

# Prosilica GX

## 1660



- 240 MBps with dual port LAG technology
- 3-axis motorized lens control
- High frame rate at full bit depth
- ON Semi KAI-02050 sensor

## Description

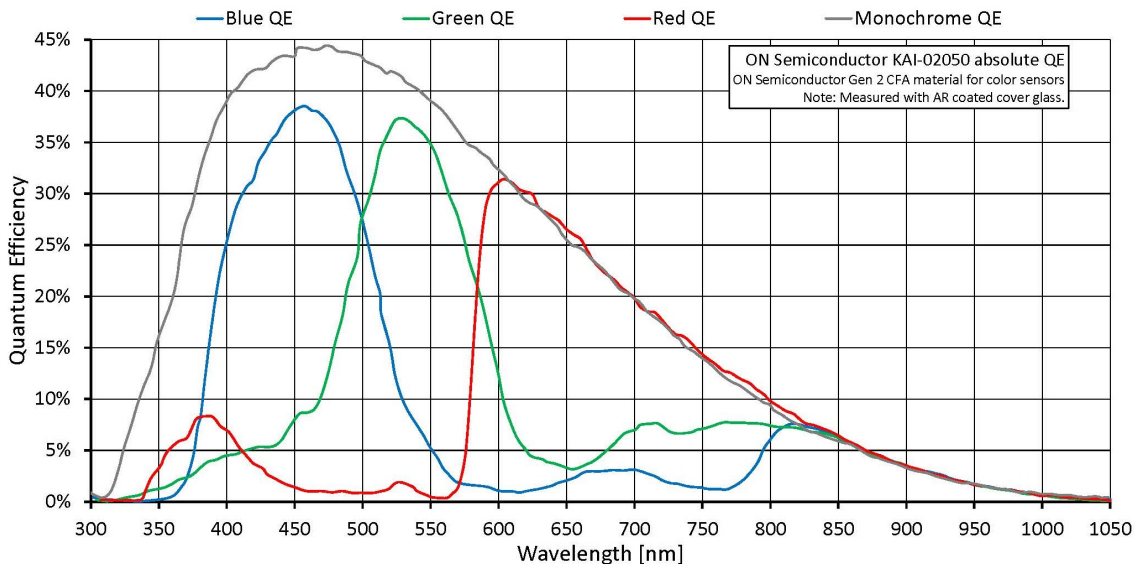
GigE Vision camera, ON Semi KAI-02050 CCD sensor, 66 fps

Prosilica GX1660 is a high resolution CCD camera with dual Gigabit Ethernet ports (GigE Vision®). This camera incorporates a high-quality 2/3" ON Semiconductor KAI-02050 CCD sensor providing excellent monochrome and color image quality in 4:3 format. At full resolution, this camera has a frame rate of 66 frames per second. With a smaller region of interest higher frame rates are possible. This camera has two screw-captivated Gigabit Ethernet ports configured as a Link Aggregation Group (LAG) to provide a sustained maximum data rate of 240 MBps. It can also work at half the bandwidth (120 MBps) using a single cable. By default monochrome models ship with no optical filter and color models ship with an IRC30 IR cut filter.

## Specifications

<b>Prosilica GX</b>	<b>1660</b>
Interface	IEEE 802.3 1000baseT
Resolution	1600 (H) × 1200 (V)
Sensor	ON Semi KAI-02050
Sensor type	CCD Progressive
Sensor size	Type 2/3
Pixel size	5.5 μm × 5.5 μm
Lens mount (default)	C-Mount
Max. frame rate at full resolution	66 fps
ADC	14 bit
Image buffer (RAM)	128 MByte
<b>Output</b>	
Bit depth	14 (monochrome); 12 (color) bit

