

# Prosilica GX

## 1660



- 240 MB/s with dual port LAG technology
- 3-axis motorized lens control
- High frame rate at full bit depth
- Various lens mount options

## Description

Fast frame rate, 2 megapixel CCD camera - Dual port Gigabit Ethernet output

Prosilica GX1660/GX1660C is a high resolution CCD camera with Gigabit Ethernet interface (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. This camera has two screw-captivated Gigabit Ethernet interfaces configured as a Link Aggregation Group (LAG) to provide a sustained maximum data rate of 240 MB per second. It can also work at half the bandwidth (120 MB/s) using a single cable. By default monochrome models ship with no optical filter and color models ship with an IRC30 IR cut filter.

### Options:

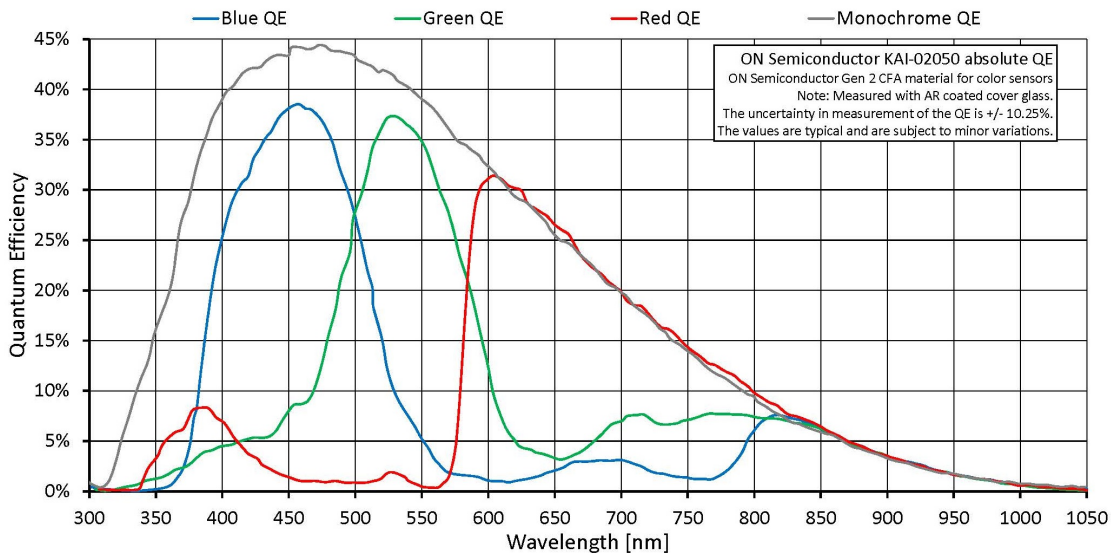
- Various lens mounts
- Optical filters (IR cut filter/Protection glass)
- Sensor variant: Class 2, taped cover glass, with microlens
- Sensor variant: Class 2, taped cover glass, without microlens

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

## Specifications

| Prosilica GX | 1660                 |
|--------------|----------------------|
| Interface    | IEEE 802.3 1000baseT |
| Resolution   | 1600 (H) × 1200 (V)  |
| Sensor       | ON Semi KAI-02050    |
| Sensor type  | CCD Progressive      |
| Cell size    | 5.5 μm x 5.5 μm      |
| Lens mount   | C-Mount              |

|   |   |
|---|---|
| <b>Prosilica GX</b>                           | <b>1660</b>   |
| 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                               |
| Mono modes                                    | Mono8, Mono12, Mono12Packed, Mono14                           |
| Color modes RGB                               | RGB8Packed, BGR8Packed, RGBA8Packed, BGRA8Packed, RGB12Packed |
| Raw modes                                     | BayerGR8, BayerGR12, BayerGR12Packed                          |
| <b>General purpose inputs/outputs (GPIOs)</b> |   |
| Opto-isolated I/Os                            | 2 inputs, 4 outputs   |
| 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)                     | 5.6W (1 port); 6.7W (2 ports)                                 |
| Mass  | 269 g   |
| Body dimensions (L × W × H in mm)             | 107.2 × 53.3 × 33 (including connectors)                      |
| Regulations                                   | CE, RoHS, REACH, WEEE, FCC, ICES                              |



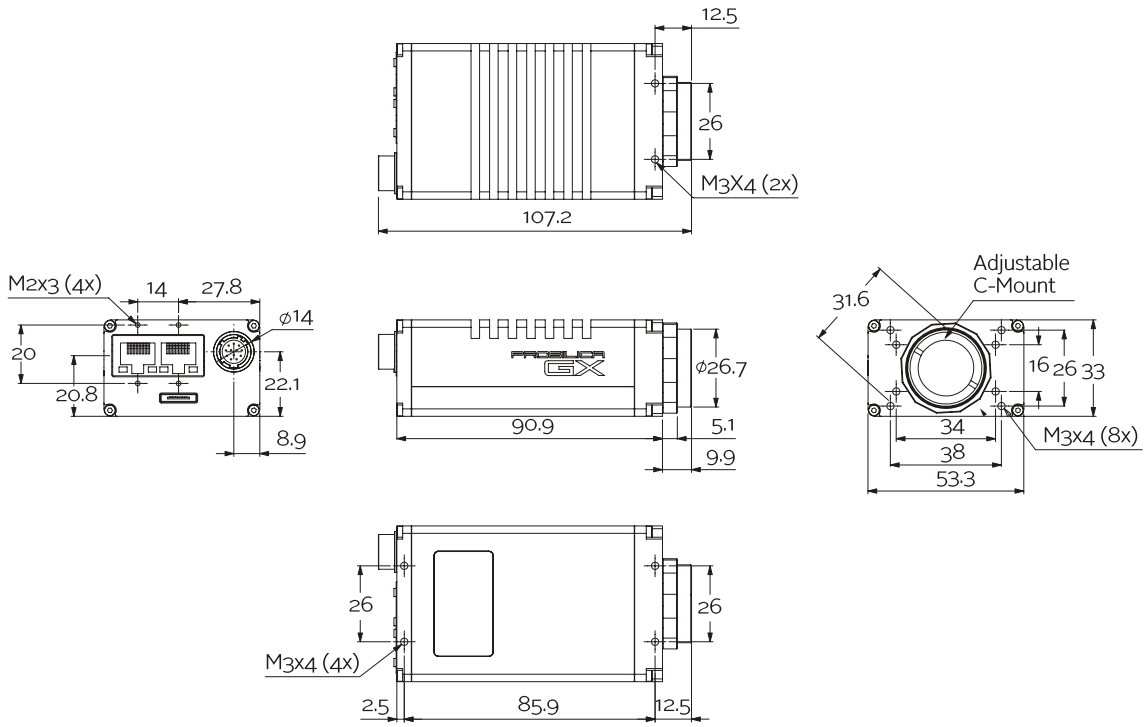
## Features

Prosilica GX1660/GX1660C 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 #s to 26.8 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
- Chunk data
- Storable user set

## Technical drawing





## Applications

**Prosilica GX1660/GX1660C 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