

# Prosilica GC

## 780



- Sony ICX415 sensor
- High frame rate
- Rugged housing
- Video-type auto iris

## Description

Low cost GigE camera, 64 frames per second

Prosilica GC780/GC780C is an ultra-compact, economically priced, machine vision camera with a GigE Vision compliant Gigabit Ethernet interface. This camera incorporates the high quality Sony ICX415 CCD sensor with HAD technology. This camera runs 64 frames per second at full resolution. By default monochrome models ship with no optical filter and color models ship with an IRC30 IR cut filter.

### Options:

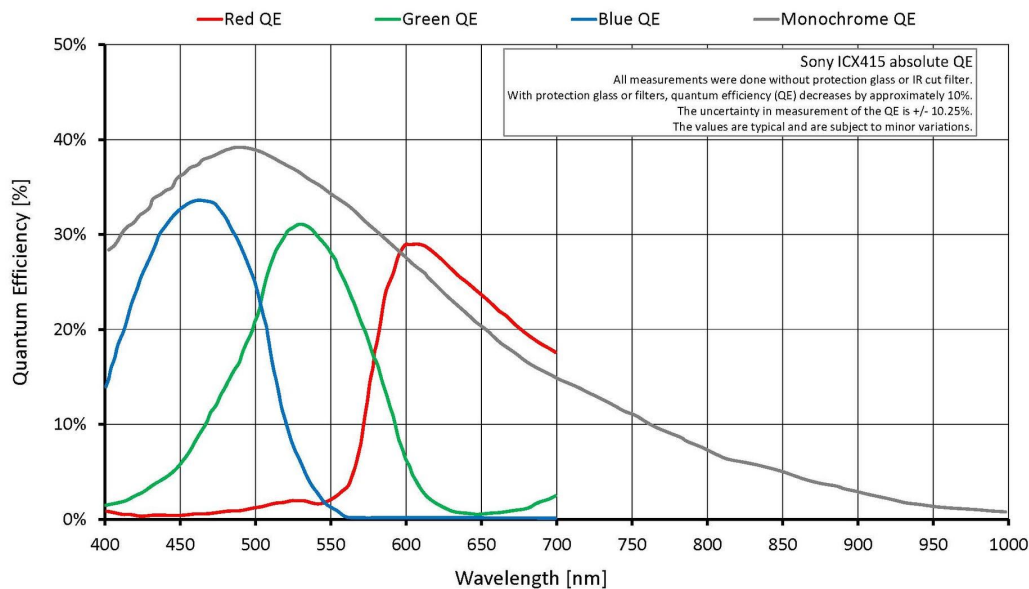
- CS-Mount
- Optical filters (IR cut filter/Protection glass)

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

## Specifications

Prosilica GC	780
Interface	IEEE 802.3 1000baseT
Resolution	782 (H) × 582 (V)
Sensor	Sony ICX415
Sensor type	CCD Progressive
Cell size	8.3 μm x 8.3 μm
Lens mount	C-Mount
Max frame rate at full resolution	63.9 fps
ADC	12 bit
Image buffer (RAM)	16 MByte
<b>Output</b>	
Bit depth	8/12 bit

<b>Prosilica GC</b>	<b>780</b>
Mono modes	Mono8, Mono12, Mono12Packed
Color modes RGB	RGB8Packed, BGR8Packed
Raw modes	BayerRG8, BayerRG12, BayerGR12Packed
<b>General purpose inputs/outputs (GPIOs)</b>	
TTL I/Os	1 input, 1 output
Opto-isolated I/Os	1 input, 1 output
RS-232	1
<b>Operating conditions/dimensions</b>	
Operating temperature	0 °C to +50 °C ambient (without condensation)
Power requirements (DC)	5 to 25 VDC
Power consumption (@12 V)	2.8 W
Mass	100 g
Body dimensions (L × W × H in mm)	59 × 46 × 33 (including connectors)
Regulations	CE, RoHS, REACH, WEEE, FCC, ICES



