

In development

The model is not yet in series production, but will be introduced shortly.

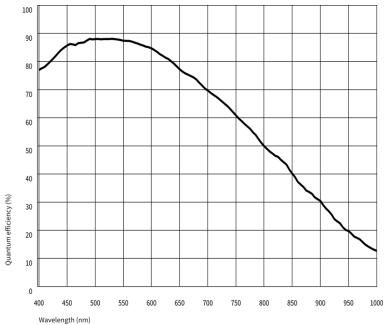


Specification

- PRELIMINARY -

Sensor

|   |                      |
|---|----------------------|
| Sensor type                             | CMOS Mono            |
| Shutter                                 | Global Shutter       |
| Sensor characteristic                   | Linear               |
| Readout mode                            | Progressive scan     |
| Pixel Class                             | 3 MP                 |
| Resolution                              | 3.20 Mpix            |
| Resolution (h x v)                      | 2064 x 1552 Pixel    |
| Aspect ratio                            | 4:3                  |
| ADC                                     | 12 bit               |
| Color depth (camera)                    | 12 bit               |
| Optical sensor class                    | 1/3.1"               |
| Optical Size                            | 4.644 mm x 3.492 mm  |
| Optical sensor diagonal                 | 5.81 mm (1/2.75")    |
| Pixel size                              | 2.25 µm              |
| Manufacturer                            | Sony                 |
| Sensor Model                            | IMX900-AMR-C         |
| Gain (master/RGB)                       | 15.8x/-              |
| AOI horizontal                          | same frame rate      |
| AOI vertical                            | increased frame rate |
| AOI image width / step width            | 264 / 24             |
| AOI image height / step width           | 16 / 8               |
| AOI position grid (horizontal/vertical) | 8 / 8                |
| Binning horizontal                      | increased frame rate |
| Binning vertical                        | increased frame rate |
| Binning method                          |                      |
| Binning factor                          | -                    |
| Subsampling horizontal                  |                      |
| Subsampling vertical                    |                      |
| Subsampling method                      | -                    |
| Subsampling factor                      | -                    |



## Model

|                                   |                   |
|-----------------------------------|-------------------|
| Frame rate freerun mode           | -1 fps            |
| Frame rate trigger (continuous)   | -1 fps            |
| Frame rate trigger (maximum)      | -1 fps            |
| Exposure time (minimum - maximum) | 0.02 ms - 1999 ms |
| Power consumption                 | 0.5 W - 1 W       |

## 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 | USB 3.0 micro-B, screwable |
| I/O connector       | 8-pin Wuerth connector     |
| Power supply        | USB cable                  |

## Pin assignment I/O connector

|   |  |
|---|--|
| 1 | Voltage output 3.3 V                       |
| 2 | Ground (GND)                               |
| 3 | Flash output without optocoupler - Line 1  |
| 4 | Trigger input without optocoupler - Line 0 |
| 5 | General Purpose I/O (GPIO) 1 - Line 2      |
| 6 | General Purpose I/O (GPIO) 2 - Line 3      |
| 7 | Ground (GND)                               |
| 8 | USB Power: 5 V, max. 400 mA                |



## Design

|                  |                             |
|------------------|-----------------------------|
| Lens Mount       | C-Mount                     |
| IP code          | IP30                        |
| Dimensions H/W/L | 29.0 mm x 29.0 mm x 17.0 mm |
| Mass             | 62 g                        |
| Housing material | Zinc nickel-plated          |

## 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                   | - |

### Flashing

|              |   |
|--------------|---|
| Flashing     | ✓ |
| PWM flashing | - |

|                           |                                |                              |
|---------------------------|--------------------------------|------------------------------|
| Image Adjustments         | Auto exposure                  | -                            |
|                           | Auto gain                      | -                            |
|                           | Auto whitebalance              | -                            |
|                           | Color correction               | -                            |
|                           | Gamma                          | -                            |
|                           | LUT                            | -                            |
|                           | Mirror/flip                    | X/Y                          |
| On-board Image Processing | Pixel formats                  | Mono10g40IDS<br>Mono12g24IDS |
|                           | Region of interest             | ✓                            |
|                           | Decimation (FPGA)              | -                            |
|                           | Decimation (Sensor)            |                              |
|                           | Binning (FPGA)                 | -                            |
|                           | Binning (Sensor)               | 2x2<br>Increases frame rate. |
| Others                    | Chunks                         | -                            |
|                           | Sequencer                      | -                            |
|                           | Events                         | ✓                            |
|                           | Firmware update                | ✓                            |
|                           | 1st supported firmware version |                              |