

# LTCL4K090-G | DATASHEET

# Telecentric illuminator for line scan cameras, beam dimension 102 x 10 mm, green



## **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**

RôHS K CE UK

Beam dimension <sup>1</sup>	(mm)	102 x 10
Working distance	(mm)	90 - 300
Light color, peak wavelength <sup>2</sup>		green, 525 nm
Spectral FWHM	(nm)	40

#### **Electrical specifications**

Supply voltage <sup>3</sup>	(V)	12-24
Max power consumption	(W)	2.5
Led forward voltage typical (max) <sup>4</sup>	(V)	3.3 (4.0)
Max led forward current <sup>5</sup>	(mA)	350
Max pulse current <sup>6</sup>	(mA)	2000
Connector		M8
Included cable		CB244P1500

#### **Mechanical specifications**

Length <sup>7</sup>	(mm)	294.4
Width	(mm)	114.0
Height	(mm)	38.5
Mass	(g)	1315

#### 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 1

- <sup>1</sup> Beam shape is not circular
- <sup>2</sup> Opto Engineering recommends green light for high precision measurements application
- <sup>3</sup> Tolerance ±10%
- $^4\,$  At max forward current. Tolerance is  $\pm 0.06 \text{V}$  on forward voltage measurements
- <sup>5</sup> In continuous mode (not pulsed)
- $^6$  At pulse with  $\leq$  10ms and duty cycle  $\leq$ 10%. Built in electronics board must be bypassed (see tech info)
- <sup>7</sup> Nominal value, with no spacers in place

## **COMPATIBLE PRODUCTS**

#### Full list of compatible products available here.

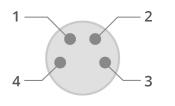


A wide selection of innovative machine vision components.

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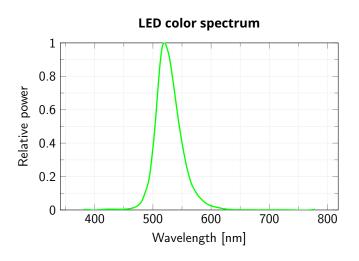
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## **CONNECTOR PINOUT**



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

Device side



Forward Current Characteristics

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