



Bigeye P

P-629 NIR

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

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 μm 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.

Benefits and Features:

- 6 Megapixel OnSemi 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, 14-bit signal processing and output

Models:

Bigeye P-629B NIR Cool (GigE)

性能参数

Bigeye P	P-629 NIR
接口	IEEE 802.3 1000BASE-T, IEEE 802.3af (PoE)
分辨率	3072 (H) × 2048 (V)
传感器	ON Semi KAF-6303E
传感器类型	CCD Progressive
传感器尺寸	Type 35 mm

Bigeye P	P-629 NIR
像元尺寸	9.0 μm \times 9.0 μm
Lens mount (default)	F-Mount
最大满帧帧率	0.67 fps
ADC	14 Bit
输出	
Bit位数	14 Bit
黑白像素格式	Mono8, Mono10, Mono12, Mono14, Mono16
工作条件/尺寸	
工作温度	0 $^{\circ}\text{C}$ to +35 $^{\circ}\text{C}$
电源要求 (DC)	12 V
功耗	33.6 W @ 12 VDC
重量	1460 g
尺寸 (L \times W \times H in mm)	141.75 \times 90 \times 109 (including connectors)
符合规范	CE: 2014/30/EU (EMC), 2011/65/EU (RoHS); FCC Class B

量子转换效率



特性

- 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



应用场景

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