



## Bigeye G G-283 Cool

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

### 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 at 530 nm: 73%, exposure time up to 4292 s ( $\approx$  71 min)
- Reliable operation under rough industrial conditions

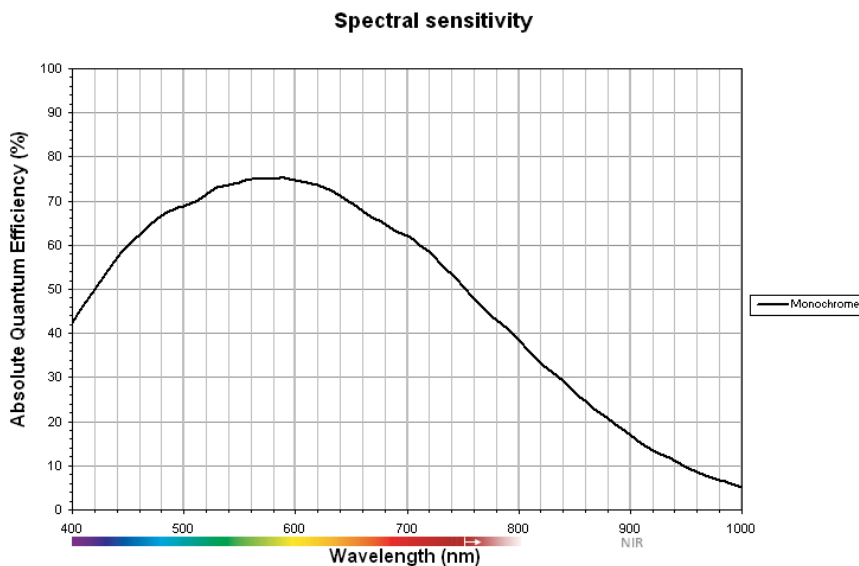
### Specifications

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 $\mu$ m × 4.54 $\mu$ m
Lens mount (default)	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

撮影性能

Bigeye G	G-283 Cool
Cooling temperature	-10 °C
Dark current	0.020 e-/pixel/s
ダークノイズ	8 e-
飽和電荷量	18000 e-
ダイナミックレンジ	67 dB
<b>Output</b>	
Bit depth	14 Bit
ビデオフォーマット(Mono)	Mono8, Mono12Packed, Mono14
<b>General purpose inputs/outputs (GPIOs)</b>	
TTL I/Os	1/1
Opto-isolated I/Os	3/3
RS232	2
<b>Operating conditions/dimensions</b>	
Operating temperature	0 °C to 35 °C
消費電力	max. <36 W at 12 VDC, typ. <18 W at 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)

## Quantum efficiency





## Features

- Gain (6 dB)
- Exposure time 9083  $\mu$ 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