

In series

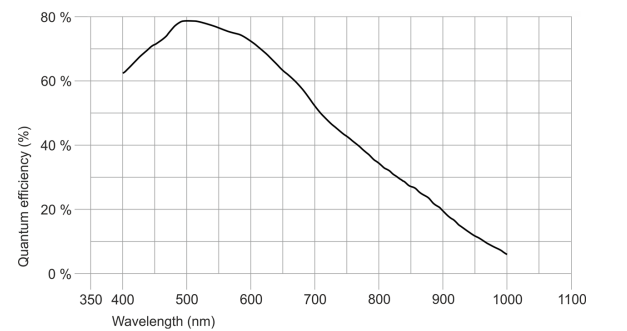
The model is in series and available for the long term.



Specification

Sensor

Sensor type	CMOS Mono
Shutter	Rolling shutter
Sensor characteristic	Linear
Readout mode	Progressive scan
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	1/3"
Optical Size	5.614 mm x 3.178 mm
Optical sensor diagonal	6.45 mm (1/2.48")
Pixel size	2.9 µm
Manufacturer	Sony
Sensor Model	IMX290LLR-C
Gain (master/RGB)	20x/5x
AOI horizontal	same frame rate
AOI vertical	increased frame rate
AOI image width / step width	32 / 8
AOI image height / step width	1 / 1
AOI position grid (horizontal/vertical)	8 / 1
Binning horizontal	same frame rate
Binning vertical	same frame rate
Binning method	M/C automatic
Binning factor	2 / 4 / 8
Subsampling horizontal	same frame rate
Subsampling vertical	same frame rate
Subsampling method	M/C automatic
Subsampling factor	2, 4, 8



Model

Frame rate freerun mode (in 8-bit mode)	56 fps
Frame rate trigger (continuous)	28 fps
Frame rate trigger (maximum)	28 fps
Exposure time (minimum - maximum)	0.020 ms - 1735 ms
Long exposure (maximum)	120000 ms
Power consumption	1.7 W - 2.5 W
Image memory	128 MB

Ambient conditions

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

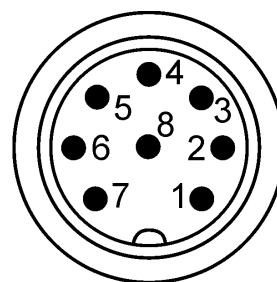
Device temperature during operation	0 °C - 55 °C / 32 °F - 131 °F
Device temperature during storage	-20 °C - 60 °C / -4 °F - 140 °F
Humidity (relative, non-condensing)	0 % - 100 %

Connectors

Interface connector	GigE M12, screwable
I/O connector	8-pin Binder connector (Binder series 712: 09-0427-020-08)
Power supply	12 V - 24 V or PoE

Pin assignment I/O connector

1	Trigger input with optocoupler (+) - Line 0
2	Input power supply (VCC) 12-24 V DC
3	General Purpose I/O (GPIO) 1 - Line 2
4	Ground (GND)
5	Flash output with optocoupler (+) - Line 1
6	Flash output with optocoupler (-) - Line 1
7	Trigger input with optocoupler (-) - Line 0
8	General Purpose I/O (GPIO) 2



Design

Lens Mount	C-Mount
IP code	IP65/67
Dimensions H/W/L	41.0 mm x 53.0 mm x 42.7 mm
Mass	172 g

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	-
On-board Image Processing	Pixel formats	Mono8 Mono10 Mono10p Mono12 Mono12p
	Region of interest	✓
	Decimation (FPGA)	✓
	Decimation (Sensor)	-
	Binning (FPGA)	✓
	Binning (Sensor)	-
Others	IP settings	✓
	Bandwidth management	✓
	Chunks	✓
	Sequencer	-
	PTP	-
	Firmware update	✓
	1st supported firmware version	2.10