

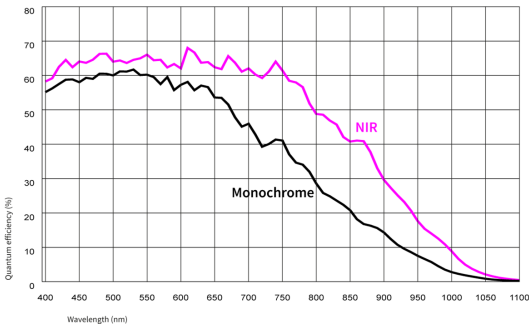
Not recommended for new designs  
The camera model is no longer recommended for new application development.



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)                    | 12 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                            | EV76C661ABT                                             |
| 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 - 86 MHz                                                                                                                      |
| Frame rate freerun mode           | 60 fps                                                                                                                              |
| Frame rate trigger (maximum)      | 56 fps                                                                                                                              |
| Exposure time (minimum - maximum) | 0.009 ms - 2000 ms                                                                                                                  |
| Power consumption                 | 1.3 W - 1.9 W                                                                                                                       |
| Image memory                      | 128 MB                                                                                                                              |
| Special features                  | Linescan mode<br>IDS line scan 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.

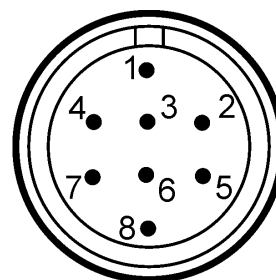
|                                             |                                 |
|---------------------------------------------|---------------------------------|
| Allowed device temperature during operation | 0 °C - 55 °C / 32 °F - 131 °F   |
| Allowed ambient temperature during storage  | -20 °C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

## Connectors

|                     |                                           |
|---------------------|-------------------------------------------|
| Interface connector | USB 3.0 micro-B, screwable                |
| I/O connector       | 8-pin Hirose connector (HR25-7TR-8PA(73)) |
| Power supply        | USB cable                                 |

## Pin assignment I/O connector

|   |                                     |
|---|-------------------------------------|
| 1 | Ground (GND)                        |
| 2 | Flash output with optocoupler (-)   |
| 3 | General Purpose I/O (GPIO) 1        |
| 4 | Trigger input with optocoupler (-)  |
| 5 | Flash output with optocoupler (+)   |
| 6 | General Purpose I/O (GPIO) 2        |
| 7 | Trigger input with optocoupler (+)  |
| 8 | Output supply voltage, 5 V (100 mA) |



## Design

|                  |                             |
|------------------|-----------------------------|
| Lens Mount       | C-Mount                     |
| IP code          | IP30                        |
| Dimensions H/W/L | 29.0 mm x 29.0 mm x 29.0 mm |
| Mass             | 49 g                        |
| Housing material | Magnesium / 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-3240CP-NIR-GL Rev.2 (AB00615)

|                           |                                |      |
|---------------------------|--------------------------------|------|
| 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 | 4.80 |