

# Prosilica GC 650



- Sony ICX424 sensor
- 90 fps @ full resolution
- Rugged housing
- Video-type auto iris

## Description

Very small VGA CCD camera with GigE Vision, 90 frames per second

Prosilica GC650 is a fast, VGA-resolution, high-performance machine vision camera with a GigE Vision compliant Gigabit Ethernet interface. The Sony ICX424 CCD sensor with HAD technology has excellent image quality and sensitivity. This camera is suitable for applications where speed and excellent image quality are key requirements. At full resolution, this camera has a frame rate of 90 frames per second. With a smaller region of interest higher frame rates are possible. By default monochrome models ship with no optical filter and color models ship with an IRC30 IR cut filter.

## Options:

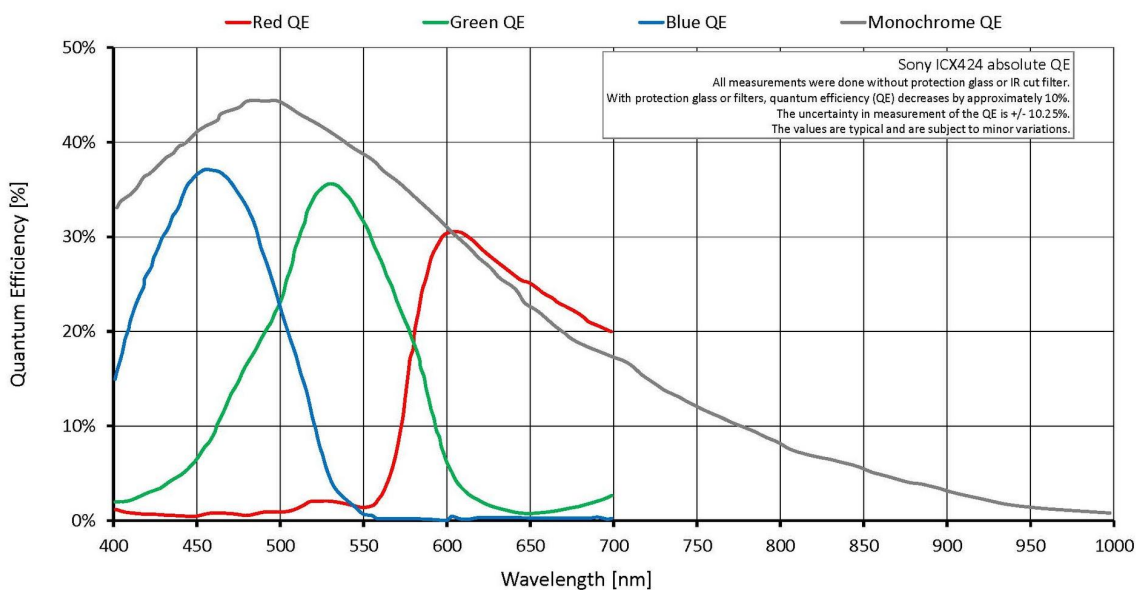
- CS-Mount
- Optical filters (IR cut filter/Protection glass)

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

## Specifications

Prosilica GC	650
インターフェイス	IEEE 802.3 1000baseT
解像度	659 (H) × 493 (V)
センサー	Sony ICX424
Sensor type	CCD Progressive
センサーサイズ	Type 1/3

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ピクセルサイズ	7.4 $\mu\text{m}$ $\times$ 7.4 $\mu\text{m}$
レンズマウント (標準搭載)	C-Mount
フレームレート (フル解像度)	90 fps
ADC	12 bit
Image buffer (RAM)	16 MByte
<b>Output</b>	
Bit depth	8/12 bit
ビデオフォーマット(Mono)	Mono8, Mono12, Mono12Packed
ビデオフォーマット(RGB)	RGB8Packed, BGR8Packed
ビデオフォーマット(Raw)	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
RS232	1
<b>Operating conditions/dimensions</b>	
Operating temperature	0 $^{\circ}\text{C}$ to +50 $^{\circ}\text{C}$ ambient (without condensation)
Power requirements (DC)	5 to 25 VDC
消費電力	3 W at 12 VDC
Mass	99 g
Body dimensions (L $\times$ W $\times$ H in mm)	59 $\times$ 46 $\times$ 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

