

# Prosilica GC 1020



- Sony ICX204 sensor
- 33 fps at full resolution
- Rugged housing
- Video-type auto iris

Compact performance

## Prosilica GC - Ultra-compact GigE Vision camera

Prosilica GC 1020 with Sony ICX204 runs 33.0 frames per second at 0.8 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.

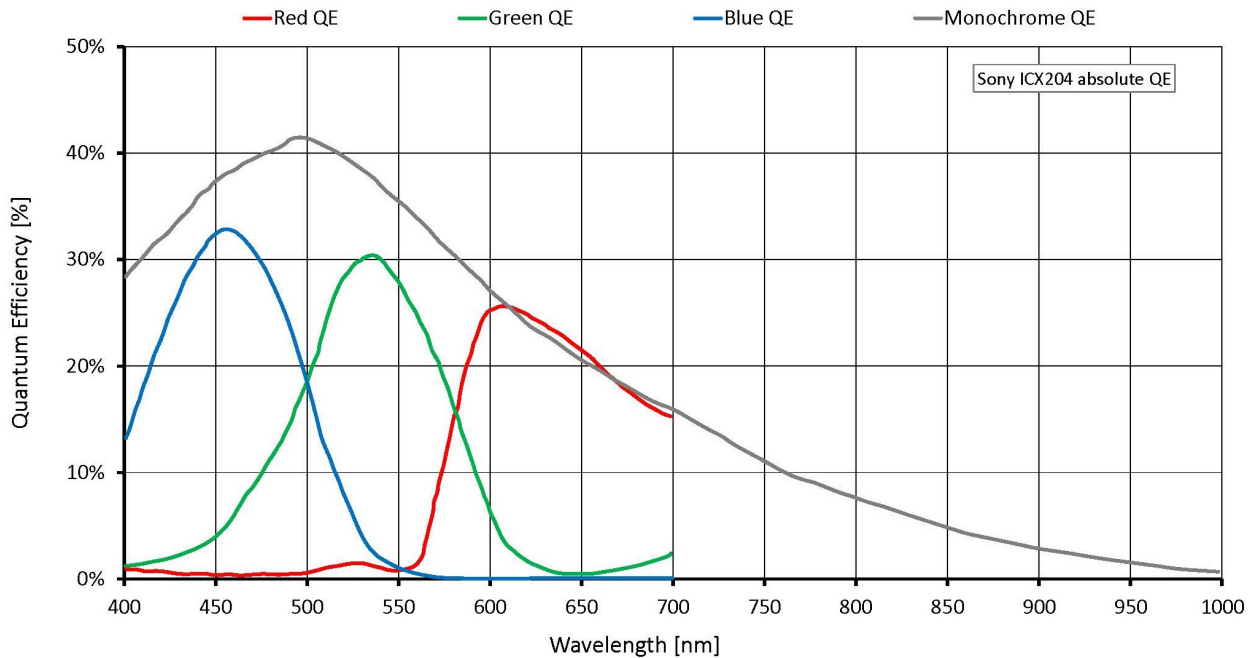
See the [Modular Concept](#) for lens mount, housing variants, optical filters, case design, and other modular options. See the [Customization and OEM Solutions webpage](#) for additional options.

## Specifications

Prosilica GC 1020	
Interface	IEEE 802.3 1000baseT
Resolution	1024 (H) × 768 (V)
Sensor	Sony ICX204
Sensor type	CCD Progressive
Shutter mode	Global shutter
Sensor size	Type 1/3
Pixel size	4.65 μm × 4.65 μm
Lens mount (default)	C-Mount
Max. frame rate at full resolution	33 fps

<b>Prosilica GC 1020</b>	
ADC	12 Bit
Image buffer (RAM)	16 MByte
<b>Output</b>	
Bit depth	8/12 Bit
Monochrome pixel formats	Mono8, Mono12, Mono12Packed
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 +50 °C ambient (without condensation)
Power requirements (DC)	5 to 25 VDC
Power consumption	2.9 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:

