OPTO ENGINEERING

LTCLHP064-B

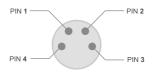
Telecentric HP illuminator, beam diameter 80 mm, blue

SPECIFICATIONS

Optical specifications		
Beam diameter	(mm)	80
Working distance range	(mm)	120 - 240
Light color, peak wavelength (1)		blue, 460 nm
Mechanical specifications		
Length (2)	(mm)	231.6
Outer diameter	(mm)	100
Mass	(g)	913
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
Last update: 2021-06-22		



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.

NOTES

- ${\it 1. \ Opto \ Engineering @ \ recommends \ green \ light for \ high \ precision \ measurement \ applications}$
- 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 $\pm 0.06 V$ 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 ${\tt Opto\ Engineering \it \& technical\ support\ department\ before\ purchasing\ a\ compatible\ product.\ Opto\ }$ $\label{thm:engineering} \textbf{Engineering} \textbf{@} \textbf{ shall not be liable for any damage or malfunctioning caused by the incorrect selection of a liable for any damage or malfunctioning caused by the incorrect selection of a liable for any damage or malfunctioning caused by the incorrect selection of a liable for any damage or malfunctioning caused by the incorrect selection of a liable for any damage or malfunctioning caused by the incorrect selection of a liable for any damage or malfunctioning caused by the incorrect selection of a liable for any damage or malfunctioning caused by the incorrect selection of a liable for any damage or malfunctioning caused by the incorrect selection of a liable for any damage or malfunctioning caused by the incorrect selection of a liable for all the liable for all the$ compatible product.



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

TC13064	Bi-telecentric lens for 1/3" detectors, magnification 0.074 x, C-mount
TC12064	Bi-telecentric lens for 1/2" detectors, magnification 0.100 x, C-mount
TC23064	Bi-telecentric lens for 2/3" detectors, magnification 0.138 x, C-mount



TC CORE series

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

TCCR12064 Bi-telecentric CORE lens for 1/2" detectors, magnification 0.100 x, C-mount
TCCR23064 Bi-telecentric CORE lens for 2/3" detectors, magnification 0.138 x, C-mount



TC1MHR-TC4MHR CORE series

Compact telecentric lenses for sensors up to 4/3"

TCCR2M064-C	Telecentric CORE lens for 1" detectors, magnification 0.200 x, C-mount
TCCR2M064-E	Telecentric CORE lens for 1" detectors, magnification 0.200 x, M42x1 FD=16
TCCR4M064-C	Telecentric CORE lens for 4/3" detectors, magnification 0.275 x, C-mount
TCCR4M064-F	Telecentric CORE lens for 4/3" detectors, magnification 0.275 x, F-mount
TCCR4M064-E	Telecentric CORE lens for 4/3" detectors, magnification 0.275 x, M42x1 FD=16



TC1MHR-TC4MHR series

Telecentric lenses for sensors up to 4/3"

TC1MHR064-C	High resolution telecentric lens for 1/1.2" detectors, magnification 0.166x, C-mount
TC2MHR064-C	High resolution telecentric lens for 1" detectors, magnification 0.200x, C-mount
TC2MHR064-F	High resolution telecentric lens for 1" detectors, magnification 0.200x, F-mount
TC2MHR064-E	High resolution telecentric lens for 1" detectors, magnification 0.200x, mount M42X1 FD=16
TC3MHR064-C	High resolution telecentric lens for 1.1" detectors, magnification 0.227x, C-mount
TC4MHR064-C	High resolution telecentric lens for 4/3" detectors, magnification 0.275x, C-mount
TC4MHR064-F	High resolution telecentric lens for 4/3" detectors, magnification 0.275x, F-mount
TC4MHR064-E	High resolution telecentric lens for 4/3" detectors, magnification 0.275x, mount M42X1 FD=16



TC16M series

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

TC16M064	Telecentric lens for 35 mm detectors, magnification 0.561 x, F-mount
TC16M064-Q	Telecentric lens for 35 mm detectors, magnification 0.561 x, mount M58x0.75 FD = 6.56
TC16M064-K	Telecentric lens for 45.72 mm detectors, magnification 0.56 x, M58x0.75 FD 12.96-mount



TC12K series

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

TC12K064 Telecentric lens for 12k and 16k line scan cameras, magnification 0.960 x, M72 x 0.75 mount



TC12M series

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

TC12M064-F	High resolution telecentric lenses, magnification 0.465, WD 157.6, F mount
TC12M064-J	High resolution telecentric lenses, magnification 0.465, WD 157.7, M42x1 FD12



CMBS series

45° beam splitters

CMBS064

45° beam splitter with mount for 100 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

CMMR064 45° first surface mirror for 100 mm clamping diameter optics

WI series



Protective windows for lenses

WI064

Protective window for 100 mm clamping diameter optics



CMHO series

Clamping mechanics for lenses

CMHO064

Clamping mechanics for TCxx064 lenses and LTCLHP064-X illuminators



LTSCHP series

High-performance replacement LED modules

LTSCHP1W-B

Replacement LED module, blue



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

CMTH064

Precision alignment mechanics for telecentric optics 064



LTIC series

LED lighting controllers

LTIC1CH-A1-4

Analogue lighting controller unit, 4A, 24V