# OPTO ENGINEERING

# LTCLHP192-G

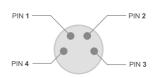
# Telecentric HP illuminator, beam diameter 250 mm, green

#### **SPECIFICATIONS**

Optical specifications		
Beam diameter	(mm)	250
Working distance range	(mm)	350 - 700
Light color, peak wavelength (1)		green, 520 nm
Mechanical specifications		
Length (2)	(mm)	608.2
Outer diameter	(mm)	260
Mass	(g)	9799
Electrical specifications		
Device power ratings		
DC voltage minimum (3)	(V)	12
DC voltage maximum (3)	(V)	24
Power consumption	(VV)	< 2.5
Max LED forward current (4)	(mA)	350
Cables		CB244P1500 included
LED power ratings		
Forward voltage (typical) (5)	(V)	3.3
Forward voltage (max) (5)	(V)	4.00
Max pulse current (6)	(mA)	2000
Eye safety		
Risk group according to CEI EN 62471:2010		Risk group 1
Last update: 2021-06-22		



# CONNECTION



Device side - male pins Front view Pinout reference

Pin	Function
1	Earth
2	GND
3	LED Anode
4	Power supply (+12÷24 V)



All product specifications and data are subject to change without notice to improve reliability, functionality, design or other. Photos and pictures are for illustration purposes only.

# NOTES

- ${\it 1. \ Opto \ Engineering \& \ recommends \ green \ light for \ high \ precision \ measurement \ applications}$
- 2. Nominal value, with no spacers in place
- 3. Tolerance ± 10%
- 4. Used in continuous (not pulsed) mode
- 5. At max forward current. Tolerance is ±0.06V on forward voltage measurements
- 6. At pulse width <= 10 ms, duty cycle <= 10% condition. Built-in electronics board must be bypassed (see tech info)

### COMPATIBLE PRODUCTS

Despite the efforts made to generate an error-free compatibility list, we always recommend to consult the Opto Engineering® **technical support** department before purchasing a compatible product. Opto Engineering® shall not be liable for any damage or malfunctioning caused by the incorrect selection of a compatible product.



TC3MHR-TC5MHR CORE PLUS series

Compact large-FOV telecentric lenses for sensors up to 4/3"

TCCP3MHR192-C	Ultra compact bi-telecentric lens for matrix detectors up to 1.1", magnification 0.064x	
TCCP5MHR192-F	Ultra compact bi-telecentric lens for matrix detectors up to 4/3", magnification 0.088x	



TC series

TC23172	Bi-telecentric lens for 2/3" detectors, magnification 0.051 x, C-mount
TC13192	Bi-telecentric lens for 1/3" detectors, magnification 0.025 ×, C-mount
TC12192	Bi-telecentric lens for 1/2" detectors, magnification 0.033 x, C-mount
TC23192	Bi-telecentric lens for 2/3" detectors, magnification 0.046 x, C-mount



TC CORE PLUS series

Compact large-FOV bi-telecentric lenses for sensors up to 2/3"

TCCP12192 Ultra compact bi-telecentric lens for matrix detectors up to 1/1.8", magnification 0.033x



TC1MHR-TC4MHR series

Telecentric lenses for sensors up to 4/3"

TC1MHR192-C	High resolution telecentric lens for 1/1.2" detectors, magnification 0.056x, C-mount
TC2MHR192-C	High resolution telecentric lens for 1" detectors, magnification 0.067x, C-mount
TC2MHR192-F	High resolution telecentric lens for 1" detectors, magnification 0.067x, F-mount
TC2MHR192-E	High resolution telecentric lens for 1" detectors, magnification 0.067x, mount M42X1 FD=16
TC3MHR192-C	High resolution telecentric lens for 1.1" detectors, magnification 0.075x, C-mount
TC4MHR192-C	High resolution telecentric lens for 4/3" detectors, magnification 0.092x, C-mount
TC4MHR192-F	High resolution telecentric lens for 4/3" detectors, magnification 0.092x, F-mount
TC4MHR192-E	High resolution telecentric lens for 4/3" detectors, magnification 0.092x, mount M42X1 FD=16



TC12K series

Telecentric lenses for sensors up to 62 mm and 12k line scan cameras

TC12K192 Telecentric lens for 12k and 16k line scan cameras, magnification 0.320 x, M72 x 0.75 mount



TCDP series

Double port bi-telecentric lens for detector up to 2/3"

TCDP2X192	Double magnification bi-telecentric lens, for detectors up to 2/3"
TCDP4X192	Double magnification bi-telecentric lens, for detectors up to 2/3"



Accessories

Accessories and add-ons to make the most of Opto Engineering  $\hspace{-0.6em}^{\text{(B)}}$  lenses.

Diffuser cap for LTCLHP illuminators

LED1W-G

Replacement LED source, green



CMHO series

Clamping mechanics for lenses

CMHO192R Clamping mechanics for TCxx192 lenses and LTCLHP192-X illuminators rotation type



LTSCHP series

High-performance replacement LED modules

LTSCHP1W-G	Replacement LED module, green
LTSCHP1W-GZ	Replacement LED module with diffuser, green



PS series

Power supplies

RT-SDR-120-24 24VDC DIN rail power supply



CB series

Cables

CB244P1500 Power cable, side 1 M8 connector straight, side 2 cable end - 2 m - type 1 labels

CB244P1500L Power cable, side 1 M8 connector angled, side 2 cable end - 2 m - type 1 labels



LTIC series

LED lighting controllers

LTIC1CH-A1-4	Analogue lighting controller unit, 4A, 24V
LTIC1CH-D1-4	Digital lighting controller unit, 4A, 24V
LTICOBUL1000CH1-24VUSTB	24VDC analog lighting controller 1 channel, UK power cord, Illumination cable, side A SM 3 way male connector, side B terminal blocks connector, 24V - 3m
LTICOBUL1000CH1-24VEUTB	24VDC analog lighting controller 1 channel, UK power cord, Illumination cable, side A SM 3 way male connector, side B terminal blocks connector, 24V - 3m
LTICOBUL1000CH1-24VUKTB	24VDC analog lighting controller 1 channel, UK power cord, Illumination cable, side A SM 3 way male connector, side B terminal blocks connector, 24V - 3m