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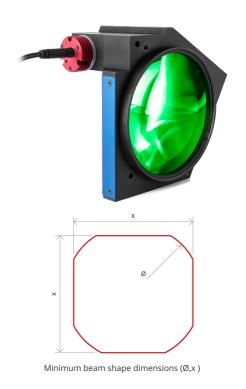
# OPTO ENGINEERING

# LTCLCR096-G

Telecentric CORE illuminator, beam dimensions Ø = 120; x = 99, green

### **SPECIFICATIONS**

Optical specifications		
Minimum beam shape dimension (7)	(mm)	Ø = 120; x = 99
Working distance range	(mm)	200 - 350
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)	2.4
Forward voltage (max) (3)	(V)	3.00
Max pulse current (4)	(mA)	2000
Mechanical specifications		
A	(mm)	139
В	(mm)	172
C (6)	(mm)	223
Mass	(g)	4161



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.

# NOTES

Eye safety

1. Tolerance ±10%

Last update: 2021-06-22

2. Used in continuous (not pulsed) mode.

Risk group according to CEI EN 62471:2010

- 3. At max forward current, Tolerance is  $\pm 0.06 \text{V}$  on forward voltage measurements.
- 4. At pulse width <= 10 ms, duty cycle <= 10% condition. Built-in electronics board must be bypassed (see tech info).

Risk group 1

- $5. \ \, {\rm Opto} \, \, {\rm Engineering}^{\, @} \, {\rm recommends} \, {\rm green} \, {\rm light} \, {\rm for} \, {\rm high} \, {\rm precision} \, {\rm measurement} \, {\rm applications}. \\$
- 6. Nominal value, with no spacers in place.
- 7. Beam shape is not circular. See  $\underline{\text{Tech Info}}$  for minimun 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.



TC series

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

TC13096	Bi-telecentric lens for 1/3" detectors, magnification 0.050 x, C-mount
TC12096	Bi-telecentric lens for 1/2" detectors, magnification 0.068 x, C-mount
TC23096	Bi-telecentric lens for 2/3" detectors, magnification 0.093 x, C-mount



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

TCCR12096	Bi-telecentric CORE lens for 1/2" detectors, magnification 0.068 x, C-mount
TCCR23096	Bi-telecentric CORE lens for 2/3" detectors, magnification 0.093 x, C-mount



TCSM series

3D bi-telecentric lenses with Scheimpflug adjustment

TCSM096	3D bi-telecentric lens with	Scheimpflug adjustment
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TC1MHR-TC4MHR CORE series

Compact telecentric lenses for sensors up to 4/3"

TCCR1M096-C	Telecentric CORE lens for 1/1.2" detectors, magnification 0.114 x, mount C, WD=278.6
TCCR2M096-C	Telecentric CORE lens for 1" detectors, magnification 0.137 x, C-mount
TCCR2M096-E	Telecentric CORE lens for 1" detectors, magnification 0.137 x, M42x1 FD=16
TCCR3M096-C	Telecentric CORE lens for 1.1" detectors, magnification 0.153 x, mount C, WD=278.6
TCCR4M096-C	Telecentric CORE lens for 4/3" detectors, magnification 0.186 x, C-mount
TCCR4M096-F	Telecentric CORE lens for 4/3" detectors, magnification 0.186 x, F-mount
TCCR4M096-E	Telecentric CORE lens for 4/3" detectors, magnification 0.186 x, M42x1 FD=16



TC1MHR-TC4MHR series

Telecentric lenses for sensors up to 4/3"

TC1MHR096-C	High resolution telecentric lens for 1/1.2" detectors, magnification 0.114x, C-mount
TC2MHR096-C	High resolution telecentric lens for 1" detectors, magnification 0.137x, C-mount
TC2MHR096-F	High resolution telecentric lens for 1" detectors, magnification 0.137x, F-mount
TC2MHR096-E	High resolution telecentric lens for 1" detectors, magnification 0.137x, mount M42X1 $$ FD=16
TC3MHR096-C	High resolution telecentric lens for 1.1" detectors, magnification 0.153x, C-mount
TC4MHR096-C	High resolution telecentric lens for 4/3" detectors, magnification 0.186x, C-mount
TC4MHR096-F	High resolution telecentric lens for 4/3" detectors, magnification 0.186x, F-mount
TC4MHR096-E	High resolution telecentric lens for 4/3" detectors, magnification 0.186x, mount M42X1 FD=16



TC16M series

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

TC16M096 Telecentric lens for 35 mm detectors, magnification 0.380 x, F-mount	
TC16M096-Q	Telecentric lens for 35 mm detectors, magnification 0.380 x, mount M58x0.75 FD = 6.56



TC12M series

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

TC12M096-F	High resolution telecentric lenses, magnification 0.306, WD 256.0, F mount
TC12M096-J	High resolution telecentric lenses, magnification 0.306, WD 256.1, M42x1 FD12



LTSCHP series

High-performance replacement LED modules

LTSCHP1W-G	Replacement LED module, green
LTSCHP1W-GZ	Replacement LED module with diffuser, green



LTDV series

LED lighting strobe controllers

LTDV1CH-17V Strobe controller 1 channel variable current 5 mA - 17A



CMHOCR series

Clamping mechanics for CORE lenses

 ${\tt CMHOCR096} \quad {\tt Clamping\ mechanics\ for\ CORE\ telecentric\ lenses\ and\ illuminators\ TCCRxx96\ and}$ LTCLCR096-x



PS series

Power supplies

RT-SDR-120-24

24VDC DIN rail power supply



Mounting plates for CORE optical benches

 ${\tt CMPTCR096} \quad {\tt Mechanical\ components\ designed\ for\ CORE\ telecentric\ lenses\ and\ illuminators\ \emptyset\ 96mm}$ 



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



Precision alignment mechanics for lenses

CMTHCR096 Precision alignment mechanics for CORE telecentric optics 096



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