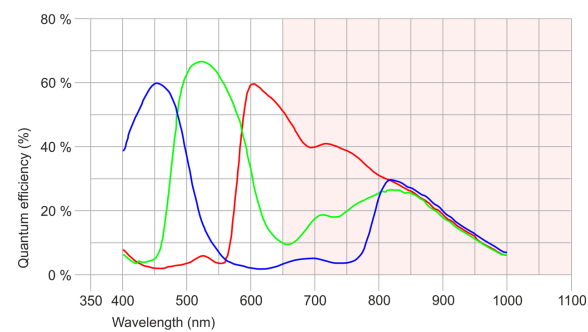


**In series**  
The model is in series and available for the long term.



Specification

|                                         |                             |
|-----------------------------------------|-----------------------------|
| Sensor                                  |                             |
| Sensor type                             | CMOS Color                  |
| Shutter                                 | Rolling shutter             |
| Sensor characteristic                   | Linear                      |
| Pixel Class                             | 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                    | 1/2.8"                      |
| Optical Size                            | 5.614 mm x 3.178 mm         |
| Optical sensor diagonal                 | 6.45 mm 1/2.8"              |
| Pixel size                              | 2.9 µm                      |
| CRA (Chief Ray Angle)                   | 0 °                         |
| Manufacturer                            | Sony                        |
| Sensor Model                            | IMX290LQR-C                 |
| Gain (master/RGB)                       | 13.8x/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                      | -                           |
| Binning vertical                        | -                           |
| Binning method                          | Horizontal: - / Vertical: - |
| Binning factor                          | -                           |
| Decimation (subsampling) horizontal     | -                           |
| Decimation (subsampling) vertical       | -                           |
| Decimation (subsampling) method         | M/C automatic               |
| Decimation (subsampling) factor         | -                           |



## Model

|                                   |                    |
|-----------------------------------|--------------------|
| Frame rate freerun mode           | 134 fps            |
| Frame rate trigger (continuous)   | 67 fps             |
| Frame rate trigger (maximum)      | 67 fps             |
| Exposure time (minimum - maximum) | 0.011 ms - 1736 ms |
| Long exposure (maximum)           | 120000 ms          |
| Power consumption                 | 0.7 W - 1.4 W      |
| Image memory                      | -                  |

## 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 - 80 °C / -4 °F - 176 °F |
| Humidity (relative, non-condensing)         | 20 % - 80 %                     |

## Connectors

|                     |            |
|---------------------|------------|
| Interface connector | USB Type-C |
| I/O connector       | -          |
| Power supply        | USB cable  |

## Design

|                  |                             |
|------------------|-----------------------------|
| Lens Mount       | CS- / C-Mount               |
| IP code          | IP30                        |
| Dimensions H/W/L | 47.0 mm x 46.0 mm x 23.9 mm |
| Mass             | 36 g                        |
| Housing material | Plastic                     |

## 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                | -   |
| Image Adjustments | Auto exposure               | -   |
|                   | Auto gain                   | -   |
|                   | Auto whitebalance           | -   |
|                   | Color correction            | -   |
|                   | Gamma                       | -   |
|                   | LUT                         | -   |
|                   | Mirror/flip                 | X/Y |

U3-3860LE-C-HQ Rev.1.2 (AB03456)

|                           |                                |                                                                |
|---------------------------|--------------------------------|----------------------------------------------------------------|
| On-board Image Processing | Pixel formats                  | BayerRG8<br>BayerRG10p<br>BayerRG12<br>BayerRG12p<br>BayerRG10 |
|                           | Region of interest             | ✓                                                              |
|                           | Decimation (FPGA)              | ✓                                                              |
|                           | Decimation (Sensor)            |                                                                |
|                           | Binning (FPGA)                 | -                                                              |
|                           | Binning (Sensor)               |                                                                |
| Others                    | Chunks                         | -                                                              |
|                           | Sequencer                      | -                                                              |
|                           | Events                         | -                                                              |
|                           | Firmware update                | ✓                                                              |
|                           | 1st supported firmware version | 2.20                                                           |