

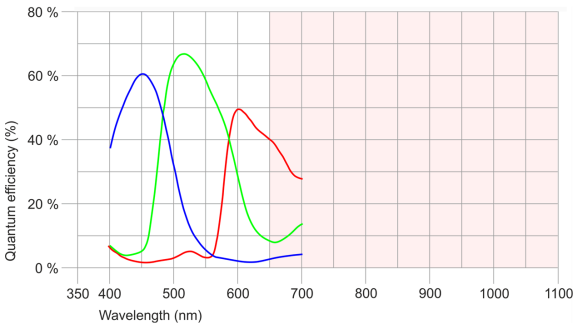
**In series**  
The model is in series and available for the long term.



Specification

Sensor

|                                         |                                   |
|-----------------------------------------|-----------------------------------|
| Sensor type                             | CMOS Color                        |
| Shutter                                 | Rolling shutter                   |
| Sensor characteristic                   | Linear                            |
| 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                    | 1/1.7"                            |
| Optical Size                            | 7.400 mm x 5.550 mm               |
| Optical sensor diagonal                 | 9.25 mm 1/1.7"                    |
| Pixel size                              | 1.85 µm                           |
| CRA (Chief Ray Angle)                   | 0 °                               |
| Manufacturer                            | Sony                              |
| Sensor Model                            | IMX226CQJ-C                       |
| Gain (master/RGB)                       | 16x/16x                           |
| AOI horizontal                          | same frame rate                   |
| AOI vertical                            | same 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                      | increased frame rate              |
| Binning vertical                        | increased frame rate              |
| Binning method                          | Horizontal: mean / Vertical: mean |
| Binning factor                          | 2x2                               |
| Decimation (subsampling) horizontal     | -                                 |
| Decimation (subsampling) vertical       | -                                 |
| Decimation (subsampling) method         | M/C automatic                     |
| Decimation (subsampling) factor         | -                                 |



### Model

|                                   |                   |
|-----------------------------------|-------------------|
| Frame rate freerun mode           | 10 fps            |
| Frame rate trigger (continuous)   | 5.3 fps           |
| Frame rate trigger (maximum)      | 5.3 fps           |
| Exposure time (minimum - maximum) | 0.13 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.

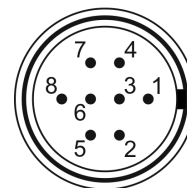
|                                             |                                 |
|---------------------------------------------|---------------------------------|
| Allowed device temperature during operation | 0 °C - 55 °C / 32 °F - 131 °F   |
| Allowed ambient temperature during storage  | -20 °C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

### Connectors

|                     |                                           |
|---------------------|-------------------------------------------|
| Interface connector | GigE RJ45, screwable                      |
| I/O connector       | 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 - Line 3       |
| 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                       |
| 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).

#### Image Acquisition

|                             |   |
|-----------------------------|---|
| Freerun                     | ✓ |
| Software trigger            | ✓ |
| Hardware trigger            | ✓ |
| Trigger controlled exposure | - |
| Denoiser                    | ✓ |
| Long exposure               | ✓ |
| Line scan                   | - |
| Global start                | - |

#### Flashing

|              |   |
|--------------|---|
| Flashing     | ✓ |
| PWM flashing | ✓ |

Subject to technical modifications (2026-07-13)

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

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