



Bigeye G

G-132 Cool

- Exposure time up to more than 4200 s
- Excellent quantum efficiency

Description

Peltier cooled CCD camera with Sony ICX285, -20 °C

The Bigeye G-132B Cool is a low noise CCD camera. It is distinguished by an outstandingly low dark current and an excellent quantum efficiency. The Bigeye G-132B Cool is designed to produce a superior image quality even at very long exposure times.

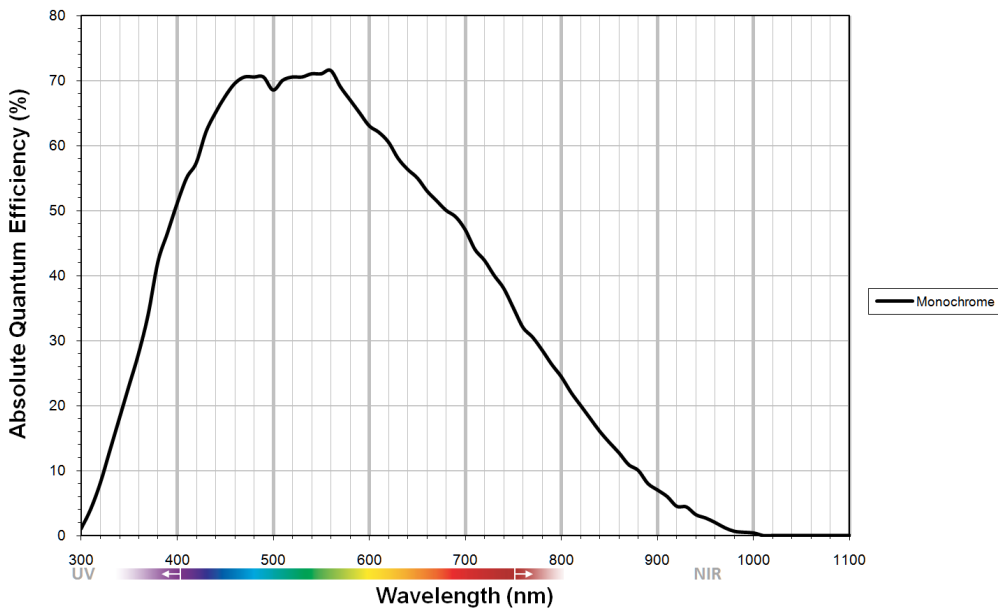
Benefits and features:

- GigE Vision, Multi-functional, user-configurable I/O interface
- Sony ICX285 EXview HAD CCD sensor, 1280 x 1024 pixels, quantum efficiency @530 nm: 72%, exposure time up to 4292 s (\approx 71 min)
- Reliable operation under rough industrial conditions

Specifications

| Bigeye G | G-132 Cool |
|---------------------|-----------------------------|
| Interface | IEEE 802.3 1000baseT |
| Resolution | 1280 (H) × 1024 (V) |
| Sensor | Sony ICX285 |
| Sensor type | CCD Progressive |
| Cell size | 6.45 μ m x 6.45 μ m |
| Cooling temperature | -20 °C |
| Temporal dark noise | 8 e- |
| Dark current | 0.003 e-/pixel/s |
| Saturation capacity | 13000 e- |
| Dynamic range | 65 dB |
| Lens mount | C-Mount, F-Mount |

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|---|--|
| Max frame rate at full resolution | 12.5 fps |
| ADC | 12 bit |
| Image buffer (RAM) | 32 MByte |
| Output | |
| Bit depth | 12 bit |
| Mono modes | Mono8, Mono12, Mono12Packed |
| General purpose inputs/outputs (GPIOs) | |
| TTL I/Os | 1/1 |
| Opto-isolated I/Os | 3/3 |
| RS-232 | 2 |
| Operating conditions/dimensions | |
| Operating temperature | 0 °C to +35 °C |
| Power consumption (@12 V) | max. <36 W, typ. <18 W |
| Mass | 1270 g |
| Body dimensions (L × W × H in mm) | 100.8 × 90 × 99 (including connectors) |
| Regulations | CE, RoHS, REACH, WEEE, FCC, ICES |



Features

- Gain (6 dB)
- Binning (2x1, 2x2)
- Exposure time 80077 μ s to 4294 seconds (\approx 71 min)
- Three look-up tables (LUTs)



- Gamma (0.45, 0.5, 0.7)
- Five storable user sets

Easy integration

The Bigeye G-132B 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-132B Cool is a prime quality CCD camera with dual level Peltier cooling. It is best suited for applications with the highest demands on image quality, especially under low-light conditions.

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