

EN5MP5018

Fixed focal 5 Megapixel lens, focal length 50 mm, f/# 1.8 - 22, C-mount

SPECIFICATIONS

Optical specifications

| | | |
|--|------|--------------------|
| Focal length | (mm) | 50 |
| Magnification | | 0.132 |
| Image circle Ø | (mm) | 11 |
| Max detector size | | 2/3" |
| Minimum working distance | (mm) | 400 |
| F/# | | 1.8 - 22 |
| Back focal length | (mm) | 13.63 |
| Angle of view with detector of 2/3" (D x H x V) 1 | (°) | 12.6 x 10.1 x 7.6 |
| Angle of view with detector of 1/2" (D x H x V) 2 | (°) | 9.1 x 7.3 x 5.5 |
| Field of view with detector of 2/3" (D x H x V) | (mm) | 83.8 x 66.9 x 50.2 |
| Distortion with detector of 2/3" 3 | (%) | 0.03 |
| Distortion with detector of 1/2" 4 | (%) | 0.02 |

Mechanical specifications

| | | |
|-----------------------|------|---------------------------|
| Mount | | C |
| Length | (mm) | 63.1 |
| Diameter | (mm) | 46.2 |
| Mass | (g) | 173 |
| Filter thread | | M37.5×0.5 |
| Operating temperature | | -10°C - +50°C |
| Iris lock screws | | Manual with locking screw |
| Focus lock screws | | Manual with locking screw |

Last update: 2021-06-11

NOTES

1. Angle of view while using detector of 2/3".
2. Angle of view while using detector of 1/2".
3. Max distortion while using detector of 2/3".
4. Max distortion while using detector of 1/2".

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.



LTPR series

LED patterns projectors

| | |
|------------|---|
| LTPRHP3W-W | LED pattern projector 3W, HP, white |
| LTPRHP3W-R | LED pattern projector 3W, HP, red |
| LTPRHP3W-G | LED pattern projector 3W, HP, green |
| LTPRHP3W-B | LED pattern projector 3W, HP, blue |
| LTPRXP-W | High Power LED pattern projector, white |
| LTPRXP-R | High Power LED pattern projector, red |



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.

| | |
|----------|---|
| LTPRXP-G | High Power LED pattern projector, green |
| LTPRXP-B | High Power LED pattern projector, blue |
| LTPRUP-W | 90W strobed LED pattern projector white |
| LTPRUP-R | 90W strobed LED pattern projector red |
| LTPRUP-G | 90W strobed LED pattern projector green |
| LTPRUP-B | 90W strobed LED pattern projector blue |



COE-G series

GenICam® PoE C-mount cameras

| | |
|--------------------------|--|
| COE-004-M-POE-021-IR-C | Area Scan camera IMX287, CMOS, Global shutter, 720 x 540, 0.4 MP, 6.9 pix, 1/2.9", mono, 313 fps, GigE, POE, C - mount, Glass filter |
| COE-004-C-POE-021-IR-C | Area Scan camera IMX287, CMOS, Global shutter, 720 x 540, 0.4 MP, 6.9 pix, 1/2.9", color, 313 fps, GigE, POE, C - mount, Infrared cut filter |
| 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", mono, 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-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", mono, 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-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", mono, 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-050-M-POE-023-IR-C | Area Scan camera MT9P031, CMOS, Rolling shutter, 2592 x 1944, 5 MP, 2.2 pix, 1/2.5", mono, 14 fps, GigE, POE, C - mount, Glass 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", mono, 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-106-M-POE-031-IR-C-2 | Area Scan camera MT9J003, CMOS, Rolling shutter, 3840 x 2748, 10.6 MP, 1.67 pix, 1/2.3", mono, 11 fps, GigE, POE, C - mount, Glass filter |
| COE-106-C-POE-031-IR-C | Area Scan camera MT9J003, CMOS, Global shutter, 3840 x 2748, 10.6 MP, 1.67 pix, 1/2.3", color, 7 fps, GigE, POE, C - mount, Infrared cut filter |



