

LTCLCP144-G | DATASHEET

Space-saving telecentric illuminator for LARGE FOV systems, beam dimension 165 x 120 mm, green



KEY ADVANTAGES

Large illumination area in a super compact form factor

LTCLHP CORE PLUS are up to 40% shorter than other telecentric lights on the market.

Reduce the size of your vision system

The working distance of LTCLHP CORE PLUS telecentric illuminators has been optimized to reduce the overall system's footprint.

Boost your measurement system's performance

LTCLHP CORE PLUS illuminators may be used in place of flat backlights to improve your system's performance.

Smart integration

LTCLHP CORE PLUS illuminators integrate a mounting flange for easy integration without additional clamps.

System compactness is a competitive advantage

A smaller vision system or measurement machine is preferred by the industry.



LTCLHP CORE PLUS telecentric illuminators are designed to illuminate large areas in a reduced space. They are up to 40% shorter than other telecentric lights on the market.

SPECIFICATIONS

Lighting specifications

Beam dimension ¹	(mm)	165 x 120
Working distance	(mm)	170 - 350
Light color, peak wavelength ²		green, 525 nm
Spectral FWHM	(nm)	40

Electrical specifications

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

Mechanical specifications

A ⁷	(mm)	332.0
B ⁷	(mm)	303.0
C ⁷	(mm)	314.0
Mass	(g)	7047

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)	Exempt
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¹ Beam shape is not circular

² Opto Engineering recommends green light for high precision measurements application

³ Tolerance $\pm 10\%$

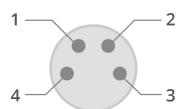
⁴ At max forward current. Tolerance is $\pm 0.06V$ on forward voltage measurements

⁵ In continuous mode (not pulsed)

⁶ At pulse with $\leq 10ms$ and duty cycle $\leq 10\%$. Built in electronics board must be bypassed.

⁷ Nominal value, with no spacers in place.

M8 CONNECTOR PINOUT



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

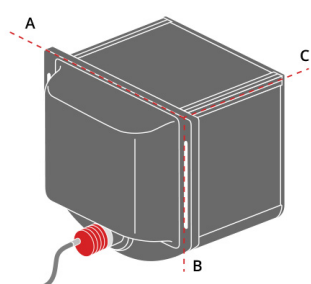
COMPATIBLE PRODUCTS

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

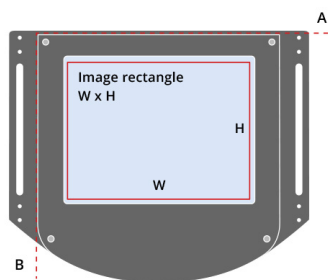


A wide selection of innovative machine vision components.

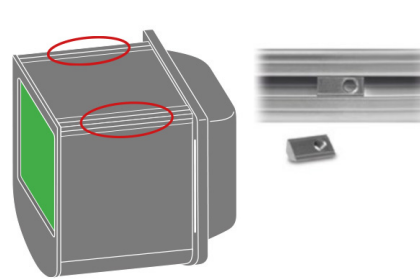
LTCLHP CORE PLUS illuminator dimensions (A, B, C)



A, B and C indicate the mechanical dimensions of the illuminator.

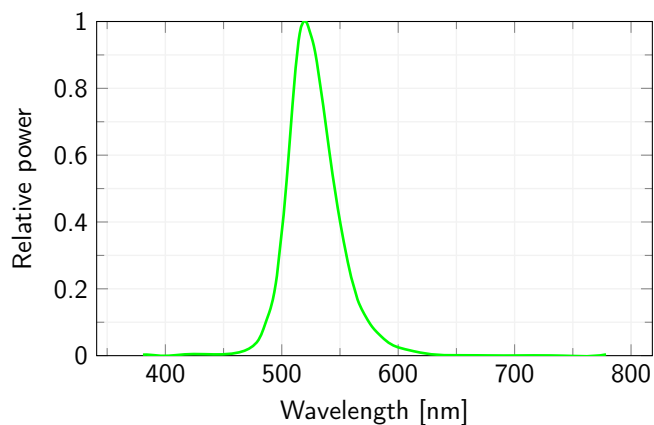


The width of the beam rectangle is aligned along the A axis. The height of the beam rectangle is aligned along the B axis.



Integrated extruded aluminum profiles with M5 T-slot nuts allow for easy and cost-effective mounting.

LED color spectrum



Forward Current Characteristics

