

**In series**

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

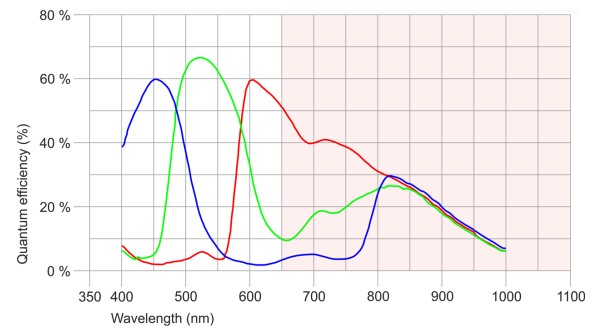


uEye industrial cameras now also work with IDS peak! We recommend the Software Development Kit for the implementation of new projects. [Learn about the process here and switch now.](#)  
Please note: The technical data given here was measured using the IDS Software Suite.

## Specification

### Sensor

|   |  |
|---|--|
| Sensor type                             | CMOS Color                             |
| Shutter                                 | Rolling shutter / Global Start Shutter |
| Sensor characteristic                   | Linear                                 |
| Readout mode                            | Progressive scan                       |
| Pixel Class                             | 2 MP                                   |
| Resolution                              | 2.12 Mpix                              |
| Resolution (h x v)                      | 1936 x 1096 Pixel                      |
| Aspect ratio                            | 16:9                                   |
| ADC                                     | 12 bit                                 |
| Color depth (camera)                    | 12 bit                                 |
| Optical sensor class                    | 1/3"                                   |
| Optical Size                            | 5.610 mm x 3.175 mm)                   |
| Optical sensor diagonal                 | 6.45 mm (1/2.48")                      |
| Pixel size                              | 2.9 µm                                 |
| Manufacturer                            | Sony                                   |
| Sensor Model                            | IMX290LQR-C                            |
| Gain (master/RGB)                       | 20x/5x                                 |
| AOI horizontal                          | same frame rate                        |
| AOI vertical                            | increased frame rate                   |
| AOI image width / step width            | 32 / 8                                 |
| AOI image height / step width           | 2 / 2                                  |
| AOI position grid (horizontal/vertical) | 4 / 2                                  |
| Binning horizontal                      | -                                      |
| Binning vertical                        | -                                      |
| Binning method                          | -                                      |
| Binning factor                          | -                                      |
| Subsampling horizontal                  | same frame rate                        |
| Subsampling vertical                    | same frame rate                        |
| Subsampling method                      | M/C automatic                          |
| Subsampling factor                      | 2, 4, 6, 8                             |



Subject to technical modifications (2024-09-16)

## Model

|                                   |  |
|-----------------------------------|--|
| Pixel clock range                 | 20 MHz - 160 MHz                         |
| Frame rate freerun mode           | 53 fps                                   |
| Frame rate trigger (continuous)   | 27 fps                                   |
| Frame rate trigger (maximum)      | 27 fps                                   |
| Exposure time (minimum - maximum) | 0.020 ms - 999 ms                        |
| Long exposure (maximum)           | 120000 ms                                |
| Power consumption                 | 1.4 W - 3.2 W                            |
| Image memory                      | 128 MB                                   |
| Special features                  | IDS line scan mode<br>Sensor source gain |

## Ambient conditions

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

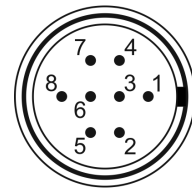
|   |                                 |
|---|---------------------------------|
| Allowed device temperature during operation | 0 °C - 55 °C / 32 °F - 131 °F   |
| Allowed device temperature during storage   | -20 °C - 60 °C / -4 °F - 140 °F |
| Humidity (relative, non-condensing)         | 20 % - 80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

## 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 (-)   |
| 3 | General Purpose I/O (GPIO) 1        |
| 4 | Trigger input with optocoupler (-)  |
| 5 | Flash output with optocoupler (+)   |
| 6 | General Purpose I/O (GPIO) 2        |
| 7 | Trigger input with optocoupler (+)  |
| 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             | 50 g                        |

## Features

|                   |                             |   |
|-------------------|-----------------------------|---|
| Image Acquisition | Freerun                     | ✓ |
|                   | Software trigger            | - |
|                   | Hardware trigger            | ✓ |
|                   | Trigger controlled exposure | - |
|                   | Denoisier                   | - |
|                   | Long exposure               | ✓ |
|                   | Line scan                   | ✓ |
|                   | Line scan highspeed         | - |
|                   | Global start                | ✓ |

|                           |                                |             |
|---------------------------|--------------------------------|-------------|
| Flashing                  | Flashing                       | -           |
|                           | PWM flashing                   | -           |
| Image Adjustments         | Auto exposure                  | -           |
|                           | Auto gain                      | -           |
|                           | Auto whitebalance              | -           |
|                           | Color correction               | -           |
|                           | Gamma                          | -           |
|                           | LUT                            | -           |
|                           | Mirror/flip                    | -           |
| On-board Image Processing | Pixel formats                  |             |
|                           | Region of interest             | ✓           |
|                           | Decimation (FPGA)              | -           |
|                           | Decimation (Sensor)            | (2,4)x(2,4) |
|                           | Binning (FPGA)                 | -           |
| Others                    | Chunks                         | -           |
|                           | Sequencer                      | -           |
|                           | Firmware update                | -           |
|                           | 1st supported firmware version | 4.96.1      |



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