

LTCLHP064-R

Telecentric HP illuminator, beam diameter 80 mm, red

SPECIFICATIONS

Optical specifications

Beam diameter	(mm)	80
Working distance range	(mm)	120 - 240
Light color, peak wavelength (1)		red, 630 nm

Mechanical specifications

Length (2)	(mm)	231.6
Outer diameter	(mm)	100
Mass	(g)	913

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"

TC13064	Bi-telecentric lens for 1/3" detectors, magnification 0.074 x, C-mount
TC12064	Bi-telecentric lens for 1/2" detectors, magnification 0.100 x, C-mount
TC23064	Bi-telecentric lens for 2/3" detectors, magnification 0.138 x, C-mount

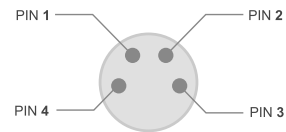


TC CORE series

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.

TCCR12064 Bi-telecentric CORE lens for 1/2" detectors, magnification 0.100 x, C-mount

TCCR23064 Bi-telecentric CORE lens for 2/3" detectors, magnification 0.138 x, C-mount



TC1MHR-TC4MHR CORE series

Compact telecentric lenses for sensors up to 4/3"

TCCR2M064-C Telecentric CORE lens for 1" detectors, magnification 0.200 x, C-mount

TCCR2M064-E Telecentric CORE lens for 1" detectors, magnification 0.200 x, M42x1 FD=16

TCCR4M064-C Telecentric CORE lens for 4/3" detectors, magnification 0.275 x, C-mount

TCCR4M064-F Telecentric CORE lens for 4/3" detectors, magnification 0.275 x, F-mount

TCCR4M064-E Telecentric CORE lens for 4/3" detectors, magnification 0.275 x, M42x1 FD=16



TC1MHR-TC4MHR series

Telecentric lenses for sensors up to 4/3"

TC1MHR064-C High resolution telecentric lens for 1/1.2" detectors, magnification 0.166x, C-mount

TC2MHR064-C High resolution telecentric lens for 1" detectors, magnification 0.200x, C-mount

TC2MHR064-F High resolution telecentric lens for 1" detectors, magnification 0.200x, F-mount

TC2MHR064-E High resolution telecentric lens for 1" detectors, magnification 0.200x, mount M42X1 FD=16

TC3MHR064-C High resolution telecentric lens for 1.1" detectors, magnification 0.227x, C-mount

TC4MHR064-C High resolution telecentric lens for 4/3" detectors, magnification 0.275x, C-mount

TC4MHR064-F High resolution telecentric lens for 4/3" detectors, magnification 0.275x, F-mount

TC4MHR064-E High resolution telecentric lens for 4/3" detectors, magnification 0.275x, mount M42X1 FD=16



TC16M series

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

TC16M064 Telecentric lens for 35 mm detectors, magnification 0.561 x, F-mount

TC16M064-Q Telecentric lens for 35 mm detectors, magnification 0.561 x, mount M58x0.75 FD = 6.56



TC12K series

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

TC12K064 Telecentric lens for 12k and 16k line scan cameras, magnification 0.960 x, M72 x 0.75 mount



TC12M series

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

TC12M064-F High resolution telecentric lenses, magnification 0.465, WD 157.6, F mount

TC12M064-J High resolution telecentric lenses, magnification 0.465, WD 157.7, M42x1 FD12



CMBS series

45° beam splitters

CMBS064 45° beam splitter with mount for 100 mm clamping diameter optics



CMMR series

45° first surface mirrors

CMMR064 45° first surface mirror for 100 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

[WI064](#) Protective window for 100 mm clamping diameter optics



CMHO series

Clamping mechanics for lenses

[CMHO064](#) Clamping mechanics for TCxx064 lenses and LTCLHP064-X illuminators



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

[CMTH064](#) Precision alignment mechanics for telecentric optics 064



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 5M 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 5M 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 5M 3 way male connector, side B terminal blocks connector, 24V - 3m
