

# Prosilica GE

## 4000



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

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

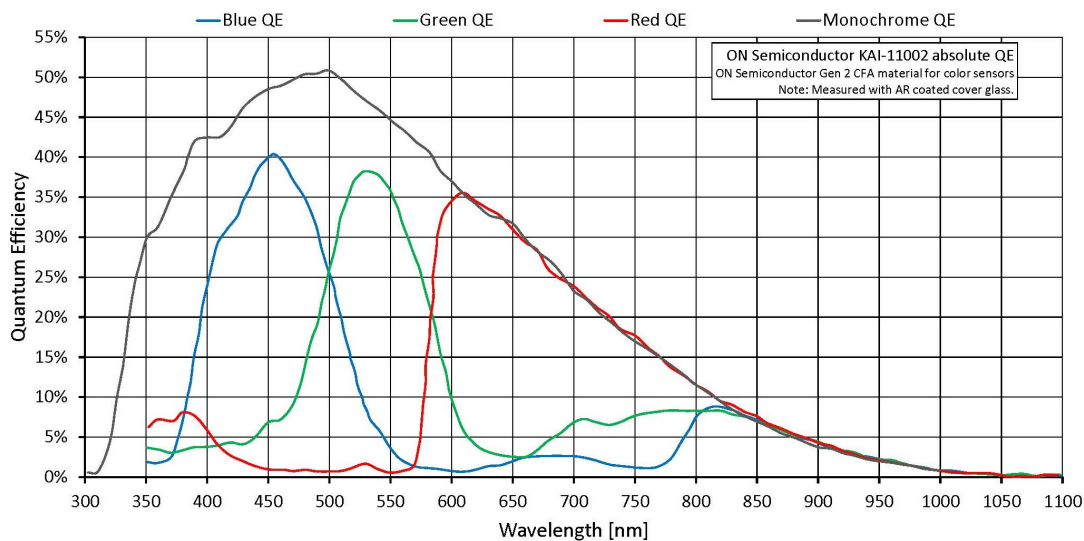
Prosilica GE4000 is a very high-resolution CCD camera with Gigabit Ethernet output (GigE Vision®). This camera features the high-quality 35 mm optical format ON Semiconductor KAI-11002 CCD image sensor that provides exceptionally high resolution, sensitivity, and dynamic range. At full resolution, this 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

<b>Prosilica GE</b>	<b>4000</b>
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
	<b>Output</b>
Bit depth	8/12 Bit
Monochrome pixel formats	Mono8, Mono12, Mono12Packed

<b>Prosilica GE</b>	<b>4000</b>
Raw pixel formats	BayerGR8, BayerGR12, BayerGR12Packed
<b>General purpose inputs/outputs (GPIOs)</b>	
TTL I/Os	1 input, 3 outputs (with galvanic isolation)
RS232	1
<b>Operating conditions/dimensions</b>	
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)

## Quantum efficiency



## Features

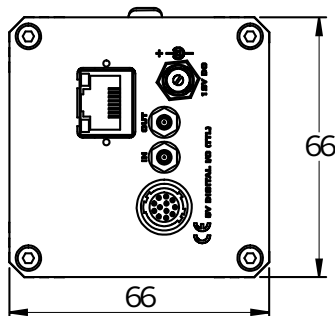
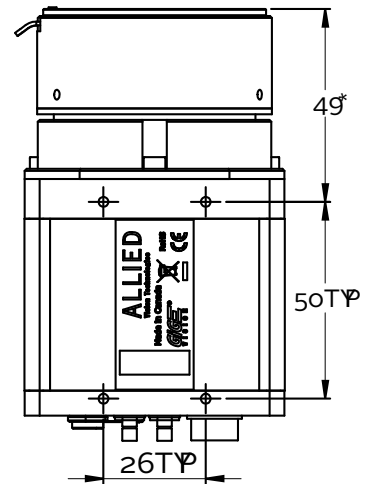
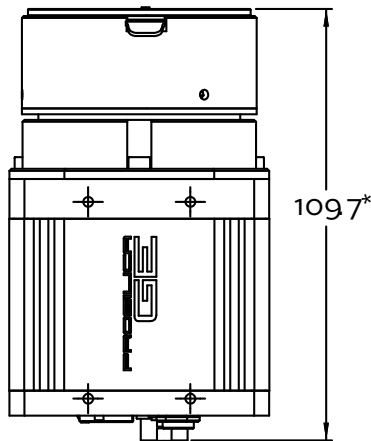
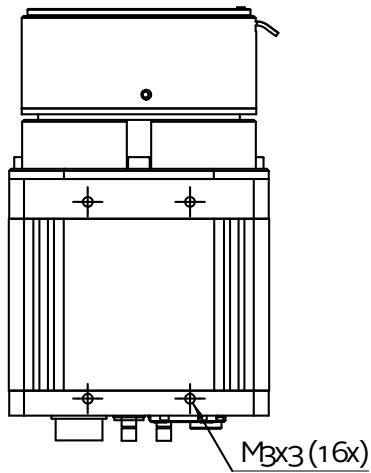
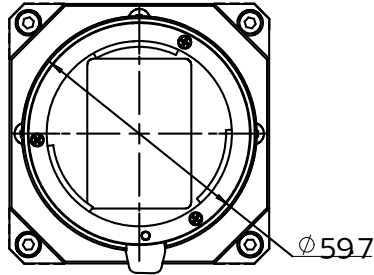
Prosilica GE4000 features include:

- 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  $\mu$ s 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