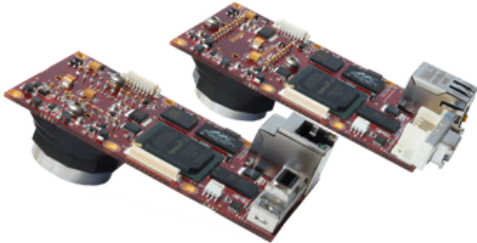


# Prosilica GB

## 650



- Single board
- High frame rate
- Landscape or portrait sensor orientation
- Auto-iris (video type)

## Description

### Single-board CCD camera, VGA resolution, 121.6 frames per second

Prosilica GB650 is a fast, VGA resolution, high-performance single-board machine vision camera with GigE Vision Gigabit Ethernet interface. This camera incorporates the high quality Type 1/3 (6.0 mm diagonal) Sony ICX424 CCD sensor with EXview HAD technology. At full resolution, this camera runs 12.6 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.

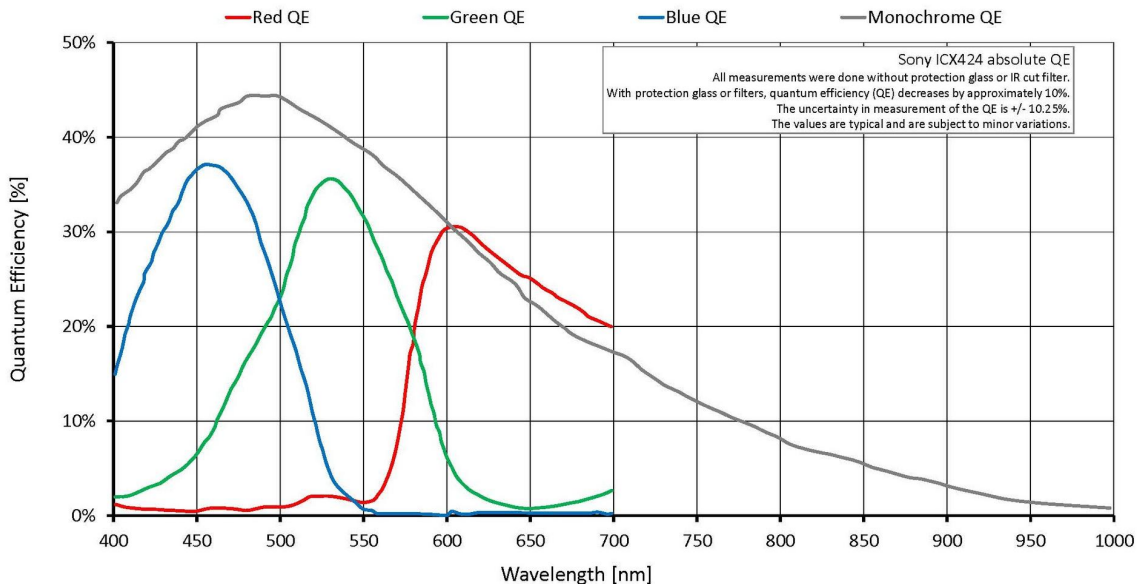
### Options:

- Portrait or landscape sensor orientation
- Inline or vertical connector orientation

## Specifications

<b>Prosilica GB</b>	<b>650</b>
Interface	IEEE 802.3 1000baseT
Resolution	659 (H) × 493 (V)
Sensor	Sony ICX424
Sensor type	CCD Progressive
Sensor size	Type 1/3
Pixel size	7.4 μm × 7.4 μm
Lens mount (default)	C-Mount
Max. frame rate at full resolution	121.6 fps
ADC	14 bit

<b>Prosilica GB</b>	<b>650</b>
Image buffer (RAM)	16 MByte
<b>Output</b>	
Bit depth	8/12 bit
Monochrome pixel formats	Mono8, Mono12, Mono12Packed
YUV color pixel formats	YUV411Packed, YUV422Packed, YUV444Packed
RGB color pixel formats	RGB8Packed, BGR8Packed
Raw pixel formats	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 °C to +70 °C ambient (without condensation)
Power requirements (DC)	5 to 25 VDC
Power consumption	3 W at 12 VDC
Mass	59 g
Body dimensions (L × W × H in mm)	51 × 89 (board size - W × L)
Regulations	2011/65/EU, including amendment 2015/863/EU (RoHS)





## Features

### Image optimization features:

- Auto gain (manual gain control: 0 to 30 dB; 1 dB increments)
- Auto exposure (manual exposure control: 10  $\mu$ s to 78.5 s; 1  $\mu$ s increments)
- Auto white balance (GB650C only)
- 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)
- Image chunk data
- Recorder and Multiframe acquisition modes
- RS232
- Storable user sets
- StreamBytesPerSecond (bandwidth control)
- Stream hold
- Sync out modes: Trigger ready, input, exposing, readout, imaging, strobe, GPO



## Applications

Prosilica GB650 is ideal for a wide range of applications including:

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