

LTCLHP024-R

Telecentric HP illuminator, beam diameter 30 mm, red

SPECIFICATIONS

Optical specifications

Beam diameter	(mm)	30
Working distance range	(mm)	45 - 90
Light color, peak wavelength (1)		red, 630 nm

Mechanical specifications

Length (2)	(mm)	124.7
Outer diameter	(mm)	44
Mass	(g)	284

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)	2.4
Forward voltage (max) (5)	(V)	3.00
Max pulse current (6)	(mA)	2000

Eye safety

Risk group according to CEI EN 62471:2010	Exempt
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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"

TC13024 Bi-telecentric lens for 1/3" detectors, magnification 0.192 x, C-mount

TC12024 Bi-telecentric lens for 1/2" detectors, magnification 0.255 x, C-mount

TC23024 Bi-telecentric lens for 2/3" detectors, magnification 0.350 x, C-mount

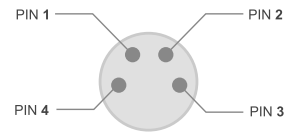


TC1MHR-TC4MHR series

Telecentric lenses for sensors up to 4/3"



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.

TC1MHR024-C	High resolution telecentric lens for 1/1.2" detectors, magnification 0.424x, C-mount
TC2MHR024-C	High resolution telecentric lens for 1" detectors, magnification 0.508x, C-mount
TC2MHR024-F	High resolution telecentric lens for 1" detectors, magnification 0.508x, F-mount
TC2MHR024-E	High resolution telecentric lens for 1" detectors, magnification 0.508x, mount M42X1 FD=16
TC3MHR024-C	High resolution telecentric lens for 1.1" detectors, magnification 0.564x, C-mount
TC4MHR024-C	High resolution telecentric lens for 4/3" detectors, magnification 0.700x, C-mount
TC4MHR024-F	High resolution telecentric lens for 4/3" detectors, magnification 0.700x, F-mount
TC4MHR024-E	High resolution telecentric lens for 4/3" detectors, magnification 0.700x, mount M42X1 FD=16



TC16M series

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

TC16M009	Telecentric lens for 35 mm detectors, magnification 4.000 x, F-mount
TC16M009-Q	Telecentric lens for 35 mm detectors, magnification 4.000 x, mount M58x0.75 FD = 6.56
TC16M012	Telecentric lens for 35 mm detectors, magnification 3.000 x, F-mount
TC16M012-Q	Telecentric lens for 35 mm detectors, magnification 3.000 x, mount M58x0.75 FD =6.56
TC16M018	Telecentric lens for 35 mm detectors, magnification 2.000 x, F-mount
TC16M018-Q	Telecentric lens for 35 mm detectors, magnification 2.000 x, mount M58x0.75 FD =6.56



TC12M series

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

TC12M024-F	High resolution telecentric lenses, magnification 1.208, WD 66.7, F mount
TC12M024-J	High resolution telecentric lenses, magnification 1.208, WD 66.8, M42x1 FD12



Accessories

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

Diffuser cap for LTCLHP illuminators

LED1W-R	Replacement LED source, red
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CMHO series

Clamping mechanics for lenses

CMHO024	Clamping mechanics for TCxx024 lenses and LTCLHP024-X illuminators
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LTSCHP series

High-performance replacement LED modules

LTSCHP1W-R	Replacement LED module, red
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PS series

Power supplies

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

Cables

CB244P1500	Power cable, side 1 M8 connector straight, side 2 cable end - 2 m - type 1 labels
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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

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