

# LTCLCR080-G

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

## SPECIFICATIONS

### Optical specifications

Minimum beam shape dimension (7)	(mm)	$\varnothing = 98$ ; $x = 90$
Working distance range	(mm)	150 - 300
Light color, peak wavelength (5)		green, 520 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)	3.3
Forward voltage (max) (3)	(V)	4.00
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	Risk group 1
---	--------------

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  $\leq 10$  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

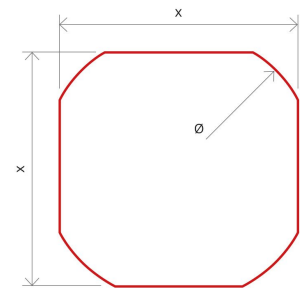
Despite the efforts made to generate an error-free compatibility list, we always recommend to consult the Opto Engineering® technical support department before purchasing a compatible product. Opto Engineering® shall not be liable for any damage or malfunctioning caused by the incorrect selection of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

<a href="#">TC12M080-F</a>	High resolution telecentric lenses, magnification 0.376, WD 199.0, F mount
<a href="#">TC12M080-J</a>	High resolution telecentric lenses, magnification 0.376, WD 199.1, M42x1 FD12
	LTSCHP series High-performance replacement LED modules
<a href="#">LTSCHP1W-G</a>	Replacement LED module, green
<a href="#">LTSCHP1W-GZ</a>	Replacement LED module with diffuser, green
	LTDV series LED lighting strobe controllers
<a href="#">LTDV1CH-17V</a>	Strobe controller 1 channel variable current 5 mA - 17A
	CMHOCR series Clamping mechanics for CORE lenses
<a href="#">CMHOCR080</a>	Clamping mechanics for CORE telecentric lenses and illuminators TCCRxx80 and LTCLCR080-x
	PS series Power supplies
<a href="#">RT-SDR-120-24</a>	24VDC DIN rail power supply
	CMPTCR series Mounting plates for CORE optical benches
<a href="#">CMPTCR080</a>	Mechanical components designed for CORE telecentric lenses and illuminators Ø 80mm
	CB series Cables
<a href="#">CB244P1500</a>	Power cable, side 1 M8 connector straight, side 2 cable end - 2 m - type 1 labels
<a href="#">CB244P1500L</a>	Power cable, side 1 M8 connector angled, side 2 cable end - 2 m - type 1 labels
	CMT series Precision alignment mechanics for lenses
<a href="#">CMTHCR080</a>	Precision alignment mechanics for CORE telecentric optics 080
	LTIC series LED lighting controllers
<a href="#">LTIC1CH-A1-4</a>	Analogue lighting controller unit, 4A, 24V
<a href="#">LTIC1CH-D1-4</a>	Digital lighting controller unit, 4A, 24V
<a href="#">LTICOBUL1000CH1-24VUSTB</a>	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
<a href="#">LTICOBUL1000CH1-24VEUTB</a>	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
<a href="#">LTICOBUL1000CH1-24VUKTB</a>	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