# GV-5580CP-C-HQ Rev.2.2 (AB12032)

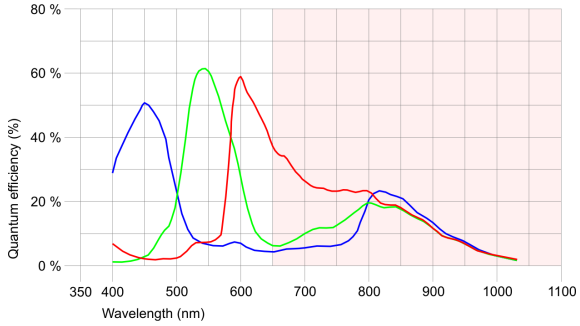
In series
The model is in series and available for the long term.



## Specification

### Sensor

| | |
|---|---|
| Sensor type | CMOS Color |
| Shutter | Rolling shutter |
| Sensor characteristic | Linear |
| Readout mode | Progressive scan |
| Pixel Class | 5 MP |
| Resolution | 4.92 Mpix |
| Resolution (h x v) | 2560 x 1920 Pixel |
| Aspect ratio | 4:3 |
| ADC | 12 bit |
| Color depth (camera) | 12 bit |
| Optical sensor class | 1/2.5" |
| Optical Size | 5.632 mm x 4.224 mm |
| Optical sensor diagonal | 7.04 mm (1/2.27") |
| Pixel size | 2.2 µm |
| Micro lens shift | 7.00 |
| Manufacturer | Onsemi |
| Sensor Model | MT9P006STC |
| Gain (master/RGB) | 12.2x/5.8x |
| AOI horizontal | increased frame rate |
| AOI vertical | increased frame rate |
| AOI image width / step width | 16 / 4 |
| AOI image height / step width | 2 / 2 |
| AOI position grid (horizontal/vertical) | 4 / 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 |





IDS Imaging Development Systems GmbH
Dimbacher Str. 10 · 74182 Obersulm · Germany · Phone +49 7134 96196-0 · E-mail info@ids-imaging.com

## Model

| | |
|---|---|
| Frame rate freerun mode (in 8-bit mode) | 15 fps |
| Frame rate trigger (continuous) | 15 fps |
| Frame rate trigger (maximum) | 15 fps |
| Exposure time (minimum - maximum) | 0.030 ms - 131 ms |
| Power consumption | 1.8 W - 2.8 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 | 29.0 mm x 29.0 mm x 29.0 mm |
| Mass | 51 g |

## Features

| | | |
|---|---|---|
| Image Acquisition | Freerun | ✓ |
| | Software trigger | ✓ |
| | Hardware trigger | ✓ |
| | Trigger controlled exposure | - |
| | Denoiser | ✓ |
| | 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<br>BayerRG8<br>BayerRG10<br>BayerRG10p<br>BayerRG12<br>BayerRG12p<br>BGR8<br>RGB8<br>BGR10p32<br>RGB10p32 |
| | Region of interest | ✓ |
| | Decimation (FPGA) | ✓ |
| | Decimation (Sensor) | - |
| | Binning (FPGA) | ✓ |
| | Binning (Sensor) | 2;4x2;4 |
| Others | IP settings | ✓ |
| | Bandwidth management | ✓ |
| | Chunks | - |
| | Sequencer | - |
| | PTP | ✓ |
| | Firmware update | ✓ |
| | 1st supported firmware version | 2.10 |



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