

# LTCLCP192-G | DATASHEET

# Space-saving telecentric illuminator for LARGE FOV systems, beam dimension 220 x 160 mm,



### **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 <sup>1</sup>	(mm)	220 x 160
Working distance	(mm)	230 - 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**

A <sup>7</sup>	(mm)	410.0
B <sup>7</sup>	(mm)	344.0
C <sup>7</sup>	(mm)	376.0
Mass	(g)	8980

#### **Environment**

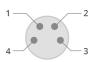
Operating temperature	(°C)	0-40
Storage temperature	(°C)	0-50
Operating relative humidity	(%)	20-85, non condensing
Installation		Indoor use only

Eye safety	
Risk group (CFI FN 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  $\pm 0.06$ V on forward voltage measurements
- <sup>5</sup> In continuous mode (not pulsed)
- <sup>6</sup> At pulse with  $\leq$  10ms and duty cycle  $\leq$ 10%. Built in electronics board must be bypassed.
- <sup>7</sup> 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	Brown

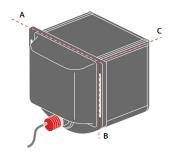
#### **COMPATIBLE PRODUCTS**

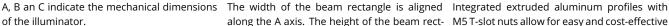
#### Full list of compatible products available here.

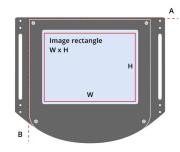


A wide selection of innovative machine vision components.

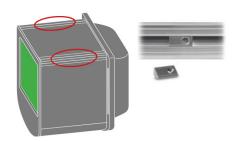
# LTCLHP CORE PLUS illuminator dimensions (A, B, C)







angle is aligned along the B axis.



along the A axis. The height of the beam rect- M5 T-slot nuts allow for easy and cost-effective mounting.

# **LED** color spectrum 1 0.8 Relative power 0.6 0.4 0.2 0 400 500 600 700 800 Wavelength [nm]

### **Forward Current Characteristics**

