

Prosilica GE

4000



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

Description

11 Megapixel CCD camera, 5 frames per second

Prosilica GE4000/GE4000C 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. By default monochrome models ship with no optical filter and color models ship with an IRC30 IR cut filter.

Options:

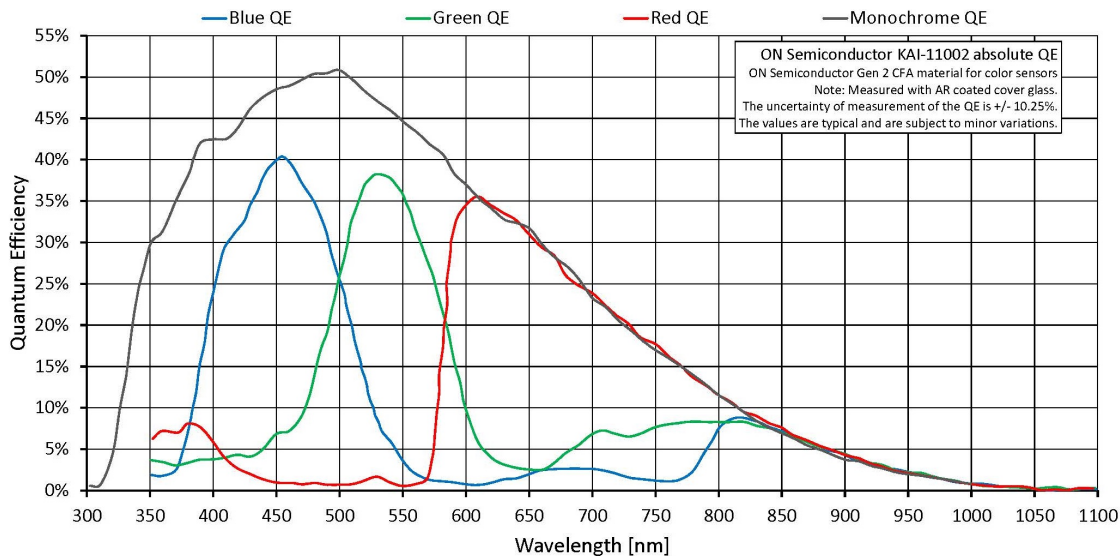
- Optical filters (IR cut filter/Protection glass)
- Sensor Class 1 or 2; fixed cover glass with or without microlenses; class 1 or 2 with taped cover glass with or without microlenses
- Various lens mounts

See the Modular Concept for lens mount, optical filter, and sensor options.

Specifications

Prosilica GE	4000
Interface	IEEE 802.3 1000baseT
Resolution	4008 (H) × 2672 (V)
Sensor	ON Semi KAI-11002
Sensor type	CCD Progressive
Cell size	9 μm × 9 μm
Lens mount	F-Mount
Max frame rate at full resolution	5 fps
ADC	12 bit
Image buffer (RAM)	32 MByte

Prosilica GE	4000
	Output
Bit depth	8/12 bit
Mono modes	Mono8, Mono12, Mono12Packed
Raw modes	BayerGR8, BayerGR12, BayerGR12Packed
	General purpose inputs/outputs (GPIOs)
TTL I/Os	1 input, 3 outputs (with galvanic isolation)
RS-232	1
	Operating conditions/dimensions
Operating temperature	0 °C to +50 °C ambient (without condensation)
Power requirements (DC)	5 to 24 VDC
Power consumption (@12 V)	6 W
Mass	402 g
Body dimensions (L × W × H in mm)	110 × 66 × 66 (including connectors)
Regulations	CE, RoHS, REACH, WEEE, FCC, ICES



Features

Prosilica GE4000/GE4000C features include:

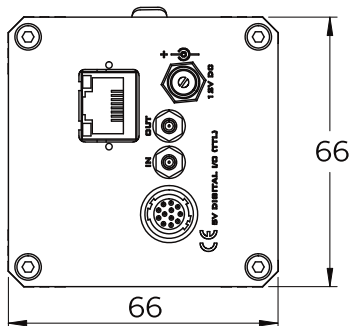
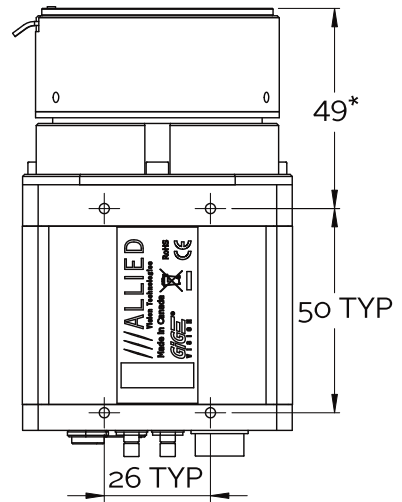
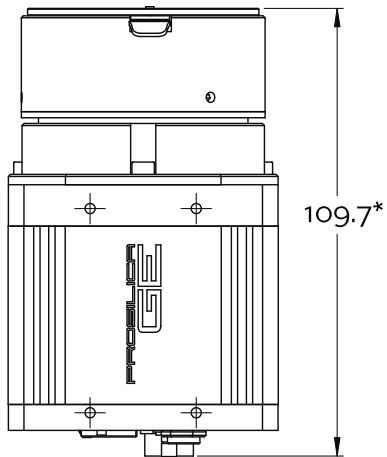
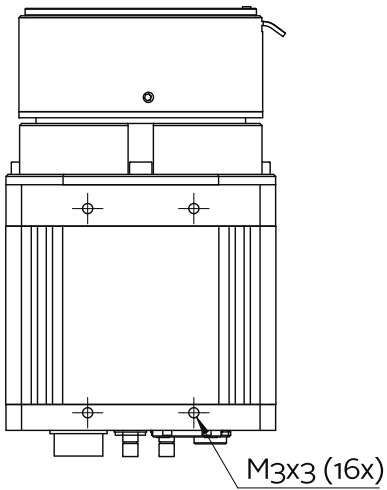
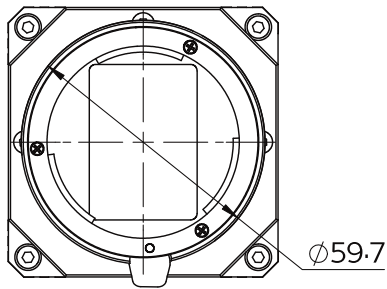
- Defect masking for columns
- Region of interest (ROI), DSP subregion (selectable ROI for auto features)
- Binning (Sum)
- Auto gain (manual gain control: 0 to 34 dB)



Allied Vision

- Auto exposure (manual exposure controls: 140 #s to 68.7 s)
- Auto white balance
- StreamBytesPerSecond (easy 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 0.33 mm for color cameras



Applications

Prosilica GE4000/GE4000C 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