



## Bigeye G G-629 Cool

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

### 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
- ON Semi KAF-6303E sensor, 3072 x 2048 pixels, cooled to +5 °C (stabilized), quantum efficiency at 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 |
| Lens mount (default) | F-Mount                   |
| 最大满帧帧率               | 0.67 fps                  |
| ADC                  | 14 Bit                    |
| 缓存 (RAM)             | 32 MByte                  |



# Allied Vision

|                      |  |
|----------------------|--|
| Bigeye G             | G-629 Cool                                   |
| 成像性能                 |  |
| 冷却温度                 | +5 °C  |
| 暗流                   | 0.008 e-/pixel/s                             |
| 暗噪声                  | 21 e-  |
| 饱和电子数                | 56000 e-                                     |
| 动态范围                 | 69 dB  |
| 输出                   |  |
| Bit位数                | 14 Bit                                       |
| 黑白像素格式               | Mono8, Mono12, Mono12Packed, Mono14          |
| 通用输入输出口(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 at 12 VDC, typ. <18 W at 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)      |

## 量子转换效率





## 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