

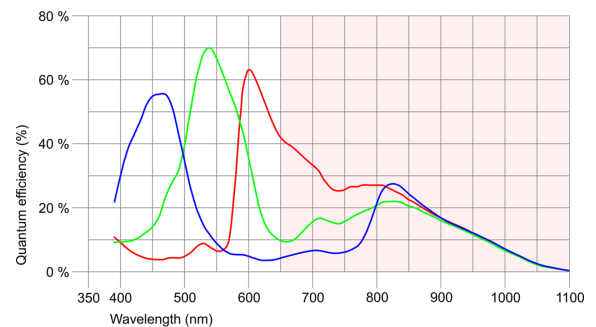
UI-3590CP-C-HQ Rev.2



Specification

Sensor

| | |
|---|----------------------|
| Sensor type | CMOS Color |
| Shutter | Rolling shutter |
| Sensor characteristic | Linear |
| Readout mode | Progressive scan |
| Pixel Class | 18 MP |
| Resolution | 18.10 Mpix |
| Resolution (h x v) | 4912 x 3684 Pixel |
| Aspect ratio | 4:3 |
| ADC | 10 bit |
| Color depth (camera) | 10 bit |
| Sensor Size | 1/2.3" |
| Optical Size | 6.140 mm x 4.605 mm |
| Optical sensor diagonal | 7.68 mm (1/2.08") |
| Pixel size | 1.25 µm |
| Manufacturer | ON Semiconductor |
| Sensor Model | AR1820HSSC00SHEA0 |
| Gain (master/RGB) | 16x/4x |
| AOI horizontal | increased frame rate |
| AOI vertical | same frame rate |
| AOI image width / step width | 320 / 4 |
| AOI image height / step width | 240 / 2 |
| AOI position grid (horizontal/vertical) | 4 / 2 |
| Binning horizontal | increased frame rate |
| Binning vertical | increased frame rate |
| Binning method | Color |
| Binning factor | 2 / 4 |
| Subsampling horizontal | increased frame rate |
| Subsampling vertical | increased frame rate |
| Subsampling method | Color |
| Subsampling factor | 2, 4 |



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Model

| | |
|-----------------------------------|-------------------|
| Pixel clock range | 96 MHz - 432 MHz |
| Frame rate freerun mode | 21.0 fps |
| Frame rate trigger | 21.0 fps |
| Exposure time (minimum - maximum) | 0.013 ms - 998 ms |
| Power consumption | 1.4 W - 2.7 W |

Ambient conditions

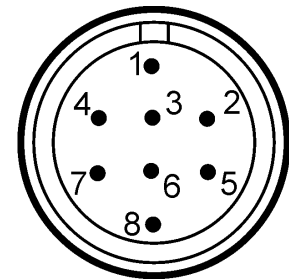
| | |
|---------------------|---------------------------------|
| Ambient temperature | 0 °C - 40 °C / 32 °F - 104 °F |
| Storage temperature | -20 °C - 60 °C / -4 °F - 140 °F |
| Relative humidity | 20 % - 80 % |

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 | 52 g |

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