

# LTCLCR064-R

Telecentric CORE illuminator, beam dimensions  $\varnothing = 86$ ;  $x = 67$ , red

## SPECIFICATIONS

### Optical specifications

Minimum beam shape dimension (7)	(mm)	$\varnothing = 86$ ; $x = 67$
Working distance range	(mm)	120 - 240
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)	101
B	(mm)	122
C (6)	(mm)	179
Mass	(g)	1832

### 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

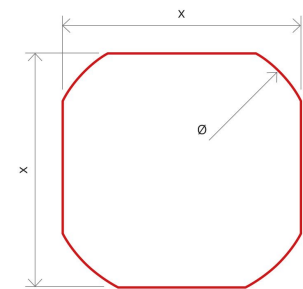
Despite the efforts made to generate an error-free compatibility list, we always recommend to consult the Opto Engineering® technical support department before purchasing a compatible product. Opto Engineering® shall not be liable for any damage or malfunctioning caused by the incorrect selection of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



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

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



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"

**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



TCSM series

3D bi-telecentric lenses with Scheimpflug adjustment

**TCSM064** 3D bi-telecentric lens with Scheimpflug adjustment



TC1MHR-TC4MHR CORE series

Compact telecentric lenses for sensors up to 4/3"

**TCCR1M056-C** Telecentric CORE lens for 1/1.2" detectors, magnification 0.190 x, mount C, WD=157.8

**TCCR1M064-C** Telecentric CORE lens for 1/1.2" detectors, magnification 0.166 x, mount C, WD=181.9

**TCCR2M056-C** Telecentric CORE lens for 1" detectors, magnification 0.228 x, C-mount

**TCCR2M056-E** Telecentric CORE lens for 1" detectors, magnification 0.228 x, M42x1 FD=16

**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

**TCCR3M056-C** Telecentric CORE lens for 1.1" detectors, magnification 0.259 x, mount C, WD=157.8

**TCCR4M056-C** Telecentric CORE lens for 4/3" detectors, magnification 0.314 x, C-mount

**TCCR4M056-F** Telecentric CORE lens for 4/3" detectors, magnification 0.314 x, F-mount

**TCCR4M056-E** Telecentric CORE lens for 4/3" detectors, magnification 0.314 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"

**TC1MHR056-C** High resolution telecentric lens for 1/1.2" detectors, magnification 0.190x, C-mount

**TC2MHR056-C** High resolution telecentric lens for 1" detectors, magnification 0.228x, C-mount

**TC2MHR056-F** High resolution telecentric lens for 1" detectors, magnification 0.228x, F-mount

**TC2MHR056-E** High resolution telecentric lens for 1" detectors, magnification 0.228x, mount M42X1 FD=16

**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

**TC3MHR056-C** High resolution telecentric lens for 1.1" detectors, magnification 0.259x, C-mount

**TC4MHR056-C** High resolution telecentric lens for 4/3" detectors, magnification 0.314x, C-mount

**TC4MHR056-F** High resolution telecentric lens for 4/3" detectors, magnification 0.314x, F-mount

**TC4MHR056-E** High resolution telecentric lens for 4/3" detectors, magnification 0.314x, mount M42X1 FD=16

**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

**TC12K192** Telecentric lens for 12k and 16k line scan cameras, magnification 0.320 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



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

**CMHOCR064** Clamping mechanics for CORE telecentric lenses and illuminators TCCRxx64 and LTCLCR064-x



PS series

Power supplies

**RT-SDR-120-24** 24VDC DIN rail power supply



CMPTCR series

Mounting plates for CORE optical benches

**CMPTCR064** Mechanical components designed for CORE telecentric lenses and illuminators Ø 64mm



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

**CMTHCR064** Precision alignment mechanics for CORE 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 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