

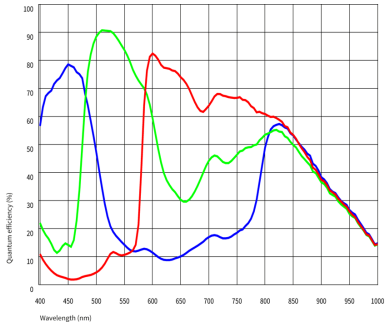
**In series**  
The model is in series and available for the long term.



Specification

Sensor

|                                         |                                   |
|-----------------------------------------|-----------------------------------|
| Sensor type                             | CMOS Color                        |
| Shutter                                 | Rolling shutter                   |
| Sensor characteristic                   | Linear                            |
| Pixel Class                             | 13 MP                             |
| Resolution                              | 12.62 Mpix                        |
| Resolution (h x v)                      | 3552 x 3552 Pixel                 |
| Aspect ratio                            | 1:1                               |
| ADC                                     | 12 bit                            |
| Color depth (camera)                    | 12 bit                            |
| Optical sensor class                    | 1/1.6"                            |
| Optical Size                            | 7.104 mm x 7.104 mm               |
| Optical sensor diagonal                 | 10.05 mm 1/1.6"                   |
| Pixel size                              | 2 µm                              |
| CRA (Chief Ray Angle)                   | 12 °                              |
| Manufacturer                            | Sony                              |
| Sensor Model                            | IMX676-AACR1-C                    |
| Gain (master/RGB)                       | 31.6x/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                      | 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                     |



### Model

|                                           |                    |
|-------------------------------------------|--------------------|
| Frame rate freerun mode                   | 9.9 fps            |
| Frame rate trigger (maximum)              | -                  |
| Exposure time (minimum - maximum)         | 0.037 ms - 1999 ms |
| Long exposure (maximum)                   | 120034 ms          |
| Power consumption (Power over Ethernet)   | 4.6 W              |
| Power consumption (external power supply) | 3.9 W              |
| Image memory                              | 128 MB             |

### HDR

|      |          |
|------|----------|
| Mode | ClearHDR |
|------|----------|

### 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 | 29.0 mm x 29.0 mm x 29.0 mm |
| Mass             | 51 g                        |
| Housing material | Magnesium / stainless steel |

### 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-54L0CP-C-HQ Rev.2.3 (1012368)

|                           |                                |                              |
|---------------------------|--------------------------------|------------------------------|
| Image Acquisition         | Freerun                        | ✓                            |
|                           | Software trigger               | -                            |
|                           | Hardware trigger               | -                            |
|                           | Trigger controlled exposure    | -                            |
|                           | Denoiser                       | ✓                            |
|                           | Long exposure                  | ✓                            |
|                           | Line scan                      | -                            |
|                           | Global start                   | -                            |
| 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)            |                              |
|                           | Binning (FPGA)                 | ✓                            |
|                           | Binning (Sensor)               | 2x2<br>Increases frame rate. |
| Others                    | IP settings                    | ✓                            |
|                           | Bandwidth management           | ✓                            |
|                           | Chunks                         | ✓                            |
|                           | Sequencer                      | -                            |
|                           | PTP                            | ✓                            |
|                           | Firmware update                | ✓                            |
|                           | 1st supported firmware version | 3.93.27929                   |