

# LTCLHP240-R

Telecentric HP illuminator, beam diameter 300 mm, red

## SPECIFICATIONS

### Optical specifications

Beam diameter	(mm)	300
Working distance range	(mm)	350 - 700
Light color, peak wavelength (1)		red, 630 nm

### Mechanical specifications

Length (2)	(mm)	769.2
Outer diameter	(mm)	322
Mass	(g)	18192

### Electrical specifications

#### Device power ratings

DC voltage minimum (3)	(V)	12
DC voltage maximum (3)	(V)	24
Power consumption	(W)	< 2.5
Max LED forward current (4)	(mA)	350
Cables		CB244P1500 included

#### LED power ratings

Forward voltage (typical) (5)	(V)	2.4
Forward voltage (max) (5)	(V)	3.00
Max pulse current (6)	(mA)	2000

#### Eye safety

Risk group according to CEI EN 62471:2010	Exempt
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Last update: 2021-06-22

## NOTES

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.



TC series

Bi-telecentric lenses for sensors up to 2/3"

**TC23200** Bi-telecentric lens for 2/3" detectors, magnification 0.044 x, C-mount

**TC23240** Bi-telecentric lens for 2/3" detectors, magnification 0.037 x, C-mount



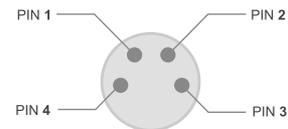
TC1MHR-TC4MHR series

Telecentric lenses for sensors up to 4/3"

**TC1MHR240-C** High resolution telecentric lens for 1/1.2" detectors, magnification 0.045x, C-mount



## 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.

TC2MHR240-C	High resolution telecentric lens for 1" detectors, magnification 0.053x, C-mount
TC2MHR240-F	High resolution telecentric lens for 1" detectors, magnification 0.053x, F-mount
TC2MHR240-E	High resolution telecentric lens for 1" detectors, magnification 0.053x, mount M42X1 FD=16
TC3MHR240-C	High resolution telecentric lens for 1.1" detectors, magnification 0.059x, C-mount
TC4MHR240-C	High resolution telecentric lens for 4/3" detectors, magnification 0.073x, C-mount
TC4MHR240-F	High resolution telecentric lens for 4/3" detectors, magnification 0.073x, F-mount
TC4MHR240-E	High resolution telecentric lens for 4/3" detectors, magnification 0.073x, mount M42X1 FD=16



TC12M series

Telecentric lenses for sensors up to APS-H and 4k line scan cameras

TC12M240-F	High resolution telecentric lenses, magnification 0.115, WD 542.8, F mount
TC12M240-J	High resolution telecentric lenses, magnification 0.115, WD 542.9, M42x1 FD12



Accessories

Accessories and add-ons to make the most of Opto Engineering® lenses.

Diffuser cap for LTCLHP illuminators

LED1W-R	Replacement LED source, red
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CMHO series

Clamping mechanics for lenses

CMHO240R	Clamping mechanics rotation for TCxx240 lenses and LTCLHP240-X illuminators rotation type
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LTSCHP series

High-performance replacement LED modules

LTSCHP1W-R	Replacement LED module, red
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CB series

Cables

CB244P1500	Power cable, side 1 M8 connector straight, side 2 cable end - 2 m - type 1 labels
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CB244P1500L	Power cable, side 1 M8 connector angled, side 2 cable end - 2 m - type 1 labels
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LTIC series

LED lighting controllers

LTIC1CH-A1-4	Analogue lighting controller unit, 4A, 24V
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LTIC1CH-D1-4	Digital lighting controller unit, 4A, 24V
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