

LTBP144180-R-CO | DATASHEET

High Power strobed LED backlight, 144 x 180 mm illumination area, red, with collimation film in both directions





SPECIFICATIONS

Lightning specifications

Modules		3x5
Illumination area width	(mm)	144
Illumination area height	(mm)	180
Number of LEDs		720
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)	252.0
Max pulse current ²	(A)	12.6
Typical pulse voltage	(V)	20.0
Max pulse duration	(ms)	1
Max duty cycle	(%)	1.5
Max continuous current	(mA)	75
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)	156.0
Width	(mm)	200.0
Height	(mm)	26.0
Mass	(g)	1400
Clamping system	4x	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)

¹ Minimum value, at max driving current, on emitting surface. Where

Exempt

n.a. is reported data is available upon request. ² Models where two currents are listed (such as LTBP240180-R) feature

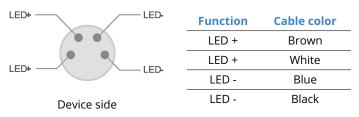
two separate channels.

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



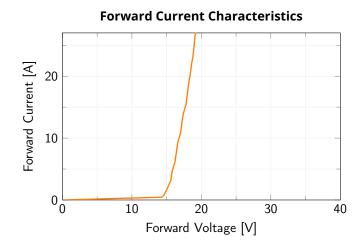
LED color spectrum 1 0.8 Relative power 0.6 0.4 0.2 0 400 450 500 550 700 600 650 Wavelength [nm]

COMPATIBLE PRODUCTS

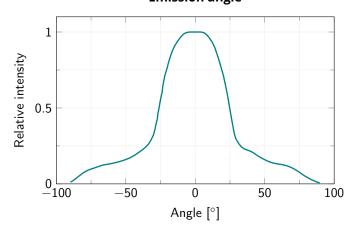
Full list of compatible products available here.



A wide selection of innovative machine vision components.



Emission angle



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.