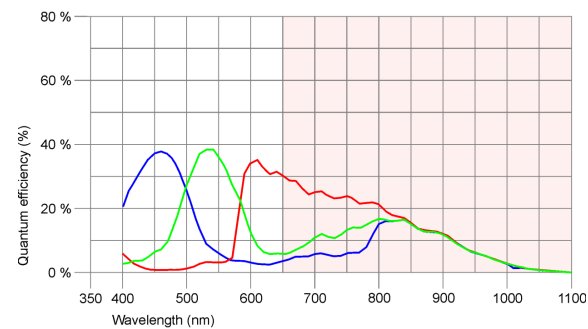


**In series**  
The model is in series and available for the long term.



Specification

|                                         |                                           |
|-----------------------------------------|-------------------------------------------|
| Sensor                                  |                                           |
| Sensor type                             | CMOS Color                                |
| Shutter                                 | Global Shutter                            |
| Sensor characteristic                   | Linear                                    |
| Pixel Class                             | 1.9 MP                                    |
| Resolution                              | 1.92 Mpix                                 |
| Resolution (h x v)                      | 1600 x 1200 Pixel                         |
| Aspect ratio                            | 4:3                                       |
| ADC                                     | 10 bit                                    |
| Color depth (camera)                    | 10 bit                                    |
| Optical sensor class                    | 1/1.8"                                    |
| Optical Size                            | 7.200 mm x 5.400 mm                       |
| Optical sensor diagonal                 | 9 mm 1/1.8"                               |
| Pixel size                              | 4.5 µm                                    |
| CRA (Chief Ray Angle)                   | 12 °                                      |
| Manufacturer                            | e2v                                       |
| Sensor Model                            | EV76C570ACT                               |
| Gain (master/RGB)                       | 16x/4x                                    |
| 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                      | same frame rate                           |
| Binning vertical                        | same frame rate                           |
| Binning method                          | Horizontal: addition / Vertical: addition |
| Binning factor                          | 2x2                                       |
| Decimation (subsampling) horizontal     | -                                         |
| Decimation (subsampling) vertical       | -                                         |
| Decimation (subsampling) method         | M/C automatic                             |
| Decimation (subsampling) factor         | -                                         |



## Model

|                                   |                  |
|-----------------------------------|------------------|
| Frame rate freerun mode           | 49 fps           |
| Frame rate trigger (continuous)   | 49 fps           |
| Frame rate trigger (maximum)      | 49 fps           |
| Exposure time (minimum - maximum) | 0.02 ms - 195 ms |
| Power consumption                 | 1.7 W - 2.4 W    |
| Image memory                      | 128 MB           |

## Ambient conditions

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

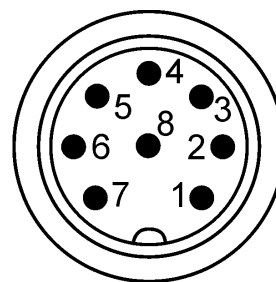
|                                             |                                 |
|---------------------------------------------|---------------------------------|
| Allowed device temperature during operation | -20 °C - 55 °C / -4 °F - 131 °F |
| Allowed ambient temperature during storage  | -20 °C - 60 °C / -4 °F - 140 °F |
| Humidity (relative, non-condensing)         | 0 % - 100 %                     |

## Connectors

|                     |                                                            |
|---------------------|------------------------------------------------------------|
| Interface connector | GigE M12, screwable                                        |
| I/O connector       | 8-pin Binder connector (Binder series 712: 09-0427-020-08) |
| Power supply        | 12 V - 24 V or PoE                                         |

## Pin assignment I/O connector

|   |                                             |
|---|---------------------------------------------|
| 1 | Trigger input with optocoupler (+) - Line 0 |
| 2 | Input power supply (VCC) 12-24 V DC         |
| 3 | General Purpose I/O (GPIO) 1 - Line 2       |
| 4 | Ground (GND)                                |
| 5 | Flash output with optocoupler (+) - Line 1  |
| 6 | Flash output with optocoupler (-) - Line 1  |
| 7 | Trigger input with optocoupler (-) - Line 0 |
| 8 | General Purpose I/O (GPIO) 2                |



## Design

|                  |                             |
|------------------|-----------------------------|
| Lens Mount       | C-Mount                     |
| IP code          | IP66, IP67, IP69, IPx9K     |
| Dimensions H/W/L | 41.0 mm x 53.0 mm x 42.7 mm |
| Mass             | 173 g                       |
| Housing material | Aluminum                    |

## 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                    | -                            |
| On-board Image Processing | Pixel formats                  |                              |
|                           | Mono8                          |                              |
|                           | BayerRG8                       |                              |
|                           | BayerRG10                      |                              |
|                           | BayerRG10p                     |                              |
|                           | BayerRG12                      |                              |
|                           | BayerRG12p                     |                              |
|                           | BGR8                           |                              |
|                           | RGB8                           |                              |
|                           | BGR10p32                       |                              |
|                           | RGB10p32                       |                              |
|                           | Region of interest             | ✓                            |
|                           | Decimation (FPGA)              | ✓                            |
|                           | Decimation (Sensor)            |                              |
|                           | Binning (FPGA)                 | ✓                            |
|                           | Binning (Sensor)               | 2x2<br>Increases frame rate. |
| Others                    | IP settings                    | ✓                            |
|                           | Bandwidth management           | ✓                            |
|                           | Chunks                         | -                            |
|                           | Sequencer                      | -                            |
|                           | PTP                            | ✓                            |
|                           | Firmware update                | ✓                            |
|                           | 1st supported firmware version | 2.10                         |