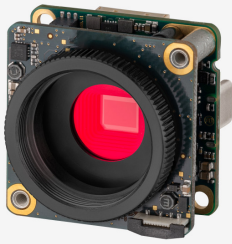


## U3-3274LE-M-GL-VU-AF Rev.1.2 (1008148)

### In series

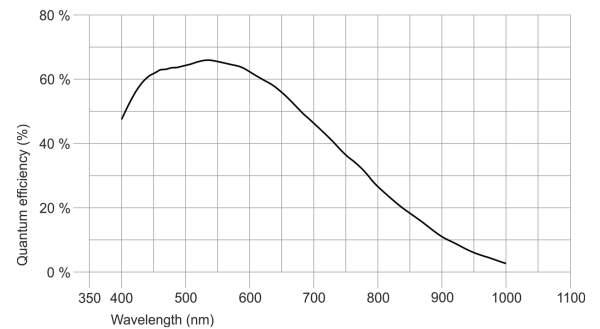
The model is in series and available for the long term.



## Specification

### Sensor

|   |                      |
|---|----------------------|
| Sensor type                             | CMOS Mono            |
| Shutter                                 | Global Shutter       |
| Sensor characteristic                   | Linear               |
| Readout mode                            | Progressive scan     |
| Pixel Class                             | 3 MP                 |
| Resolution                              | 3.19 Mpix            |
| Resolution (h x v)                      | 2064 x 1544 Pixel    |
| Aspect ratio                            | 4:3                  |
| ADC                                     | 12 bit               |
| Color depth (camera)                    | 12 bit               |
| Optical sensor class                    | 1/1.8"               |
| Optical Size                            | 7.121 mm x 5.327 mm  |
| Optical sensor diagonal                 | 8.89 mm (1/1.8")     |
| Pixel size                              | 3.45 $\mu$ m         |
| Micro lens shift                        | 0.00                 |
| Manufacturer                            | Sony                 |
| Sensor Model                            | IMX265LLR-C          |
| Gain (master/RGB)                       | 24x/4x               |
| AOI horizontal                          | same frame rate      |
| AOI vertical                            | increased frame rate |
| AOI image width / step width            | 265 / 8              |
| AOI image height / step width           | 1 / 1                |
| AOI position grid (horizontal/vertical) | 8 / 1                |
| Binning horizontal                      | -                    |
| Binning vertical                        | increased frame rate |
| Binning method                          | M/C automatic        |
| Binning factor                          | 2                    |
| Subsampling horizontal                  | same frame rate      |
| Subsampling vertical                    | same frame rate      |
| Subsampling method                      | M/C automatic        |
| Subsampling factor                      | 2, 4, 8              |



Subject to technical modifications (2023-12-18)

## Model

|   |                    |
|---|--------------------|
| Frame rate freerun mode (in 8-bit mode) | 58 fps             |
| Frame rate trigger (continuous)         | 58 fps             |
| Frame rate trigger (maximum)            | 58 fps             |
| Exposure time (minimum - maximum)       | 0.025 ms - 1900 ms |
| Long exposure (maximum)                 | 90000 ms           |
| Power consumption                       | 1 W - 2 W          |

## Ambient conditions

The temperature values given below refer to the outer device temperature of the camera housing.  
For PCB versions, refer to the separate hints in the respective documentation.

|                                     |                                 |
|-------------------------------------|---------------------------------|
| Device temperature during operation | 0 °C - 55 °C / 32 °F - 131 °F   |
| Device 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       | 10-pin Wuerth connector (WR-WTB 1.00 mm) |
| Power supply        | USB cable                                |

## Pin assignment I/O connector

|    |  |
|----|--|
| 1  | Voltage output 5 V, max. 400 mA                                |
| 2  | Ground (GND)   |
| 3  | General Purpose I/O (GPIO) 2, 3.3 V - Line 3                   |
| 4  | General Purpose I/O (GPIO) 1, 3.3 V - Line 2                   |
| 5  | I2C clock signal - requires USB3 Vision Firmware 3.2 or higher |
| 6  | I2C data signal - requires USB3 Vision Firmware 3.2 or higher  |
| 7  | Trigger input without optocoupler 3.3 V - Line 0               |
| 8  | Flash output without optocoupler 3.3 V - Line 1                |
| 9  | Ground (GND)   |
| 10 | Voltage output 3.3 V   |



## Design

|                  |                             |
|------------------|-----------------------------|
| Lens Mount       | CS- / C-Mount               |
| IP code          | -                           |
| Dimensions H/W/L | 36.0 mm x 36.0 mm x 26.0 mm |
| Mass             | 20 g                        |

## Features

|                     |                             |   |
|---------------------|-----------------------------|---|
| Image Acquisition   | Freerun                     | ✓ |
|                     | Software trigger            | ✓ |
|                     | Hardware trigger            | ✓ |
|                     | Trigger controlled exposure | ✓ |
|                     | Denoiser                    | ✓ |
|                     | Long exposure               | ✓ |
|                     | Line scan                   | - |
| Line scan highspeed | -                           |   |
| Flashing            | Flashing                    | ✓ |
|                     | PWM flashing                | - |

Subject to technical modifications (2023-12-18)

Image Adjustments

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

On-board Image Processing

|                     |   |
|---------------------|---|
| Pixel formats       | Mono8<br>Mono10<br>Mono10p<br>Mono12<br>Mono12p |
| Region of interest  | ✓   |
| Decimation (FPGA)   | ✓   |
| Decimation (Sensor) | -   |
| Binning (FPGA)      | -   |
| Binning (Sensor)    | 1x2<br>Increases frame rate.                    |

Others

|                                |      |
|--------------------------------|------|
| Chunks                         | -    |
| Sequencer                      | -    |
| Events                         | -    |
| Firmware update                | ✓    |
| 1st supported firmware version | 2.20 |