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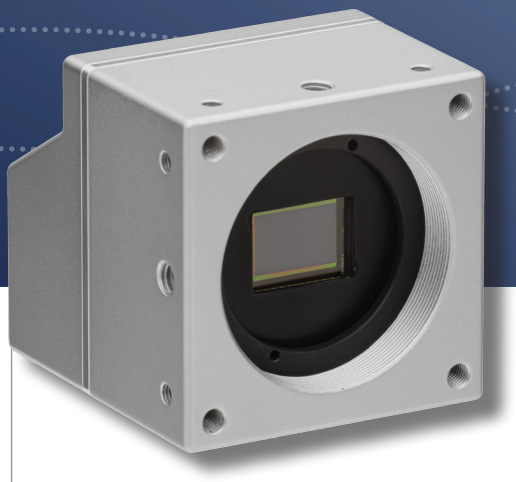
CYCLONE SERIES

Cyclone-16-300

High-Speed Machine Vision Camera



CXP-12

- ☑ METROLOGY AND HIGH SPEED MACHINE VISION
- ☑ LASER LINE PROFILOMETRY
- ☑ AUTOMATED OPTICAL INSPECTION (AOI)

- 293 fps with 4 672 x 3 416 pixels
- Global shutter with low noise pixel
- Micro-BNC (HD-BNC™) connectors
- CoaXPress V2.1

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Cyclone-16-300 High-Speed Machine Vision Camera

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FEATURES

The Cyclone-16-300 is a high resolution camera with low noise pixels. It is part of Optronis Cyclone series for demanding machine vision applications. Reducing vertical resolution allows increased frame rate.

- 4 672 x 3 416 pixel resolution
- low noise pixel

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

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

Resolution (HxV)	Frame rate	Resolution (HxV)	Frame rate
4 672 x 3 416	293 fps	4 672 x 3 072	326 fps
2 304x 1720	600 fps	4 672 x 2048	488 fps
1024 x 512	1 990 fps	4 672 x 32	23 947 fps
1 024 x 8	57 653 fps	4 672 x 16	38 673 fps

MODELS

Cyclone-16-300-M	monochrome Camera
Cyclone-16-300-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

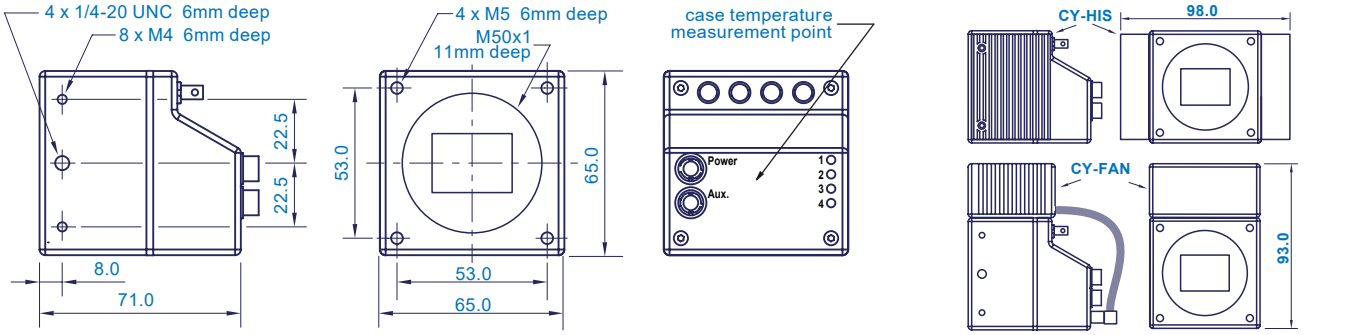
1288 EMVA Standard Compliant · GEN<i>CAM · CoaXPress · DIN EN 60721-3-2 VIBRATION SHOCK · CE · ISO 9001:2015 DEKRA

SPECIFICATIONS

Sensor type	LUX160, Global Shutter
Resolution	4 672 pixel x 3 416 pixel
Frame rate (full resolution)	20 .. 2 84 fps
Exposure time	4 µs .. 1 / frame rate
Active area / Diagonal	18.22 mm x 13.32 mm / 22.56 mm
Pixel distance	3.9 µm x 3.9 µm
A/D conversion	8/10 Bit
Quantum efficiency (sensor)	>45 % @ 550 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	12 W, PoCXP, ext.
Temperature Ranges	
- operation, amb., no cooling	0 .. +30°C / 32 .. 86°F
- operation, amb., with CY-HIS	0 .. +40°C / 32 .. 104°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	56 dB	60 dB
Saturation capacity	8 000 e^-	8 000 e^-
Temporal dark noise	<12 e^-	6 e^-
System gain	30 e^-/DN	7.5 e^-/DN
Signal-to-Noise Ratio	39 dB	39 dB
Dark Signal Non-Uniformity	75 e^-	53 e^-
Photo Response Non-Uniformity	2.0 %	2.0 %
Non-Linearity Error (V3.0)	0.4 %	0.4 %

TECHNICAL DRAWINGS



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