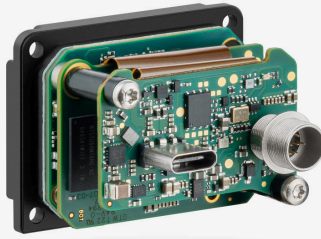
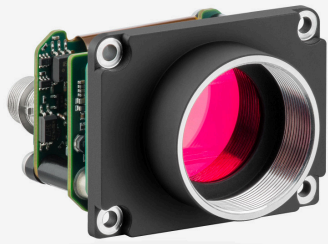


**In series**

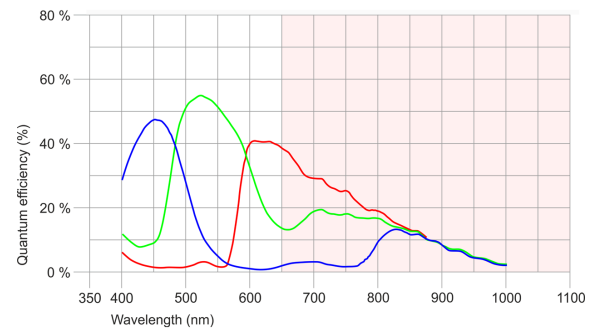
The model is in series and available for the long term.



## Specification

### Sensor

Sensor type	CMOS Color
Shutter	Global Shutter
Sensor characteristic	Linear
Readout mode	Progressive scan
Pixel Class	16 MP
Resolution	16.20 Mpix
Resolution (h x v)	5328 x 3040 Pixel
Aspect ratio	16:9
ADC	12 bit
Color depth (camera)	12 bit
Optical sensor class	1.1"
Optical Size	14.599 mm x 8.330 mm)
Optical sensor diagonal	16.81 mm
Pixel size	2.74 $\mu$ m
Manufacturer	Sony
Sensor Model	IMX542-AAQJ-C
Gain (master/RGB)	-/-
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	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	25 fps
Frame rate trigger (continuous)	25 fps
Frame rate trigger (maximum)	26 fps
Exposure time (minimum - maximum)	0.015 ms - 2000 ms
Long exposure (maximum)	120000 ms
Power consumption	1.6 W - 4.4 W
Image memory	128 MB

## 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 - 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 (-) - Line 1
3	General Purpose I/O (GPIO) 1, 3.3 V - Line 2
4	Trigger input with optocoupler (-) - Line 0
5	Flash output with optocoupler (+) - Line 1
6	General Purpose I/O (GPIO) 2, 3.3 V - Line 3
7	Trigger input with optocoupler (+) - Line 0
8	Output supply voltage, 5 V (100 mA)



## Design

Lens Mount	C-Mount
IP code	-
Dimensions H/W/L	34.0 mm x 44.0 mm x 31.0 mm
Mass	48 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	X/Y
On-board Image Processing	Pixel formats	Mono8 BayerRG8 BayerRG10 BayerRG10p BayerRG12 BayerRG12p BGR8 RGB8 BGR10p32 RGB10p32
	Region of interest	✓
	Decimation (FPGA)	✓
	Decimation (Sensor)	2x2
	Binning (FPGA)	✓
	Binning (Sensor)	-
Others	Chunks	✓
	Sequencer	✓
	Events	✓
	Firmware update	✓
	1st supported firmware version	3.31



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