

Prosilica GC 650



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

Compact performance

Prosilica GC - Ultra-compact GigE Vision camera

Prosilica GC 650 with Sony ICX424 runs 90.0 frames per second at 0.3 MP resolution.

The Prosilica GC is a GigE camera with an ultra-compact, lightweight housing, fast frame rates, and auto-iris control. It offers a large choice of CCD and CMOS sensors up to 5 Megapixels and fits a wide range of applications.

Easy software integration with [Allied Vision's Vimba Suite](#) and compatibility to the most popular third party image-processing libraries.

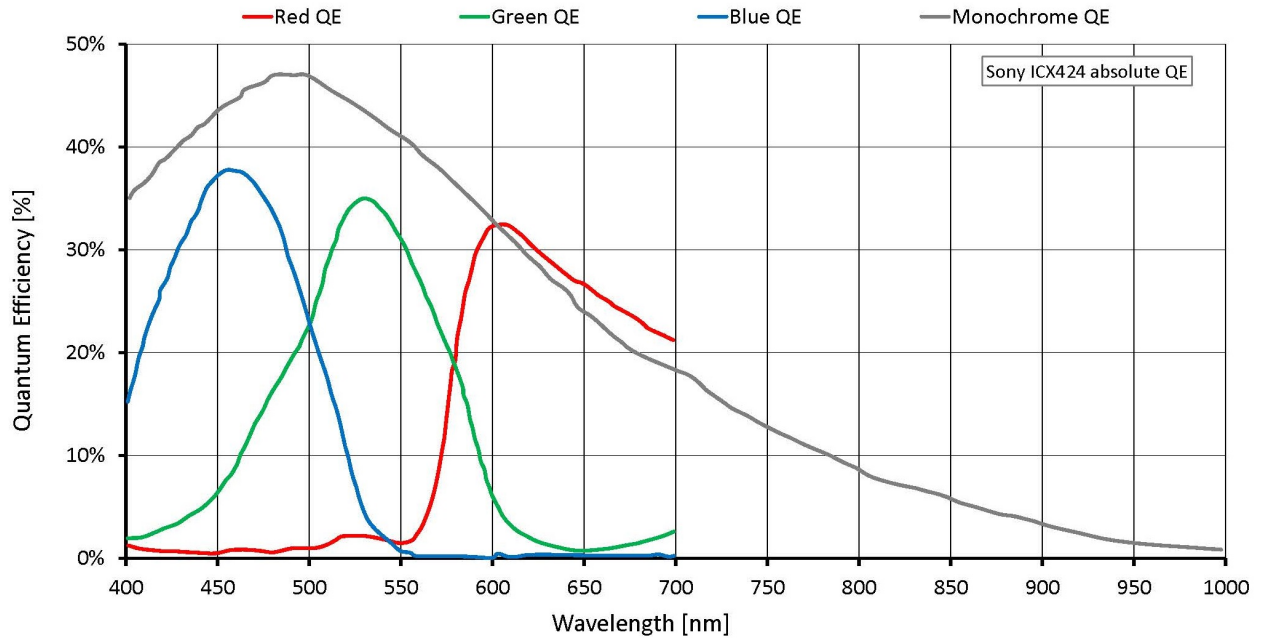
See the [Modular Concept](#) for lens mount, housing variants, optical filters, case design, and other modular options. See the [Customization and OEM Solutions webpage](#) for additional options.

Specifications

Prosilica GC 650	
Interface	IEEE 802.3 1000baseT
Resolution	659 (H) × 493 (V)
Sensor	Sony ICX424
Sensor type	CCD Progressive
Shutter mode	Global shutter
Sensor size	Type 1/3
Pixel size	7.4 μm × 7.4 μm
Lens mount (default)	C-Mount

Prosilica GC 650	
Max. frame rate at full resolution	90 fps
ADC	12 Bit
Image buffer (RAM)	16 MByte
Output	
Bit depth	8/12 Bit
Monochrome pixel formats	Mono8, Mono12, Mono12Packed
RGB color pixel formats	RGB8Packed, BGR8Packed
Raw pixel formats	BayerRG8, BayerRG12, BayerGR12Packed
General purpose inputs/outputs (GPIOs)	
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 +50 °C ambient (without condensation)
Power requirements (DC)	5 to 25 VDC
Power consumption	3 W at 12 VDC
Mass	99 g
Body dimensions (L × W × H in mm)	59 × 46 × 33 (including connectors)
Regulations	CE: 2014/30/EU (EMC), 2011/65/EU, including amendment 2015/863/EU (RoHS); FCC Class A; CAN ICES-003

