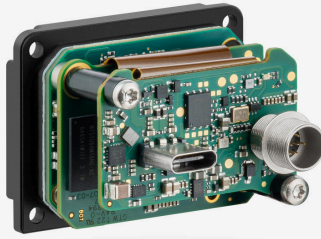
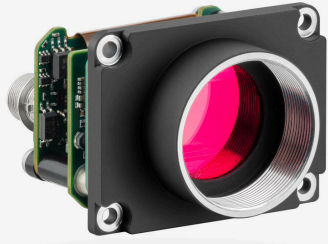


**In series**

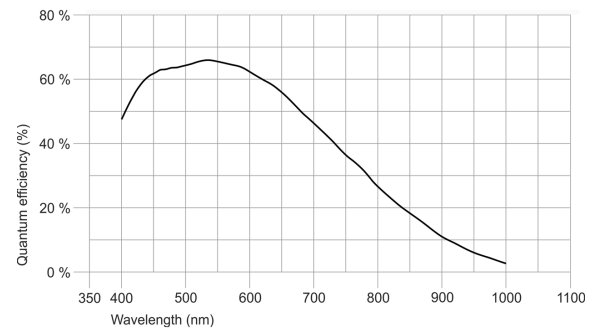
The model is in series and available for the long term.



## Specification

### Sensor

Sensor type	CMOS Mono
Shutter	Global Shutter
Sensor characteristic	Linear
Readout mode	Progressive scan
Pixel Class	12 MP
Resolution	12.29 Mpix
Resolution (h x v)	4096 x 3000 Pixel
Aspect ratio	4:3
ADC	12 bit
Color depth (camera)	12 bit
Optical sensor class	1.1"
Optical Size	14.131 mm x 10.350 mm)
Optical sensor diagonal	17.52 mm
Pixel size	3.45 µm
Manufacturer	Sony
Sensor Model	IMX253LLR-C
Gain (master/RGB)	24x/4x
AOI horizontal	same frame rate
AOI vertical	increased frame rate
AOI image width / step width	264 / 8
AOI image height / step width	1 / 1
AOI position grid (horizontal/vertical)	8 / 1
Binning horizontal	increased frame rate
Binning vertical	increased 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	32 fps
Frame rate trigger (continuous)	32 fps
Frame rate trigger (maximum)	37 fps
Exposure time (minimum - maximum)	0.032 ms - 2000 ms
Long exposure (maximum)	44000 ms
Power consumption	1.7 W - 4.3 W
Image memory	128 MB

## 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.

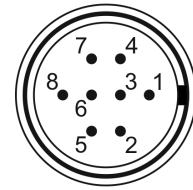
Device temperature during operation	0 °C - 55 °C / 32 °F - 131 °F
Device temperature during storage	-20 °C - 60 °C / -4 °F - 140 °F
Humidity (relative, non-condensing)	20 % - 80 %

## 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 (-) - 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	46 g

## Features

Image Acquisition	Freerun	✓
	Software trigger	✓
	Hardware trigger	✓
	Trigger controlled exposure	✓
	Denoisier	✓
	Long exposure	✓
	Line scan	✓
	Line scan highspeed	-
Flashing	Flashing	✓
	PWM flashing	✓

Subject to technical modifications (2024-07-08)

Image Adjustments	Auto exposure	✓
	Auto gain	✓
	Auto whitebalance	-
	Color correction	-
	Gamma	✓
	LUT	✓
	Mirror/flip	X/Y
On-board Image Processing	Pixel formats	
	Region of interest	✓
	Decimation (FPGA)	✓
	Decimation (Sensor)	-
	Binning (FPGA)	✓
	Binning (Sensor)	2x2 Increases frame rate.
Others	Chunks	✓
	Sequencer	✓
	Events	✓
	Firmware update	✓
	1st supported firmware version	2.20.17746