

LTCLHP120-R

Telecentric HP illuminator, beam diameter 150 mm, red

SPECIFICATIONS

Optical specifications

Beam diameter	(mm)	150
Working distance range	(mm)	220 - 440
Light color, peak wavelength (1)		red, 630 nm

Mechanical specifications

Length (2)	(mm)	408.2
Outer diameter	(mm)	180
Mass	(g)	4596

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"

TC23110	Bi-telecentric lens for 2/3" detectors, magnification 0.079 x, C-mount
TC12120	Bi-telecentric lens for 1/2" detectors, magnification 0.052 x, C-mount
TC13120	Bi-telecentric lens for 1/3" detectors, magnification 0.038 x, C-mount
TC23120	Bi-telecentric lens for 2/3" detectors, magnification 0.072 x, C-mount

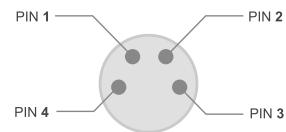


TC CORE series

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



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.

TCCR12120 Bi-telecentric CORE lens for 1/2" detectors, magnification 0.052 x, C-mount

TCCR23120 Bi-telecentric CORE lens for 2/3" detectors, magnification 0.072 x, C-mount



TC1MHR-TC4MHR CORE series

Compact telecentric lenses for sensors up to 4/3"

TCCR2M120-C Telecentric CORE lens for 1" detectors, magnification 0.104 x, C

TCCR2M120-E Telecentric CORE lens for 1" detectors, magnification 0.104 x, M42x1 FD 16

TCCR2M120-F Telecentric CORE lens for 1" detectors, magnification 0.104 x, F

TCCR4M120-C Telecentric CORE lens for 4/3" detectors, magnification 0.143 x, C

TCCR4M120-F Telecentric CORE lens for 4/3" detectors, magnification 0.143 x, F

TCCR4M120-E Telecentric CORE lens for 4/3" detectors, magnification 0.143 x, M42x1 FD 16



TC1MHR-TC4MHR series

Telecentric lenses for sensors up to 4/3"

TC1MHR120-C High resolution telecentric lens for 1/1.2" detectors, magnification 0.087x, C-mount

TC2MHR120-C High resolution telecentric lens for 1" detectors, magnification 0.104x, C-mount

TC2MHR120-F High resolution telecentric lens for 1" detectors, magnification 0.104x, F-mount

TC2MHR120-E High resolution telecentric lens for 1" detectors, magnification 0.104x, mount M42X1 FD=16

TC3MHR120-C High resolution telecentric lens for 1.1" detectors, magnification 0.118x, C-mount

TC4MHR120-C High resolution telecentric lens for 4/3" detectors, magnification 0.143x, C-mount

TC4MHR120-F High resolution telecentric lens for 4/3" detectors, magnification 0.143x, F-mount

TC4MHR120-E High resolution telecentric lens for 4/3" detectors, magnification 0.143x, mount M42X1 FD=16



TC16M series

Telecentric lenses for sensors up to 43.3 mm and 8k line scan cameras

TC16M120 Telecentric lens for 35 mm detectors, magnification 0.289 x, F-mount

TC16M120-Q Telecentric lens for 35 mm detectors, magnification 0.289 x, mount M58x0.75 FD = 6.56



TC12K series

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

TC12K120 Telecentric lens for 12k and 16k line scan cameras, magnification 0.529 x, M72 x 0.75 mount



TC12M series

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

TC12M120-F High resolution telecentric lenses, magnification 0.233, WD 303.9, F mount

TC12M120-J High resolution telecentric lenses, magnification 0.233, WD 303.10, M42x1 FD12



TCDP series

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

TCDP2X120 Double magnification bi-telecentric lens, for detectors up to 2/3"

TCDP4X120 Double magnification bi-telecentric lens, for detectors up to 2/3"



Accessories

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

Diffuser cap for LTCLHP illuminators

LED1W-R Replacement LED source, red



CMHO series

Clamping mechanics for lenses



LTSCHP series

High-performance replacement LED modules

LTSCHP1W-R

Replacement LED module, red



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
