

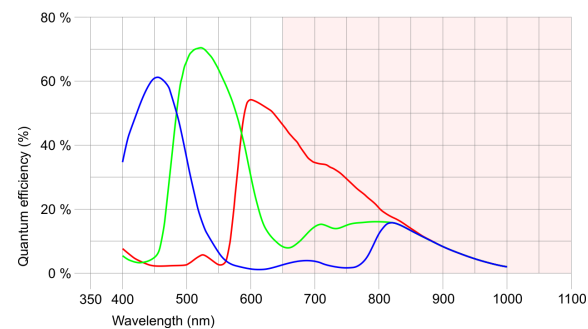
Not recommended for new designs
The camera model is no longer recommended for new application development.



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	1/1.2"
Optical Size	11.345 mm x 7.126 mm
Optical sensor diagonal	13.4 mm 1/1.2"
Pixel size	5.86 µm
CRA (Chief Ray Angle)	0 °
Manufacturer	Sony
Sensor Model	IMX174LQJ-C
Gain (master/RGB)	24x/4x
AOI horizontal	same frame rate
AOI vertical	increased frame rate
AOI image width / step width	96 / 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
Decimation (subsampling) horizontal	same frame rate
Decimation (subsampling) vertical	same frame rate
Decimation (subsampling) method	M/C automatic



Model

Pixel clock range	30 MHz - 480 MHz
Frame rate freerun mode	166 fps
Frame rate trigger (continuous)	166 fps
Frame rate trigger (maximum)	166 fps
Exposure time (minimum - maximum)	0.018 ms - 998 ms
Long exposure (maximum)	30000 ms
Power consumption	1.6 W - 3.2 W
Image memory	128 MB
Special features	IDS line scan mode Overlap trigger Multi-AOI

Ambient conditions

The temperature values given below refer to the outer device temperature of the camera housing.

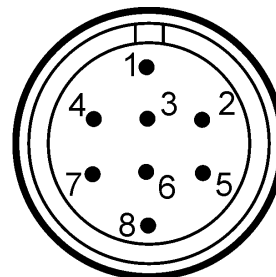
Allowed device temperature during operation	0 °C - 55 °C / 32 °F - 131 °F
Allowed ambient temperature during storage	-20 °C - 60 °C / -4 °F - 140 °F
Humidity (relative, non-condensing)	20 % - 80 %

Connectors

Interface connector	USB 3.0 micro-B, 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 (-)
3	General Purpose I/O (GPIO) 1
4	Trigger input with optocoupler (-)
5	Flash output with optocoupler (+)
6	General Purpose I/O (GPIO) 2
7	Trigger input with optocoupler (+)
8	Output supply voltage, 5 V (100 mA)



Design

Lens Mount	C-Mount
IP code	IP30
Dimensions H/W/L	29.0 mm x 29.0 mm x 29.0 mm
Mass	49 g
Housing material	Magnesium / stainless steel

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	✓

UI-3060CP-C-HQ Rev.2 (AB00605)

Flashing	Flashing	-
	PWM flashing	-
Image Adjustments	Auto exposure	-
	Auto gain	-
	Auto whitebalance	-
	Color correction	-
	Gamma	-
	LUT	-
On-board Image Processing	Mirror/flip	-
	Pixel formats	
	Region of interest	✓
	Decimation (FPGA)	-
	Decimation (Sensor)	
Others	Binning (FPGA)	-
	Chunks	-
	Sequencer	-
	Firmware update	-
	1st supported firmware version	4.60