

# Bigeye P-629 NIR



## Description

### Cooled 6 Megapixel camera for visible + NIR spectrum, Full Frame CCD

The Bigeye P-629B NIR Cool includes a sensitive Full Frame sensor. The camera is distinguished by a high quantum efficiency both in the visible and in the NIR spectrum up to 1  $\mu\text{m}$  wavelength. The sensor temperature is stabilized to  $+5^{\circ}\text{C}$ , this ensures low noise and a constant dark current for high-precision image acquisition. The camera can operate with its internal long-live electromechanical shutter, or with external impulse light sources and constantly opened shutter.

- 6 Megapixel Kodak Full Frame CCD sensor
- Cooled to  $+5^{\circ}\text{C}$  (stabilized)
- High QE (quantum efficiency) in the visible and NIR range
- Built-in electromechanical long-live shutter
- 14-bit signal processing and output

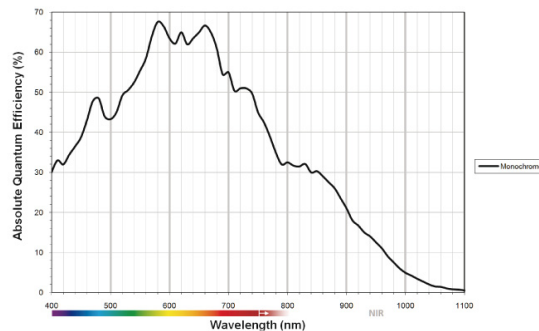
#### Models:

Bigeye P-629B NIR Cool (GigE)

## Specifications

<b>Bigeye</b>		<b>P-629 NIR</b>	
<b>Interface</b>		IEEE 802.3 1000baseT	
<b>Resolution</b>		3072 x 2048	
<b>Sensor</b>		Kodak KAF-6303E	
<b>Sensor type</b>		CCD Progressive	
<b>Sensor size</b>		Type 35 mm	
<b>Cell size</b>		9.0 x 9.0 µm	
<b>Lens mount</b>		F-Mount	
<b>Max frame rate at full resolution</b>		0,67 fps	
<b>A/D</b>		14 bit	
<b>Output</b>			
<b>Bit depth</b>		14 bit	
<b>Mono modes</b>		Mono8, Mono10, Mono12, Mono14, Mono16	
<b>Operating conditions/Dimensions</b>			
<b>Operating temperature</b>		0 °C ... 35 °C	
<b>Power requirements (DC)</b>		12 V	
<b>Power consumption (12 V)</b>		33.6 W	
<b>Mass</b>		1460 g	
<b>Body Dimensions (L x W x H in mm)</b>		141.75 x 90 x 109 incl. connectors, w/o lens	
<b>Regulations</b>		CE, RoHS (2002/95/EC)	

[Download technical drawing \(click here\)](#)



## Smart 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 AVT'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
- ... and more

## 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