

# Prosilica GE

## 4900



- 16 Megapixel camera
- OnSemi KAI-16000 sensor
- Galvanically isolated I/O
- Various lens mount options

## Description

16 Megapixel CCD camera, 3 frames per second

Prosilica GE4900/GE4900C 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-16000 CCD image sensor that provides exceptionally high resolution and good sensitivity.

### Options:

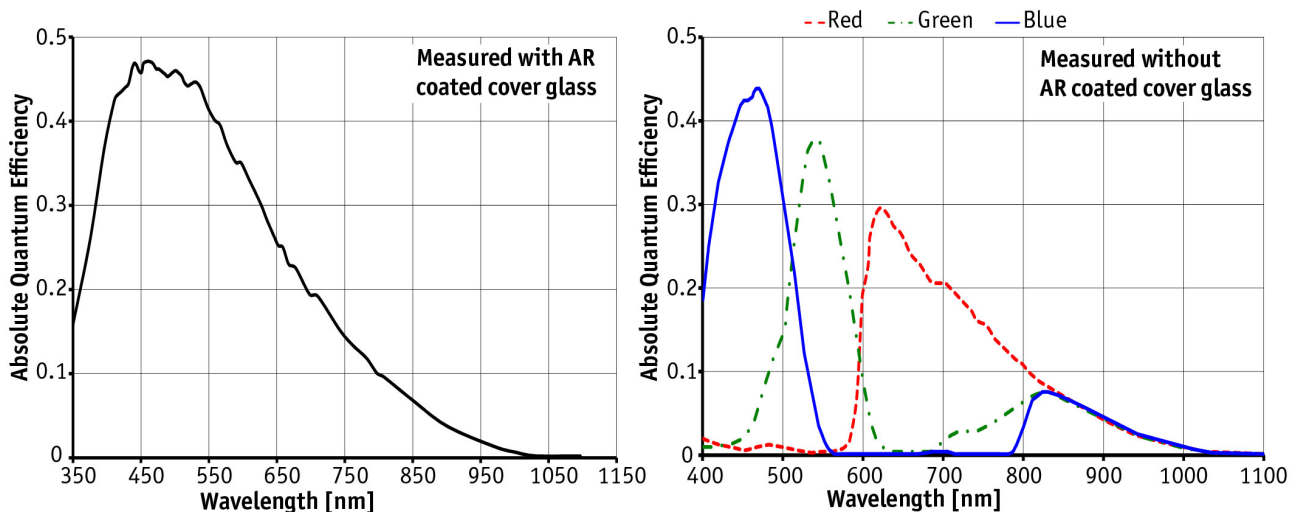
- Optical filters (IR cut filter/Protection glass)
- Sensor Class 1 or 2; fixed cover glass with or without microlenses; class 1 or 2 with taped cover glass with or without microlenses
- Various lens mounts

See the [Modular Concept](#) for lens mount, optical filter, and sensor options.

## Specifications

Prosilica GE	4900
Interface	IEEE 802.3 1000baseT
Resolution	4872 (H) × 3248 (V)
Sensor	OnSemi KAI-16000
Sensor type	CCD Progressive
Cell size	7.4 μm x 7.4 μm
Lens mount	F-Mount
Max frame rate at full resolution	3 fps
ADC	12 bit
Image buffer (RAM)	32 MByte
<b>Output</b>	

<b>Prosilica GE</b>	<b>4900</b>
Bit depth	8/12 bit
Mono modes	Mono8, Mono12, Mono12Packed
Color modes RGB	n/a
Raw modes	BayerGR8, BayerGR12, BayerGR12Packed
<b>General purpose inputs/outputs (GPIOs)</b>	
TTL I/Os	1 input, 3 outputs (with galvanic isolation)
RS-232	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 (@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

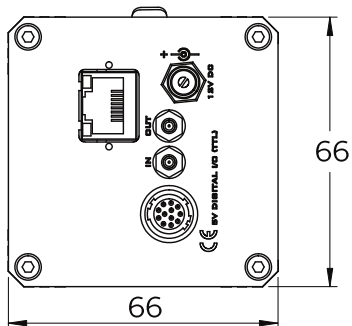
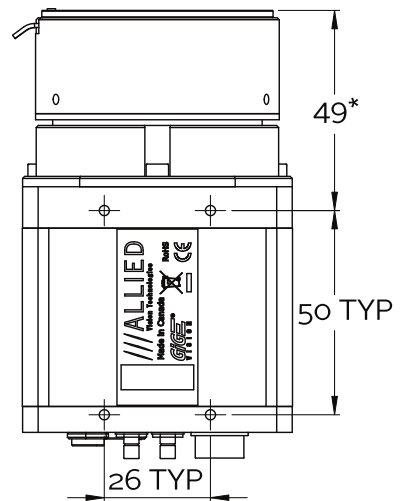
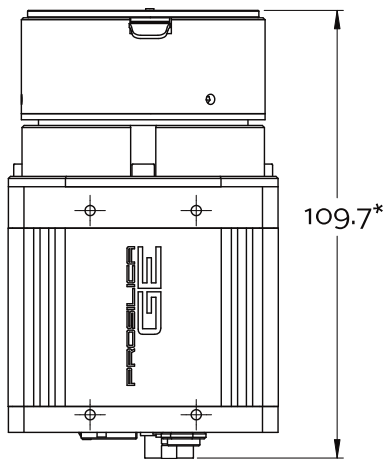
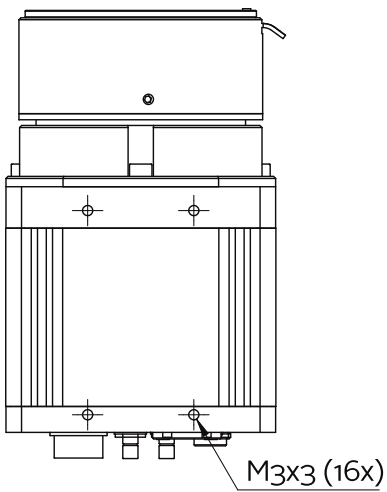
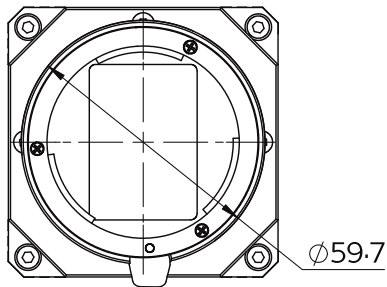
#Prosilica GE4900/GE4900C features include:

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



- Auto exposure (manual exposure controls: 625 #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#GE4900/GE4900C is ideal for a wide range of applications including:**

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