




Bigeye G G-283 Cool

- Specially made for scientific applications
- Exposure time up to more than 4200 s

Description

Cooled CCD camera with Sony ICX674

The Bigeye G-283B Cool is a Peltier cooled low-noise camera for the highest demands. It is made for scientific applications with low light conditions requiring long exposure times. The camera features an excellent dynamic range and an outstanding signal-to-noise ratio.

Benefits and features:

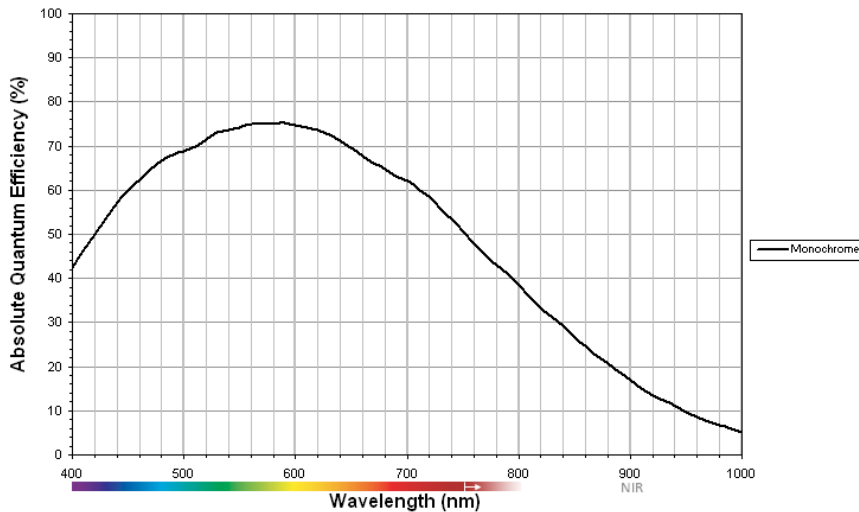
- GigE Vision, multi-functional, user-configurable I/O interface
- Sony ICX674 EXview HAD II sensor, 1928 x 1452 pixels, quantum efficiency @530 nm: 73%, exposure time up to 4292 s (\approx 71 min)
- Reliable operation under rough industrial conditions

Specifications

| | |
|---------------------|-----------------------------|
| Bigeye G | G-283 Cool |
| インターフェイス | IEEE 802.3 1000baseT |
| 解像度 | 1928 (H) × 1452 (V) |
| センサー | Sony ICX674 |
| Sensor type | CCD Progressive |
| センサーサイズ | Type 2/3 |
| ピクセルサイズ | 4.54 μ m × 4.54 μ m |
| Cooling temperature | -10 °C |
| Temporal dark noise | 8 e- |
| Dark current | 0.020 e-/pixel/s |
| Saturation capacity | 18000 e- |

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| Bigeye G | G-283 Cool |
| Dynamic range | 67 dB |
| レンズマウント (標準搭載) | C-Mount |
| フレームレート (フル解像度) | 5.7 fps |
| ADC | 14 bit |
| Image buffer (RAM) | 32 MByte |
| Output | |
| Bit depth | 14 bit |
| ビデオフォーマット(Mono) | Mono8, Mono12Packed, Mono14 |
| General purpose inputs/outputs (GPIOs) | |
| TTL I/Os | 1/1 |
| Opto-isolated I/Os | 3/3 |
| RS232 | 2 |
| Operating conditions/dimensions | |
| Operating temperature | 0 °C to 35 °C |
| 消費電力 | max. <36 W @ 12 VDC, typ. <18 W @ 12 VDC |
| Mass | 1250 g |
| Body dimensions (L × W × H in mm) | 100.8 × 90 × 99 (including connectors) |
| Regulations | CE: 2014/30/EU (EMC), 2011/65/EU (RoHS) |

Spectral sensitivity



Features

- Gain (6 dB)



- Exposure time 9083 μ s to 4294 seconds (\approx 71 min)
- Binning (2x1, 2x2)
- Gamma 0.45, 0.5, 0.7
- Three look-up tables (LUTs)
- Five storable user sets

Easy integration

The Bigeye G-283B Cool can be easily integrated into your application, since it is GigE Vision compliant and compatible with Allied Vision's GigE SDKs. Additionally, this camera can be used with numerous third-party software solutions.



Applications

The Bigeye G-283B Cool is a low noise CCD camera with an excellent signal/noise ratio. It is best suited for applications with the highest demands on image quality. Thanks to the Peltier cooling, it is ideal for image acquisition with long exposure times.

Typical applications:

- Low-noise imaging (industrial and scientific imaging)
- Image acquisition with long exposure times
- Microscopy with high resolution
- Fluorescence microscopy
- Gel electrophoresis, DNA documentation
- Non-destructive evaluation of photosensitive objects
- Astronomy