

## GV-5890SE-C-HQ Rev.4.2 (AB12896)

### In series

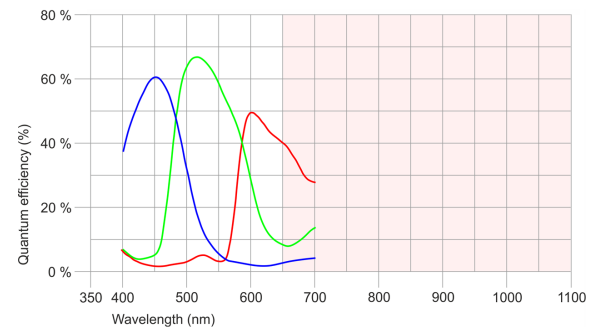
The model is in series and available for the long term.



## Specification

### Sensor

Sensor type	CMOS Color
Shutter	Rolling shutter
Sensor characteristic	Linear
Readout mode	Progressive scan
Pixel Class	12 MP
Resolution	12.00 Mpix
Resolution (h x v)	4000 x 3000 Pixel
Aspect ratio	4:3
ADC	12 bit
Color depth (camera)	12 bit
Optical sensor class	1/1.8"
Optical Size	7.400 mm x 5.550 mm
Optical sensor diagonal	9.25 mm (1/1.73")
Pixel size	1.85 µm
Micro lens shift	0.00
Manufacturer	Sony
Sensor Model	IMX226CQJ-C
Gain (master/RGB)	17x/15x
AOI horizontal	same frame rate
AOI vertical	same frame rate
AOI image width / step width	256 / 16
AOI image height / step width	2 / 2
AOI position grid (horizontal/vertical)	16 / 2
Binning horizontal	increased frame rate
Binning vertical	increased frame rate
Binning method	M/C automatic
Binning factor	2 / 4 / 8
Subsampling horizontal	same frame rate
Subsampling vertical	same frame rate
Subsampling method	M/C automatic
Subsampling factor	2, 4, 8



Subject to technical modifications (2023-12-14)

## Model

Frame rate freerun mode (in 8-bit mode)	10 fps
Frame rate trigger (continuous)	5.0 fps
Frame rate trigger (maximum)	5.0 fps
Exposure time (minimum - maximum)	0.130 ms - 2000 ms
Long exposure (maximum)	30000 ms
Power consumption	1.8 W - 3 W
Image memory	128 MB

## Ambient conditions

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

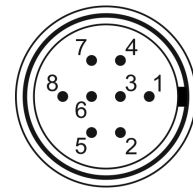
Device temperature during operation	0 °C - 55 °C / 32 °F - 131 °F
Device temperature during storage	-20 °C - 60 °C / -4 °F - 140 °F
Humidity (relative, non-condensing)	20 % - 80 %

## Connectors

Interface connector	GigE RJ45, screwable
I/O connector	8-pin Hirose connector (HR25-7TR-8PA(73))
Power supply	12 V - 24 V or PoE

## Pin assignment I/O connector

1	Ground (GND)
2	Flash output with optocoupler (-) - Line 1
3	General Purpose I/O (GPIO) 1 - Line 2
4	Trigger input with optocoupler (-) - Line 0
5	Flash output with optocoupler (+) - Line 1
6	General Purpose I/O (GPIO) 2
7	Trigger input with optocoupler (+) - Line 0
8	Input power supply (VCC) 12-24 V DC



## Design

Lens Mount	C-Mount
IP code	IP30
Dimensions H/W/L	34.0 mm x 44.0 mm x 47.0 mm
Mass	105 g

## Features

Image Acquisition	Freerun	✓
	Software trigger	✓
	Hardware trigger	✓
	Trigger controlled exposure	-
	Denoisier	✓
	Long exposure	✓
	Line scan	-
	Line scan highspeed	-
Global start	-	
Flashing	Flashing	✓
	PWM flashing	✓

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Image Adjustments	Auto exposure	✓
	Auto gain	✓
	Auto whitebalance	✓
	Color correction	✓
	Gamma	✓
	LUT	✓
	Mirror/flip	-
On-board Image Processing	Pixel formats	Mono8 BayerRG8 BayerRG10 BayerRG10p BayerRG12 BayerRG12p BGR8 RGB8 BGR10p32 RGB10p32
	Region of interest	✓
	Decimation (FPGA)	✓
	Decimation (Sensor)	-
	Binning (FPGA)	✓
	Binning (Sensor)	2x2 Increases frame rate.
Others	IP settings	✓
	Bandwidth management	✓
	Chunks	✓
	Sequencer	-
	PTP	✓
	Firmware update	✓
	1st supported firmware version	2.10