

# TCCRBNCH048

Telecentric CORE optical bench, magnification 0.184 x

## SPECIFICATIONS

### Object field of view

with 1/3" detector (4.8 x 3.6 mm)	(mm × mm)	26.1 x 19.6
with 1/2.5" detector (5.70 x 4.28 mm)	(mm × mm)	31.0 x 23.3
with 1/2" detector (6.4 x 4.8 mm)	(mm × mm)	34.8 x 26.1
with 1/1.8" detector (7.13 x 5.37 mm)	(mm × mm)	38.8 x 29.2
with 2/3" - 5 MP detector (8.45 x 7.07 mm)	(mm × mm)	46.0 x 38.4

### Optical specifications

Magnification	(x)	0.184
Image shape dimension (4)	(∅, x mm)	∅=11.0, x=9.6
Working distance	(mm)	132.9
Optical Accuracy (1)	(µm)	< 31
Field depth (2)	(mm)	24
CTF @ 70 lp/mm	(%)	> 50
Phase adjustment (3)		Yes

### Dimensions

Length	(mm)	352
Width	(mm)	134
Height	(mm)	118
Mass	(g)	3849
Mount		C

Last update: 2018-04-17

## NOTES

- Working distance: distance between the front end of the lens mechanics and the object. Set this distance within +/- 3% of the nominal value for maximum resolution and minimum distortion.
- At the borders of the field depth the image can be still used for measurement but, to get a perfectly sharp image, only half of the nominal field depth should be considered. Pixel size used for calculation is 5.5 µm
- Indicates the availability of an integrated camera phase adjustment feature.
- Indicates the dimensions and shape of image, where "∅=" stands for diameter and "x=" indicates the nominal image height and length ([Tech Info](#) for related drawing).

## 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.



LTSCHP series

High-performance replacement LED modules

<a href="#">LTSCHP1W-G</a>	Replacement LED module, green
<a href="#">LTSCHP1W-GZ</a>	Replacement LED module with diffuser, green



PS series

Power supplies

<a href="#">RT-SDR-120-24</a>	24VDC DIN rail power supply
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LTIC series

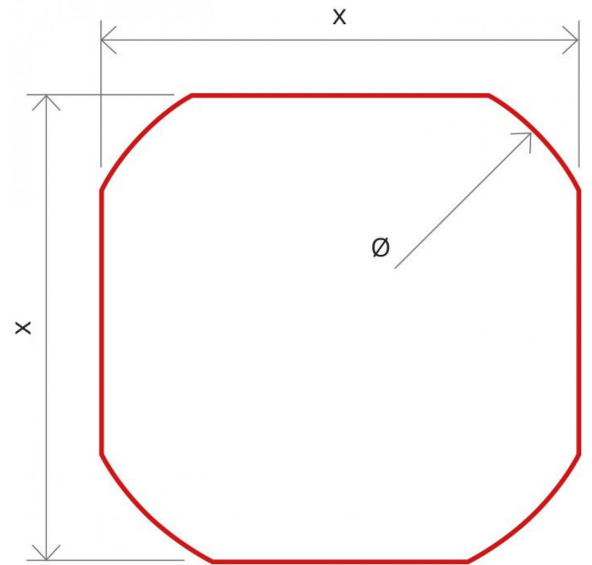
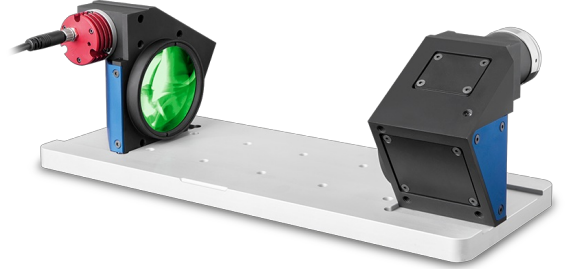


Image shape dimensions (∅, x )

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.

## Light intensity controllers

<a href="#">LTICOBUL1000CH1-24VUSTB</a>	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
<a href="#">LTICOBUL1000CH1-24VEUTB</a>	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
<a href="#">LTICOBUL1000CH1-24VUKTB</a>	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