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Monochrome pixel formats	Mono8, Mono12, Mono12Packed, Mono14
RGB color pixel formats	RGB8Packed, BGR8Packed, RGBA8Packed, BGRA8Packed, RGB12Packed
Raw pixel formats	BayerGR8, BayerGR12, BayerGR12Packed
<b>General purpose inputs/outputs (GPIOs)</b>	
Opto-isolated I/Os	2 inputs, 4 outputs
RS232	1
<b>Operating conditions/dimensions</b>	
Operating temperature	0 °C to +50 °C ambient (without condensation)
Power requirements (DC)	10 to 24 VDC
Power consumption	5.6 W at 12 VDC (Single GigE Mode); 6.7 W at 12 VDC (Dual GigE Mode)
Mass	269 g
Body dimensions (L × W × H in mm)	107.2 × 53.3 × 33 (including connectors)
Regulations	CE: 2014/30/EU (EMC), 2011/65/EU, including amendment 2015/863/EU (RoHS); FCC Class A; CAN ICES-003



## Features

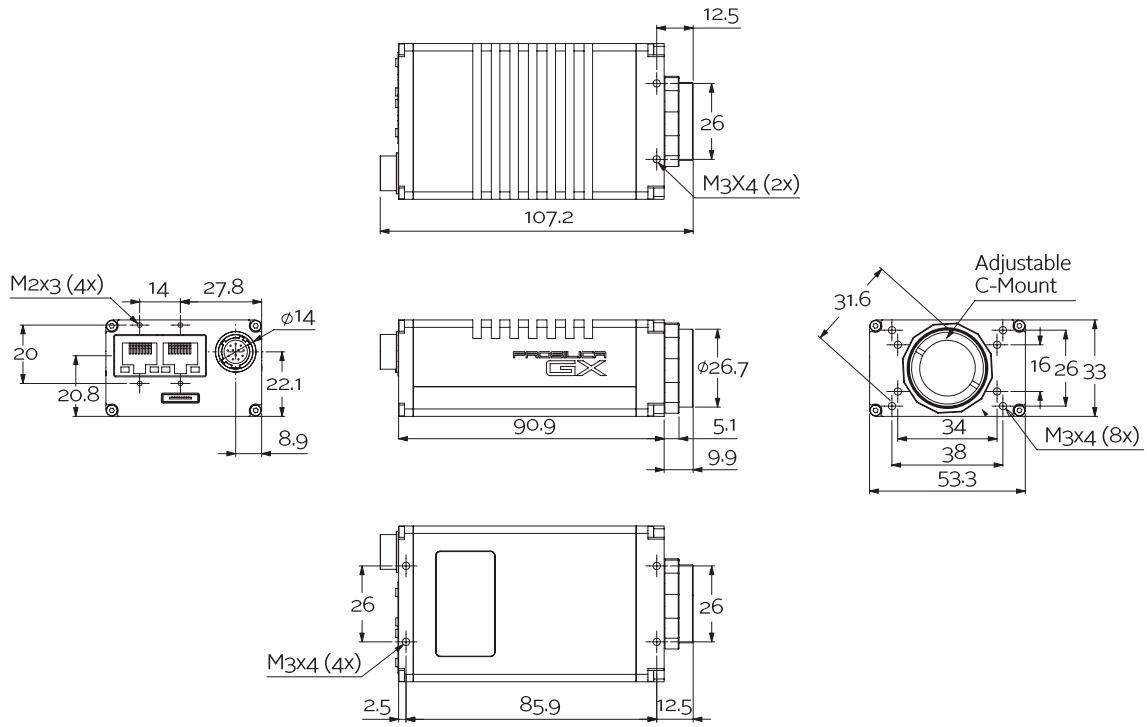
Prosilica GX1660 features include:

- 3-axis motorized lens control



- Video-type auto iris
- 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: 10  $\mu$ s to 26.8 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
- Chunk data
- Storable user set

## Technical drawing





## Applications

Prosilica GX1660 is ideal for a wide range of applications including:

- Industrial inspection
- Machine vision
- LCD panel inspection
- Medical imaging
- Ophthalmology
- Aeronautical and aerospace
- Public security
- Surveillance
- Traffic imaging
- OEM applications