

# Bigeye

P-132 NIR



- Superior image quality
- Enhanced NIR sensitivity
- Peltier cooling -20°C

## \*Bigeye P\*

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

Bigeye P-132 NIR with Sony ICX285 runs 12.5 frames per second at 1.3 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 1000baseT
Resolution	1280 (H) × 1024 (V)
Sensor	Sony ICX285
Sensor type	CCD Progressive
Sensor size	Type 2/3
Pixel size	6.45 μm × 6.45 μm
Lens mount (default)	C-Mount
Max. frame rate at full resolution	12.5 fps
ADC	14 Bit

## Output

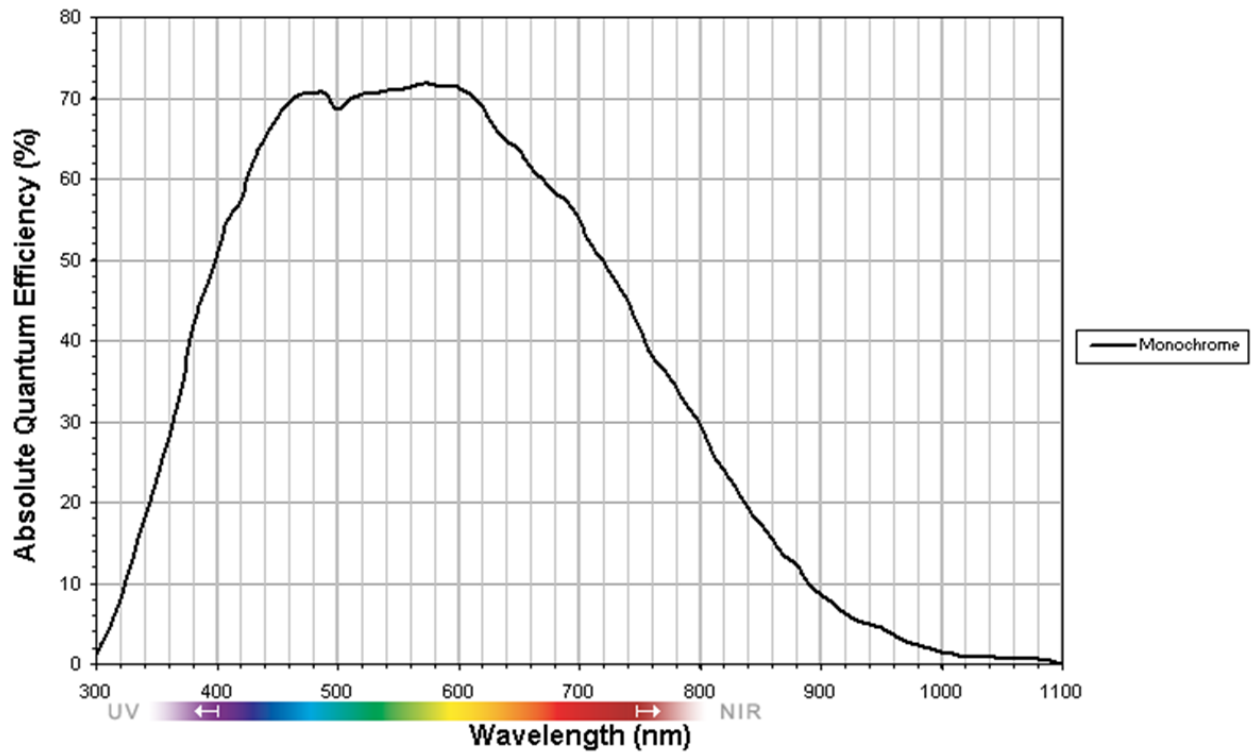
Bit depth	12-bit
Monochrome pixel formats	Mono8, Mono10, Mono12
Raw pixel formats	BayerGB8, BayerGB10, BayerGB12

## 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	1410 g
Body dimensions (L × W × H in mm)	111 × 90 × 99 (including connectors)

## Quantum efficiency



## Features

- Binning (2 x 2)
- Gain (6 dB)
- Exposure time 100  $\mu$ s to 1000 seconds
- 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-132B NIR Cool is optimized for image acquisition both in the visible and in the NIR spectral range. For this reason, many applications 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