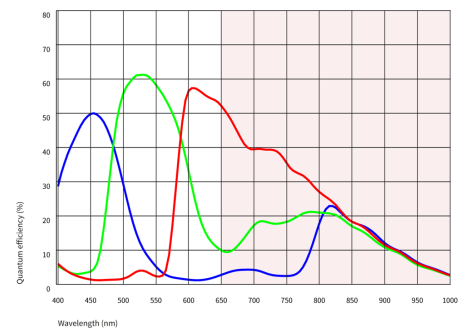


Not recommended for new designs
The camera model is no longer recommended for new application development.



Specification

Sensor	
Sensor type	CMOS Color
Shutter	Global Shutter
Sensor characteristic	Linear
Pixel Class	2 MP
Resolution	2.35 Mpix
Resolution (h x v)	1936 x 1216 Pixel
Aspect ratio	16:10
ADC	12 bit
Color depth (camera)	12 bit
Optical sensor class	1/2.3"
Optical Size	6.679 mm x 4.195 mm
Optical sensor diagonal	7.89 mm 1/2.3"
Pixel size	3.45 µm
CRA (Chief Ray Angle)	0 °
Manufacturer	Sony
Sensor Model	IMX392LQR-C
Gain (master/RGB)	16x/16x
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	same frame rate
Binning vertical	same frame rate
Binning method	Horizontal: addition / Vertical: addition
Binning factor	2 / 4 / 8
Decimation (subsampling) horizontal	same frame rate
Decimation (subsampling) vertical	same frame rate
Decimation (subsampling) method	M/C automatic



U3-30C0SE-C-HQ (AB03425)

Model

Frame rate freerun mode	166 fps
Frame rate trigger (continuous)	166 fps
Frame rate trigger (maximum)	166 fps
Exposure time (minimum - maximum)	0.023 ms - 2000 ms
Long exposure (maximum)	30000 ms
Line rate freerun mode (line scan)	5084 1/s
Line rate trigger mode (line scan)	5485 1/s
Lines per frame (line scan)	8000
Power consumption	2.1 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.

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	110 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	✓

Subject to technical modifications (2026-08-20)

U3-30C0SE-C-HQ (AB03425)

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	
	Region of interest	✓
	Decimation (FPGA)	✓
	Decimation (Sensor)	-
	Binning (FPGA)	✓
	Binning (Sensor)	-
Others	Chunks	✓
	Sequencer	-
	Events	✓
	Firmware update	✓
	1st supported firmware version	2.9