

LTCLCR080-R

Telecentric CORE illuminator, beam dimensions $\varnothing = 98$; $x = 90$, red

SPECIFICATIONS

Optical specifications

Minimum beam shape dimension (7)	(mm)	$\varnothing = 98$; $x = 90$
Working distance range	(mm)	150 - 300
Light color, peak wavelength (5)		red, 630 nm

Electrical specifications

Device power ratings

DC voltage minimum(1)	(V)	12
DC voltage maximum(1)	(V)	24
Power consumption	(W)	< 2.5
Max LED forward current (2)	(mA)	350

LED power ratings

Forward voltage (typical) (3)	(V)	2.4
Forward voltage (max) (3)	(V)	3.00
Max pulse current (4)	(mA)	2000

Mechanical specifications

A	(mm)	119
B	(mm)	145
C (6)	(mm)	198
Mass	(g)	2919

Eye safety

Risk group according to CEI EN 62471:2010	Exempt
---	--------

Last update: 2021-06-22

NOTES

1. Tolerance $\pm 10\%$
2. Used in continuous (not pulsed) mode.
3. At max forward current. Tolerance is $\pm 0.06V$ on forward voltage measurements.
4. At pulse width ≤ 10 ms, duty cycle $\leq 10\%$ condition. Built-in electronics board must be bypassed (see tech info).
5. Opto Engineering® recommends green light for high precision measurement applications.
6. Nominal value, with no spacers in place.
7. Beam shape is not circular. See [Tech Info](#) for minimum beam dimensions.

COMPATIBLE PRODUCTS

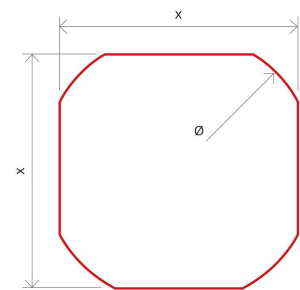
Despite the efforts made to generate an error-free compatibility list, we always recommend to consult the Opto Engineering® technical support department before purchasing a compatible product. Opto Engineering® shall not be liable for any damage or malfunctioning caused by the incorrect selection of a compatible product.



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

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



Minimum beam shape dimensions (\varnothing, x)

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.



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

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



TCSM series

3D bi-telecentric lenses with Scheimpflug adjustment

TCSM080 3D bi-telecentric lens with Scheimpflug adjustment



TCZR series

8x bi-telecentric zoom lenses with motorized controls

TCZR072 Bi-telecentric zoom with motorized controls, magnification 0.125x to 1x, for detectors up to 2/3"



TCZRS series

Bi-telecentric zoom lenses with motorized control

TCZR072S Bi-telecentric zoom with motorized controls, magnification 0.125x to 1x, for detectors up to 2/3"



TC1MHR-TC4MHR CORE series

Compact telecentric lenses for sensors up to 4/3"

TCCR1M080-C Telecentric CORE lens for 1/1.2" detectors, magnification 0.134 x, mount C, WD=226.8

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

TCCR3M080-C Telecentric CORE lens for 1.1" detectors, magnification 0.182 x, mount C, WD=226.8

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



LTSCHP series

High-performance replacement LED modules

[LTSCHP1W-R](#) Replacement LED module, red



LTDV series

LED lighting strobe controllers

[LTDV1CH-17V](#) Strobe controller 1 channel variable current 5 mA - 17A



CMHOCR series

Clamping mechanics for CORE lenses

[CMHOCR080](#) Clamping mechanics for CORE telecentric lenses and illuminators TCCRxx80 and LTCLCR080-x



PS series

Power supplies

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



CMPTCR series

Mounting plates for CORE optical benches

[CMPTCR080](#) Mechanical components designed for CORE telecentric lenses and illuminators Ø 80mm



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

[CMTHCR080](#) Precision alignment mechanics for CORE 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
