

In series

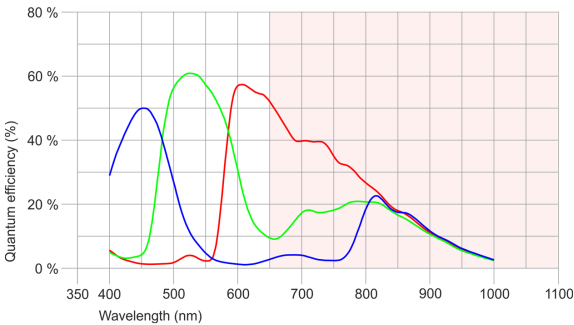
The model is in series and available for the long term.



Specification

Sensor

Sensor type	CMOS Color
Shutter	Global Shutter
Sensor characteristic	Linear
Readout mode	-
Pixel Class	9 MP
Resolution	8.95 Mpix
Resolution (h x v)	4112 x 2176 Pixel
Aspect ratio	17:9
ADC	12 bit
Color depth (camera)	12 bit
Optical sensor class	1"
Optical Size	14.159 mm x 7.500 mm
Optical sensor diagonal	16.02 mm 1"
Pixel size	3.45 µm
Manufacturer	Sony
Sensor Model	IMX255LQR-C
Gain (master/RGB)	25.4x/16x
AOI horizontal	same frame rate
AOI vertical	increased frame rate
AOI image width / step width	256 / 2
AOI image height / step width	2 / 2
AOI position grid (horizontal/vertical)	2 / 2
Binning horizontal	
Binning vertical	
Binning method	M/C automatic
Binning factor	1x1
Decimation (subsampling) horizontal	increased frame rate
Decimation (subsampling) vertical	increased frame rate
Decimation (subsampling) method	M/C automatic
Decimation (subsampling) factor	2x2



Model

Frame rate freerun mode	61 fps*
Frame rate trigger (continuous)	62 fps
Frame rate trigger (maximum)	62 fps
Exposure time (minimum - maximum)	0.021 ms - 2000 ms
Long exposure (maximum)	90000 ms
Power consumption	10 W - 14 W
Image memory	2032 MB

* Maximum frame rate achievable with upcoming firmware to be released shortly. For now, the maximum frame rate has to remain at 50 fps.

Ambient conditions

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

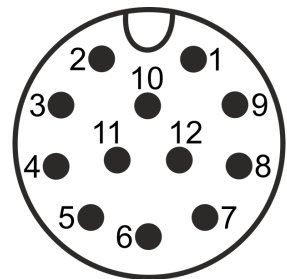
Allowed device temperature during operation	0 °C - 55 °C / 32 °F - 131 °F
Allowed device temperature during storage	-20 °C - 60 °C / -4 °F - 140 °F
Humidity (relative, non-condensing)	20 % - 80 %

Connectors

Interface connector	GigE RJ45, screwable
I/O connector	12-pin M12 connector (Attend 216A-12MSR)
Power supply	12 V - 24 V or PoE+

Pin assignment I/O connector

1	Power supply, 12-24 V DC
2	Power supply, ground
3	(Trigger) input 0 with optocoupler - Line0
4	Reference level for all optocoupler outputs
5	Reference level for all optocoupler inputs
6	(Trigger) input 1 with optocoupler - Line1
7	(Flash) output 1 with optocoupler - Line4
8	Fast (flash) output 2 with optocoupler - Line5
9	Power supply for fast (flash) outputs, 3-5 V DC
10	Fast (flash) output 3 with optocoupler - Line6
11	(Trigger) input 2 with optocoupler - Line2
12	(Flash) output 0 with optocoupler - Line3



Design

Lens Mount	C-Mount
IP code	IP30
Dimensions H/W/L	60.0 mm x 75.0 mm x 94.5 mm
Mass	550 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).

GV-7090WP-C-HQ (1007769)

Image Acquisition	Freerun	✓
	Software trigger	✓
	Hardware trigger	✓
	Trigger controlled exposure	✓
	Denoiser	✓
	Long exposure	✓
	Line scan	✓
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
		RGB8
		BGR10p32
		RGB10p32
	Region of interest	✓
	Decimation (FPGA)	✓
	Decimation (Sensor)	2x2
	Binning (FPGA)	✓
Others		Binning (Sensor)
		IP settings
		Bandwidth management
		Chunks
		Sequencer
		PTP
		Firmware update
		1st supported firmware version
		3.0