

Prosilica GE



4000

- 11 Megapixel camera
- ON Semi KAI-11002 sensor
- Galvanically isolated I/O
- Various lens mount options

Description

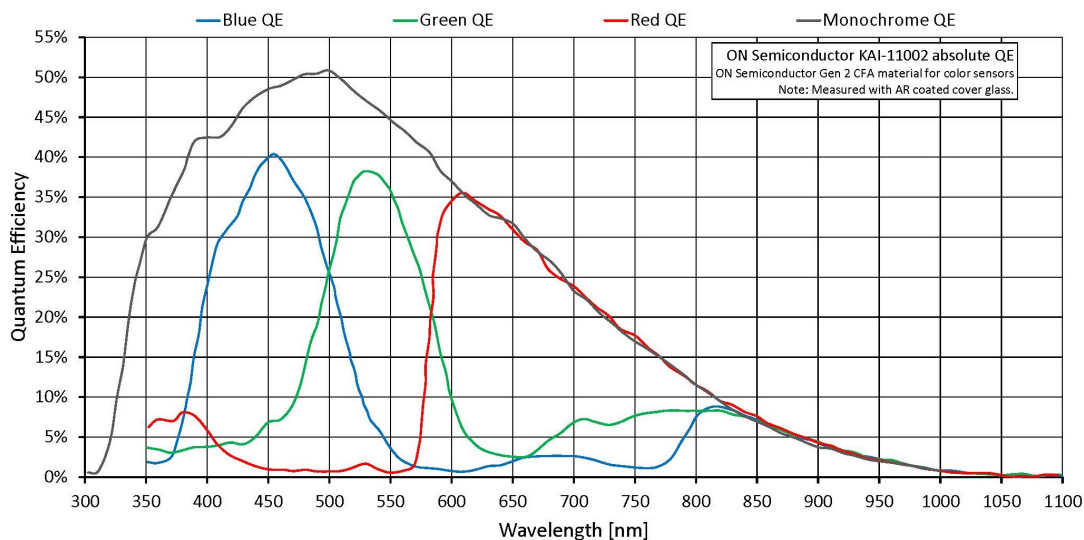
11 Megapixel ON Semi KAI-11002 CCD camera, 5 frames per second

Prosilica GE4000 is a very high-resolution CCD camera with Gigabit Ethernet output (GigE Vision®). This camera features the high-quality 35 mm optical format ON Semiconductor KAI-11002 CCD image sensor that provides exceptionally high resolution, sensitivity, and dynamic range. At full resolution, this camera has a frame rate of 5 frames per second. With a smaller region of interest higher frame rates are possible. By default monochrome models ship with no optical filter and color models ship with an IRC30 IR cut filter.

Specifications

Prosilica GE	4000
Interface	IEEE 802.3 1000baseT
Resolution	4008 (H) × 2672 (V)
Sensor	ON Semi KAI-11002
Sensor type	CCD Progressive
Sensor size	Type 35 mm
Pixel size	9 μm × 9 μm
Lens mount (default)	F-Mount
Max. frame rate at full resolution	5 fps
ADC	12 bit
Image buffer (RAM)	32 MByte
	Output
Bit depth	8/12 bit
Monochrome pixel formats	Mono8, Mono12, Mono12Packed

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Raw pixel formats	BayerGR8, BayerGR12, BayerGR12Packed
General purpose inputs/outputs (GPIOs)	
TTL I/Os	1 input, 3 outputs (with galvanic isolation)
RS232	1
Operating conditions/dimensions	
Operating temperature	0 °C to +50 °C ambient (without condensation)
Power requirements (DC)	5 to 24 VDC
Power consumption	6 W at 12 VDC
Mass	402 g
Body dimensions (L × W × H in mm)	110 × 66 × 66 (including connectors)
Regulations	2011/65/EU, including amendment 2015/863/EU (RoHS)



Features

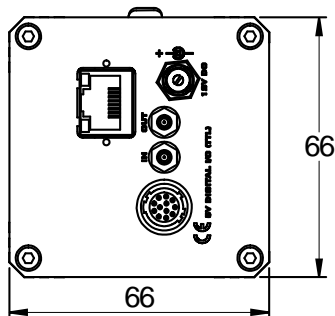
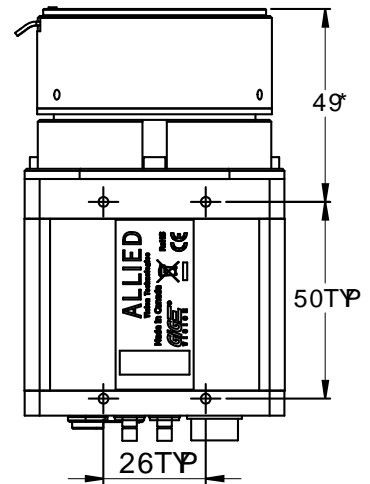
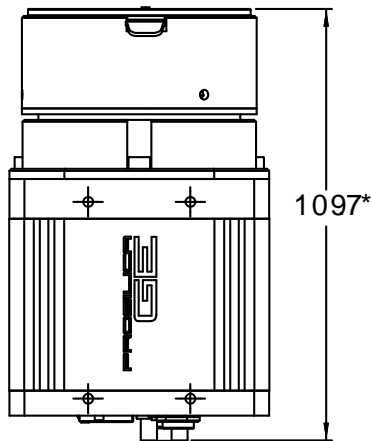
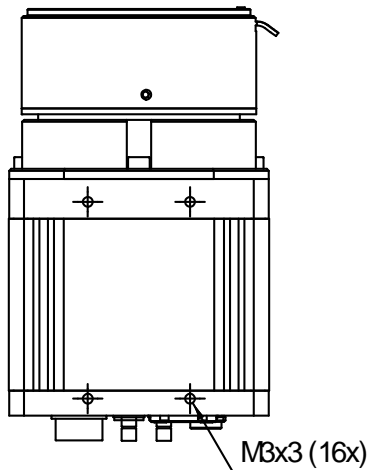
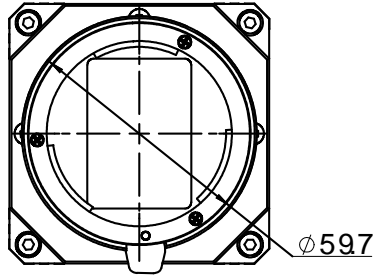
Prosilica GE4000 features include:

- Defect masking for columns
- Region of interest (ROI), DSP subregion (selectable ROI for auto features)
- Binning (Sum)
- Auto gain (manual gain control: 0 to 34 dB)
- Auto exposure (manual exposure controls: 140 µs to 68.7 s)
- Auto white balance



- StreamBytesPerSecond (bandwidth control)
- Stream hold
- Sync out modes: Trigger ready, input, exposing, readout, imaging, strobe, GPO
- Global shutter (digital shutter)
- Recorder and Multiframe acquisition modes
- Event channel
- Image chunk data
- Storable user sets

Technical drawing



* Nominal value Add 0.3mm for color cameras.



Applications

Prosilica GE4000 is ideal for a wide range of applications including:

- LCD panel inspection
- Semiconductor wafer inspection
- Solar panel inspection
- Aerial photography
- 3D metrology
- General machine vision
- Public security
- Surveillance
- Traffic imaging (Intelligent Traffic Systems)
- Embedded systems
- OEM applications