



Bigeye

G-1100 Cool

- Outstanding signal-to-noise ratio
- Exposure time up to more than 4200 s
- 10 Megapixel resolution

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-1100 Cool 搭载 ON Semi KAI-11002 传感器，在 10.8 MP 分辨率下速度可达 1.6 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).

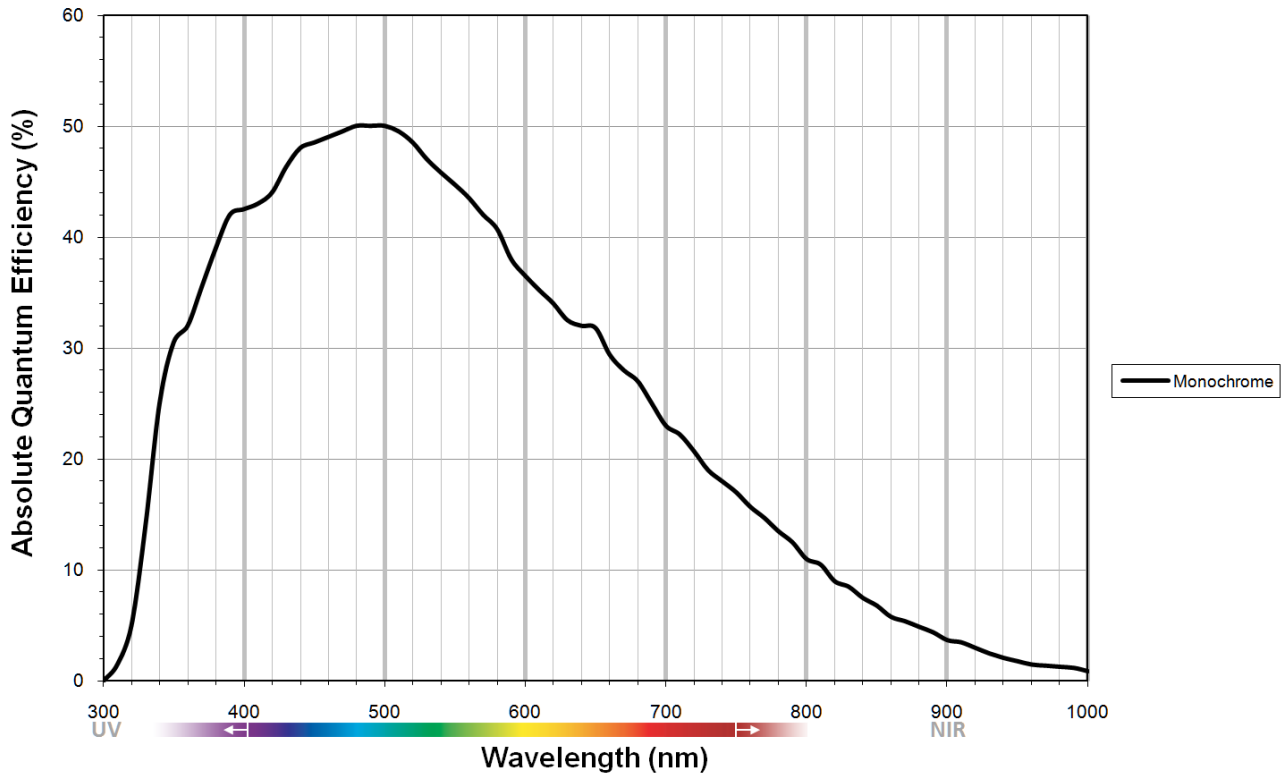
- Dual level Peltier cooling with 5 years warranty against condensation
- Low dark current even at very long exposure times
- Superior signal/noise ratio
- Robust alloy metal housing for industrial use
- Secure operation due to screw locks at all connectors
- Multi-functional, user-configurable I/O interface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

性能参数

Bigeye G-1100 Cool	
接口	IEEE 802.3 1000baseT
分辨率	4024 (H) × 2680 (V)

Bigeye G-1100 Cool	
传感器	ON Semi KAI-11002
传感器类型	CCD Progressive
传感器尺寸	Type 35 mm
像元尺寸	9 μm \times 9 μm
标准镜头接口	F-Mount
最大满帧帧率	1.58 fps
ADC	14 Bit
缓存 (RAM)	32 MByte
冷却温度	0 $^{\circ}\text{C}$
暗流	0.010 e-/pixel/s
暗噪声	40 e-
饱和电子数	54000 e-
动态范围	63 dB
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 $^{\circ}\text{C}$ to 35 $^{\circ}\text{C}$
功耗	max. <36 W at 12 VDC, typ. <18 W at 12 VDC
重量	1320 g
尺寸 (L \times W \times H in mm)	132.8 \times 90 \times 99 (including connectors)
符合规范	CE: 2014/30/EU (EMC), 2011/65/EU (RoHS)

