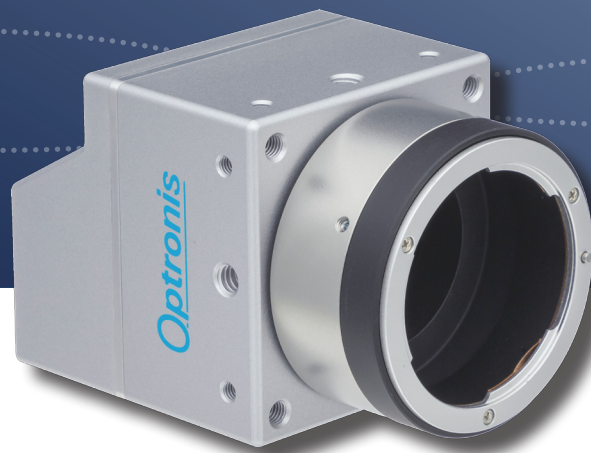


CAMPERFORM-CYCLONE SERIES

# 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 V2.0 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 CamPerform-Cyclone series for demanding machine vision applications.

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

Firmware features

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

## SPECIFICATIONS

Sensor type	GMAX3265, Global Shutter
Resolution	9 344 pixel x 7 000 pixel
Frame rate (full resolution)	20 .. 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 2.0 (4 ch., CXP-12) Micro-BNC (HD-BNC) connectors
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 .. +70°C / 32 .. 158°F
Weight	400 g w/o mount, w/o cooling
Dimensions	65 mm x 65 mm x 71 mm (3D model data available)

## EMVA1288 measurements (v3.1 typ. preliminary)

Dynamic range	55 dB
Saturation capacity	10 000 e <sup>-</sup>
Temporal dark noise	18 e <sup>-</sup>
System gain	46 e <sup>-</sup> /DN
Signal-to-Noise Ratio	40 dB
DSNU	72 e <sup>-</sup>

## 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
3 840 x 2 160	228 fps	9 280 x 876	550 fps
1 920 x 1 080	449 fps	9 280 x 256	1 736 fps
1 280 x 720	664 fps	9 280 x 8	12 496 fps

## MODELS

Cyclone-65-70-M	monochrome Camera
Cyclone-65-70-C	color Camera
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

