

LTCLCR048-R

Telecentric CORE illuminator, beam dimensions $\varnothing = 56$; $x = 50$, red

SPECIFICATIONS

Optical specifications

Minimum beam shape dimension (7)	(mm)	$\varnothing = 56$; $x = 50$
Working distance range	(mm)	90 - 180
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)	77
B	(mm)	106
C (6)	(mm)	162
Mass	(g)	1019

Eye safety

Risk group according to CEI EN 62471:2010	Exempt
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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.

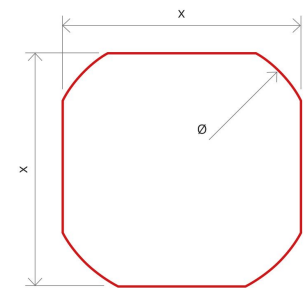
COMPATIBLE PRODUCTS

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"

TC13048	Bi-telecentric lens for 1/3" detectors, magnification 0.098 x, C-mount
TC12048	Bi-telecentric lens for 1/2" detectors, magnification 0.134 x, C-mount
TC23048	Bi-telecentric lens for 2/3" detectors, magnification 0.184 x, C-mount
TC13056	Bi-telecentric lens for 1/3" detectors, magnification 0.084 x, C-mount
TC12056	Bi-telecentric lens for 1/2" detectors, magnification 0.114 x, C-mount



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.

TC23056 Bi-telecentric lens for 2/3" detectors, magnification 0.157 x, C-mount



TC CORE series

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

TCCR12048 Bi-telecentric CORE lens for 1/2" detectors, magnification 0.134 x, C-mount

TCCR23048 Bi-telecentric CORE lens for 2/3" detectors, magnification 0.184 x, C-mount



TCSM series

3D bi-telecentric lenses with Scheimpflug adjustment

TCSM048 3D bi-telecentric lens with Scheimpflug adjustment



TC1MHR-TC4MHR CORE series

Compact telecentric lenses for sensors up to 4/3"

TCCR1M048-C Telecentric CORE lens for 1/1.2" detectors, magnification 0.222 x, mount C, WD=132.4

TCCR2M048-C Telecentric CORE lens for 1" detectors, magnification 0.268 x, C-mount

TCCR2M048-E Telecentric CORE lens for 1" detectors, magnification 0.268 x, M42x1 FD=16

TCCR3M048-C Telecentric CORE lens for 1.1" detectors, magnification 0.303 x, mount C, WD=132.9

TCCR4M048-C Telecentric CORE lens for 4/3" detectors, magnification 0.369 x, C-mount

TCCR4M048-F Telecentric CORE lens for 4/3" detectors, magnification 0.369 x, F-mount

TCCR4M048-E Telecentric CORE lens for 4/3" detectors, magnification 0.369 x, M42x1 FD=16



TC1MHR-TC4MHR series

Telecentric lenses for sensors up to 4/3"

TC1MHR048-C High resolution telecentric lens for 1/1.2" detectors, magnification 0.222x, C-mount

TC2MHR048-C High resolution telecentric lens for 1" detectors, magnification 0.268x, C-mount

TC2MHR048-F High resolution telecentric lens for 1" detectors, magnification 0.268x, F-mount

TC2MHR048-E High resolution telecentric lens for 1" detectors, magnification 0.268x, mount M42X1 FD=16

TC3MHR048-C High resolution telecentric lens for 1.1" detectors, magnification 0.303x, C-mount

TC4MHR048-C High resolution telecentric lens for 4/3" detectors, magnification 0.369x, C-mount

TC4MHR048-F High resolution telecentric lens for 4/3" detectors, magnification 0.369x, F-mount

TC4MHR048-E High resolution telecentric lens for 4/3" detectors, magnification 0.369x, mount M42X1 FD=16



TC16M series

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

TC16M048 Telecentric lens for 35 mm detectors, magnification 0.751 x, F-mount

TC16M048-Q Telecentric lens for 35 mm detectors, magnification 0.751 x, mount M58x0.75 FD =6.56



TC12M series

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

TC12M048-F High resolution telecentric lenses, magnification 0.635, WD 131.1, F mount

TC12M048-J High resolution telecentric lenses, magnification 0.635, WD 131.2, M42x1 FD12



CMHO series

Clamping mechanics for lenses

CMHORBCR048 Clamping mechanics robotics



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
CMHOCR048	Clamping mechanics for CORE telecentric lenses and illuminators TCCRxx48 and LTCLCR048-x
	CMPTCR series Mounting plates for CORE optical benches
CMPTCR048	Mechanical components designed for CORE telecentric lenses and illuminators Ø 48mm
	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
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