LT3BC200250-W | 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)	250
Number of LEDs		720
Light color, peak wavelength		white, 5700 K
Spectral FWHM	(nm)	-
Illuminance, continuos[1]	(klux)	109
Irradiance, continuos[1]	(W/m^2)	314
Illuminance, boosted[1]	(klux)	233
Irradiance, boosted[1]	(W/m^2)	649
Illuminance, strobe[1]	(klux)	640
Irradiance, strobe[1]	(W/m^2)	1755
Diffuser		yes
Collimation film		optional

Mechanical specifications

Height	(mm)	208.0
Width	(mm)	276.0
Thickness	(mm)	24.0
Mass	(g)	1077
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)	2000
Power consumption, continuos	(W)	48
Current, boosted	(mA)	4000
Power consumption, boosted	(W)	96
Pear current, strobe	(mA)	12000
Peak power consumption, strobe	(W)	288
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 logic input, analog dimming input
Connector		1x M12 straight plug male connector
Included cable		not included

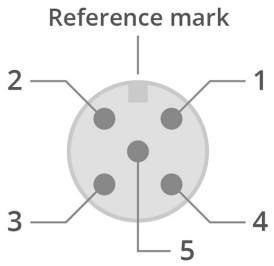
Eye safety

Risk group (CEI EN 62471:2010)	Exempt

[1] At emitting surface.

All product specifications and data are subject to change without notice to improve reliability, functionality, design or other. Photos and pictures are for illustration purposes only. Data are reported by design, actual lens performance may vary due to manufacturing tolerances.

CONNECTOR PINOUT



Device side

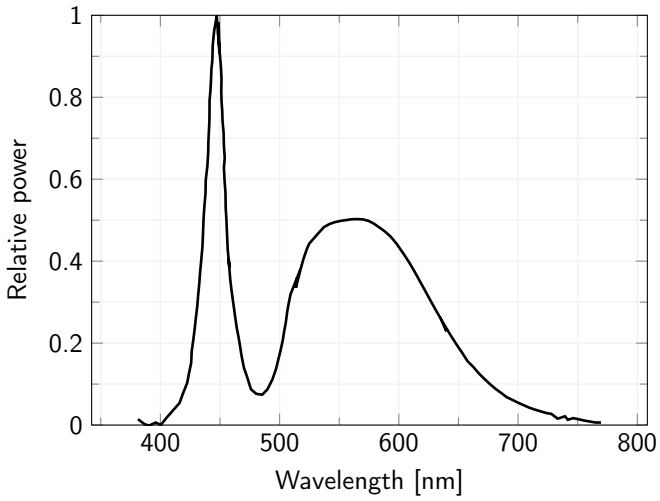
Pin	Function
1	+24Vdc
2	NPN
3	GND
4	PNP
5	Analogue dimming (0-10V)

COMPATIBLE PRODUCTS

Full list of compatible products available *here*.

A wide selection of innovative machine vision components.

LED color spectrum



All product specifications and data are subject to change without notice to improve reliability, functionality, design or other. Photos and pictures are for illustration purposes only. Data are reported by design, actual lens performance may vary due to manufacturing tolerances.