

LTCLHP056-B

Telecentric HP illuminator, beam diameter 70 mm, blue

SPECIFICATIONS

Optical specifications

Beam diameter	(mm)	70
Working distance range	(mm)	100 - 200
Light color, peak wavelength (1)		blue, 460 nm

Mechanical specifications

Length (2)	(mm)	210,5
Outer diameter	(mm)	80
Mass	(g)	814

Electrical specifications

Device power ratings

DC voltage minimum (3)	(V)	12
DC voltage maximum (3)	(V)	24
Power consumption	(W)	< 2.5
Max LED forward current (4)	(mA)	350
Cables		CB244P1500 included

LED power ratings

Forward voltage (typical) (5)	(V)	3.3
Forward voltage (max) (5)	(V)	4.00
Max pulse current (6)	(mA)	2000

Eye safety

Risk group according to CEI EN 62471:2010	Risk group 2
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Last update: 2021-06-22

NOTES

1. Opto Engineering® recommends green light for high precision measurement applications
2. Nominal value, with no spacers in place
3. Tolerance $\pm 10\%$
4. Used in continuous (not pulsed) mode
5. At max forward current. Tolerance is $\pm 0.06V$ on forward voltage measurements
6. At pulse width ≤ 10 ms, duty cycle $\leq 10\%$ condition. Built-in electronics board must be bypassed (see tech info)

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"

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

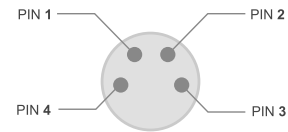


TC CORE series

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



CONNECTION



Device side - male pins
Front view

Pinout reference

Pin	Function
1	Earth
2	GND
3	LED Anode
4	Power supply (+12÷24 V)



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.

TCCR12056 Bi-telecentric CORE lens for 1/2" detectors, magnification 0.114 x, C-mount

TCCR23056 Bi-telecentric CORE lens for 2/3" detectors, magnification 0.157 x, C-mount



TC1MHR-TC4MHR CORE series

Compact telecentric lenses for sensors up to 4/3"

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

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



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

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



TC16M series

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

TC16M056 Telecentric lens for 35 mm detectors, magnification 0.641 x, F-mount

TC16M056-Q Telecentric lens for 35 mm detectors, magnification 0.641 x, mount M58x0.75 FD =6.56



TC12M series

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

TC12M056-F High resolution telecentric lenses, magnification 0.531, WD 136.5, F mount

TC12M056-J High resolution telecentric lenses, magnification 0.531, WD 136.6, M42x1 FD12



CMBS series

45° beam splitters

CMBS056 45° beam splitter with mount for 80 mm clamping diameter optics



Accessories

Accessories and add-ons to make the most of Opto Engineering® lenses.

LED1W-B Replacement LED source, blue

Diffuser cap for LTCLHP illuminators



CMMR series

45° first surface mirrors

CMMR056 45° first surface mirror for 80 mm clamping diameter optics



WI series

Protective windows for lenses

WI056 Protective window for 80 mm clamping diameter optics



CMHO series

Clamping mechanics for lenses

CMHO056 Clamping mechanics for TCxx056 lenses and LTCLHP056-X illuminators



LTSCHP series

High-performance replacement LED modules

LTSCHP1W-B Replacement LED module, blue



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
