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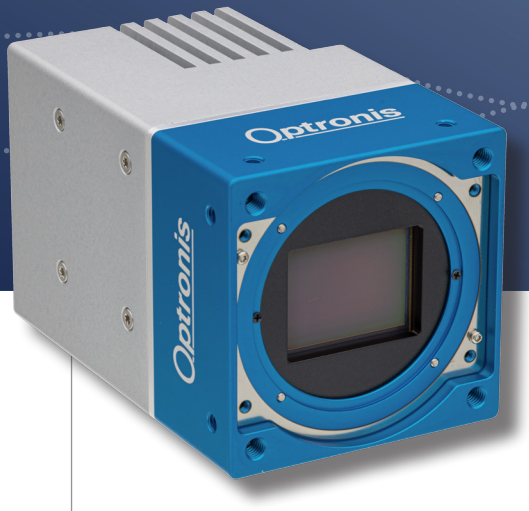
CYCLONEFIBER SERIES

CycloneFiber-65

High-Speed Machine Vision Camera



CoaXPress over-Fiber

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

- 71 fps with 9 344 x 7 000 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

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CycloneFiber-65 High-Speed Machine Vision Camera

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FEATURES

CycloneFiber-65 is a very high reslution, high speed camera with 65 MPixel. At full resolution the camera provides 71 fps. It is desinged for machine vision applications requiring high-resolution. The camera uses the CoaX-Press-over-Fiber (CoF) de-facto standard protocol. Standard QSFP+ optical transceiver modules can be installed. The main advantage of this transmission is the long range and immunity to EM interference.

- 9344 x 7000 pixel resolution
- low noise pixel

Firmware features

- Analogue gain, RGB gain and offset adjustment
- Defect pixel correction (customer activatable)
- Dual ROI and line skipping

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

Resolution (HxV)	Frame rate	Resolution (HxV)	Frame rate
9344 x 7000	71 fps	9344 x 3500	141 fps
4672 x 3500	141 fps	9344 x 1752	280 fps
3840 x 2160	228 fps	9280 x 876	550 fps
1920 x 1080	449 fps	9280 x 256	1736 fps
1280 x 720	664 fps	9280 x 4	13885 fps

MODELS

CycloneFiber-65-M	monochrome Camera
CycloneFiber-65-C	color Camera,
Scope of delivery	Camera, brief introduction

ACCESSORIES

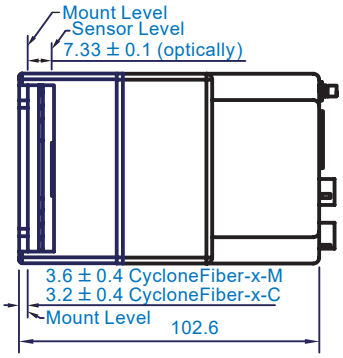
CYP-CM	C-Mount lens adapter
CYP-FM	F-Mount lens adapter
CYP-M42-12	M42 Mount, BF 12 mm
CYP-M58-11,58	M58 Mount, BF 11.58 mm
CPH6-PTC	Pig tail cable for synch
CPH6-USB	Programming Cable
CYP-FAN	Cooling Fan
CPH4-PSA	Power Supply

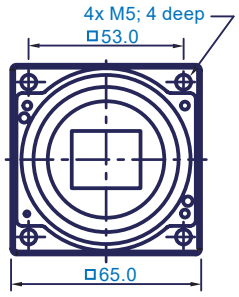
For camera operation, power supply and typically one lens mount are needed.

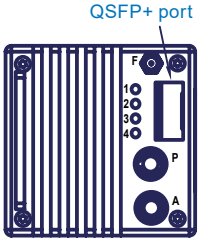
SPECIFICATIONS

Sensor type	GMAX3265, Global Shutter
Resolution	9344 pixel x 7000 pixel
Frame rate (full resolution)	1 .. 71 fps
Exposure time	12 µs .. 1 / frame rate
Active area / Diagonal	29.90 mm x 22.40 mm / 37.36 mm
Pixel distance	3.2 µm x 3.2 µm
A/D conversion	8/10 Bit
Quantum efficiency (sensor)	65 % @ 500 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)	16 W
Temperature Ranges	
- operation, amb.	0 .. +25°C / 32 .. 77°F
- operation, amb., with CY-FAN	0 .. +45°C / 32 .. 113°F
- operation, case temperature	0 .. +60°C / 32 .. 140°F
Weight	540 g w/o mount, w/o cooling
Dimensions	65 mm x 65 mm x 102.6 mm (3D model data available)
EMVA1288 measurements (v3.1 typ.)	
Dynamic range	57 dB
Saturation capacity	10500 e^-
Temporal dark noise	18 e^-
System gain	46 e^-/DN
Signal-to-Noise Ratio	40 dB
DSNU	58 e^-
PRNU	2 %
Non-linearity error (v 3.0)	0.3 %

TECHNICAL DRAWINGS







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