LTCL4K120-W | DATASHEET

OPTO ENGINEERING

Telecentric illuminator for line scan cameras, beam dimension 132 x 10 mm, white



KEY ADVANTAGES

Compact design
"Flat" shape for easy integration.

High optical throughput and enhanced field depth
When coupled with compatible TC4K telecentric lenses.

Dedicated CMMR4K mirrors
Right-angle deflection of the light path for usage in tight spaces.

Homogeneity test report with measured values

LTCL4K telecentric illuminators are specifically designed to be paired with TC4K telecentric lenses, in order to provide the high optical throughput needed for high-speed line scan measurement applications involving for instance steering components, gear and cam shafts, grinding and turning parts.

SPECIFICATIONS

Lighting specifications

Beam dimension[1]	(mm)	132 x 10
Working distance	(mm)	90 - 300
Light color, peak wavelength[2]		white, 6000 K
Spectral FWHM	(nm)	-

Electrical specifications

Supply voltage[3]	(V)	12-24
Max power consumption	(W)	2.5
Led forward voltage typical (max)[4]	(V)	2.8 (-)
Max led forward current[5]	(mA)	350
Max pulse current[6]	(mA)	2000
Connector		M8
Included cable		CB244P1500

Mechanical specifications

Length[7]	(mm)	305.3
Width	(mm)	144.0
Height	(mm)	38.5
Mass	(g)	1559

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

[1] Beam shape is not circular
[2] Opto Engineering recommends green light for high precision measurements application
[3] Tolerance ±10%
[4] At max forward current. Tolerance is ±0.06V on forward voltage measurements
[5] In continuous mode (not pulsed)
[6] At pulse with ≤ 10ms and duty cycle ≤10%. Built in electronics board must be bypassed (see tech info)
[7] Nominal value, with no spacers in place

COMPATIBLE PRODUCTS

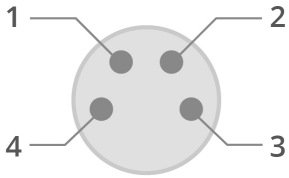
Full list of compatible products available *here*.



A wide selection of innovative machine vision components.

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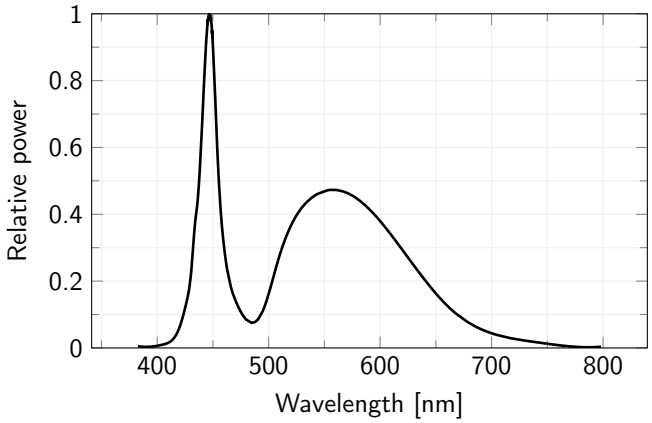
CONNECTOR PINOUT



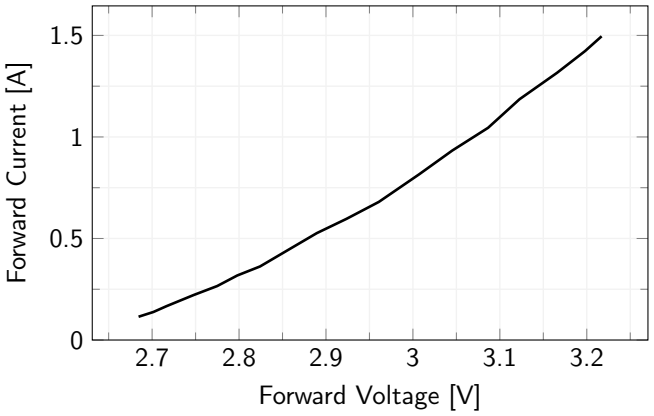
Device side

Pin	Function	Cable color
1	Earth	Yellow/Green
2	Ground	Black
3	Anode	Blue
4	Power supply (+12/24 V)	Brown

LED color spectrum



Forward Current Characteristics



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