

Bigeye

P-629



- 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 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.

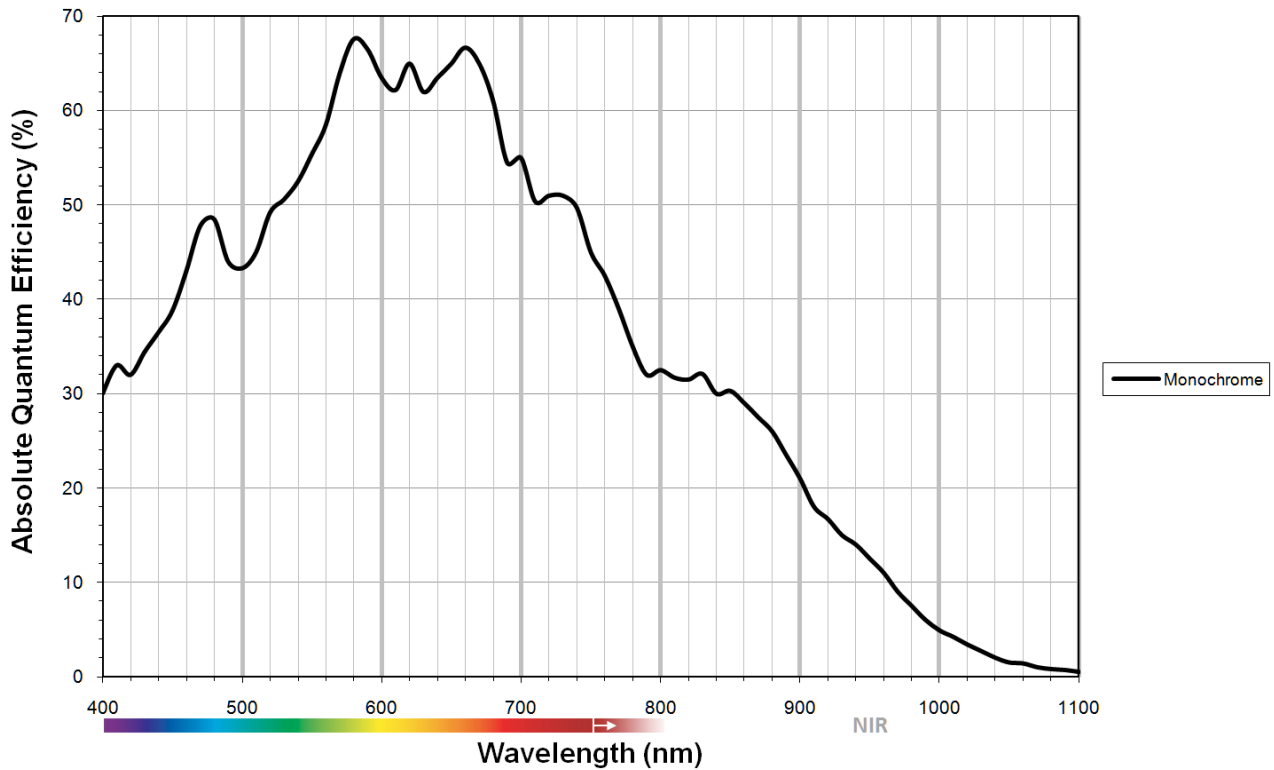
- Sensitive Sony and OnSemi sensors, up to 11 Megapixels
- Peltier cooling for long exposure times
- Superior signal/noise ratio
- Robust metal housing for industrial use
- GigE Vision

Specifications

Bigeye P-629	
Interface	IEEE 802.3 1000baseT
Resolution	3072 (H) \times 2048 (V)
Sensor	ON Semi KAF-6303E
Sensor type	CCD Progressive
Sensor size	Type 35 mm

Bigeye P-629	
Pixel size	9.0 μm \times 9.0 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 $^{\circ}\text{C}$ to 35 $^{\circ}\text{C}$
Power requirements (DC)	12 V
Power consumption	33.6 W @ 12 VDC
Mass	1460 g
Body dimensions (L \times W \times H in mm)	141.75 \times 90 \times 109 (including connectors)
Regulations	CE: 2014/30/EU (EMC), 2011/65/EU (RoHS)

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 Cool is a low noise CCD camera with an invincible signal/noise ratio. It is best suited for applications with the highest demands on image quality. The spectral range of its sensor covers both the visible and the NIR spectral range. 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
- Non-destructive evaluation of photosensitive objects