

In series

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

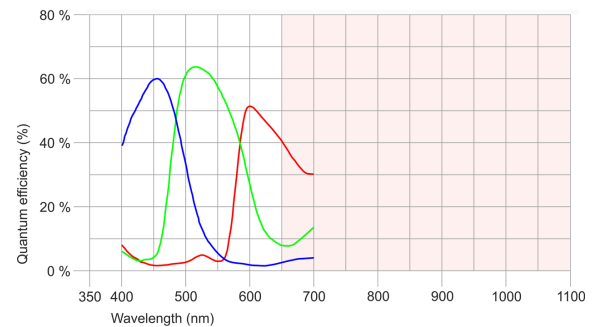


uEye industrial cameras now also work with IDS peak! We recommend the Software Development Kit for the implementation of new projects. [Learn about the process here and switch now.](#)
Please note: The technical data given here was measured using the IDS Software Suite.

Specification

Sensor

Sensor type	CMOS Color
Shutter	Rolling shutter / Global Start Shutter
Sensor characteristic	Linear
Readout mode	Progressive scan
Pixel Class	6 MP
Resolution	6.41 Mpix
Resolution (h x v)	3088 x 2076 Pixel
Aspect ratio	3:2
ADC	12 bit
Color depth (camera)	12 bit
Optical sensor class	1/1.8"
Optical Size	7.411 mm x 4.982 mm)
Optical sensor diagonal	8.93 mm (1/1.79")
Pixel size	2.4 µm
Manufacturer	Sony
Sensor Model	IMX178LQJ-C
Gain (master/RGB)	14.5x/5x
AOI horizontal	same frame rate
AOI vertical	increased frame rate
AOI image width / step width	88 / 8
AOI image height / step width	28 / 2
AOI position grid (horizontal/vertical)	4 / 2
Binning horizontal	-
Binning vertical	-
Binning method	-
Binning factor	-
Subsampling horizontal	same frame rate
Subsampling vertical	same frame rate
Subsampling method	M/C automatic
Subsampling factor	2, 4, 6, 8, 16



Subject to technical modifications (2024-09-16)

Model

Pixel clock range	20 MHz - 118 MHz
Frame rate freerun mode	17 fps
Frame rate trigger (continuous)	17 fps
Frame rate trigger (maximum)	17 fps
Exposure time (minimum - maximum)	0.032 ms - 999 ms
Long exposure (maximum)	120000 ms
Power consumption	1.8 W - 2.9 W
Image memory	128 MB
Special features	IDS line scan mode Overlap trigger Sensor source gain

Ambient conditions

The temperature values given below refer to the outer device temperature of the camera housing.

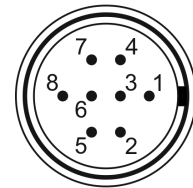
Allowed device temperature during operation	0 °C - 55 °C / 32 °F - 131 °F
Allowed device temperature during storage	-20 °C - 60 °C / -4 °F - 140 °F
Humidity (relative, non-condensing)	20 % - 80 %

Connectors

Interface connector	GigE RJ45, screwable
I/O connector	8-pin Hirose connector (HR25-7TR-8PA(73))
Power supply	12 V - 24 V or PoE

Pin assignment I/O connector

1	Ground (GND)
2	Flash output with optocoupler (-)
3	General Purpose I/O (GPIO) 1
4	Trigger input with optocoupler (-)
5	Flash output with optocoupler (+)
6	General Purpose I/O (GPIO) 2
7	Trigger input with optocoupler (+)
8	Input power supply (VCC) 12-24 V DC



Design

Lens Mount	C-Mount
IP code	IP30
Dimensions H/W/L	29.0 mm x 29.0 mm x 29.0 mm
Mass	51 g

Features

Image Acquisition	Freerun	✓
	Software trigger	-
	Hardware trigger	✓
	Trigger controlled exposure	-
	Denoisier	-
	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	-
On-board Image Processing	Pixel formats	
	Region of interest	✓
	Decimation (FPGA)	-
	Decimation (Sensor)	(2,4)x(2,4)
	Binning (FPGA)	-
Others	Chunks	-
	Sequencer	-
	Firmware update	-
	1st supported firmware version	4.96.1



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