, boosted[1]	(W/m^2)	372
Illuminance, strobe[1]	(klux)	469
Irradiance, strobe[1]	(W/m^2)	924
Diffuser		yes
Collimation film		optional

Mechanical specifications

Height	(mm)	208.0
Width	(mm)	326.0
Thickness	(mm)	24.0
Mass	(g)	1222
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

Electrical specifications

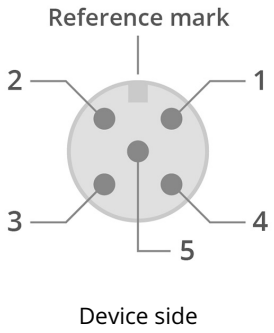
Operating mode		Continuous and strobe
Supply voltage	(V)	24
Current, continuos	(mA)	2400
Power consumption, continuos	(W)	57.6
Current, boosted	(mA)	4800
Power consumption, boosted	(W)	115.2
Pear current, strobe	(mA)	14400
Peak power consumption, strobe	(W)	346
Min pulse duration	(μs)	3
Max pulse duration	(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		M12 straight plug male connector
Included cable		2x 20 cm pigtail

Eye safety

Risk group (CEI EN 62471:2010)	Exempt

[1] At emitting surface.

CONNECTOR PINOUT



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*.

A wide selection of innovative machine vision components.

LED color spectrum