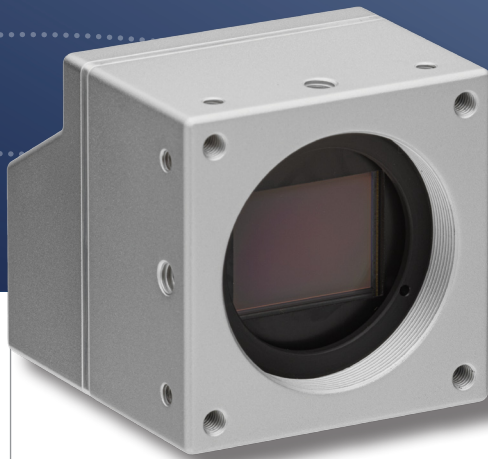


CYCLONE SERIES

Cyclone-65-70



CXP-12

- ✓ HIGH SPEED MACHINE VISION
- ✓ AUTOMATED OPTICAL INSPECTION (AOI)
- ✓ SEMICONDUCTOR QUALITY CONTROL

- 71 fps with 9 344 x 7 000 pixels
- Global shutter mode
- Low noise pixel
- Micro-BNC (HD-BNC™) connectors
- CoaXPress V2.1 interface with 4 x 12.5 Gbit/s
- Power and trigger via CoaXPress

Cyclone-65-70 High-Speed Machine Vision Camera

Optronis

Make time visible

FEATURES

With 65 MPixel resolution the Cyclone-65-70 still provides high frame rate of more than 70 fps. The camera is part of Optronis Cyclone series for demanding machine vision applications.

- 9 344 x 7 000 pixel resolution
- low noise pixel
- sensor frame rate increases with vertical window size reduction

Firmware features

- Analogue gain adjustment
- Analogue offset adjustment
- Defect pixel correction (customer activatable)
- Dual ROI and Line skipping
- Framenumber and Microsecond counter on image

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

Resolution (HxV)	Frame rate	Resolution (HxV)	Frame rate
9 344 x 7 000	71 fps	9 344 x 3 500	141 fps
4 672 x 3 500	141 fps	9 344 x 1 752	280 fps
1 280 x 720	664 fps	9 280 x 4	13 885 fps

MODELS

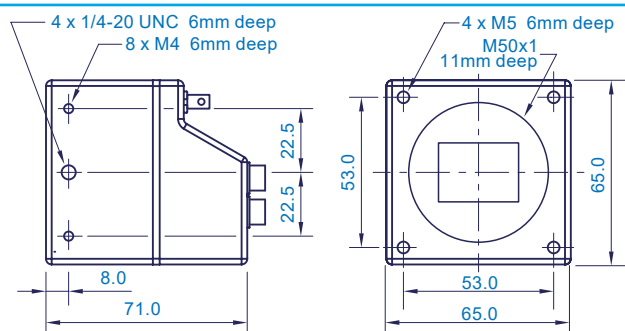
Cyclone-65-70-M-G1	monochrome Camera, Grade 1
Cyclone-65-70-C-G1	color Camera, Grade 1
Scope of delivery	Camera, brief introduction

ACCESSORIES

CY-CM	C-Mount lens adapter
CY-FM	F-Mount lens adapter
CY-M42	M42 Mount lens adapter
CPH6-PTC	Pig tail cable for synch
CPH6-USB	Programming Cable
CY-HIS	Heat Sink
CY-FAN	Cooling Fan



TECHNICAL DRAWINGS



CONTACT INFORMATION

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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	GMAX3265, High-Speed, Grade 1
Resolution	9 344 pixel x 7 000 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, CoaXPress
Synchronization signals	Synch IN and Synch OUT, TTL level, electrically isolated
Interface	CoaXPress 2.1 Micro-BNC (HD-BNC) connectors
Interface Configurations	4 x CXP12, 2 x CXP12, 1 x CXP12, 4 x CXP6, 2 x CXP6
Power	14 W, PoCXP, ext.
Temperature Ranges	- operation, amb., no cooling 0 .. +25°C / 32 .. 77°F - operation, amb., with CY-HIS 0 .. +35°C / 32 .. 95°F - operation, amb., with CY-FAN 0 .. +55°C / 32 .. 131°F - operation, case temperature 0 .. +65°C / 32 .. 149°F
Weight	400 g w/o mount, w/o cooling
Dimensions	65 mm x 65 mm x 71 mm (3D model data available)

EMVA1288 data (v4.0 typ.)	8 bit	10 bit
Dynamic range	57 dB	61 dB
Saturation capacity	10 500 e ⁻	10 500 e ⁻
Temporal dark noise	<17 e ⁻	8 e ⁻
System gain	46 e ⁻ /DN	12 e ⁻ /DN
Signal-to-Noise Ratio	40 dB	40 dB
Dark Signal Non-Uniformity	55 e ⁻	55 e ⁻
Photo Response Non-Uniformity	2.0 %	2.0 %
Non-Linearity Error (V3.0)	0.3 %	0.3 %

