

■ Not recommended for new designs
The camera model is no longer recommended for new application development.

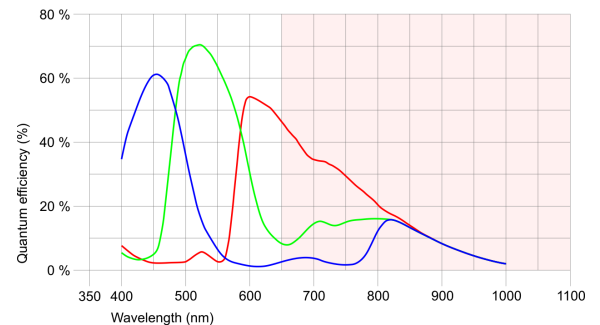


uEye industrial cameras now also work with IDS peak! We recommend the Software Development Kit for the implementation of new projects. [Learn about the process here and switch now.](#)
Please note: The technical data given here was measured using the IDS Software Suite.

Specification

Sensor

Sensor type	CMOS Color
Shutter	Global Shutter
Sensor characteristic	Linear
Readout mode	Progressive scan
Pixel Class	2 MP
Resolution	2.35 Mpix
Resolution (h x v)	1936 x 1216 Pixel
Aspect ratio	16:10
ADC	12 bit
Color depth (camera)	12 bit
Optical sensor class	1/1.2"
Optical Size	11.345 mm x 7.126 mm)
Optical sensor diagonal	13.4 mm (1/1.19")
Pixel size	5.86 µm
Manufacturer	Sony
Sensor Model	IMX174LQJ-C
Gain (master/RGB)	24x/4x
AOI horizontal	same frame rate
AOI vertical	increased frame rate
AOI image width / step width	96 / 8
AOI image height / step width	2 / 2
AOI position grid (horizontal/vertical)	8 / 2
Binning horizontal	same frame rate
Binning vertical	same frame rate
Binning method	M/C automatic
Binning factor	2
Decimation (subsampling) horizontal	same frame rate
Decimation (subsampling) vertical	same frame rate
Decimation (subsampling) method	M/C automatic
Decimation (subsampling) factor	2, 4, 6, 8, 16



Subject to technical modifications (2024-11-27)

Model

Pixel clock range	30 MHz - 480 MHz
Frame rate freerun mode	166 fps
Frame rate trigger (continuous)	166 fps
Frame rate trigger (maximum)	166 fps
Exposure time (minimum - maximum)	0.018 ms - 998 ms
Long exposure (maximum)	30000 ms
Power consumption	1.6 W - 3.2 W
Image memory	128 MB
Special features	IDS line scan mode Overlap trigger Multi-AOI

Ambient conditions

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

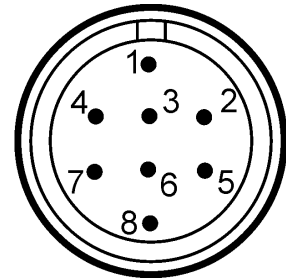
Allowed device temperature during operation	0 °C - 55 °C / 32 °F - 131 °F
Allowed device temperature during storage	-20 °C - 60 °C / -4 °F - 140 °F
Humidity (relative, non-condensing)	20 % - 80 %

Connectors

Interface connector	USB 3.0 micro-B, screwable
I/O connector	8-pin Hirose connector (HR25-7TR-8PA(73))
Power supply	USB cable

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	Output supply voltage, 5 V (100 mA)



Design

Lens Mount	C-Mount
IP code	IP30
Dimensions H/W/L	29.0 mm x 29.0 mm x 29.0 mm
Mass	49 g

Features

Image Acquisition	Freerun	✓
	Software trigger	-
	Hardware trigger	✓
	Trigger controlled exposure	-
	Denoisier	-
	Long exposure	✓
	Line scan	✓
	Line scan highspeed	-

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)	
	Binning (FPGA)	-
Others	Chunks	-
	Sequencer	-
	Firmware update	-
	1st supported firmware version	4.60