

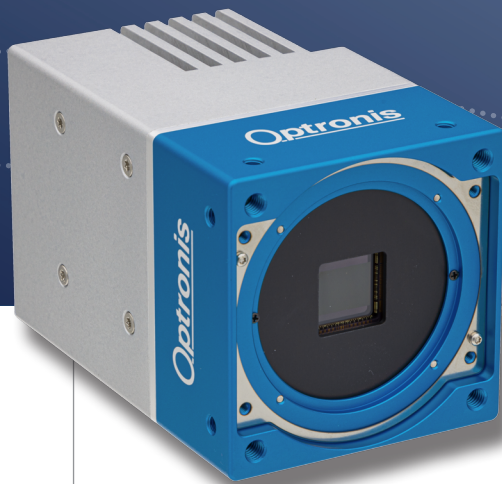
Optronis

Make time visible

CYCLONEFIBER SERIES

CycloneFiber-5

High-Speed Machine Vision Camera



CoaXPress
over-Fiber

- ✓ OUTDOOR TEST AREA
- ✓ MEDICAL ENVIRONMENT
- ✓ PRODUCTION FLOOR INSPECTION

- 693 fps with 2560 x 1916 pixels
- Global shutter mode with low noise pixel
- CoaXPress-over-Fiber 40 Gbit/s
- EMC immune transmission up to 20 km
- Trigger via CoaXPress-over-Fiber

www.optronis.com

CycloneFiber-5 High-Speed Machine Vision Camera

Optronis

Make time visible

FEATURES

CycloneFiber-5 is a high resolution camera with 5 MPixel and low noise pixel. At full resolution the camera provides 693 fps. It is desinged for high-speed machine vision applications. The camera uses the de-facto standard protocol CoaXPress-over-Fiber (CoF). Standard QSFP+ optical transceiver modules can be installed. The main advantage of this transmission is the long range and immunity to EM interference.

- 2560 x 1916 pixel resolution
- low noise pixel

Firmware features

- Analogue gain, RGB gain and offset adjustment
- Defect pixel correction (customer activatable)
- LUT factory set or customer definition

PERFORMANCE (EXAMPLES, 8 BIT, SEE ALSO FRAME RATE CALCULATOR)

Resolution (HxV)	Frame rate	Resolution (HxV)	Frame rate
2560 x 1916	693 fps	2560 x 960	1380 fps
1920 x 1080	1227 fps	2560 x 480	2743 fps
1280 x 960	1380 fps	2560 x 120	10579 fps
512 x 384	3418 fps	2560 x 32	35063 fps
256 x 8	95057 fps	2560 x 8	95057 fps

MODELS

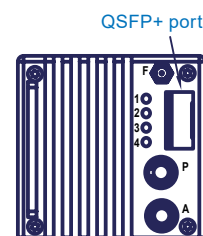
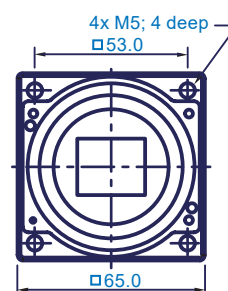
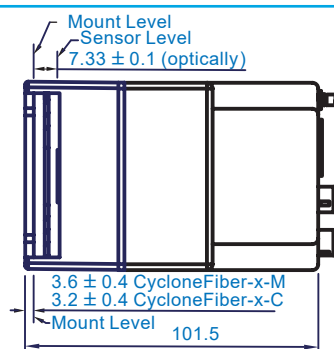
CycloneFiber-5-M	monochrome Camera
CycloneFiber-5-C	color Camera,
Scope of delivery	Camera, brief introduction

ACCESSORIES

CYP-CM	C-Mount lens adapter
CYP-FM	F-Mount lens adapter
CYP-M42-12	M42 Mount, BF 12 mm
CYP-M58-11,58	M58 Mount, BF 11.58 mm
CPH6-PTC	Pig tail cable for synch
CPH6-USB	Programming Cable
CYP-FAN	Cooling Fan
CPH4-PSA	Power Supply

For camera operation, power supply and typically one lens mount are needed.

TECHNICAL DRAWINGS



CONTACT INFORMATION

Optronis GmbH
Ludwigstraße 2
77694 Kehl
Germany

Phone: +49 7851 91 26 - 0
Fax: +49 7851 91 26 - 10
info@optronis.com
www.optronis.com

The information given herein is believed to be reliable, however Optronis makes no warranties as to its accuracy or completeness. Data sheet is subject to modifications at any time. 11.25

SPECIFICATIONS

Sensor type	LUX51, Global Shutter
Resolution	2560 pixel x 1916 pixel
Frame rate (full resolution)	20 .. 693 fps
Exposure time	4 µs .. 1 / frame rate
Active area / Diagonal	12.80 mm x 9.60 mm / 16.00 mm
Pixel distance	5.0 µm x 5.0 µm
A/D conversion	8/10 Bit
Quantum efficiency (sensor)	45 % @ 550 nm
Synchronization	internal, external, CoF
Synchronization signals	Synch IN and Synch OUT, TTL level, electrically isolated
Interface	QSFP+ port
Protocol	CoaXPress-over-Fiber (CoF)
Power (incl. 1.5 W QSFP+ module)	10 W
Temperature Ranges	
- operation, ambient	0 .. +45°C / 32 .. 113°F
- operation, amb., with CY-FAN2	0 .. +55°C / 32 .. 131°F
- operation, case temperature	0 .. +70°C / 32 .. 158°F
Weight	540 g w/o mount, w/o cooling
Dimensions	65 mm x 65 mm x 101.5 mm (3D model data available)

EMVA1288 measurements (v3.1 typ.)

Dynamic range	55 dB
Saturation capacity	12 000 e ⁻
Temporal dark noise	21 e ⁻
System gain	52 e ⁻ /DN
Signal-to-Noise Ratio	41 dB
DSNU	75 e ⁻
PRNU	2.3 %
Non-linearity error (v 3.0)	1.2 %

