Allied Vision

GiGE VISION

Bigeye

P-629 NIR

- High quantum efficiency
- Sensitivity up to 1 µm wavelength
- 6 Megapixel Full Frame sensor

Bigeye P

Low noise CCD camera, Peltier cooling, up to 11 MP

Bigeye P-629 NIR with ON Semi KAF-6303E runs 0.7 frames per second at 6.3 MP resolution.

The Bigeye is a low noise CCD camera. It satisfies even the highest expectations for excellent image quality. The peltier cooling provides a superior signal-to-noise ratio even with very long exposure times. Bigeye NIR camera versions are designed for applications which require sensitivity both in the visible spectrum and the NIR spectrum.

- Sensitive Sony and OnSemi sensors, up to 11 Megapixels
- Peltier cooling for long exposure times
- Superior signal/noise ratio
- Robust metal housing for industrial use
- GigE Vision

Specifications

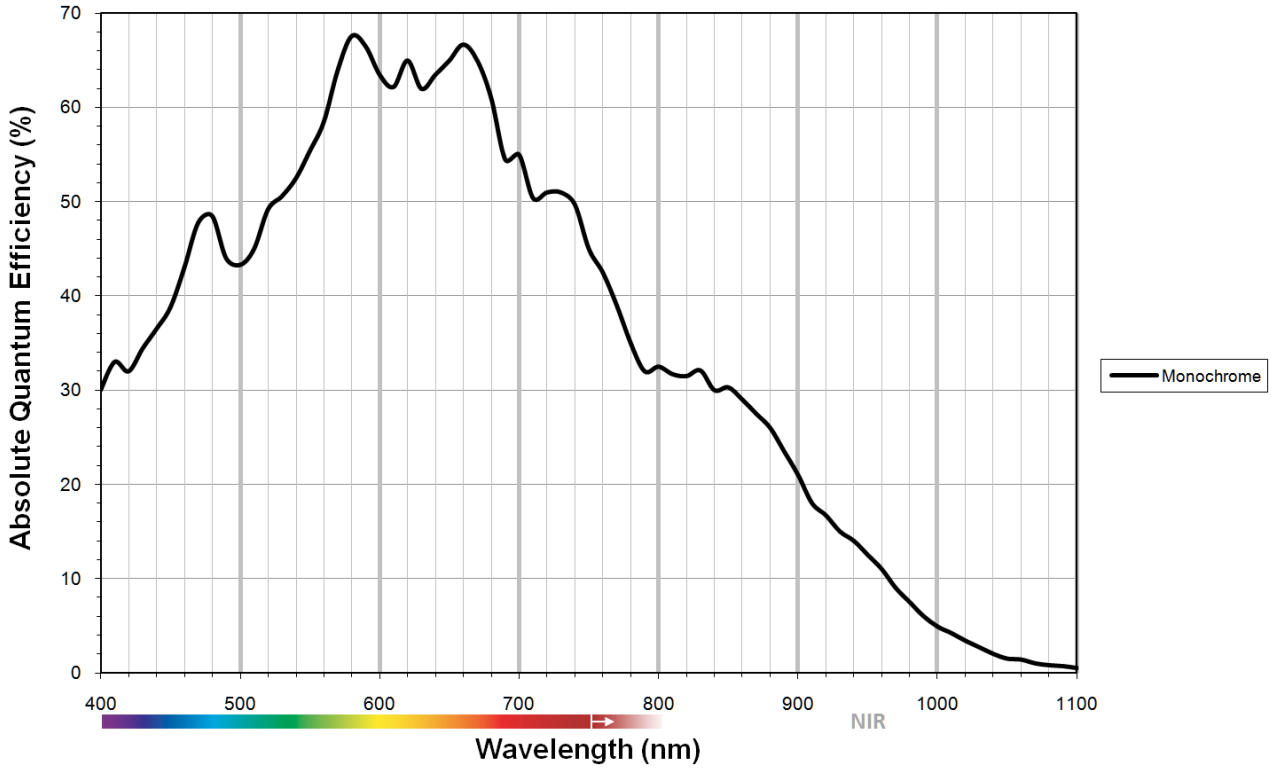
Interface	IEEE 802.3 1000BASE-T, IEEE 802.3af (PoE)
Resolution	3072 (H) × 2048 (V)
Sensor	ON Semi KAF-6303E
Sensor type	CCD Progressive
Sensor size	Type 35 mm
Pixel size	9 µm × 9 µm
Lens mount (default)	F-Mount
Max. frame rate at full resolution	0.67 fps
ADC	14 Bit

Output	
Bit depth	14-bit
Monochrome pixel formats	Mono8, Mono10, Mono12, Mono14, Mono16

General purpose inputs/outputs (GPIOs)

Operating conditions/dimensions	
Operating temperature	0 °C to +35 °C
Power requirements (DC)	12 V
Power consumption	33.6 W @ 12 VDC
Mass	1460 g
Body dimensions (L × W × H in mm)	141.75 × 90 × 109 (including connectors)

Quantum efficiency



Features

- Binning (2 x 2)
- Manual gain, 6 dB
- Exposure time 50 ms to 30 minutes
- Background 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:

- BCG LUT (brightness, contrast, gamma)
- Auto contrast
- Auto brightness
- Analyze multiple regions (rectangular, circle) within the image
- Real-time statistics and histogram display

Applications

The Bigeye P-629B NIR Cool is optimal for image acquisition both in the visible and in the NIR spectral range. For this reason, applications which require sensitivity in the visible spectrum and in the NIR spectrum can be realized with just one camera. Applications:

- Machine vision, visible and NIR spectrum
- Food inspection
- Medical and healthcare
- Microscopy
- Solar cell/wafer inspection, visible and NIR:
  - Glass inspection
  - Assembling inspection
  - Electroluminescence
  - Micro cracks detection
  - Defects
  - Efficiency