LTLNC050-IR850 | DATASHEET

OPTO ENGINEERING

LED line light 50 mm, IR, 850 nm

KEY ADVANTAGES

Ultra high power

Color matched white model

Condenser lens for a perfectly focused beam of light

Rugged industrial design with built in industrial connector
for easy integration into any machine vision system.

Forced air cooling option

LTLNC series are ultra-high power LED line illuminators designed for line scan applications. Their special design provides both a powerful and homogeneous beam of light that is sharply focused onto the object that must be inspected, by means of a condenser lens.

SPECIFICATIONS

Lighting specifications

Illumination area width	(mm)	50
Illumination area height	(mm)	15
Optimal working distance	(mm)	20-100
Number of LEDs		11
Light color, Peak wavelength		IR, 850 nm
Spectral FWHM	(nm)	30
Illuminance[1]	(klux)	-
Irradiance[1]	(W/m^2)	n.a.

Electrical specifications

Supply voltage[2]	(V)	24
Current[2]	(mA)	300
Power consumption	(W)	7.2
Typical pulse voltage	(V)	59
Max pulse current	(mA)	1500
Peak power consumption	(W)	89
Max pulse duration	(ms)	100
Max duty cycle	(%)	5
Estimated MTBF[4]	(hours)	> 20000
Connector		M8
Included cable		CBLT003 included

[1] Measured at minimum working distance
[2] ±2%
[3] With constant driving voltage
[4] Drop tp 50% intensity @ 25°C

Mechanical specifications

Length	(mm)	80.0
Width	(mm)	32.0
Height	(mm)	60.0
Mass	(g)	80
Clamping system		4x M3 threaded holes
Cooling method		air compressed cooling or passive

Environment

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

Eye safety

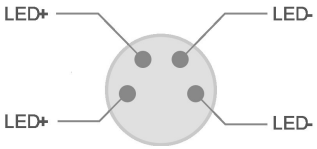
Risk group (CEI EN 62471:2010)	Risk group 2

COMPATIBLE PRODUCTS

Full list of compatible products available *here*.

A wide selection of innovative machine vision components.

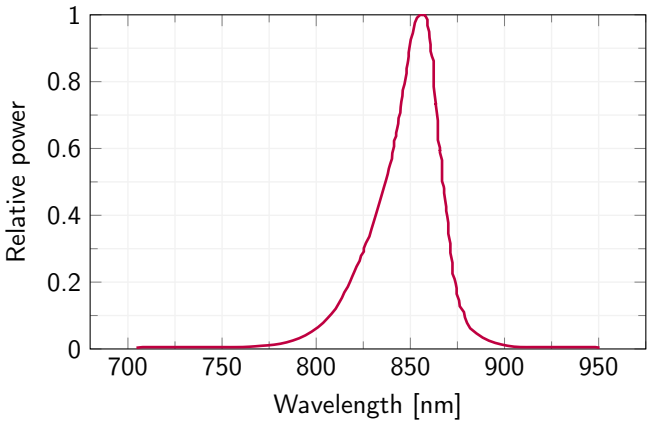
CONNECTOR PINOUT



Device side

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

LED color spectrum



LIGHT BEAM COARSE ADJUSTMENT

Simply untighten the lateral screws to adjust the axial position of the condenser lens.
When the position is set, do not overthighten the screws to avoid damage to the condenser lens.

ADDITIONAL INFO

Lighting structure