

# TCCAGE12048

Bi-telecentric multi-mirror system for 1/2"

## SPECIFICATIONS

Detector type		1/2"
Image size	(mm * mm)	6.4 x 4.8
Max. object diameter	(mm)	8
Max. object height	(mm)	32
Optical specifications		
Wavelength range	(nm)	450 .. 650
CTF @ 70 lp/mm	(%)	> 60
wF/# (1)		8
Mechanical specifications		
Width	(mm)	111
Length	(mm)	192.8
Height	(mm)	248
Mass	(g)	2700
Mount		C
Phase adjustment (2)		Yes
Electrical specifications		
Ring illumination voltage	(V, DC)	24
Ring illumination power	(W)	3
Coaxial illumination voltage	(V, DC)	24
Coaxial illumination power	(W)	9
Cable		included

Last update: 2020-06-11

## NOTES

- 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.
- F/# = F-number, wF/# = working F-number, the real F-number of a lens when used as a macro.

## 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.



LTRNOB series

LED ring illuminators - oblique type

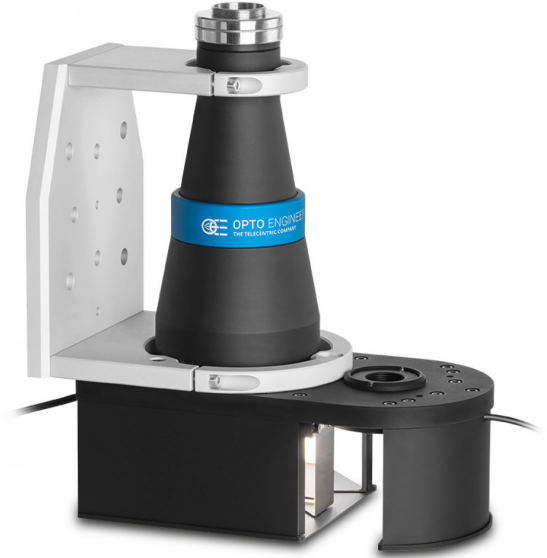
LTRN050R45	Ring LED illuminator, inner diam. 15.2 mm, oblique type, red 630 nm
LTRN050G45	Ring LED illuminator, inner diam. 15.2 mm, oblique type, green 525 nm
LTRN050B45	Ring LED illuminator, inner diam. 15.2 mm, oblique type, blue 470 nm
LTRN050W45	Ring LED illuminator, inner diameter 15.2 mm, oblique type, white



Accessories

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

CSCAGE048	Sample for alignment of TCCAGExx048
SPMI001	First surface mirror, active area 20x40 mm, mount type 1
SPMI002	First surface mirror, active area 20x40 mm, mount type 2



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.

SPPS001	Right angle prism, legs 17 mm, H 39 mm, mirror coating
RT-mvBC-X104iC	CMOS camera GIGE, 2064 x 1544 color, 1/1.8", 37 Hz, IR cut, C-mount, I/O
RT-mvBC-X105bC	CMOS camera GIGE, 2464 x 2056 Colour sensor, 2/3", 23.5 Hz, IR cut, C-mount, I/O



#### COE-G series

GenCam® PoE cameras

COE-013-M-POE-030-IR-C	Area Scan camera PYTHON 1300, CMOS, Global shutter, 1280 x 1024, 1.3 MP, 4.8 pix, 1/2", Gray, 90 fps, GigE, POE, C - mount, Glass filter
COE-013-C-POE-030-IR-C	Area Scan camera PYTHON 1300, CMOS, Global shutter, 1280 x 1024, 1.3 MP, 4.8 pix, 1/2", Color, 90 fps, GigE, POE, C - mount, Infrared cut filter
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-U series

USB 3.0 GenCam® cameras

COE-013-M-USB-030-IR-C	Area Scan camera PYTHON 1300, CMOS, Global shutter, 1280 x 1024, 1.3 MP, 4.8 pix, 1/2", Gray, 170 fps, USB 3.0, C - mount, Glass filter
COE-013-C-USB-030-IR-C	Area Scan camera PYTHON 1300, CMOS, Global shutter, 1280 x 1024, 1.3 MP, 4.8 pix, 1/2", Color, 90 fps, USB 3.0, C - mount, Infrared cut filter
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



#### mvBlueFOX3-2 series

USB3 vision camera with Sony Pregius CMOS sensors

RT-mvBF3-2032a	USB3 Vision camera with Sony Pregius CMOS sensor IMX265
RT-mvBF3-2032	USB3 Vision camera with Sony Pregius CMOS sensor IMX252
RT-mvBF3-2064	USB3 vision camera with Sony Pregius CMOS sensor IMX178



#### mvBlueCOUGAR series

GigE & Dual GigE Vision cameras

RT-mvBC-X104i	Camera with interface GigE (1GB/s), sensor size 1/1.8", mpixel 3.19, resolution 2064 x 1544, sensor name IMX265, sensor type CMOS
RT-mvBC-XD104h	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