量子转换效率

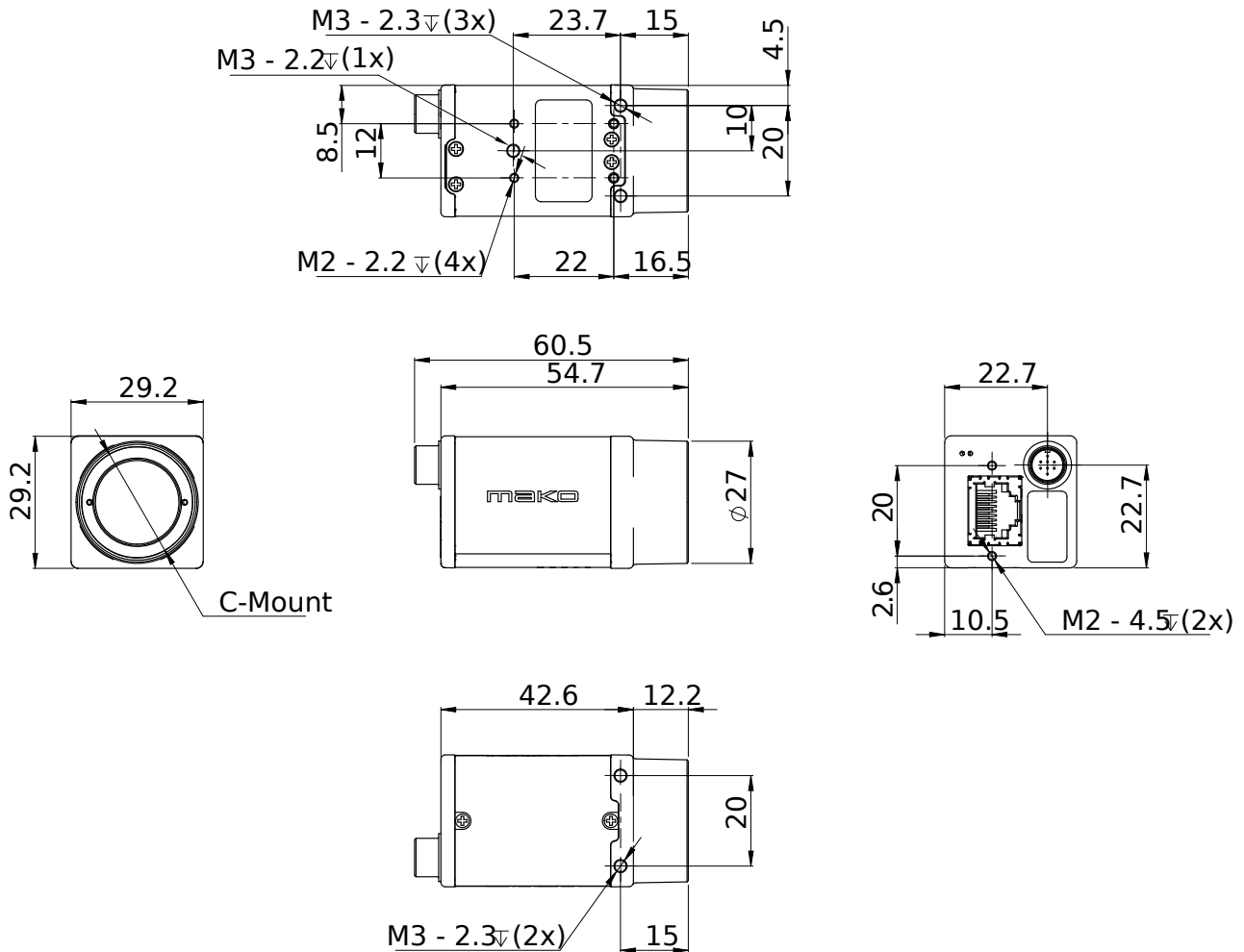


特性

- Gain (6 dB)
- Exposure time 1394 μ s to \approx 71 minutes
- Binning (1x2, 2x1, 2x2)
- Gamma (0.45, 0.5, 0.7)
- Three look-up tables (LUTs)
- Five storable user sets

Easy integration The Bigeye G-1100B 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.

外形尺寸



应用场景

The Bigeye G-1100B Cool is the perfect choice for image acquisition with high resolution and low noise. Long exposure times with the cooled sensor produce images with outstanding image quality. 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