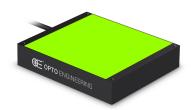


LT3BC100100-G | DATASHEET

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, continuos ¹ | (klux) | 145 |
| Irradiance, continuos 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) | 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

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

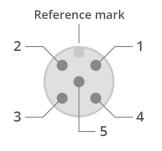
| Operating mode | | Continuous and strobe |
|--------------------------------|------|-----------------------|
| Supply voltage | (V) | 24 |
| Current, continuos | (mA) | 560 |
| Power consumption, continuos | (W) | 13.2 |
| Current, boosted | (mA) | 1120 |
| Power consumption, boosted | (W) | 26.4 |
| Pear 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 |
| | | PNP logic input, |
| I/O interface | | NPN dimming input, |
| | | analog dimming input |
| Connector | | M12 straight plug |
| Connector | | male connector |
| Included cable | | 1x 20 cm pigtail |
| | | |
| Eve safety | | |

Risk group (CEI EN 62471:2010) Exempt

¹ At emitting surface.



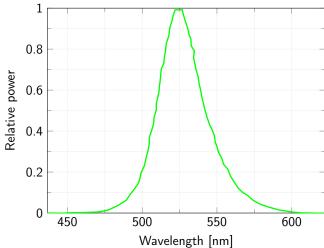
CONNECTOR PINOUT



Device side

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

LED color spectrum



COMPATIBLE PRODUCTS

Full list of compatible products available here.



A wide selection of innovative machine vision components.