

U3-3860LE-C-HQ Rev.1.2 (AB03456)

In series

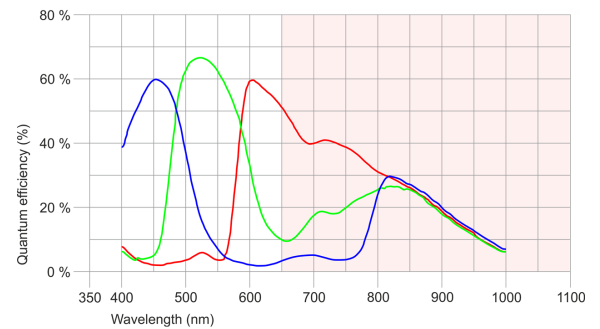
The model is in series and available for the long term.



Specification

Sensor

Sensor type	CMOS Color
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
Micro lens shift	0.00
Manufacturer	Sony
Sensor Model	IMX290LQR-C
Gain (master/RGB)	20x/5x
AOI horizontal	same frame rate
AOI vertical	increased frame rate
AOI image width / step width	256 / 8
AOI image height / step width	2 / 2
AOI position grid (horizontal/vertical)	8 / 2
Binning horizontal	-
Binning vertical	-
Binning method	-
Binning factor	-
Subsampling horizontal	same frame rate
Subsampling vertical	same frame rate
Subsampling method	M/C automatic
Subsampling factor	2, 4, 8



Subject to technical modifications (2023-12-18)

Model

Frame rate freerun mode (in 8-bit mode)	135 fps
Frame rate trigger (continuous)	67 fps
Frame rate trigger (maximum)	67 fps
Exposure time (minimum - maximum)	0.011 ms - 1649 ms
Long exposure (maximum)	114000 ms
Power consumption	1 W - 1.5 W

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 - 80 °C / -4 °F - 176 °F
Humidity (relative, non-condensing)	20 % - 80 %

Connectors

Interface connector	USB Type-C
I/O connector	-
Power supply	USB cable

Design

Lens Mount	CS- / C-Mount
IP code	IP30
Dimensions H/W/L	47.0 mm x 46.0 mm x 23.9 mm
Mass	36 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	BayerRG8 BayerRG10p BayerRG12 BayerRG12p BayerRG10
Region of interest	✓
Decimation (FPGA)	✓
Decimation (Sensor)	-
Binning (FPGA)	-
Binning (Sensor)	-

Others

Chunks	-
Sequencer	-
Events	-
Firmware update	✓
1st supported firmware version	2.20