mvBlueCOUGAR series

GigE / Dual GigE cameras with Smart Features

| | |
|----------------|--|
| RT-mvBC-X100w | Camera with interface GigE (1GB/s), sensor size 1/3", mpixel 0.36, resolution 752 x 480, sensor name MT9V034, sensor type CMOS |
| RT-mvBC-X100f | Camera with interface GigE (1GB/s), sensor size 1/2.9", mpixel 0.4, resolution 728 x 544, sensor name IMX287, sensor type CMOS |
| RT-mvBC-X102f | Camera with interface GigE (1GB/s), sensor size 1/2.9", mpixel 1.58, resolution 1456 x 1088, sensor name IMX273, sensor type CMOS |
| RT-mvBC-XD102f | Camera with interface Dual GigE (2GB/s), sensor size 1/2.9", mpixel 1.58, resolution 1456 x 1088, sensor name IMX273, sensor type CMOS |
| RT-mvBC-X104f | Camera with interface GigE (1GB/s), sensor size 1/1.2", mpixel 2.35, resolution 1936 x 1216, sensor name IMX249, sensor type CMOS |
| RT-mvBC-XD104d | Camera with interface Dual GigE (2GB/s), sensor size 1/1.2", mpixel 2.35, resolution 1936 x 1214, sensor name IMX174, sensor type CMOS |
| 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 |
| RT-mvBC-X105 | Camera with interface GigE (1GB/s), sensor size 1/2.5", mpixel 5.04, resolution 2592 x 1944, sensor name MT9P031, sensor type CMOS |
| RT-mvBC-X105b | Camera with interface GigE (1GB/s), sensor size 2/3", mpixel 5.07, resolution 2464 x 2056, sensor name IMX264, sensor type CMOS |
| RT-mvBC-XD105a | Camera with interface Dual GigE (2GB/s), sensor size 2/3", mpixel 5.01, resolution 2448 x 2048, sensor name IMX250, sensor type CMOS |
| RT-mvBC-XD107 | Camera with interface Dual GigE (2GB/s), sensor size 1.1", mpixel 7.1, resolution 3216 x 2208, sensor name IMX420, sensor type CMOS |
| RT-mvBC-X109b | Camera with interface GigE (1GB/s), sensor size 1", mpixel 8.95, resolution 4112 x 2176, sensor name IMX267, sensor type CMOS |
| RT-mvBC-XD109b | Camera with interface Dual GigE (2GB/s), sensor size 1", mpixel 8.95, resolution 4112 x 2176, sensor name IMX267, sensor type CMOS |

| | |
|---------------------------------|---|
| RT-mvBC-X1010 | Camera with interface GigE (1GB/s), sensor size 1/2.3", mpixel 10.66, resolution 3856 x 2764, sensor name MT9J003, sensor type CMOS |
| RT-mvBC-X1012b | Camera with interface GigE (1GB/s), sensor size 1.1", mpixel 12.37, resolution 4112 x 3008, sensor name IMX304, sensor type CMOS |
| RT-mvBC-XD1012b | Camera with interface Dual GigE (2GB/s), sensor size 1.1", mpixel 12.37, resolution 4112 x 3008, sensor name IMX304, sensor type CMOS |



COE-U series

GeniCam® C-mount USB3 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", mono, 210 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-050-M-USB-050-IR-C | Area Scan camera IMX264, CMOS, Global shutter, 2448 x 2048, 5 MP, 3.45 pix, 2/3", mono, 35 fps, USB 3.0, C - mount, Glass filter |
| COE-050-C-USB-050-IR-C | Area Scan camera IMX264, CMOS, Global shutter, 2448 x 2048, 5 MP, 3.45 pix, 2/3", color, 35 fps, USB 3.0, C - mount, Infrared cut filter |
| COE-050-C-USB-023-IR-C | Area Scan camera AR0521, CMOS, Rolling shutter, 2592 x 1944, 5 MP, 2.2 pix, 1/2.5", color, 31 fps, USB 3.0, C - mount, Infrared cut filter |
| COE-003-M-USB-010-IR-C | Area Scan camera PYTHON 300, CMOS, Global shutter, 640 x 480, 0.3 MP, 4.8 pix, 1/4", Gray, 814 fps, USB 3.0, C - mount, Glass filter |
| COE-003-C-USB-010-IR-C | Area Scan camera PYTHON 300, CMOS, Global shutter, 640 x 480, 0.3 MP, 4.8 pix, 1/4", Color, 814 fps, USB 3.0, C - mount, Infrared cut filter |
| COE-016-M-USB-021-IR-C | Area Scan camera IMX273, CMOS, Global shutter, 1440 x 1080, 1.6 MP, 3.45 pix, 1/2.9", Gray, 165 fps, USB 3.0, C - mount, Glass filter |
| COE-016-C-USB-021-IR-C | Area Scan camera IMX273, CMOS, Global shutter, 1440 x 1080, 1.6 MP, 3.45 pix, 1/2.9", Color, 165 fps, USB 3.0, C - mount, Infrared cut filter |



mvBlueFOX3-2 series

USB3 cameras with Smart Features

| | |
|--------------------------------|---|
| RT-mvBF3-2004 | USB3 vision camera with Sony Pregius CMOS sensor IMX287 |
| RT-mvBF3-2016 | USB3 vision camera with Sony Pregius CMOS sensor IMX273 |
| RT-mvBF3-2024a | USB3 Vision camera with Sony Pregius CMOS sensor IMX249 |
| RT-mvBF3-2024 | USB3 Vision camera with Sony Pregius CMOS sensor IMX174 |
| 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-mvBF3-2051a | USB3 Vision camera with Sony Pregius CMOS sensor IMX264 |
| RT-mvBF3-2051 | USB3 Vision camera with Sony Pregius CMOS sensor IMX250 |
| RT-mvBF3-2064 | USB3 vision camera with Sony Pregius CMOS sensor IMX178 |
| RT-mvBF3-2089a | USB3 Vision camera with Sony Pregius CMOS sensor IMX267 |
| RT-mvBF3-2089 | USB3 Vision camera with Sony Pregius CMOS sensor IMX255 |
| RT-mvBF3-2124a | USB3 Vision camera with Sony Pregius CMOS sensor IMX304 |
| RT-mvBF3-2124 | USB3 Vision camera with Sony Pregius CMOS sensor IMX253 |