

LTBP240144-R-CO | DATASHEET

High Power strobed LED backlight, 240 x 144 mm illumination area, red, with collimation film in both directions





SPECIFICATIONS

Lightning specifications

| Modules | | 5x4 |
|------------------------------|---------------------|-------------|
| Illumination area width | (mm) | 240 |
| Illumination area height | (mm) | 144 |
| Number of LEDs | | 960 |
| Light color, peak wavelength | | red, 625 nm |
| Spectral FWHM | (nm) | 20 |
| Illuminance ¹ | (klux) | n.a. |
| Irradiance ¹ | (W/m ²) | - |
| Diffuser | | yes |
| Collimation film | | yes |
| | | |

Electrical specifications

| Power supply mode | | Strobe only, constant current driving |
|--------------------------------|---------|---------------------------------------|
| Peak power consumption | (W) | 336.0 |
| Max pulse current ² | (A) | 16.8 |
| Typical pulse voltage | (V) | 20.0 |
| Max pulse duration | (ms) | 1 |
| Max duty cycle | (%) | 1.5 |
| Max continuous current | (mA) | 100 |
| Estimated MTBF ³ | (hours) | > 50000 |
| Connector | | M8 |
| Included cable | | CBLT003 |

KEY ADVANTAGES

Excellent uniformity

Test report with measured uniformity

Ultra high-power light output and strobe mode operation For inspection and measurement of fast moving objects and an extended LED lifetime

Suitable for frequent cleaning Thanks to the optical grade and scratch resistant protective cover

Wide selection and modular design Size options range from 48 x 36 to 288 x 216 mm available in red, white, green, blue and infrared

Compact design with reduced thickness (26 mm)

Special continuous alignment mode

Optional integrated collimation film

The LTBP series offers high power LED backlights designed to provide exceptional illumination performances and excellent uniformity.

Mechanical specifications

| Length | (mm) | 252.0 |
|-----------------|------|----------------------|
| Width | (mm) | 164.0 |
| Height | (mm) | 26.0 |
| Mass | (g) | 1422 |
| Clamping system | ٤ | 3x M6 threaded holes |

Environment

| Operating temperature | (°C) | 0-40 |
|-----------------------------|------|-----------------------|
| Storage temperature | (°C) | 0-50 |
| Operating relative humidity | (%) | 20-85, non condensing |
| IP rating | | IP40 |
| Installation | | Indoor use only |

Eye safety

Risk group (CEI EN 62471:2010)

Exempt

¹ Minimum value, at max driving current, on emitting surface. Where n.a. is reported data is available upon request.

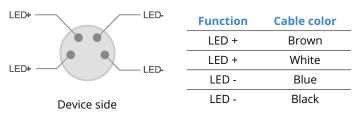
² Models where two currents are listed (such as LTBP240180-R) feature two separate channels.

³ At 25°C

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



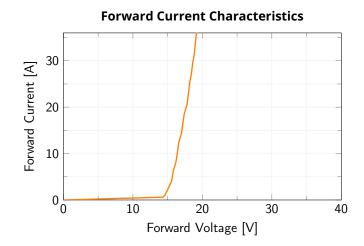
LED color spectrum 1 0.8 Relative power 0.6 0.4 0.2 0 400 450 500 550 700 600 650 Wavelength [nm]

COMPATIBLE PRODUCTS

Full list of compatible products available here.



A wide selection of innovative machine vision components.



Emission angle $h_{\text{regive}}^{\text{true intensity}} 0.5$ 0.5

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