

**In series**

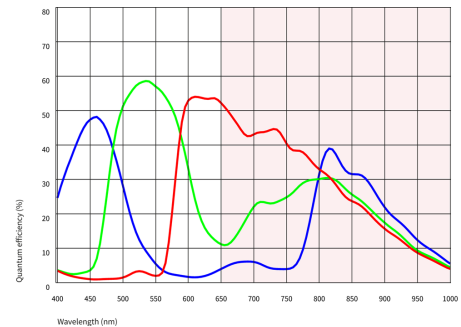
The model is in series and available for the long term.



## Specification

### Sensor

|   |                      |
|---|----------------------|
| Sensor type                             | CMOS Color           |
| Shutter                                 | Global Shutter       |
| Sensor characteristic                   | Linear               |
| Readout mode                            | Progressive scan     |
| Pixel Class                             | 2 MP                 |
| Resolution                              | 2.35 Mpix            |
| Resolution (h x v)                      | 1936 x 1216 Pixel    |
| Aspect ratio                            | 16:10                |
| ADC                                     | 12 bit               |
| Color depth (camera)                    | 12 bit               |
| Optical sensor class                    | 1/2"                 |
| Optical Size                            | 6.679 mm x 4.195 mm) |
| Optical sensor diagonal                 | 7.89 mm (1/2.03")    |
| Pixel size                              | 3.45 µm              |
| Manufacturer                            | Sony                 |
| Sensor Model                            | IMX392LQR-C          |
| Gain (master/RGB)                       | 16x/16x              |
| AOI horizontal                          | same frame rate      |
| AOI vertical                            | increased frame rate |
| AOI image width / step width            | 256 / 8              |
| AOI image height / step width           | 2 / 2                |
| AOI position grid (horizontal/vertical) | 8 / 2                |
| Binning horizontal                      | same frame rate      |
| Binning vertical                        | same 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              |



## Model

|                                   |                    |
|-----------------------------------|--------------------|
| Frame rate freerun mode           | 52 fps             |
| Frame rate trigger (continuous)   | 52 fps             |
| Frame rate trigger (maximum)      | 74 fps             |
| Exposure time (minimum - maximum) | 0.025 ms - 2000 ms |
| Long exposure (maximum)           | 30000 ms           |
| Power consumption                 | 1.5 W - 3.7 W      |
| Image memory                      | 128 MB             |

## Ambient conditions

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

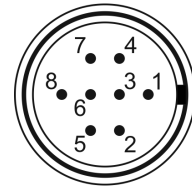
|                                     |                                 |
|-------------------------------------|---------------------------------|
| Device temperature during operation | 0 °C - 55 °C / 32 °F - 131 °F   |
| Device temperature during storage   | -20 °C - 60 °C / -4 °F - 140 °F |
| Humidity (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         | - |

### 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>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)    | -   |

Others

|                                |     |
|--------------------------------|-----|
| IP settings                    | ✓   |
| Bandwidth management           | ✓   |
| Chunks                         | ✓   |
| Sequencer                      | ✓   |
| PTP                            | ✓   |
| Firmware update                | ✓   |
| 1st supported firmware version | 2.9 |



**VISION CONSULTANCY**  
MAKING THE UNSEEN VISIBLE

Thank you for downloading this document from  
[www.machine-vision-shop.com](http://www.machine-vision-shop.com)

If you have any questions, you need help composing the  
right package for your application or do you want to order?

Feel free to contact us via e-mail at [sales@vision-consultancy.nl](mailto:sales@vision-consultancy.nl) or visit our webshop.

Our vision experts are happy to help you.



Natascha Overhof



Christian Cromptoets



**VISION CONSULTANCY**

Robert Schumandomein 2  
6229 ES Maastricht  
The Netherlands

+31 (0) 438 522 651

[sales@vision-consultancy.nl](mailto:sales@vision-consultancy.nl)  
[www.machine-vision-shop.com](http://www.machine-vision-shop.com)

Scan me to visit  
[machine-vision-shop](http://machine-vision-shop.com)

