

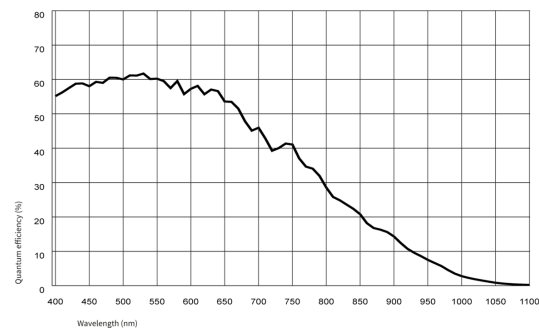
Not recommended for new designs  
The camera model is no longer recommended for new application development.



Specification

Sensor

|                                         |                                                         |
|-----------------------------------------|---------------------------------------------------------|
| Sensor type                             | CMOS Mono                                               |
| Shutter                                 | Global Shutter / Rolling shutter / Global Start Shutter |
| Sensor characteristic                   | Linear                                                  |
| Pixel Class                             | 1.3 MP                                                  |
| Resolution                              | 1.31 Mpix                                               |
| Resolution (h x v)                      | 1280 x 1024 Pixel                                       |
| Aspect ratio                            | 5:4                                                     |
| ADC                                     | 10 bit                                                  |
| Color depth (camera)                    | 8 bit                                                   |
| Optical sensor class                    | 1/1.8"                                                  |
| Optical Size                            | 6.784 mm x 5.427 mm                                     |
| Optical sensor diagonal                 | 8.69 mm 1/1.8"                                          |
| Pixel size                              | 5.3 µm                                                  |
| CRA (Chief Ray Angle)                   | 12 °                                                    |
| Manufacturer                            | e2v                                                     |
| Sensor Model                            | EV76C560ABT                                             |
| Gain (master/RGB)                       | 4x/-                                                    |
| AOI horizontal                          | same frame rate                                         |
| AOI vertical                            | increased frame rate                                    |
| AOI image width / step width            | 16 / 4                                                  |
| AOI image height / step width           | 4 / 2                                                   |
| AOI position grid (horizontal/vertical) | 2 / 2                                                   |
| Binning horizontal                      | same frame rate                                         |
| Binning vertical                        | same frame rate                                         |
| Binning method                          | Horizontal: addition / Vertical: mean                   |
| Binning factor                          | 2                                                       |
| Decimation (subsampling) horizontal     | -                                                       |
| Decimation (subsampling) vertical       | -                                                       |
| Decimation (subsampling) method         | -                                                       |



Model

|                                   |                                                                                                               |
|-----------------------------------|---------------------------------------------------------------------------------------------------------------|
| Pixel clock range                 | 7 MHz - 35 MHz                                                                                                |
| Frame rate freerun mode           | 25 fps                                                                                                        |
| Frame rate trigger (maximum)      | 24 fps                                                                                                        |
| Exposure time (minimum - maximum) | 0.009 ms - 2000 ms                                                                                            |
| Power consumption                 | 0.3 W - 0.7 W                                                                                                 |
| Image memory                      | -                                                                                                             |
| Special features                  | Linescan mode<br>Scaler<br>Sequencer<br>Log mode<br>Sensor hot pixel correction<br>Fine exposure<br>Multi-AOI |

Ambient conditions

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

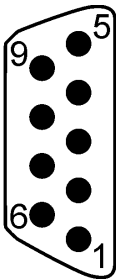
|                                             |                                 |
|---------------------------------------------|---------------------------------|
| Allowed device temperature during operation | 0 °C - 55 °C / 32 °F - 131 °F   |
| Allowed ambient temperature during storage  | -20 °C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

Connectors

|                     |                                                     |
|---------------------|-----------------------------------------------------|
| Interface connector | USB 2.0 mini-B, screwable                           |
| I/O connector       | 9-pin micro D-Sub socket (MPE Garry 11-0021-50-09L) |
| Power supply        | USB cable                                           |

Pin assignment I/O connector

|   |                                    |
|---|------------------------------------|
| 1 | Flash output with optocoupler (-)  |
| 2 | Trigger input with optocoupler (+) |
| 3 | Shielding                          |
| 4 | USB Power supply (VCC) 5 V         |
| 5 | USB Ground (GND)                   |
| 6 | Flash output with optocoupler (+)  |
| 7 | Trigger input with optocoupler (-) |
| 8 | USB data (+)                       |
| 9 | USB data (-)                       |



Design

|                  |                             |
|------------------|-----------------------------|
| Lens Mount       | C-Mount                     |
| IP code          | IP30                        |
| Dimensions H/W/L | 34.0 mm x 32.0 mm x 41.3 mm |
| Mass             | 65 g                        |
| Housing material | Aluminum / stainless steel  |

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).

## UI-1240SE-M-GL (AB.0010.1.46500.23)

|                           |                                |      |
|---------------------------|--------------------------------|------|
| 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                    | -    |
| On-board Image Processing | Pixel formats                  |      |
|                           | Region of interest             | ✓    |
|                           | Decimation (FPGA)              | -    |
|                           | Decimation (Sensor)            |      |
|                           | Binning (FPGA)                 | -    |
| Others                    | Chunks                         | -    |
|                           | Sequencer                      | ✓    |
|                           | Firmware update                | -    |
|                           | 1st supported firmware version | 3.80 |