### COE-G series

GenICam® PoE cameras

<a href="#">COE-032-M-POE-040-IR-C</a>	Area Scan camera IMX265, CMOS, Global shutter, 2048 x 1536, 3.1 MP, 3.45 pix, 1/1.8", Gray, 37.5 fps, GigE, POE, C - mount, Glass filter
<a href="#">COE-032-C-POE-040-IR-C</a>	Area Scan camera IMX265, CMOS, Global shutter, 2048 x 1536, 3.1 MP, 3.45 pix, 1/1.8", Color, 37.5 fps, GigE, POE, C - mount, Infrared cut filter
<a href="#">COE-063-M-POE-040-IR-C-B</a>	Area Scan camera IMX178, CMOS, Rolling shutter, 3072 x 2048, 6.3 MP, 2.4 pix, 1/1.8", Gray, 17 fps, GigE, POE, C - mount, Glass filter
<a href="#">COE-063-C-POE-040-IR-C</a>	Area Scan camera IMX178, CMOS, Rolling shutter, 3072 x 2048, 6.3 MP, 2.4 pix, 1/1.8", Color, 17 fps, GigE, POE, C - mount, Infrared cut filter
<a href="#">COE-122-M-POE-041-IR-C</a>	Area Scan camera IMX226, CMOS, Rolling shutter, 4024 x 3036, 12.2 MP, 1.85 pix, 1/1.7", Gray, 9.6 fps, GigE, POE, C - mount, Glass filter
<a href="#">COE-122-C-POE-041-IR-C</a>	Area Scan camera IMX226, CMOS, Rolling shutter, 4024 x 3036, 12.2 MP, 1.85 pix, 1/1.7", Color, 9.6 fps, GigE, POE, C - mount, Infrared cut filter
<a href="#">COE-023-M-POE-050-IR-C</a>	Area Scan camera PYTHON 2000, CMOS, Global shutter, 1920 x 1200, 2.3 MP, 4.8 pix, 2/3", Gray, 51 fps, GigE, POE, C - mount, Glass filter
<a href="#">COE-023-C-POE-050-IR-C</a>	Area Scan camera PYTHON 2000, CMOS, Global shutter, 1920 x 1200, 2.3 MP, 4.8 pix, 2/3", Color, 51 fps, GigE, POE, C - mount, Infrared cut filter
<a href="#">COE-050-M-POE-050-IR-C</a>	Area Scan camera IMX264, CMOS, Global shutter, 2448 x 2048, 5 MP, 3.45 pix, 2/3", Gray, 23.5 fps, GigE, POE, C - mount, Glass filter
<a href="#">COE-050-C-POE-050-IR-C</a>	Area Scan camera IMX264, CMOS, Global shutter, 2448 x 2048, 5 MP, 3.45 pix, 2/3", Color, 23.5 fps, GigE, POE, C - mount, Infrared cut filter



### COE-U series

USB 3.0 GenICam® cameras

<a href="#">COE-063-M-USB-040-IR-C</a>	Area Scan camera IMX178, CMOS, Rolling shutter, 3072 x 2048, 6.3 MP, 2.4 pix, 1/1.8", Gray, 42 fps, USB 3.0, C - mount, Glass filter
<a href="#">COE-063-C-USB-040-IR-C</a>	Area Scan camera IMX178, CMOS, Rolling shutter, 3072 x 2048, 6.3 MP, 2.4 pix, 1/1.8", Color, 42 fps, USB 3.0, C - mount, Infrared cut filter
<a href="#">COE-050-M-USB-050-IR-C</a>	Area Scan camera IMX264, CMOS, Global shutter, 2448 x 2048, 5 MP, 3.45 pix, 2/3", Gray, 35 fps, USB 3.0, C - mount, Glass filter



### mvBlueFOX3-2 series

USB3 vision camera with Sony Pregius CMOS sensors

<a href="#">RT-mvBF3-2032a</a>	USB3 Vision camera with Sony Pregius CMOS sensor IMX265
<a href="#">RT-mvBF3-2032</a>	USB3 Vision camera with Sony Pregius CMOS sensor IMX252
<a href="#">RT-mvBF3-2064</a>	USB3 vision camera with Sony Pregius CMOS sensor IMX178
<a href="#">RT-mvBF3-2051a</a>	USB3 Vision camera with Sony Pregius CMOS sensor IMX264
<a href="#">RT-mvBF3-2051</a>	USB3 Vision camera with Sony Pregius CMOS sensor IMX250



### mvBlueCOUGAR series

GigE & Dual GigE Vision cameras

<a href="#">RT-mvBC-X104i</a>	Camera with interface GigE (1GB/s), sensor size 1/1.8", mpixel 3.19, resolution 2064 x 1544, sensor name IMX265, sensor type CMOS
<a href="#">RT-mvBC-XD104h</a>	Camera with interface Dual GigE (2GB/s), sensor size 1/1.8", mpixel 3.19, resolution 2064 x 1544, sensor name IMX252, sensor type CMOS
<a href="#">RT-mvBC-X105b</a>	Camera with interface GigE (1GB/s), sensor size 2/3", mpixel 5.07, resolution 2464 x 2056, sensor name IMX264, sensor type CMOS
<a href="#">RT-mvBC-XD105a</a>	Camera with interface Dual GigE (2GB/s), sensor size 2/3", mpixel 5.01, resolution 2448 x 2048, sensor name IMX250, sensor type CMOS



### TCLIB Suite

Software library & stand-alone tools for the optimization of telecentric setups

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[TCLIB-01](#)

Software library & stand-alone tools for the optimization of telecentric setups

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### Accessories

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

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[RT-mvBC-X104iC](#)

CMOS camera GIGE, 2064 x 1544 color, 1/1.8", 37 Hz, IR cut, C-mount, I/O

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[RT-mvBC-X105bC](#)

CMOS camera GIGE, 2464 x 2056 Colour sensor, 2/3", 23.5 Hz, IR cut, C-mount, I/O

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