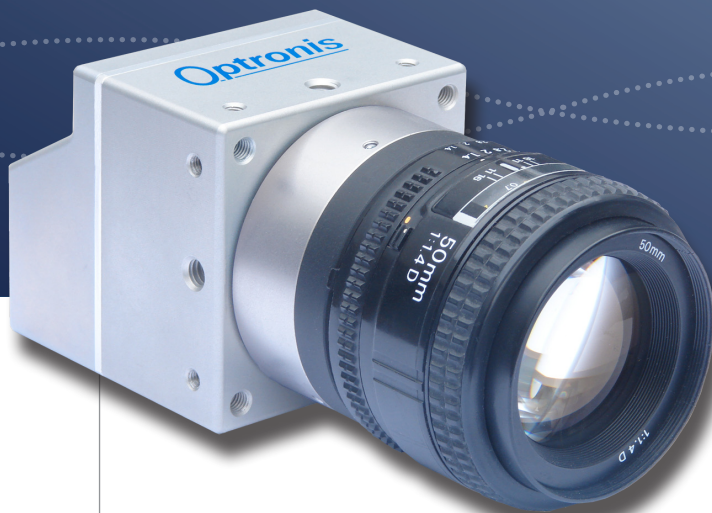


CAMPERFORM-CYCLONE SERIES

Cyclone-5-700

High-Speed Machine Vision Camera



CXP-12

- ✓ METROLOGY AND HIGH SPEED MACHINE VISION
- ✓ AUTOMATED OPTICAL INSPECTION (AOI)
- ✓ LASER TRIANGULATION

- 693 fps with 2 560 x 1 916 pixels
- Global shutter with low noise pixel
- Micro-BNC (HD-BNC™) connectors
- CoaXPress V2.0 interface with 4 x 12.5 Gbit/s
- Power and trigger via CoaXPress
- Microsecond and frame counter

Cyclone-5-700 High-Speed Machine Vision Camera

Optronis

Make time visible

FEATURES

The Cyclone-5-700 is a high resolution camera with low noise pixels. It is part of Optronis CamPerform-Cyclone series for demanding machine vision applications. Reducing vertical resolution allows to increase frame rate.

- 2 560 x 1 916 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)
- LUT factory set or customer definition
- Framenumber and Microsecond counter on image

SPECIFICATIONS

Sensor type	LUX51, Global Shutter
Resolution	2 560 pixel x 1 916 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
Sensitivity (sensor)	6 V/lux·s @ 550 nm
Quantum efficiency (sensor)	>45 % @ 550 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	10 W, PoCXP, ext.
Operating ambient temperature	0 .. +40°C / 32 .. 104°F
Weight	400 g without mount
Dimensions	65 mm x 65 mm x 71 mm (3D model data available)

PERFORMANCE (EXAMPLES)

Resolution (HxV)	Frame rate	Resolution (HxV)	Frame rate
2 560 x 1 916	693 fps	2 560 x 960	1 380 fps
1 920 x 1 080	1 227 fps	2 560 x 480	2 743 fps
1 280 x 960	1 380 fps	2 560 x 120	10 579 fps
512 x 384	3 418 fps	2 560 x 32	35 063 fps
256 x 8	95 057 fps	2 560 x 8	95 057 fps

MODELS

Cyclone-5-700-M	monochrome Camera
Cyclone-5-700-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

EMVA1288 measurements (v3.1 typ. preliminary)

Dynamic range	TBD dB
Saturation capacity	15 000 e ⁻
Temporal dark noise	10 e ⁻
System gain	15 e ⁻ /DN
Signal-to-Noise Ratio	50 dB
DSNU	50 e ⁻
PRNU	1.5 %
Non-linearity error LE _{min} , LE _{max}	TBD % (TBD % EMVA1288 v3.0)



TECHNICAL DRAWING

