

## GV-5290SE-M-GL Rev.4.2 (AB12290)

### In series

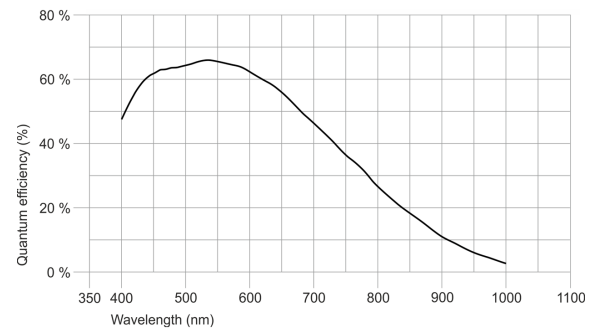
The model is in series and available for the long term.



## Specification

### Sensor

|                                         |                      |
|-----------------------------------------|----------------------|
| Sensor type                             | CMOS Mono            |
| Shutter                                 | Global Shutter       |
| Sensor characteristic                   | Linear               |
| Readout mode                            | Progressive scan     |
| Pixel Class                             | 9 MP                 |
| Resolution                              | 8.85 Mpix            |
| Resolution (h x v)                      | 4096 x 2160 Pixel    |
| Aspect ratio                            | 17:9                 |
| ADC                                     | 12 bit               |
| Color depth (camera)                    | 12 bit               |
| Optical sensor class                    | 1"                   |
| Optical Size                            | 14.131 mm x 7.452 mm |
| Optical sensor diagonal                 | 15.98 mm (1/1")      |
| Pixel size                              | 3.45 $\mu$ m         |
| Micro lens shift                        | 0.00                 |
| Manufacturer                            | Sony                 |
| Sensor Model                            | IMX267LLR-C          |
| Gain (master/RGB)                       | 24x/4x               |
| AOI horizontal                          | same frame rate      |
| AOI vertical                            | increased frame rate |
| AOI image width / step width            | 256 / 8              |
| AOI image height / step width           | 1 / 1                |
| AOI position grid (horizontal/vertical) | 8 / 1                |
| 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) | 13 fps             |
| Frame rate trigger (continuous)         | 13 fps             |
| Frame rate trigger (maximum)            | 14 fps             |
| Exposure time (minimum - maximum)       | 0.046 ms - 2000 ms |
| Long exposure (maximum)                 | 90000 ms           |
| Power consumption                       | 1.7 W - 3.1 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             | 107 g                       |

## Features

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

Image Adjustments

|                   |   |
|-------------------|---|
| Auto exposure     | ✓ |
| Auto gain         | ✓ |
| Auto whitebalance | - |
| Color correction  | - |
| Gamma             | ✓ |
| LUT               | ✓ |
| Mirror/flip       | - |

On-board Image Processing

|                     |                                                 |
|---------------------|-------------------------------------------------|
| Pixel formats       | Mono8<br>Mono10<br>Mono10p<br>Mono12<br>Mono12p |
| Region of interest  | ✓                                               |
| Decimation (FPGA)   | ✓                                               |
| Decimation (Sensor) | -                                               |
| Binning (FPGA)      | ✓                                               |
| Binning (Sensor)    | 1x2<br>Increases frame rate.                    |

Others

|                                |      |
|--------------------------------|------|
| IP settings                    | ✓    |
| Bandwidth management           | ✓    |
| Chunks                         | ✓    |
| Sequencer                      | ✓    |
| PTP                            | ✓    |
| Firmware update                | ✓    |
| 1st supported firmware version | 2.10 |