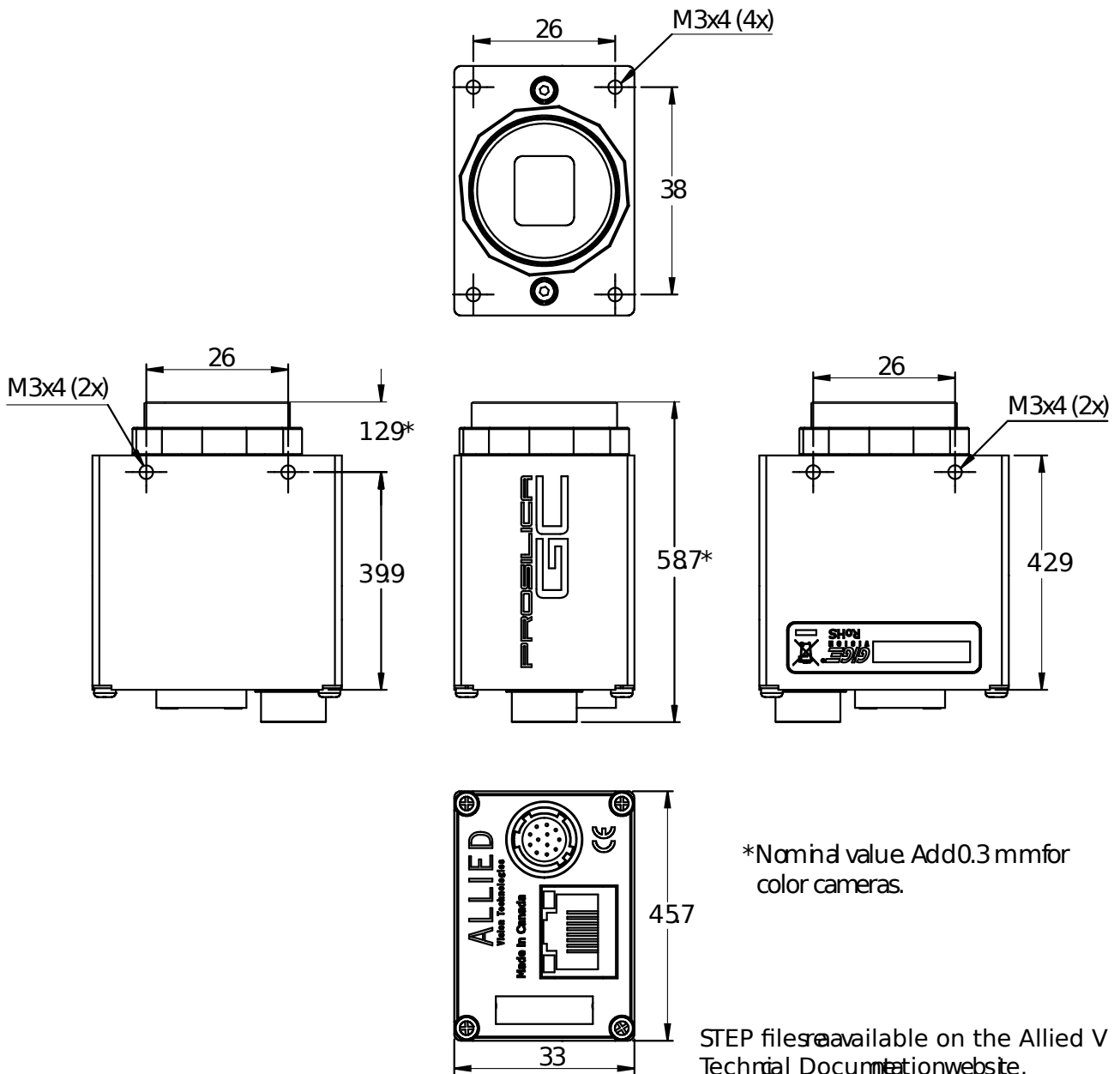
- Auto gain (manual gain control: 0 to 22 dB)
- Auto exposure (manual exposure control: 8  $\mu$ s to 116.8 s @ 1  $\mu$ s increments)
- Auto white balance
- Binning (horizontal and vertical) (sum)
- Region of interest, DSP subregion (selectable region for auto features)

### 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 GC1020 is ideal for a wide range of applications including:

- Industrial inspection
- Machine vision
- Ophthalmology
- Aeronautical and aerospace
- Public security
- Surveillance
- Traffic imaging
- OEM applications