Allied Vision

Bigeye G

G-132 Cool

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

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 at 530 nm: 72%, exposure time up to 4292 s (≈ 71 min)
- Reliable operation under rough industrial conditions

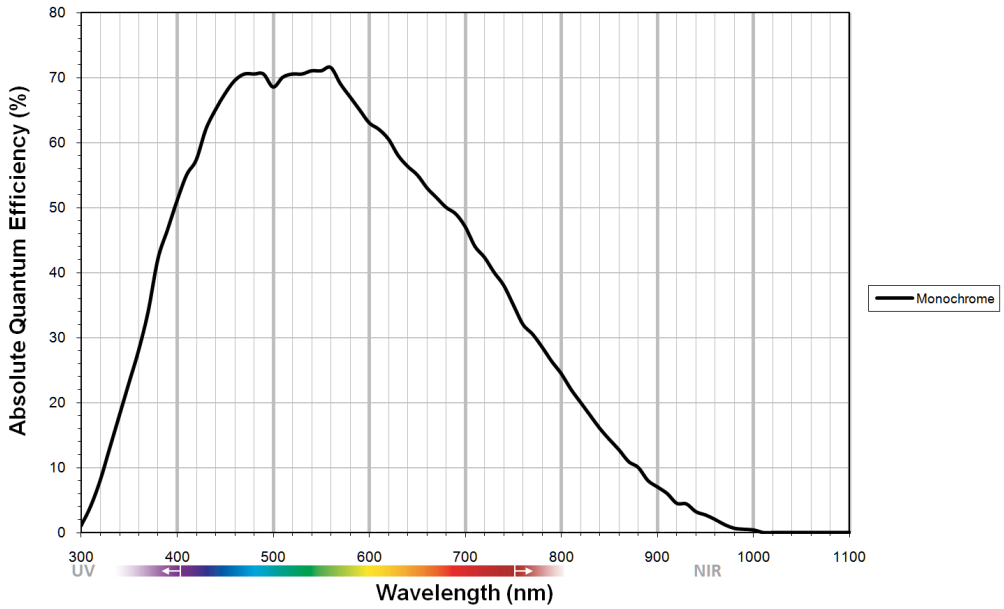
Specifications

Bigeye G	G-132 Cool
インターフェイス	IEEE 802.3 1000baseT
解像度	1280 (H) × 1024 (V)
センサー	Sony ICX285
Sensor type	CCD Progressive
センサーサイズ	Type 2/3
ピクセルサイズ	6.45 µm × 6.45 µm
Lens mount (default)	C-Mount, F-Mount
フレームレート (フル解像度)	12.5 fps
ADC	12 Bit
Image buffer (RAM)	32 MByte

撮影性能

Bigeye G	G-132 Cool
Cooling temperature	-20 °C
Dark current	0.003 e-/pixel/s
ダークノイズ	8 e-
飽和電荷量	13000 e-
ダイナミックレンジ	65 dB
Output	
Bit depth	12 Bit
ビデオフォーマット(Mono)	Mono8, Mono12, Mono12Packed
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 at 12 VDC, typ. <18 W at 12 VDC
Mass	1270 g
Body dimensions (L × W × H in mm)	100.8 × 90 × 99 (including connectors)
Regulations	CE: 2014/30/EU (EMC), 2011/65/EU (RoHS)

Quantum efficiency



Features

- Gain (6 dB)
- Binning (2x1, 2x2)
- Exposure time 80077 µs to 4294 seconds (≈ 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