



# Bigeye G G-629 Cool

- 6 Megapixels resolution
- Exposure time up to more than 4200 s

## 基本描述

### Cooled 6 Megapixel full frame CCD camera

The Bigeye G-629B Cool is a cooled CCD camera with 6 Megapixels resolution and a sensitive full frame sensor. This camera is optimal for applications with low-light conditions requiring long exposure times. The camera can operate with its internal long life electromechanical shutter or with external impulse light sources and constantly opened shutter.

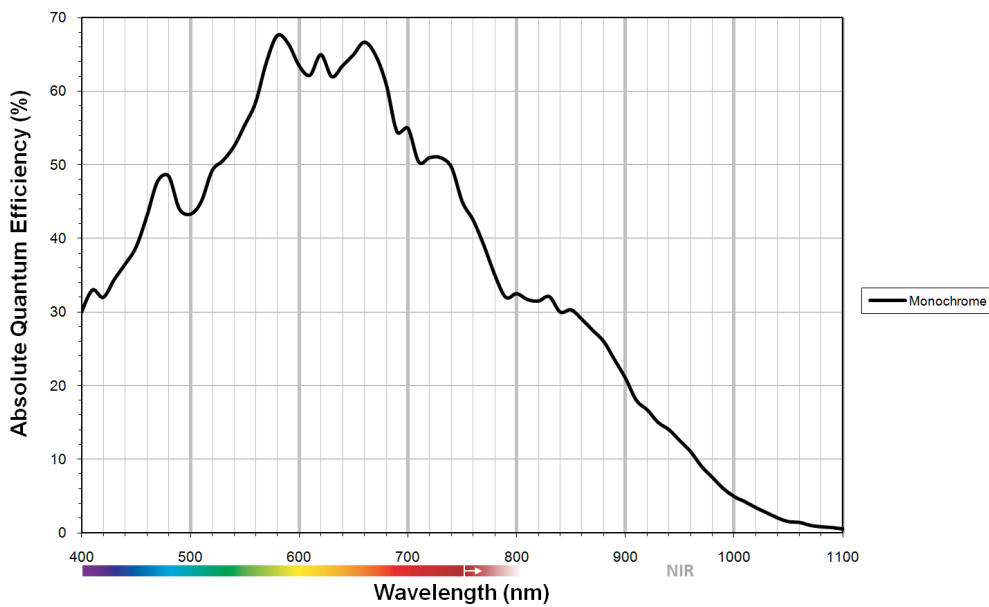
Benefits and features:

- GigE Vision, multi-functional, user-configurable I/O interface
- OnSemi KAF-6303E sensor, 3072 x 2048 pixels, cooled to +5 °C (stabilized), quantum efficiency @530 nm: 49%, exposure time up to 4292 s ( $\approx$  71 min)
- Reliable operation under rough industrial conditions

## 性能参数

Bigeye G	G-629 Cool
接口	IEEE 802.3 1000baseT
分辨率	3072 (H) × 2048 (V)
传感器	ON Semi KAF-6303E
传感器类型	CCD Progressive
传感器尺寸	Type 35 mm
像元尺寸	9.0 $\mu$ m × 9.0 $\mu$ m
Cooling temperature	+5 °C
Dark noise	21 e-
Dark current	0.008 e-/pixel/s

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Saturation capacity	56000 e-
Dynamic range	69 dB
标准镜头接口	F-Mount
最大满帧帧率	0.67 fps
ADC	14 bit
缓存 (RAM)	32 MByte
输出	
Bit位数	14 bit
黑白像素格式	Mono8, Mono12, Mono12Packed, Mono14
通用输入输出(GPIOs)	
TTL I/Os	1/1
光耦 I/Os	3/3
RS232	2
工作条件/尺寸	
工作温度	0 °C to 35 °C
功耗	max. <37.2 W @ 12 VDC, typ. <18 W @ 12 VDC
重量	1390 g
尺寸(L × W × H in mm)	131.55 × 90 × 109 (including connectors)
符合规范	CE: 2014/30/EU (EMC), 2011/65/EU (RoHS)





## 特性

- Gain (6 dB)
- Exposure time 50688  $\mu$ s to  $\approx$  71 minutes
- Binning (2x1, 2x2)
- Gamma (0.45, 0.5, 0.7)
- Three look-up tables (LUTs)
- Five storable user sets

### Easy integration

The Bigeye G-629B 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-629B Cool is a low-noise CCD camera with a very high dynamic range. It is best suited for applications with the highest demands on image quality. Due to the Peltier cooling, the camera 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