

In series

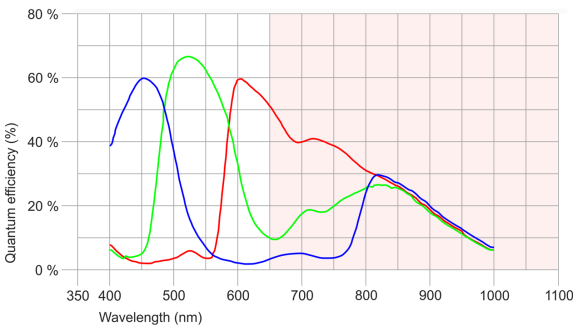
The model is in series and available for the long term.



Specification

Sensor

Sensor type	CMOS Color
Shutter	Rolling shutter
Sensor characteristic	Linear
Readout mode	-
Pixel Class	2 MP
Resolution	2.12 Mpix
Resolution (h x v)	1936 x 1096 Pixel
Aspect ratio	16:9
ADC	12 bit
Color depth (camera)	12 bit
Optical sensor class	1/2.8"
Optical Size	5.614 mm x 3.178 mm
Optical sensor diagonal	6.45 mm 1/2.8"
Pixel size	2.9 µm
Manufacturer	Sony
Sensor Model	IMX290LQR-C
Gain (master/RGB)	13.8x/16x
AOI horizontal	same frame rate
AOI vertical	increased frame rate
AOI image width / step width	256 / 2
AOI image height / step width	2 / 2
AOI position grid (horizontal/vertical)	2 / 2
Binning horizontal	
Binning vertical	
Binning method	-
Binning factor	1x1
Decimation (subsampling) horizontal	
Decimation (subsampling) vertical	
Decimation (subsampling) method	M/C automatic
Decimation (subsampling) factor	1x1



Model

Frame rate freerun mode	134 fps
Frame rate trigger (continuous)	67 fps
Frame rate trigger (maximum)	67 fps
Exposure time (minimum - maximum)	0.011 ms - 1736 ms
Long exposure (maximum)	120000 ms
Power consumption	1 W - 1.5 W
Image memory	-

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 - 80 °C / -4 °F - 176 °F
Humidity (relative, non-condensing)	20 % - 80 %

Connectors

Interface connector	USB Type-C
I/O connector	-
Power supply	USB cable

Design

Lens Mount	S-Mount
IP code	IP30
Dimensions H/W/L	47.0 mm x 46.0 mm x 25.0 mm
Mass	36 g
Housing material	Plastic

Features

List of on-camera image pre-processing features.

All features of the table are available via our IDS peak software for image pre-processing on the host computer (sensor model dependent).

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



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On-board Image Processing	Pixel formats	BayerRG8 BayerRG10p BayerRG12 BayerRG12p BayerRG10
	Region of interest	✓
	Decimation (FPGA)	✓
	Decimation (Sensor)	
	Binning (FPGA)	-
	Binning (Sensor)	
Others	Chunks	-
	Sequencer	-
	Events	-
	Firmware update	✓
	1st supported firmware version	2.20