

LTCLHP080-R

Telecentric HP illuminator, beam diameter 100 mm, red

SPECIFICATIONS

Optical specifications

Beam diameter	(mm)	100
Working distance range	(mm)	150 - 300
Light color, peak wavelength (1)		red, 630 nm

Mechanical specifications

Length (2)	(mm)	277.2
Outer diameter	(mm)	116
Mass	(g)	1348

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
---	--------

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"

TC23072	Bi-telecentric lens for 2/3" detectors, magnification 0.122 x, C-mount
TC13080	Bi-telecentric lens for 1/3" detectors, magnification 0.059 x, C-mount
TC12080	Bi-telecentric lens for 1/2" detectors, magnification 0.080 x, C-mount
TC23080	Bi-telecentric lens for 2/3" detectors, magnification 0.110 x, C-mount

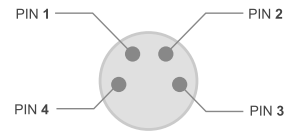


TC CORE series

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.

TCCR12080	Bi-telecentric CORE lens for 1/2" detectors, magnification 0.080 x, C-mount
TCCR23080	Bi-telecentric CORE lens for 2/3" detectors, magnification 0.110 x, C-mount



TC1MHR-TC4MHR CORE series
Compact telecentric lenses for sensors up to 4/3"

TCCR2M080-C	Telecentric CORE lens for 1" detectors, magnification 0.160 x, C-mount
TCCR2M080-E	Telecentric CORE lens for 1" detectors, magnification 0.160 x, M42x1 FD=16
TCCR4M080-C	Telecentric CORE lens for 4/3" detectors, magnification 0.221 x, C-mount
TCCR4M080-F	Telecentric CORE lens for 4/3" detectors, magnification 0.221 x, F-mount
TCCR4M080-E	Telecentric CORE lens for 4/3" detectors, magnification 0.221 x, M42x1 FD=16



TC1MHR-TC4MHR series

Telecentric lenses for sensors up to 4/3"

TC1MHR080-C	High resolution telecentric lens for 1/1.2" detectors, magnification 0.134x, C-mount
TC2MHR080-C	High resolution telecentric lens for 1" detectors, magnification 0.160x, C-mount
TC2MHR080-F	High resolution telecentric lens for 1" detectors, magnification 0.160x, F-mount
TC2MHR080-E	High resolution telecentric lens for 1" detectors, magnification 0.160x, mount M42X1 FD=16
TC3MHR080-C	High resolution telecentric lens for 1.1" detectors, magnification 0.182x, C-mount
TC4MHR080-C	High resolution telecentric lens for 4/3" detectors, magnification 0.221x, C-mount
TC4MHR080-F	High resolution telecentric lens for 4/3" detectors, magnification 0.221x, F-mount
TC4MHR080-E	High resolution telecentric lens for 4/3" detectors, magnification 0.221x, mount M42X1 FD=16



TC16M series

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

TC16M080	Telecentric lens for 35 mm detectors, magnification 0.463 x, F-mount
TC16M080-Q	Telecentric lens for 35 mm detectors, magnification 0.463 x, mount M58x0.75 FD = 6.56



TC12K series

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

TC12K080	Telecentric lens for 12k and 16k line scan cameras, magnification 0.698 x, M72 x 0.75 mount
----------	---



TC12M series

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

TC12M080-F	High resolution telecentric lenses, magnification 0.376, WD 199.0, F mount
TC12M080-J	High resolution telecentric lenses, magnification 0.376, WD 199.1, M42x1 FD12



CMBS series

45° beam splitters

CMBS080	45° beam splitter with mount for 116 mm clamping diameter optics
---------	--



CMMR series

45° first surface mirrors

CMMR080	45° first surface mirror for 116 mm clamping diameter optics
---------	--




Accessories

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

	Diffuser cap for LTCLHP illuminators
LED1W-R	Replacement LED source, red

WI series

 Protective windows for lenses

[WI080](#) Protective window for 116 mm clamping diameter optics

 CMHO series

Clamping mechanics for lenses

[CMHO080](#) Clamping mechanics for TCxx072, TCxx080, LTCLHP080-X illuminators and PCxx030XS

 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

 CMT series

Precision alignment mechanics for lenses

[CMTH080](#) Precision alignment mechanics for telecentric optics 080

 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
