Allied Vision

GigE VISION

Bigeye

G-132 NIR Cool

- Sensitive in both the visible and NIR spectrum
- Exposure time up to more than 4200 s

For demanding applications for both the visible spectrum and the NIR spectrum

Low noise cooled CCD cameras, up to 11 MP, prime quality

Bigeye G-132 NIR Cool 搭载 Sony ICX285 传感器，在 1.3 MP 分辨率下速度可达 12.5 帧/秒。

The Bigeye is a Peltier cooled camera series for demanding applications. It is equipped with highly sensitive CCD sensors from Sony and OnSemi. Bigeye cameras are designed for low-noise image acquisition even at long exposure times. The compact, robust metal housing of all Bigeye cameras has a hermetically sealed vacuum section, ensuring maintenance-free operation for many years even under rough conditions. Moreover, two NIR enhanced camera versions are available (with ICX285 and KAF-6303E).

- Dual level Peltier cooling with 5 years warranty against condensation
- Low dark current even at very long exposure times
- Superior signal/noise ratio
- Robust alloy metal housing for industrial use
- Secure operation due to screw locks at all connectors
- Multi-functional, user-configurable I/O interface
- Support of AVT's GigE software development kits (SDKs)

性能参数

接口	IEEE 802.3 1000baseT
分辨率	1280 (H) × 1024 (V)
传感器	Sony ICX285
传感器类型	CCD Progressive
传感器尺寸	Type 2/3
像元尺寸	6.45 µm × 6.45 µm
标准镜头接口	C-Mount
最大满帧帧率	12.5 fps
ADC	12 Bit
缓存 (RAM)	32 MByte
冷却温度	-20 °C
暗流	tbd
暗噪声	tdb
饱和电子数	tbd
动态范围	tbd

输出

Bit 位数	12-bit
黑白像素格式	Mono8, Mono12, Mono12Packed

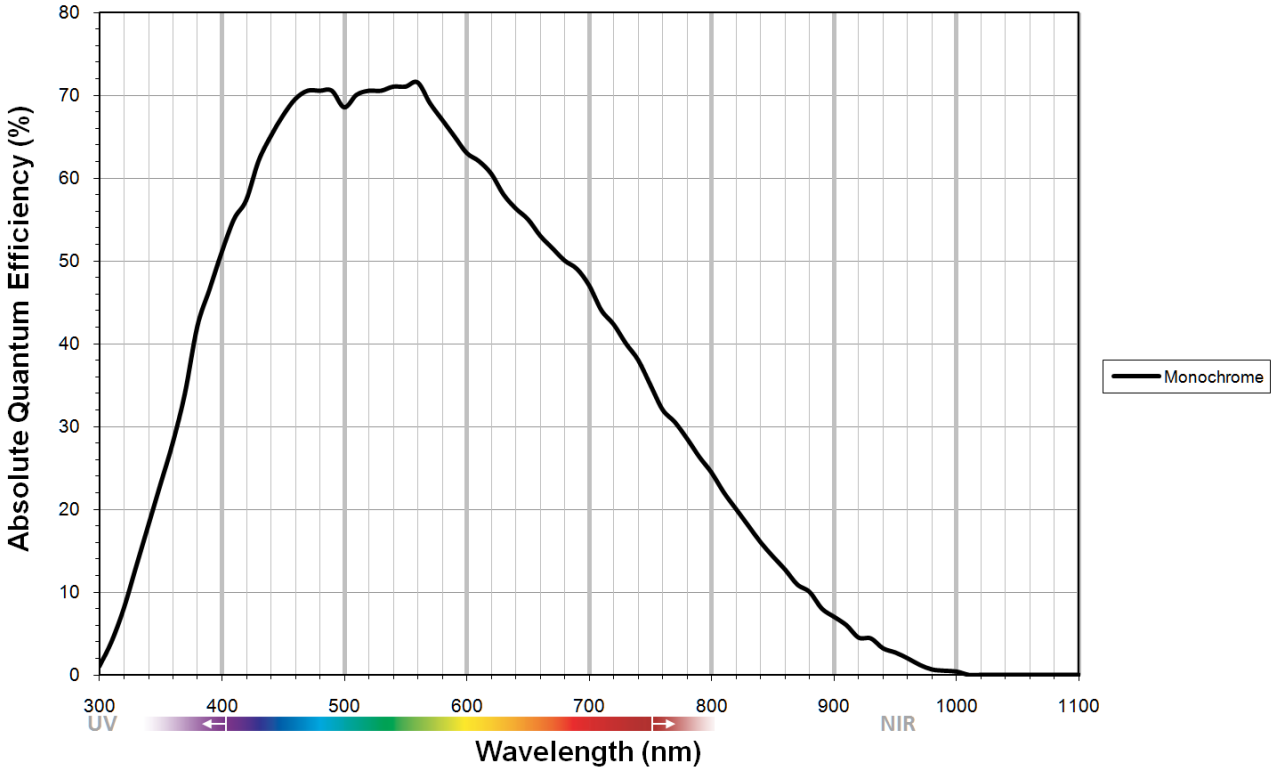
通用输入输出口 (GPIOs)

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. <36 W at 12 VDC, typ. <18 W at 12 VDC
重量	1270 g
尺寸 (L × W × H in mm)	100.8 × 90 × 99 (including connectors)

量子转换效率


Absolute Quantum Efficiency (%)
80
70
60
50
40
30
20
10
0
300
400
500
600
700
800
900
1000
1100
UV
NIR
Wavelength (nm)
Monochrome

特性

- Gain (6 dB)
- Exposure time 80077 µs to 4294 seconds (≈ 71 min)
- Binning (2x1, 2x2)
- Three look-up tables (LUTs)
- Gamma (0.45, 0.5, 0.7)
- Five storable user sets

Easy integration The Bigeye G-132 NIR 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-132B NIR Cool is a prime quality CCD camera that is sensitive both in the visible and the NIR spectrum. It is optimal for applications requiring 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
- Solar cell/wafer inspection