

# LTCLHP056-W

Telecentric HP illuminator, beam diameter 70 mm, white

## SPECIFICATIONS

### Optical specifications

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

### 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)	2.78
Forward voltage (max) (5)	(V)	-
Max pulse current (6)	(mA)	2000

#### Eye safety

Risk group according to CEI EN 62471:2010	Risk group 1
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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 ± 10%
4. Used in continuous (not pulsed) mode
5. At max forward current. Tolerance is ±0.06V on forward voltage measurements
6. At pulse width ≤ 10 ms, duty cycle ≤ 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

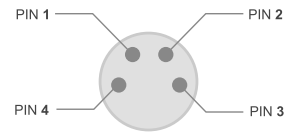


TC CORE series

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



Accessories

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

LED1W-W Replacement LED source, white

Diffuser cap for LTCLHP illuminators



CMBS series

45° beam splitters

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



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

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CMHO056 Clamping mechanics for TCxx056 lenses and LTCLHP056-X illuminators

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LTSCHP series

High-performance replacement LED modules

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LTSCHP1W-W Replacement LED module, white

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PS series

Power supplies

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

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CB series

Cables

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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

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LTIC series

LED lighting controllers

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LTIC1CH-A1-4 Analogue lighting controller unit, 4A, 24V

LTIC1CH-D1-4 Digital lighting controller unit, 4A, 24V

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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

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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

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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

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