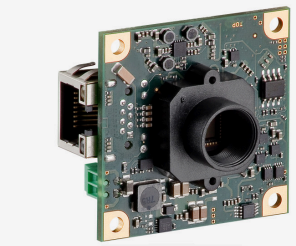
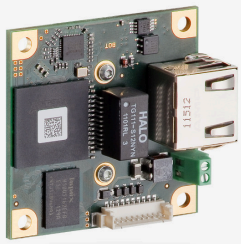
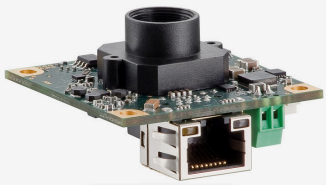
UI-5251LE-C Rev.1.2 (AB10345)

In series
The model is in series and available for the long term.

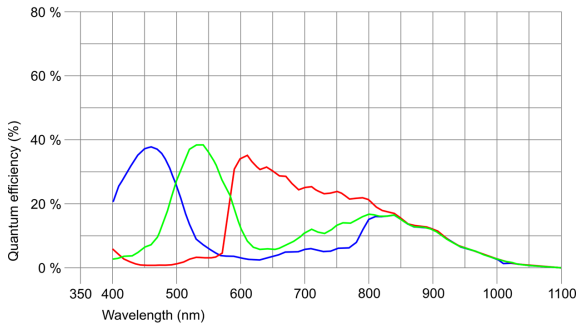




uEye industrial cameras now also work with IDS peak! We recommend the Software Development Kit for the implementation of new projects. Learn about the process here and switch now.
Please note: The technical data given here was measured using the IDS Software Suite.

Specification

Sensor

Sensor type	CMOS Color
Shutter	Global Shutter / Rolling shutter / Global Start Shutter
Sensor characteristic	Linear
Readout mode	Progressive scan
Pixel Class	1.9 MP
Resolution	1.92 Mpix
Resolution (h x v)	1600 x 1200 Pixel
Aspect ratio	4:3
ADC	10 bit
Color depth (camera)	12 bit
Optical sensor class	1/1.8""
Optical Size	7.200 mm x 5.400 mm)
Optical sensor diagonal	9 mm (1/1.78")
Pixel size	4.5 µm
Manufacturer	e2v
Sensor Model	EV76C570ACT
Gain (master/RGB)	4x/4x
AOI horizontal	same frame rate
AOI vertical	increased frame rate
AOI image width / step width	16 / 4
AOI image height / step width	4 / 2
AOI position grid (horizontal/vertical)	2 / 2
Binning horizontal	same frame rate
Binning vertical	same frame rate
Binning method	M/C automatic
Binning factor	2
Decimation (subsampling) horizontal	-
Decimation (subsampling) vertical	-
Decimation (subsampling) method	-
Decimation (subsampling) factor	-



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Model

Pixel clock range	10 MHz - 71 MHz
Frame rate freerun mode	35 fps
Frame rate trigger (maximum)	34 fps
Exposure time (minimum - maximum)	0.020 ms - 10000 ms
Long exposure (maximum)	10000 ms
Power consumption	2.2 W - 2.9 W
Image memory	60 MB
Special features	Scaler Sequencer Log mode Sensor hot pixel correction Fine exposure Multi-AOI

Ambient conditions

For PCB versions, refer to the separate hints in the respective documentation.

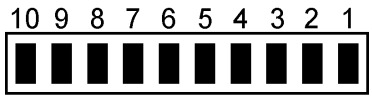
Allowed device temperature during operation	0 °C - 55 °C / 32 °F - 131 °F
Allowed device temperature during storage	-20 °C - 60 °C / -4 °F - 140 °F
Humidity (relative, non-condensing)	20 % - 80 %

Connectors

Interface connector	GigE RJ45
I/O connector	10-pin Molex connector (Pico Blade)
Power supply	12 V - 24 V

Pin assignment I/O connector

1	Ground (GND)
2	Vout 3.1 V max. 100 mA
3	Trigger input without optocoupler
4	Flash output without optocoupler
5	General Purpose I/O (GPIO) 1
6	General Purpose I/O (GPIO) 2
7	I2C bus clock signal
8	I2C bus data signal
9	Vin+ 12 V (160 mA) - 24 V (90 mA)
10	Vin- (GND)



Design

Lens Mount	S-Mount
IP code	-
Dimensions H/W/L	45.0 mm x 45.0 mm x 26.5 mm
Mass	24 g

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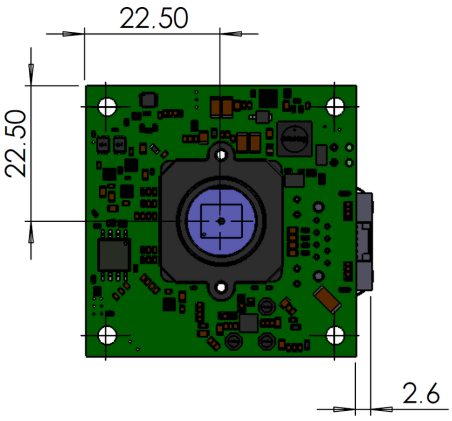

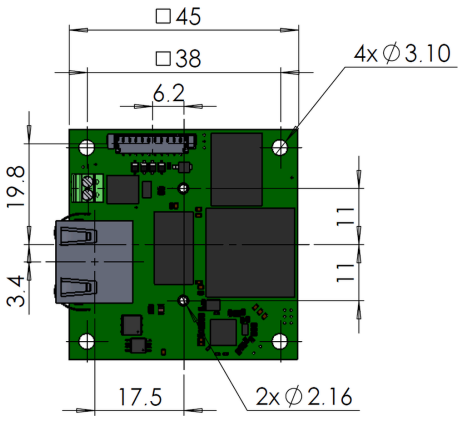

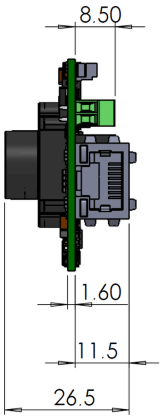

Features

Image Acquisition	Freerun	✓
	Software trigger	-
	Hardware trigger	✓
	Trigger controlled exposure	-
	Denoiser	-
	Long exposure	✓
	Line scan	-
	Line scan highspeed	-
	Global start	✓
Flashing	Flashing	-
	PWM flashing	-
Image Adjustments	Auto exposure	-
	Auto gain	-
	Auto whitebalance	-
	Color correction	-
	Gamma	-
	LUT	-
	Mirror/flip	-

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On-board Image Processing

Pixel formats	
Region of interest	✓
Decimation (FPGA)	-
Decimation (Sensor)	
Binning (FPGA)	-

Others

Chunks	-
Sequencer	✓
Firmware update	-
1st supported firmware version	4.96.1

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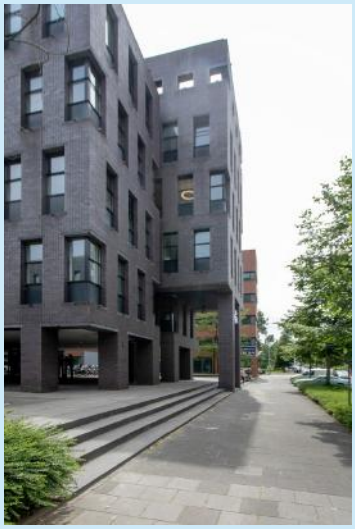
Natascha Overhof

Christian Crompvoets



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