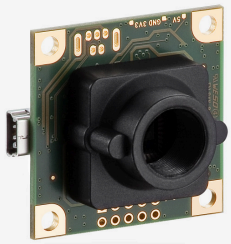
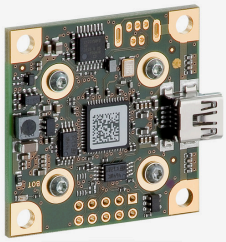
# UI-1241LE-C-HQ (AB.0010.1.48000.24)

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



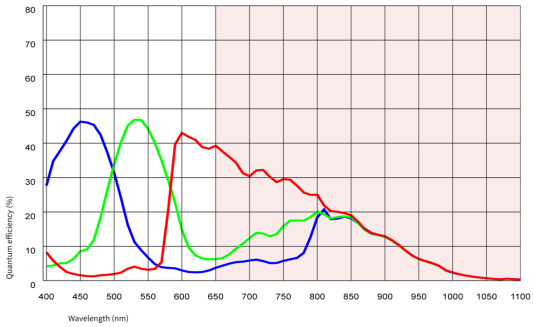




## Specification

### Sensor

| | |
|---|---|
| Sensor type | CMOS Color |
| 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 | EV76C560ACT |
| Gain (master/RGB) | 4x/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 | - |







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## 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 | Scaler<br>Sequencer<br>Log mode<br>Sensor hot pixel correction<br>Fine exposure<br>Multi-AOI |

## Ambient conditions

For PCB versions, refer to the separate hints in the respective documentation.

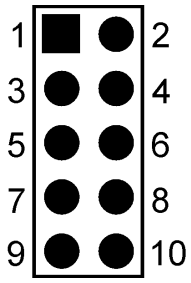
| | |
|---|---|
| Allowed device temperature during operation | 0 °C - 55 °C / 32 °F - 131 °F |
| Allowed device temperature during storage | -20 °C - 80 °C / -4 °F - 176 °F |
| Humidity (relative, non-condensing) | 20 % - 80 % |

## Connectors

| | |
|---|---|
| Interface connector | USB 2.0 mini-B |
| I/O connector | 10-pin plated-through holes |
| Power supply | USB cable |

## Pin assignment I/O connector

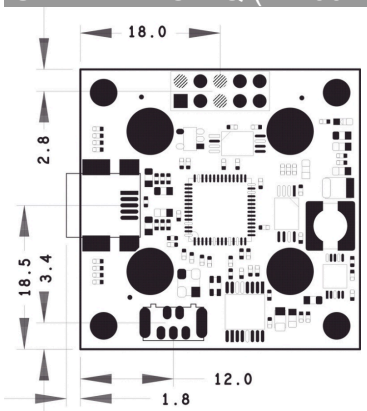
| | |
|---|---|
| 1 | USB Power supply (VCC) 5 V |
| 2 | USB Ground (GND) |
| 3 | Trigger input without optocoupler (+) |
| 4 | Flash output without optocoupler (+) |
| 5 | Power supply (internal voltage transformer), 3.3 V or 3.0 V (sensor-dependent) |
| 6 | USB Ground (GND) |
| 7 | General Purpose I/O (GPIO) 1 |
| 8 | General Purpose I/O (GPIO) 2 |
| 9 | I2C bus clock signal |
| 10 | I2C bus data signal |

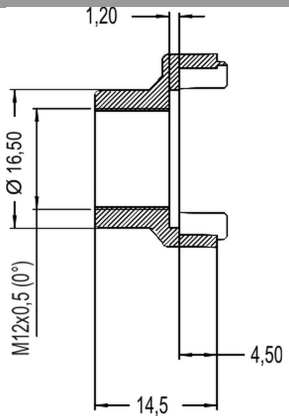


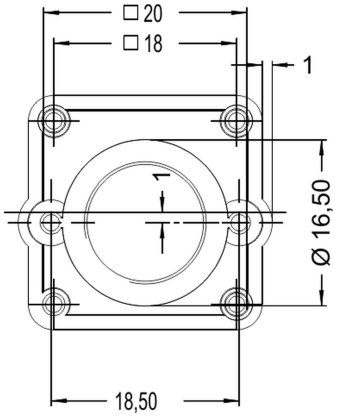

## Design

| | |
|---|---|
| Lens Mount | S-Mount |
| IP code | - |
| Dimensions H/W/L | 36.0 mm x 36.0 mm x 20.2 mm |
| Mass | 16 g |
| Housing material | - |


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## 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 | - |


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## UI-1241LE-C-HQ (AB.0010.1.48000.24)

| | | |
|---|---|---|
| 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 |



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