



Prosilica GS

650

- Right-angle CCD camera with low height profile
- High frame rate
- Video-type auto iris
- Landscape or portrait sensor orientation

90-degree GigE Vision camera, VGA resolution, 120 frames per second

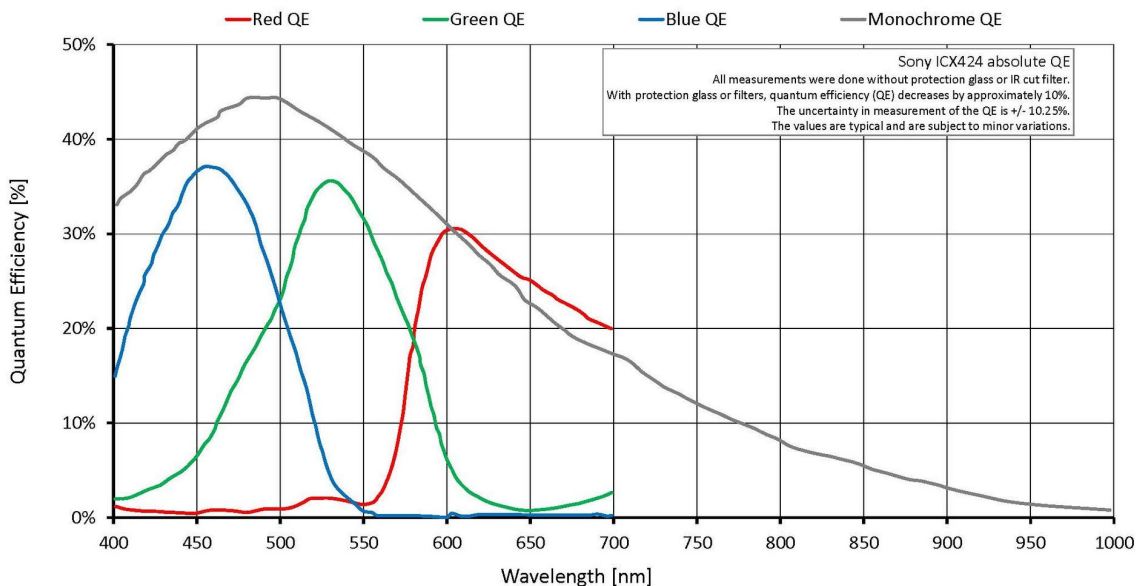
Prosilica GS650 is a fast, VGA resolution, high-performance machine vision camera with Gigabit Ethernet interface. The Sony ICX424 CCD sensor has excellent image quality and sensitivity. This camera is available in landscape or portrait orientation. At full resolution, this camera has a frame rate of 120 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.

Specifications

Prosilica GS	650
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	120 fps
ADC	14 bit
Image buffer (RAM)	16 MByte
Output	
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

General purpose inputs/outputs (GPIOs)

Prosilica GS	650
TTL I/Os	1 input, 1 output
Opto-isolated I/Os	1 input, 1 output
RS232	1
Operating conditions/dimensions	
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	184 g
Body dimensions (L × W × H in mm)	96 × 56 × 26 (including connectors)
Regulations	CE: 2014/30/EU (EMC), 2011/65/EU, including amendment 2015/863/EU (RoHS); FCC Class A



Features

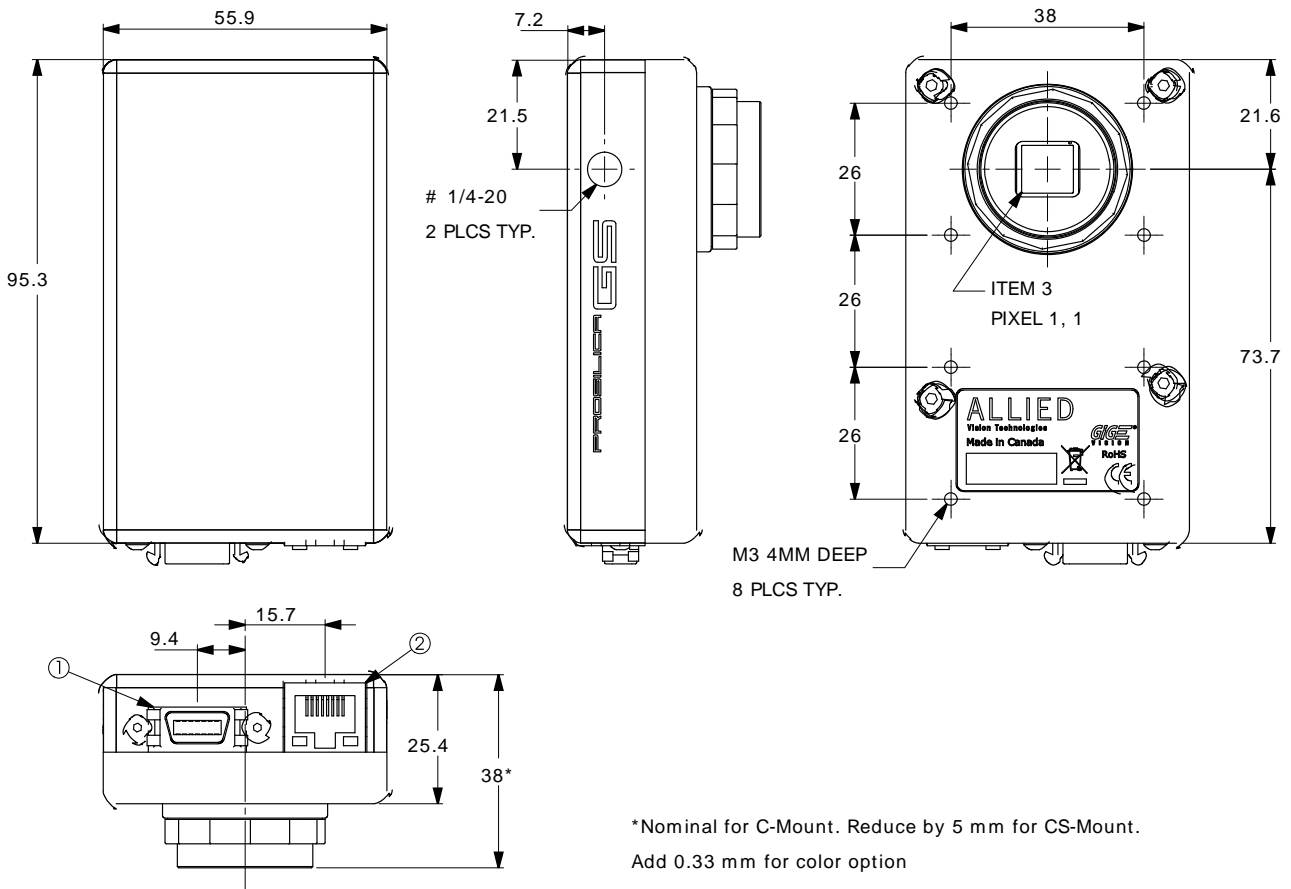
Prosilica GS650 features include:

- Auto-iris (video type)
- Region of interest (ROI), DSP subregion (selectable ROI for auto features)
- Binning (Sum)
- Auto gain (manual gain control: 0 to 30 dB)
- Auto exposure (manual exposure controls: 10 μs to 78.5 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
- Image chunk data
- Storable user sets

Technical drawing





Applications

Prosilica GS650 is ideal for a wide range of applications including:

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