



## 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

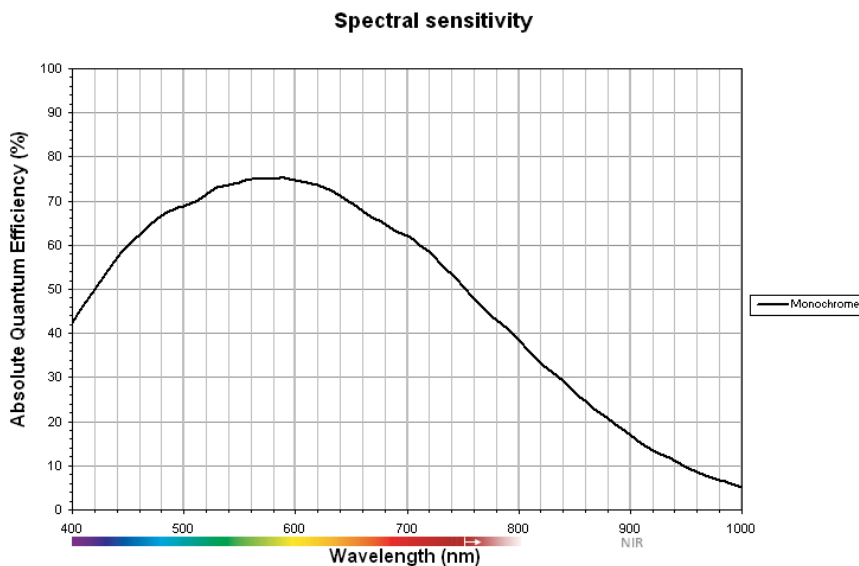
### 性能参数

Bigeye G	G-283 Cool
接口	IEEE 802.3 1000baseT
分辨率	1928 (H) × 1452 (V)
传感器	Sony ICX674
传感器类型	CCD Progressive
传感器尺寸	Type 2/3
像元尺寸	4.54 $\mu\text{m}$ × 4.54 $\mu\text{m}$
Lens mount (default)	C-Mount
最大满帧帧率	5.7 fps
ADC	14 Bit
缓存 (RAM)	32 MByte

成像性能

Bigeye G	G-283 Cool
冷却温度	-10 °C
暗流	0.020 e-/pixel/s
暗噪声	8 e-
饱和电子数	18000 e-
动态范围	67 dB
<b>输出</b>	
Bit位数	14 Bit
黑白像素格式	Mono8, Mono12Packed, Mono14
<b>通用输入输出口(GPIOs)</b>	
TTL I/Os	1/1
光耦 I/Os	3/3
RS232	2
<b>工作条件/尺寸</b>	
工作温度	0 °C to 35 °C
功耗	max. <36 W at 12 VDC, typ. <18 W at 12 VDC
重量	1250 g
尺寸 (L × W × H in mm)	100.8 × 90 × 99 (including connectors)
符合规范	CE: 2014/30/EU (EMC), 2011/65/EU (RoHS)

## 量子转换效率





## 特性

- 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.



## 应用场景

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