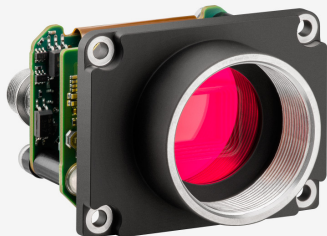


Not recommended for new designs
The camera model is no longer recommended for new application development.

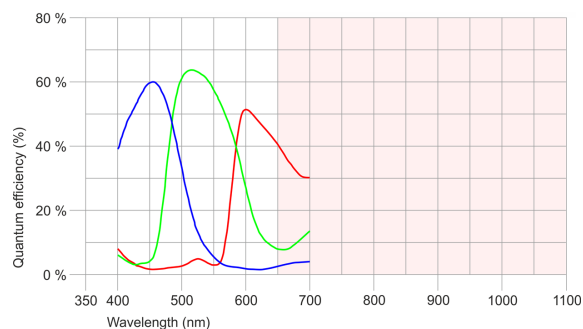


uEye industrial cameras now also work with IDS peak! We recommend the Software Development Kit for the implementation of new projects. [Learn about the process here and switch now.](#)
Please note: The technical data given here was measured using the IDS Software Suite.

Specification

Sensor

Sensor type	CMOS Color
Shutter	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	same frame rate
Binning vertical	same frame rate
Binning method	M/C automatic
Binning factor	2
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 (2024-04-19)

Model

Pixel clock range	20 MHz - 474 MHz
Frame rate freerun mode	58
Frame rate trigger (continuous)	58
Frame rate trigger (maximum)	58
Exposure time (minimum - maximum)	0.013 ms - 999 ms
Long exposure (maximum)	120000 ms
Power consumption	1.7 W - 3.2 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.
For PCB versions, refer to the separate hints in the respective documentation.

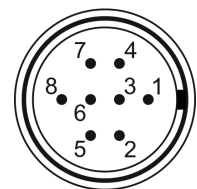
Device temperature during operation	0 °C - 55 °C / 32 °F - 131 °F
Device temperature during storage	-20 °C - 60 °C / -4 °F - 140 °F
Humidity (relative, non-condensing)	20 % - 80 %

Connectors

Interface connector	USB Type-C
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, 3.3 V
4	Trigger input with optocoupler (-)
5	Flash output with optocoupler (+)
6	General Purpose I/O (GPIO) 2, 3.3 V
7	Trigger input with optocoupler (+)
8	Voltage output (USB Power Delivery), 5-15 V



Camera rear view

Design

Lens Mount	C-Mount
IP code	-
Dimensions H/W/L	34.0 mm x 44.0 mm x 31.0 mm
Mass	45 g