

LTCLHP144-G

Telecentric HP illuminator, beam diameter 180 mm, green

SPECIFICATIONS

Optical specifications

Beam diameter	(mm)	180
Working distance range	(mm)	270 - 540
Light color, peak wavelength (1)		green, 520 nm

Mechanical specifications

Length (2)	(mm)	467.2
Outer diameter	(mm)	200
Mass	(g)	5731

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 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.



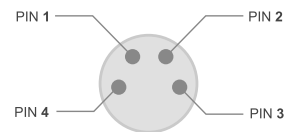
TC3MHR-TC5MHR CORE PLUS series

Compact large-FOV telecentric lenses for sensors up to 4/3"

TCCP3MHR144-C	Ultra compact bi-telecentric lens for matrix detectors up to 1.1", magnification 0.086x
TCCP3MHR192-C	Ultra compact bi-telecentric lens for matrix detectors up to 1.1", magnification 0.064x
TCCP5MHR144-F	Ultra compact bi-telecentric lens for matrix detectors up to 4/3", magnification 0.117x
TCCP5MHR192-F	Ultra compact bi-telecentric lens for matrix detectors up to 4/3", magnification 0.088x



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.



TC series

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

TC23130	Bi-telecentric lens for 2/3" detectors, magnification 0.068 x, C-mount
TC13144	Bi-telecentric lens for 1/3" detectors, magnification 0.033 x, C-mount
TC12144	Bi-telecentric lens for 1/2" detectors, magnification 0.044 x, C-mount
TC23144	Bi-telecentric lens for 2/3" detectors, magnification 0.061 x, C-mount



TC CORE PLUS series

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

TCCP12144	Ultra compact bi-telecentric lens for matrix detectors up to 1/1.8", magnification 0.044x
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TC1MHR-TC4MHR series

Telecentric lenses for sensors up to 4/3"

TC1MHR144-C	High resolution telecentric lens for 1/1.2" detectors, magnification 0.074x, C-mount
TC2MHR144-C	High resolution telecentric lens for 1" detectors, magnification 0.089x, C-mount
TC2MHR144-F	High resolution telecentric lens for 1" detectors, magnification 0.089x, F-mount
TC2MHR144-E	High resolution telecentric lens for 1" detectors, magnification 0.089x, mount M42X1 FD=16
TC3MHR144-C	High resolution telecentric lens for 1.1" detectors, magnification 0.100x, C-mount
TC4MHR144-C	High resolution telecentric lens for 4/3" detectors, magnification 0.122x, C-mount
TC4MHR144-F	High resolution telecentric lens for 4/3" detectors, magnification 0.122x, F-mount
TC4MHR144-E	High resolution telecentric lens for 4/3" detectors, magnification 0.122x, mount M42X1 FD=16



TC16M series

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

TC16M144	Telecentric lens for 35 mm detectors, magnification 0.245 x, F-mount
TC16M144-Q	Telecentric lens for 35 mm detectors, magnification 0.245 x, mount M58x0.75 FD = 6.56



TC12K series

Telecentric lenses for sensors up to 62 mm and 12k line scan cameras

TC12K144	Telecentric lens for 12k and 16k line scan cameras, magnification 0.439 x, M72 x 0.75 mount
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TC12M series

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

TC12M120-F	High resolution telecentric lenses, magnification 0.233, WD 303.9, F mount
TC12M120-J	High resolution telecentric lenses, magnification 0.233, WD 303.10, M42x1 FD12



TCDP series

Double port bi-telecentric lens for detector up to 2/3"

TCDP2X144	Double magnification bi-telecentric lens, for detectors up to 2/3"
TCDP4X144	Double magnification bi-telecentric lens, for detectors up to 2/3"



Accessories

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

LED1W-G	Diffuser cap for LTCLHP illuminators Replacement LED source, green
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CMHO series

Clamping mechanics for lenses



LTSCHP series

High-performance replacement LED modules

LTSCHP1W-G Replacement LED module, green

LTSCHP1W-GZ Replacement LED module with diffuser, green



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
