| | |
|---|---|
| **Sensor**: | **Sony CMOS IMX455** |
| **Diagonal** | 43.3 mm |
| **Sensor size**: | 35.976 mm x 23.989 mm |
| **Resolution** | 61 mega pixels, 9568 x 6380 |
| **Pixel size**: | **3.76 µm x 3.76 µm** |
| Spectral range | 380-690nm (with IR-cut Filter) |
| **ADC**: | 16 bit native |
| **Cooling**: | - Two-stage TE-cooling System 30- <br><br> - 35 K below ambient under short e <br><br> - 35 K under long exposure time (> <br><br> - integrated heating against condensa |
| Heating | - the sensor chamber is hermetically s <br><br> - there are desiccants in the sensor ch |
| **Sensitivity** | The sensor sensitivity of SkyEye62 <br> a testing standard lens with CM500 <br> F8.0. If the image is measured at F <br> current value. |
| Dark signal | 0.039mv with 1/30s |
| Binning | 1x1, 2x2, 3x3 |
| | **16 bit** |
| | 3.1 FPS @ 9568*6380 |
| Max FPS at Resolution (USB 3.0) | 9.4 FPS @ 4784*3190 |

27.8 FPS @ 3184*2124

**16 bit**

| Max FPS at Resolution (Low Noise, USB 3.0,) | 1.9 FPS @ 9568*6380 (Low Noise Mode is only available in All Pixel Readout Mode) |
|---|---|

**16 bit**

0.4 FPS @ 9568*6380

| Max FPS at Resolution (USB 2.0) | 1.5 FPS @ 4784*3190 |
|---|---|

3.3 FPS @ 3184*2124

**16 bit**

| Max FPS at Resolution (Low Noise, USB 2.0) | 0.3 FPS @ 9568*6380 (Low Noise Mode is only available in All Pixel Readout Mode) |
|---|---|

| | |
|---|---|
| Shutter-Typ | Rolling Shutter |
| Exposure | 0.1ms~3600s |
| Gain | 1x - 150x |
| SNR | 47.0 dB |
| Dynamic Range | 85.8 dB (Low Noise Mode) |
| Read Noise | 2.58 - 0.89 e- |
| Read Noise (Low Noise Model) | 1.72 - 0.89 e- |
| Read Noise (LCG) | 3.98 – 1.52 e- |
| QE Peak | >80% |
| Full Well | 51ke- (107ke- @LCG) |
| ADC | 16bit |
| DDR3 Buffer | 512MB (4Gb) |
| Connection Port | USB3.0/USB2.0 |

| | |
|---|---|
| Protect Windows | IR CUT |
| Spectral Range | 380-690nm (with IR-cut Filter) |
| Capture/Control SDK | Windows/Linux/macOS/Android Mu<br>Python, Java, DirectShow, Twain, e |
| Camera Dimensions | Diameter 89 * Height 103 (mm) |
| Camera Weight | 0.718kg |
| **Back Focus Distance** | **17.5mm** |
| Cooling: | Two stage TEC Peltierelement |
| Effective Cooling Temp: | -30°C below ambient under short e |
| Supported OS | Microsoft® Windows® XP / Vista /<br><br>OSx(Mac OS X)<br>Linux |
| Amp glow | no amp glow |
| **Power**: | **12 V, 3 A** |
| **Telescope connection**: | **M54x0,75 female** |

·35 °C below Ambient Temperature

xposure

1s)

tion

ealed

amber

AM is 435.5mV. The sensitivity is measured with
S (t = 1.0 mm) as an IR-cut filter and image at
5.6, the result could have been 2 times of the

**8 bit**

6.2 FPS @ 9568*6380

18.8 FPS @ 4784*3190

55 FPS @ 3184*2124

**8 bit**

6.2 FPS @ 9568*6380 (Low Noise Mode is only
available in All Pixel Readout Mode)

**8 bit**

0.7 FPS @ 9568*6380

2.9 FPS @ 4784*3190

6.6 FPS @ 3184*2124

**8 bit**

1.2 FPS @ 9568*6380 (Low Noise Mode is only
available in All Pixel Readout Mode)

ıltiple Platform SDK(Native C/C++, C#/VB.NET, etc.)

xposure/ -35°C under long exposure (> 1s)

7 / 8 /10 (32 & 64 bit)