

# LTCLHP080-W

Telecentric HP illuminator, beam diameter 100 mm, white

## SPECIFICATIONS

### Optical specifications

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

### 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)	2.78
Forward voltage (max) (5)	(V)	-
Max pulse current (6)	(mA)	2000

#### Eye safety

Risk group according to CEI EN 62471:2010	Risk group 1
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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"

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

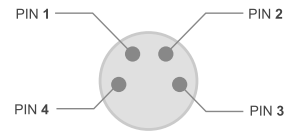


TC CORE series

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
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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



Accessories

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

LED1W-W	Replacement LED source, white Diffuser cap for LTCLHP illuminators
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CMBS series

45° beam splitters

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

45° first surface mirrors

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

 Protective windows for lenses

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

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 CMHO series

Clamping mechanics for lenses

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

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 LTSCHP series

High-performance replacement LED modules

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[LTSCHP1W-W](#) Replacement LED module, white

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 PS series

Power supplies

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[RT-SDR-120-24](#) 24VDC DIN rail power supply

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 CB series

Cables

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[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

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 CMT series

Precision alignment mechanics for lenses

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

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 LTIC series

LED lighting controllers

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[LTIC1CH-A1-4](#) Analogue lighting controller unit, 4A, 24V

[LTIC1CH-D1-4](#) Digital lighting controller unit, 4A, 24V

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[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

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