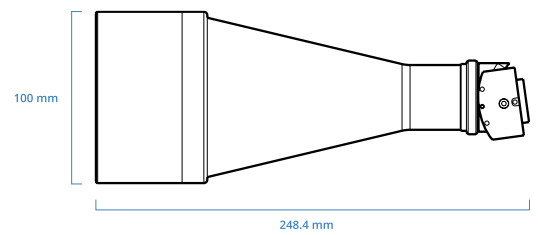


# TCSM064

3D bi-telecentric lens with Scheimpflug adjustment

## SPECIFICATIONS

Horizontal magnification		0.137
		0.137
		0.137
		0.137
Vertical magnification		0.137
		0.133
		0.119
		0.098
Max object tilt (deg)		0.0
		15.0
		30.0
		45.0
Max Mount tilt (deg)		0.0
		2.1
		4.5
		7.8
Long detector side horizontal - Field of view (mm x mm)		
1/3" (4.8 x 3.6) (mm x mm)		34.92 x 26.19
		34.92 x 27.10
		34.92 x 30.15
		34.92 x 36.70
1/2" (6.4 x 4.8) (mm x mm)		46.56 x 34.92
		46.56 x 36.13
		46.56 x 40.20
		46.56 x 48.93
2/3" (8.8 x 6.6) (mm x mm)		61.84 x 51.58
		61.84 x 53.36
		61.84 x 59.38
		61.84 x 72.27
Long detector side vertical - Field of view (mm x mm)		
1/3" (3.6 x 4.8) (mm x mm)		26.19 x 34.92
		26.19 x 36.13
		26.19 x 40.20
		26.19 x 48.93
1/2" (4.8 x 6.4) (mm x mm)		34.92 x 46.56
		34.92 x 48.17
		34.92 x 53.60
		34.92 x 65.24
2/3" (6.6 x 8.8) (mm x mm)		51.58 x 61.84
		51.58 x 63.98
		51.58 x 71.18
		51.58 x 86.65
Optical specifications		
Working distance 1 (mm)		182.0
wF/# 2		8
Field depth (mm)		17
CTF @ 50 lp/mm		35
Mechanical specifications		
Mount		C
Maximum length (mm)		248.4
Front diameter (mm)		100
Mass (g)		1040



## NOTES

1. Working distance: distance between the front end of the mechanics and the object. Set this distance within +/- 3% of the nominal value for maximum resolution and minimum distortion.
2. Indicates the availability of an integrated camera phase adjustment feature.

## 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.



### LTCLHP CORE series

Ultra compact telecentric illuminators

LTCLCR064-R	Telecentric CORE illuminator, beam dimensions Ø = 86; x = 67, red
LTCLCR064-G	Telecentric CORE illuminator, beam dimensions Ø = 86; x = 67, green
LTCLCR064-W	Telecentric CORE illuminator, beam dimensions Ø = 86; x = 67, white



### LTRNST series

LED ring illuminators - straight type

LTRN064RD	Ring LED illuminator, inner diameter 100 mm, straight type, red 630 nm
LTRN064GR	Ring LED illuminator, inner diameter 100 mm, straight type, green 525 nm
LTRN064BL	Ring LED illuminator, inner diameter 100 mm, straight type, blue 470 nm
LTRN064NW	Ring LED illuminator, inner diameter 100 mm, straight type, white



### LTBC series

Continuous LED backlight

LTBC114114-W	Continuous LED backlight, 114x114 illumination area, white
LTBC114114-G	Continuous LED backlight, 114x114 illumination area, green



### COE-G series

GenICam® PoE cameras

COE-032-M-POE-040-IR-C	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
COE-032-C-POE-040-IR-C	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
COE-063-M-POE-040-IR-C-B	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
COE-063-C-POE-040-IR-C	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
COE-122-M-POE-041-IR-C	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
COE-122-C-POE-041-IR-C	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
COE-023-M-POE-050-IR-C	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
COE-023-C-POE-050-IR-C	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
COE-050-M-POE-050-IR-C	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
COE-050-C-POE-050-IR-C	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

COE-063-M-USB-040-IR-C	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
COE-063-C-USB-040-IR-C	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
COE-050-M-USB-050-IR-C	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

RT-mvBF3-2032a	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



Accessories

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

<a href="#">RT-mvBC-X104iC</a>	CMOS camera GIGE, 2064 x 1544 color, 1/1.8", 37 Hz, IR cut, C-mount, I/O
<a href="#">RT-mvBC-X105bC</a>	CMOS camera GIGE, 2464 x 2056 Colour sensor, 2/3", 23.5 Hz, IR cut, C-mount, I/O