Quantum efficiency



Features

Image optimization features:

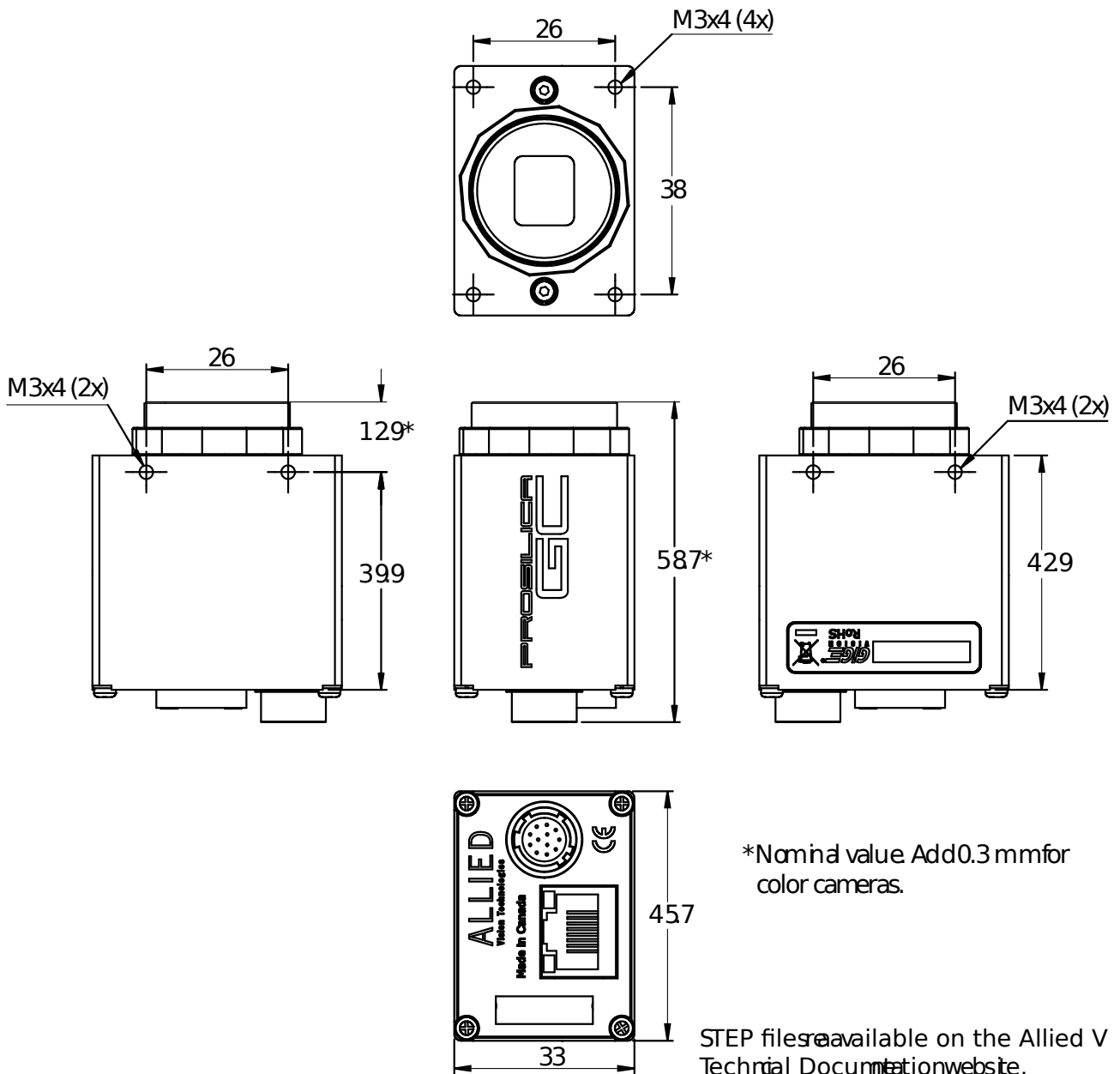
- Auto gain (manual gain control: 0 to 19 dB)
- Auto exposure (manual exposure control: 8 μ s to 116.8 s at 1 μ s increments)
- Auto white balance
- Binning (horizontal and vertical) (sum)
- Region of interest, DSP subregion (selectable region for auto features)

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