



# Bigeye P-629

**GiGE** VISION **Camera** Link

## Description

### Cooled 6 Megapixel Full Frame CCD camera

The Bigeye P-629B is a cooled CCD camera with 6 Megapixels resolution and 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°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°C (stabilized)
- High QE (quantum efficiency) in the visible and NIR range
- Built-in electromechanical long-live shutter
- Fast readout time, 1.35 seconds at full resolution
- 14-bit signal processing and output
- Options:
  - GigE (standard) or Camera Link interface

### Models:

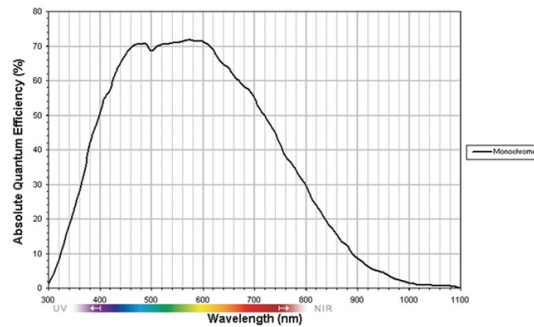
Bigeye P-629B Cool (GigE)

Bigeye CL-629B Cool (Camera Link)

## Specifications

<b>Bigeye P-629</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>	1 fps
<b>A/D</b>	14 bit
<b>Output</b>	
<b>Bit depth</b>	14 bit
<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>	1480 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
- 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 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