

Prosilica GC

1290



- Sony ICX445 sensor
- 33 fps @ full resolution
- Rugged housing
- Video-type auto iris

Description

Megapixel CCD camera with Sony EXview sensor, 33 frames per second

Prosilica#GC1290/GC1290C is a 1.2 Megapixel camera with GigE Vision Gigabit Ethernet interface. This camera incorporates a high-quality Sony ICX445 CCD sensor with EXview HAD CCD technology providing excellent monochrome and color image quality.

Note: This web page reflects the Prosilica GC hardware revision D model. Please refer to the Prosilica GC Technical Manual V2.2.0 or later for more information on hardware revision changes.#

Options:

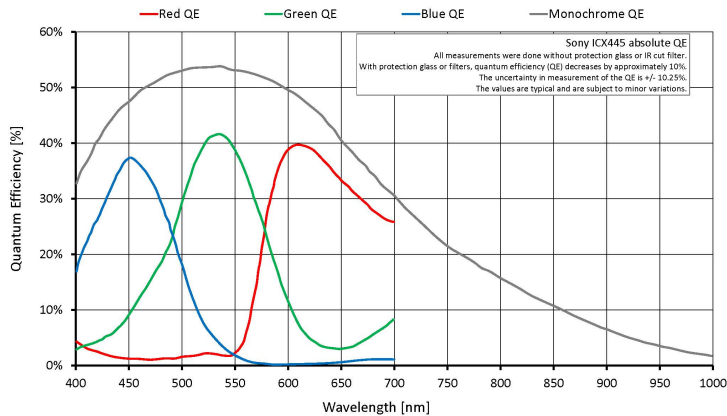
- CS-Mount
- Optical filters (IR cut filter/Protection glass)

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

Specifications

Prosilica GC	1290
Interface	IEEE 802.3 1000baseT
Resolution	1280 (H) × 960 (V)
Sensor	Sony ICX445
Sensor type	CCD Progressive
Cell size	3.75 μm x 3.75 μm
Lens mount	C-Mount
Max frame rate at full resolution	33 fps
ADC	12 bit
Image buffer (RAM)	64 MByte
Output	

Prosilica GC	1290
Bit depth	8/12 bit
Mono modes	Mono8, Mono12, Mono12Packed
Color modes RGB	RGB8Packed, BGR8Packed
Raw modes	BayerRG8, BayerRG12, BayerRG12Packed
General purpose inputs/outputs (GPIOs)	
TTL I/Os	1 input, 1 output
Opto-isolated I/Os	1 input, 1 output
RS-232	1
Operating conditions/dimensions	
Operating temperature	0 °C to +50 °C ambient (without condensation)
Power requirements (DC)	5 to 25 VDC
Power consumption (@12 V)	3 W
Mass	106 g
Body dimensions (L × W × H in mm)	59 × 46 × 33 (including connectors)
Regulations	CE, RoHS, REACH, WEEE, FCC, ICES



Features

Image optimization features:

- Auto gain (manual gain control: 0 to 24 dB)
- Auto exposure (manual exposure control: #12 #s to 78.5 s#@ 1 #s increments)
- Auto white balance

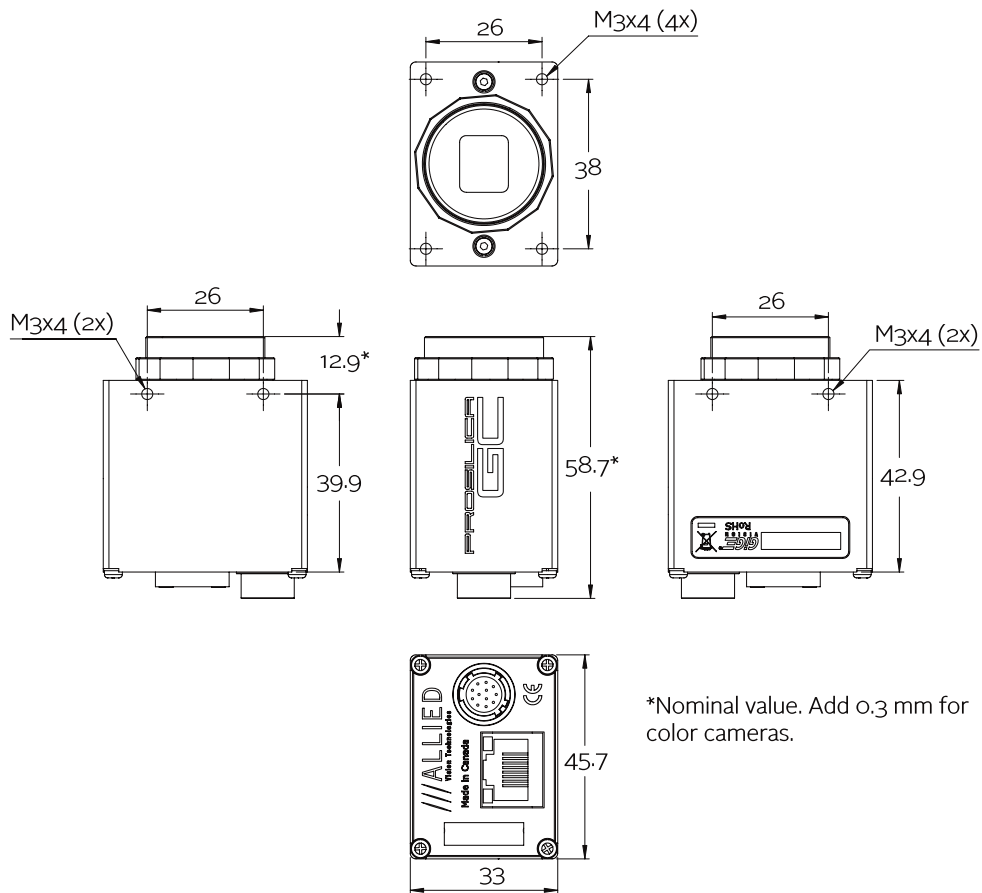


- Binning (horizontal and vertical)
- Black level (Offset)
- Gamma correction
- Hue, saturation, color transformation (color model only)
- Look-up tables (LUTs)
- Region of interest (ROI), DSP subregion (selectable ROI for auto features)

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
- Storable user sets (3)
- StreamBytesPerSecond (easy bandwidth control)
- StreamHoldCapacity (Up to 52 frames at full resolution)
- Sync out modes: Trigger ready, input, exposing, readout, imaging, strobe, GPO
- Temperature monitoring (mainboard only)

Technical drawing





Applications

Prosilica#GC1290/GC1290C is ideal#for a wide range of applications including:

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