



# LTCL4K180-G | DATASHEET

Telecentric illuminator for line scan cameras, beam dimension 187 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

Beam dimension <sup>1</sup>	(mm)	187 x 10
Working distance	(mm)	120 - 450
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)	482.6
Width	(mm)	206.0
Height	(mm)	38.5
Mass	(g)	3008

#### 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
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- <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%
- <sup>4</sup> At max forward current. Tolerance is ±0.06V on forward voltage measurements
- <sup>5</sup> In continuous mode (not pulsed)
- <sup>6</sup> At pulse with ≤ 10ms and duty cycle ≤ 10%. Built in electronics board must be bypassed (see tech info)
- <sup>7</sup> Nominal value, with no spacers in place

### COMPATIBLE PRODUCTS

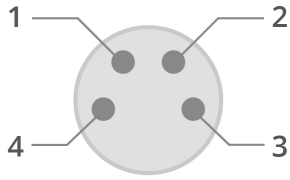
Full list of compatible products available [here](#).



A wide selection of innovative machine vision components.

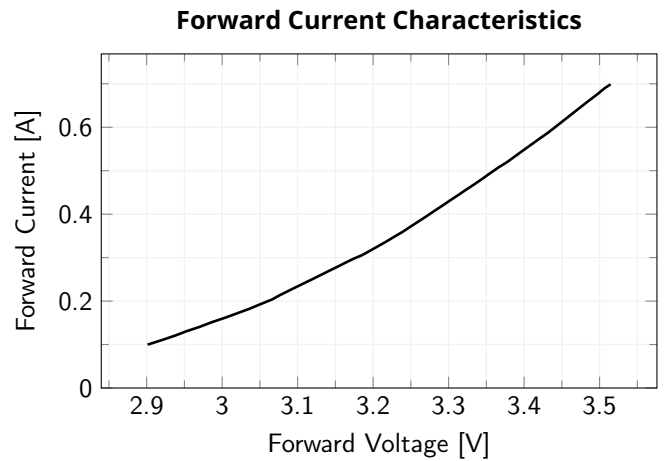
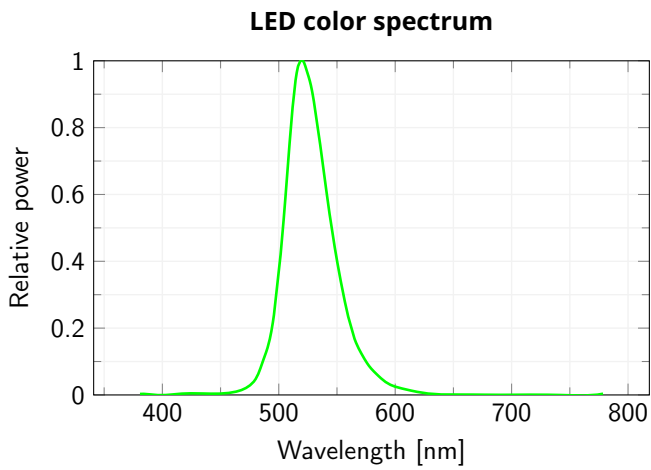
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**CONNECTOR PINOUT**



Device side

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



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