LTBP048072-IR850 | DATASHEET

OPTO ENGINEERING

High Power strobed LED backlight, 48 x 72 mm illumination area, IR

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.

SPECIFICATIONS

Lightning specifications

Modules		1x2
Illumination area width	(mm)	48
Illumination area height	(mm)	72
Number of LEDs		96
Light color, peak wavelength		IR, 850 nm
Spectral FWHM	(nm)	30
Illuminance[1]	(klux)	-
Irradiance[1]	(W/m^2)	n.a.
Diffuser		yes
Collimation film		no

Electrical specifications

Power supply mode		Strobe only, constant current driving
Peak power consumption	(W)	74.9
Max pulse current[2]	(A)	3.6
Typical pulse voltage	(V)	20.8
Max pulse duration	(ms)	1
Max duty cycle	(%)	1.5
Max continuous current	(mA)	10
Estimated MTBF[3]	(hours)	> 50000
Connector		M8
Included cable		CBLT003

Mechanical specifications

Length	(mm)	60.0
Width	(mm)	92.0
Height	(mm)	26.0
Mass	(g)	457
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

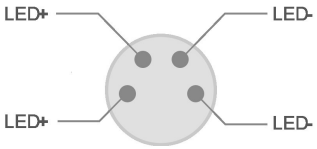
Eye safety

Risk group (CEI EN 62471:2010)	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



Device side

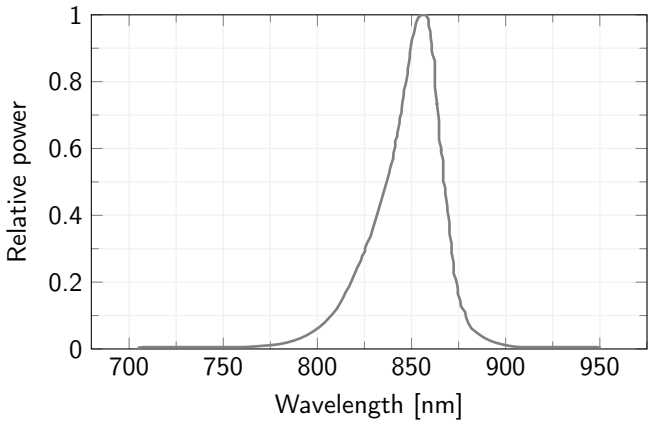
Function	Cable color
LED +	Brown
LED +	White
LED -	Blue
LED -	Black

COMPATIBLE PRODUCTS

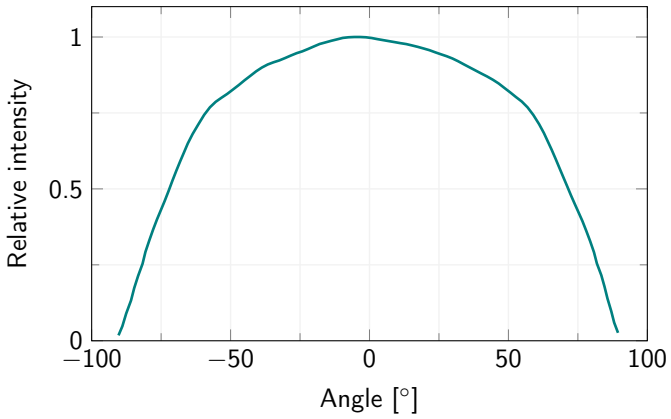
Full list of compatible products available *here*.

A wide selection of innovative machine vision components.

LED color spectrum



Emission angle



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