

# Goldeye

## P-032 SWIR



- Goldeye P-032 SWIR SWIR camera with InGaAs sensor, 636 × 508 pixels, Peltier cooling

### 见所未见

## 搭载 InGaAs 传感器技术的短波红外 (SWIR) 相机

Goldeye P-032 SWIR 搭载 InGaAs FPA 636 × 508 传感器，在 0.3 MP 分辨率下速度可达 30.0 帧/秒。

Goldeye 相机配备了 InGaAs 传感器技术，对 900-1700 nm 波段红外短波非常敏感。一些型号将波段灵敏度扩展至可见光（400nm 或 2200nm）。所有 Goldeye SWIR 相机都可以超高帧率运行，拍摄出高质量的低噪图像。此款相机是不可见光谱的工业和科技应用的理想选择。所有 Goldeye 机型均搭载 Camera Link 或 GigE Vision 接口。

The Goldeye is a short-wave infrared (SWIR) camera. It has a spectral response from 900 nm to 1700 nm. Its InGaAs sensors feature high sensitivity, very good linearity, and a high damage threshold against intense illumination. Thanks to the 14-bit processing and the numerous image correction features, Goldeye cameras produce an outstanding, low-noise image quality. The camera is also available with Peltier cooling. The Peltier cooling is beneficial especially for applications with long exposure times, or for exact temperature measurements.

- C-Mount, compatible with standard machine vision lenses
- GigE Vision, also available with Camera Link interface
- Options:
  - Peltier cooling for long exposure times and exact temperature measurements

## 性能参数

接口	IEEE 802.3 1000baseT
分辨率	636 (H) × 508 (V)
Spectral range	SWIR, 900 nm to 1700 nm
传感器	InGaAs FPA 636 × 508
传感器类型	InGaAs
传感器尺寸	No standard size
像元尺寸	25 μm × 25 μm
标准镜头接口	C-Mount, F-Mount, M42-Mount
最大满帧帧率	30 fps
ADC	14 Bit

## 输出

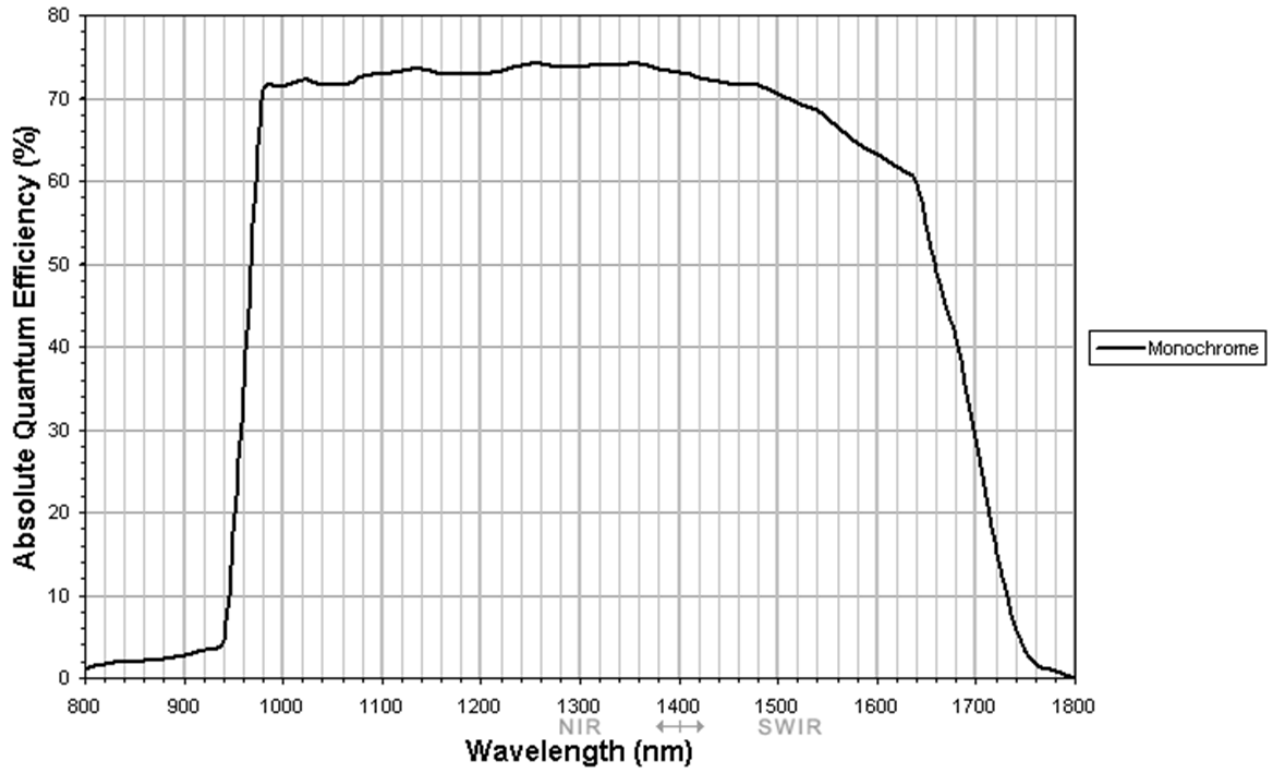
Bit 位数	12-bit
黑白像素格式	Mono12

## 通用输入输出 (GPIOs)

## 工作条件/尺寸

工作温度	0 °C to +35 °C
电源要求 (DC)	12 V
功耗	15.6 W @ 12 VDC
重量	1110 g (C-Mount)
尺寸 (L × W × H in mm)	115.8 × 90 × 99 (C-Mount)

## 量子转换效率



## 特性

- Switchable gain, factor 20 at short exposure times
- Exposure time 5  $\mu$ s to 1 s
- Shipped with built-in correction data sets
- Gain/offset correction (NUC / non-uniformity correction) for each pixel
- Factory adjusted bad pixel correction
- Background (FPN) correction
- Continuous mode (image acquisition with maximum frame rate)
- Image On Demand mode (triggered image acquisition)

In combination with Allied Vision's AcquireControl software, extensive image analysis functions are available:

- Pseudo color LUT with several color profiles
- Auto contrast
- Auto brightness
- Analyze multiple regions (rectangular, circle) within the image
- Real-time statistics and histogram display

## 应用场景

Goldeye SWIR cameras are very sensitive in the short-wave infrared spectrum, show excellent linearity, and tolerate intense illumination. They are the perfect choice for numerous SWIR applications:

- SWIR imaging
- Thermal imaging of hot objects (in a range of 250°C to 800°C)
- Imaging spectroscopy
- Laser beam profiling
- Plastic sorting
- Semiconductor inspection
- Water or moisture detection
- Medical science and biology
- Vision enhancement