## Features

### Image optimization features:

- Auto gain (manual gain control: 0 to 26 dB for GC780, 0 to 23 dB for GC780C)
- Auto exposure (manual exposure control: 8 #s to 116.8 s @ 1 #s increments)
- Auto white balance
- Binning (horizontal and vertical) (sum)

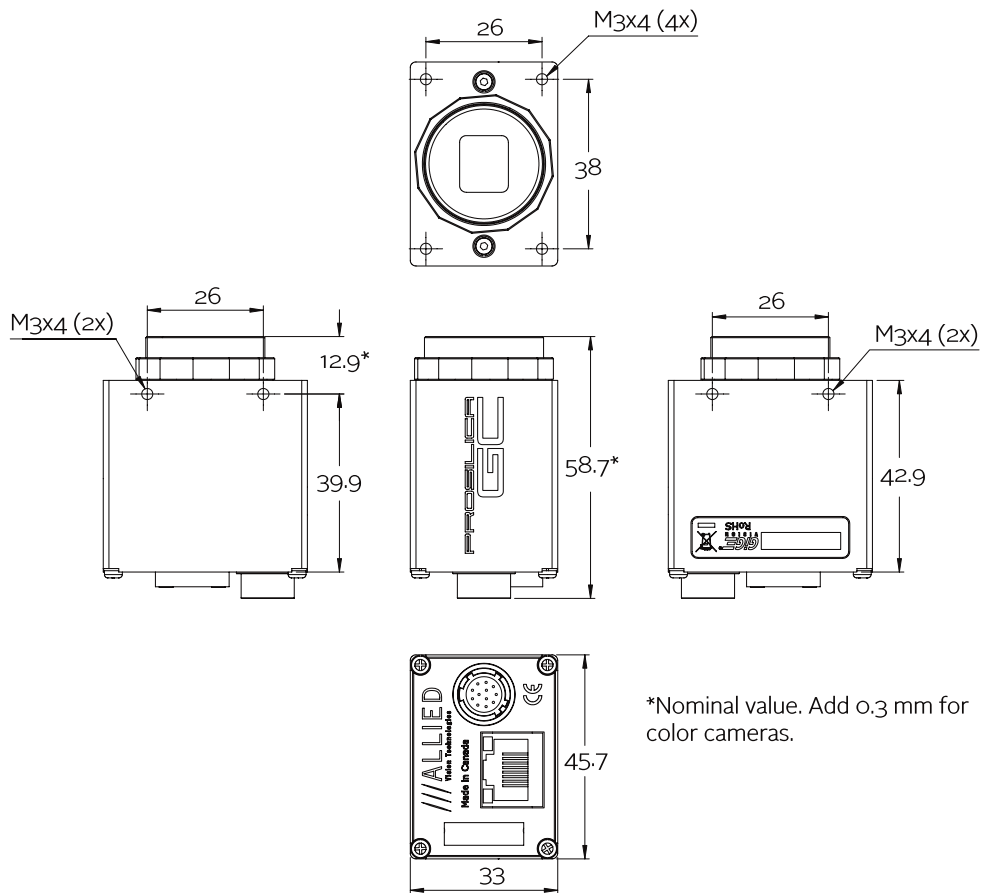


- Region of interest (ROI), DSP subregion (selectable ROI for auto features)

**Camera control features:**

- Auto-iris (video type)
- Event channel
- Global shutter (digital shutter)
- IEEE 1588 Precision Time Protocol (PTP)
- Image chunk data
- Recorder and Multiframe acquisition modes
- RS232
- Storable user sets (5)
- StreamBytesPerSecond (easy bandwidth control)
- Stream hold
- Sync out modes: Trigger ready, input, exposing, readout, imaging, strobe, GPO

## Technical drawing





## Applications

**Prosilica GC780/GC780C is ideal for a wide range of applications including:**

- Industrial inspection
- Machine vision
- Optical character recognition
- Traffic imaging
- Robotics
- OEM applications