Description

11 Megapixel CCD camera, cooled Kodak 35 mm sensor

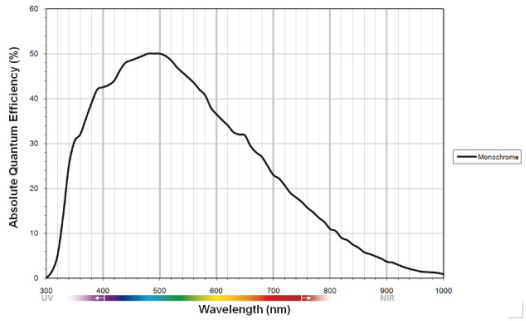
The Bigeye G-1100B Cool is a high-resolution cooled CCD camera. It includes a sensitive 35 mm Kodak sensor. Due to the cooling to 0 °C, this camera features high-resolution imaging with outstanding signal-to-noise ratio.

- Truesense (Kodak) KAI-11002 sensor, 4024 x 2680 pixels
- Quantum efficiency @530 nm: 59%
- Peltier cooled to 0 °C
- Exposure time up to 4292 s (≈ 71 min)
- Multi-functional, user-configurable I/O interface
- GigE Vision
- Reliable operation under rough industrial conditions

Specifications

Bigeye	G-1100 Cool
Interface	IEEE 802.3 1000baseT
Resolution	4024 x 2680
Sensor	Kodak KAI-11002
Sensor type	CCD Progressive
Sensor size	Type 35 mm
Cell size	9 µm
Cooling temperature	0 °C
Dark noise	40 e-
Dark current	0.010 e-/pixel/s
Saturation capacity	54000 e-
Dynamic range	63 dB
Lens mount	F-Mount
Max frame rate at full resolution	1.58 fps
A/D	14 bit
On-board FIFO	32 MB
	Output
Bit depth	12 bit
Mono modes	Mono8, Mono12, Mono12Packed
	General purpose inputs/outputs (GPIOs)
TTL I/Os	1/1
Opto-coupled I/Os	3/3
RS-232	2
	Operating conditions/Dimensions
Operating temperature	0 °C ... 35 °C
Power consumption (12 V)	max. <36 W, typ. <18 W
Mass	1320 g
Body Dimensions (L x W x H in mm)	132.8 x 90 x 99 incl. connectors, w/o lens
Regulations	CE, RoHS (2002/95/EC)

Download technical drawing (click here)



Smart features

- Gain (6 dB)
- Exposure time 1394 µs to ≈ 71 minutes
- Binning (1x2, 2x1, 2x2)
- Gamma (0.45, 0.5, 0.7)
- Three look-up tables (LUTs)
- Five storable user sets

Easy integration
The Bigeye G-1100B Cool can be easily integrated into your application, since it is GigE Vision compliant and compatible with AVT's GigE SDKs. Additionally, this camera can be used with numerous third-party software solutions.

Applications

The Bigeye G-1100B Cool is the perfect choice for image acquisition with high resolution and low noise. Long exposure times with the cooled sensor produce images with outstanding image quality.

Typical applications:

- Low-noise imaging (industrial and scientific imaging)
- Image acquisition with long exposure times
- Microscopy with high resolution
- Fluorescence microscopy
- Gel electrophoresis, DNA documentation
- Non-destructive evaluation of photosensitive objects
- Astronomy