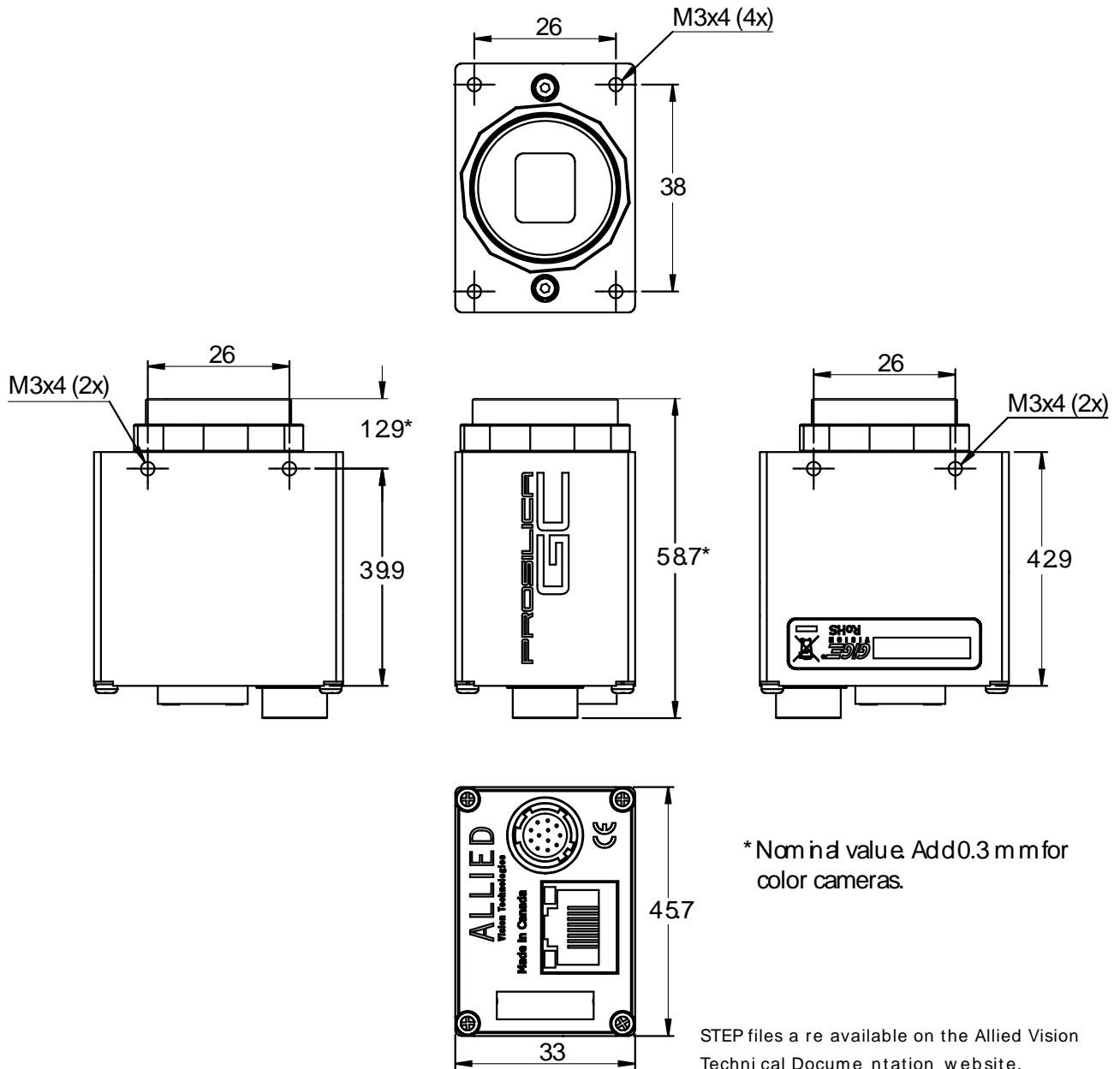
### Image optimization features:

- Auto gain (manual gain control: 0 to 19 dB)
- Auto exposure (manual exposure control: 8  $\mu$ s to 116.8 s @ 1  $\mu$ 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
- Image chunk data
- Recorder and Multiframe acquisition modes
- RS232
- Five storable user sets
- StreamBytesPerSecond (bandwidth control)
- Stream hold
- Sync out modes: Trigger ready, input, exposing, readout, imaging, strobe, GPO

## Technical drawing





## Applications

Prosilica GC650 is ideal for a wide range of applications including:

- Machine vision
- Industrial inspection
- Public security
- Traffic monitoring
- Robotics