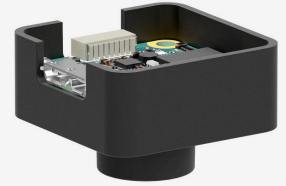
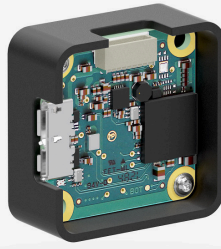


**In series**

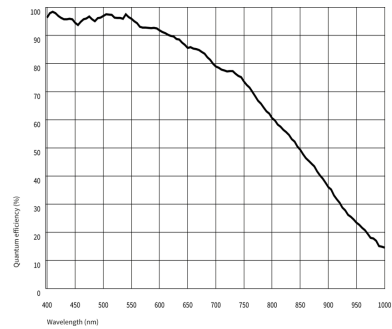
The model is in series and available for the long term.



## Specification

### Sensor

Sensor type	CMOS Mono
Shutter	Rolling shutter
Sensor characteristic	Linear
Readout mode	Progressive scan
Pixel Class	13 MP
Resolution	12.62 Mpix
Resolution (h x v)	3552 x 3552 Pixel
Aspect ratio	1:1
ADC	12 bit
Color depth (camera)	12 bit
Optical sensor class	1/1.8"
Optical Size	7.104 mm x 7.104 mm)
Optical sensor diagonal	10.05 mm (1/1.59")
Pixel size	2 μm
Manufacturer	Sony
Sensor Model	IMX676-AAMR1-C
Gain (master/RGB)	31.6x/-
AOI horizontal	same frame rate
AOI vertical	increased frame rate
AOI image width / step width	1056 / 48
AOI image height / step width	956 / 4
AOI position grid (horizontal/vertical)	4 / 2
Binning horizontal	increased frame rate
Binning vertical	increased frame rate
Binning method	-
Binning factor	-
Subsampling horizontal	-
Subsampling vertical	-
Subsampling method	-
Subsampling factor	-



## Model

Frame rate freerun mode	17 fps
Frame rate trigger (maximum)	-
Exposure time (minimum - maximum)	0.031 ms - 2000 ms
Power consumption	1 W - 1.3 W

## Ambient conditions

For PCB versions, refer to the separate hints in the respective documentation.

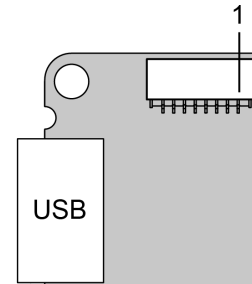
Allowed device temperature during operation	0 °C - 55 °C / 32 °F - 131 °F
Allowed device temperature during storage	-20 °C - 80 °C / -4 °F - 176 °F
Humidity (relative, non-condensing)	20 % - 80 %

## Connectors

Interface connector	USB 3.0 micro-B
I/O connector	8-pin connector
Power supply	USB cable

## Pin assignment I/O connector

1	Voltage output 3.3 V
2	Ground (GND)
3	Flash output without optocoupler - Line 1
4	Trigger input without optocoupler - Line 0
5	General Purpose I/O (GPIO) 1 - Line 2
6	General Purpose I/O (GPIO) 2 - Line 3
7	Ground (GND)
8	USB Power: 5 V, max. 400 mA



## Design

Lens Mount	S-Mount
IP code	-
Dimensions H/W/L	32.5 mm x 32.5 mm x 14.0 mm
Mass	10 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	X/Y
On-board Image Processing	Pixel formats	Mono10g40IDS Mono12g24IDS
	Region of interest	✓
	Decimation (FPGA)	-
	Decimation (Sensor)	-
	Binning (FPGA)	-
	Binning (Sensor)	2x2 Horizontal and vertical binning can only be applied jointly.
Others	Chunks	-
	Sequencer	-
	Events	-
	Firmware update	✓
	1st supported firmware version	3.34