



Bigeye G

G-132 Cool

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

Description

Peltier cooled CCD camera with 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.

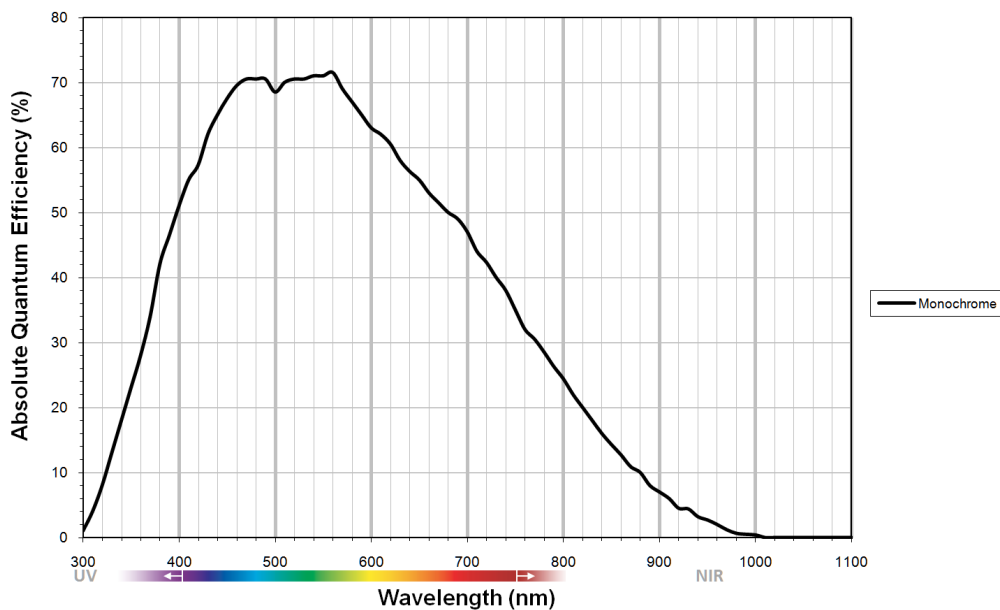
Benefits and features:

- 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 × 1024
Sensor	Sony ICX285
Sensor type	CCD Progressive
Sensor size	Type 2/3
Cell size	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

Bigeye G	G-132 Cool
Lens mount	C-Mount
Max frame rate at full resolution	12.5 fps
ADC	12 bit
On-board FIFO	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 ... 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 mm incl. connectors, w/o lens
Regulations	CE, RoHS (2011/65/EU), WEEE, FCC Class B



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 AVT'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