

# LTCLCR120-R

Telecentric CORE illuminator, beam dimensions  $\varnothing = 156$ ,  $x = 130$ , red, 630 nm

## SPECIFICATIONS

### Optical specifications

Minimum beam shape dimension (7)	(mm)	$\varnothing = 156$ , $x = 130$
Working distance range	(mm)	220-440
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)	182
B	(mm)	220
C (6)	(mm)	231
Mass	(g)	9060

### 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  $\leq 10$  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

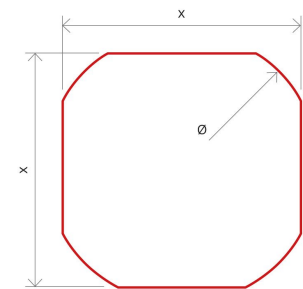
Despite the efforts made to generate an error-free compatibility list, we always recommend to consult the Opto Engineering® technical support department before purchasing a compatible product. Opto Engineering® shall not be liable for any damage or malfunctioning caused by the incorrect selection of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



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

TC12120	Bi-telecentric lens for 1/2" detectors, magnification 0.052 x, C-mount
TC13120	Bi-telecentric lens for 1/3" detectors, magnification 0.038 x, C-mount
TC23120	Bi-telecentric lens for 2/3" detectors, magnification 0.072 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"

TCCR12120 Bi-telecentric CORE lens for 1/2" detectors, magnification 0.052 x, C-mount

TCCR23120 Bi-telecentric CORE lens for 2/3" detectors, magnification 0.072 x, C-mount



TC1MHR-TC4MHR CORE series

Compact telecentric lenses for sensors up to 4/3"

TCCR1M120-C Telecentric CORE lens for 1/1.2" detectors, magnification 0.087 x, mount C, WD=334.6

TCCR2M120-C Telecentric CORE lens for 1" detectors, magnification 0.104 x, C

TCCR2M120-E Telecentric CORE lens for 1" detectors, magnification 0.104 x, M42x1 FD 16

TCCR2M120-F Telecentric CORE lens for 1" detectors, magnification 0.104 x, F

TCCR3M120-C Telecentric CORE lens for 1.1" detectors, magnification 0.118 x, mount C, WD=334.6

TCCR4M120-C Telecentric CORE lens for 4/3" detectors, magnification 0.143 x, C

TCCR4M120-F Telecentric CORE lens for 4/3" detectors, magnification 0.143 x, F

TCCR4M120-E Telecentric CORE lens for 4/3" detectors, magnification 0.143 x, M42x1 FD 16



TC1MHR-TC4MHR series

Telecentric lenses for sensors up to 4/3"

TC1MHR120-C High resolution telecentric lens for 1/1.2" detectors, magnification 0.087x, C-mount

TC2MHR120-C High resolution telecentric lens for 1" detectors, magnification 0.104x, C-mount

TC2MHR120-F High resolution telecentric lens for 1" detectors, magnification 0.104x, F-mount

TC2MHR120-E High resolution telecentric lens for 1" detectors, magnification 0.104x, mount M42X1 FD=16

TC3MHR120-C High resolution telecentric lens for 1.1" detectors, magnification 0.118x, C-mount

TC4MHR120-C High resolution telecentric lens for 4/3" detectors, magnification 0.143x, C-mount

TC4MHR120-F High resolution telecentric lens for 4/3" detectors, magnification 0.143x, F-mount

TC4MHR120-E High resolution telecentric lens for 4/3" detectors, magnification 0.143x, mount M42X1 FD=16



TC12M series

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

TC12M120-F High resolution telecentric lenses, magnification 0.233, WD 303.9, F mount

TC12M120-J High resolution telecentric lenses, magnification 0.233, WD 303.10, M42x1 FD12



LTSCHP series

High-performance replacement LED modules

LTSCHP1W-R Replacement LED module, red



CMHOCR series

Clamping mechanics for CORE lenses

CMHOCR120 Clamping mechanics for CORE telecentric lenses and illuminators TCCRxx120 and LTCLCR120-x



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

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

---