GV-7090WP-M-GL (1007770)

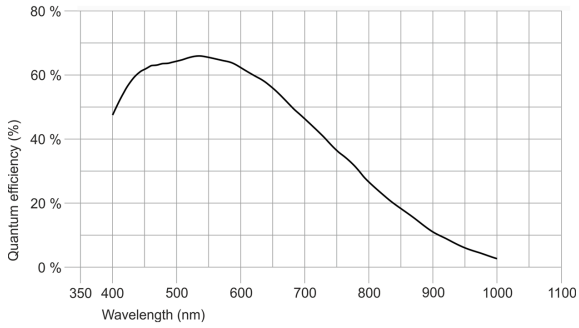
In series
The model is in series and available for the long term.



Specification

Sensor

Sensor type	CMOS Mono
Shutter	Global Shutter
Sensor characteristic	Linear
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
CRA (Chief Ray Angle)	0 °
Manufacturer	Sony
Sensor Model	IMX255LLR-C
Gain (master/RGB)	25.4x/-
AOI horizontal	same frame rate
AOI vertical	increased frame rate
AOI image width / step width	256 / 2
AOI image height / step width	1 / 1
AOI position grid (horizontal/vertical)	2 / 1
Binning horizontal	increased frame rate
Binning vertical	increased frame rate
Binning method	Horizontal: addition / Vertical: addition
Binning factor	2x2
Decimation (subsampling) horizontal	increased frame rate
Decimation (subsampling) vertical	increased frame rate
Decimation (subsampling) method	M/C automatic



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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
Line rate freerun mode (line scan)	2734 1/s
Line rate trigger mode (line scan)	2950 1/s
Lines per frame (line scan)	8000
Power consumption (Power over Ethernet)	12.8 W
Power consumption (external power supply)	11.5 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.

HDR

Mode	Sequencer

Ambient conditions

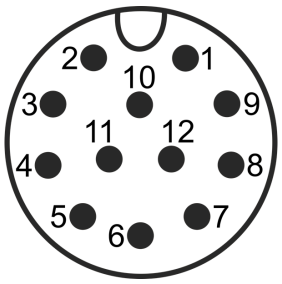
The temperature values given below refer to the outer device temperature of the camera housing.

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	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

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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	✓
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)	2x2
	Binning (FPGA)	✓
	Binning (Sensor)	2x2 Increases frame rate.
Others	IP settings	✓
	Bandwidth management	✓
	Chunks	✓
	Sequencer	✓
	PTP	✓
	Firmware update	✓
	1st supported firmware version	3.0

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