U3-3070SE-M-GL (AB02837)

Not recommended for new designs
The camera model is no longer recommended for new application development.

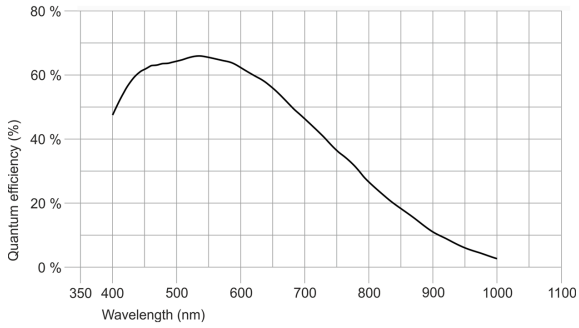




Specification

Sensor

Sensor type	CMOS Mono
Shutter	Global Shutter
Sensor characteristic	Linear
Pixel Class	3 MP
Resolution	3.15 Mpix
Resolution (h x v)	2048 x 1536 Pixel
Aspect ratio	4:3
ADC	12 bit
Color depth (camera)	12 bit
Optical sensor class	1/1.8"
Optical Size	7.093 mm x 5.320 mm
Optical sensor diagonal	8.87 mm 1/1.8"
Pixel size	3.45 µm
CRA (Chief Ray Angle)	0 °
Manufacturer	Sony
Sensor Model	IMX252LLR-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	same frame rate
Binning vertical	increased frame rate
Binning method	Horizontal: addition / Vertical: addition
Binning factor	1x2
Decimation (subsampling) horizontal	same frame rate
Decimation (subsampling) vertical	same frame rate
Decimation (subsampling) method	M/C automatic



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Model

Frame rate freerun mode	114 fps
Frame rate trigger (continuous)	114 fps
Frame rate trigger (maximum)	117 fps
Exposure time (minimum - maximum)	0.036 ms - 2000 ms
Long exposure (maximum)	90000 ms
Line rate freerun mode (line scan)	4510 1/s
Line rate trigger mode (line scan)	4510 1/s
Lines per frame (line scan)	8000
Power consumption	1.7 W - 3.4 W
Image memory	128 MB

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 ambient temperature during storage	-20 °C - 60 °C / -4 °F - 140 °F
Humidity (relative, non-condensing)	20 % - 80 %

Connectors

Interface connector	USB Type-C, screwable
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	IP30
Dimensions H/W/L	34.0 mm x 44.0 mm x 47.0 mm
Mass	111 g
Housing material	Aluminum

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	✓

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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 Mono10 Mono10p Mono12 Mono12p
	Region of interest	✓
	Decimation (FPGA)	✓
	Decimation (Sensor)	-
	Binning (FPGA)	✓
	Binning (Sensor)	1x2 Increases frame rate.
Others	Chunks	✓
	Sequencer	-
	Events	✓
	Firmware update	✓
	1st supported firmware version	2.0

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