

- Versatile temperature range for extreme environments
- IEEE 1588 PTP
- Power over Ethernet
- P-Iris and DC-Iris lens control

## Description

1.2 Megapixel machine vision camera for extreme environments

Prosilica GT1290/GT1290C is a 1.2 Megapixel camera with a GigE Vision Gigabit Ethernet interface. This camera incorporates the high-quality Type 1/3 (6.0 mm diagonal) Sony ICX445 EXview HAD CCD sensor providing excellent monochrome and color image quality. It is a robust camera designed to operate in extreme environments and fluctuating lighting conditions. This camera offers Precise iris lens control allowing users to fix the aperture size to optimize depth of field, exposure, and gain without the need for additional control elements. By default monochrome models ship with no optical filter and color models ship with an IRC30 IR cut filter.

Options:

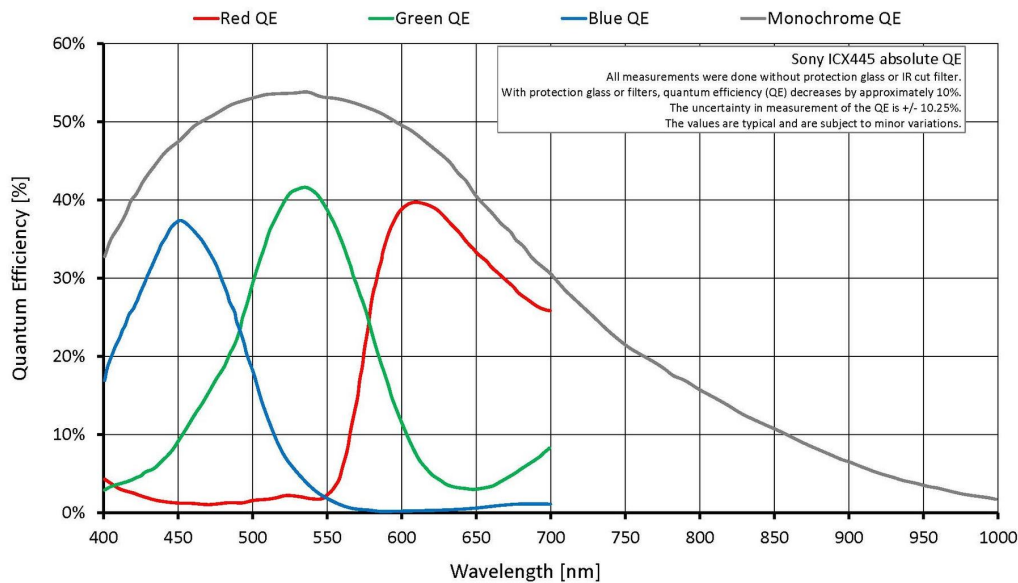
- Various optical filter and lens mount options

See the Modular Concept for lens mounts and optical filter options.

## Specifications

Prosilica GT	1290
Interface	IEEE 802.3 1000BASE-T, IEEE 802.3af (PoE)
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	33.3 fps
ADC	14 bit

<b>Prosilica GT</b>	<b>1290</b>
Image buffer (RAM)	128 MByte
<b>Output</b>	
Bit depth	14 (monochrome); 12 (color) bit
Mono modes	Mono8, Mono12, Mono12Packed, Mono14
Color modes YUV	YUV411Packed, YUV422Packed, YUV444Packed
Color modes RGB	RGB8Packed, BGR8Packed
Raw modes	BayerRG8, BayerRG12, BayerRG12Packed
<b>General purpose inputs/outputs (GPIOs)</b>	
TTL I/Os	1 input, 2 outputs
Opto-isolated I/Os	1 input, 2 outputs
RS-232	1
<b>Operating conditions/dimensions</b>	
Operating temperature	-20 °C to +65 °C ambient (without condensation)
Power requirements (DC)	7 to 25 VDC; PoE
Power consumption (@12 V)	2.9 W @ 12 VDC; 3.5 W PoE
Mass	211 g
Body dimensions (L × W × H in mm)	86 × 53.3 × 33 (including connectors)
Regulations	CE, RoHS, REACH, WEEE, FCC, ICES





## Features

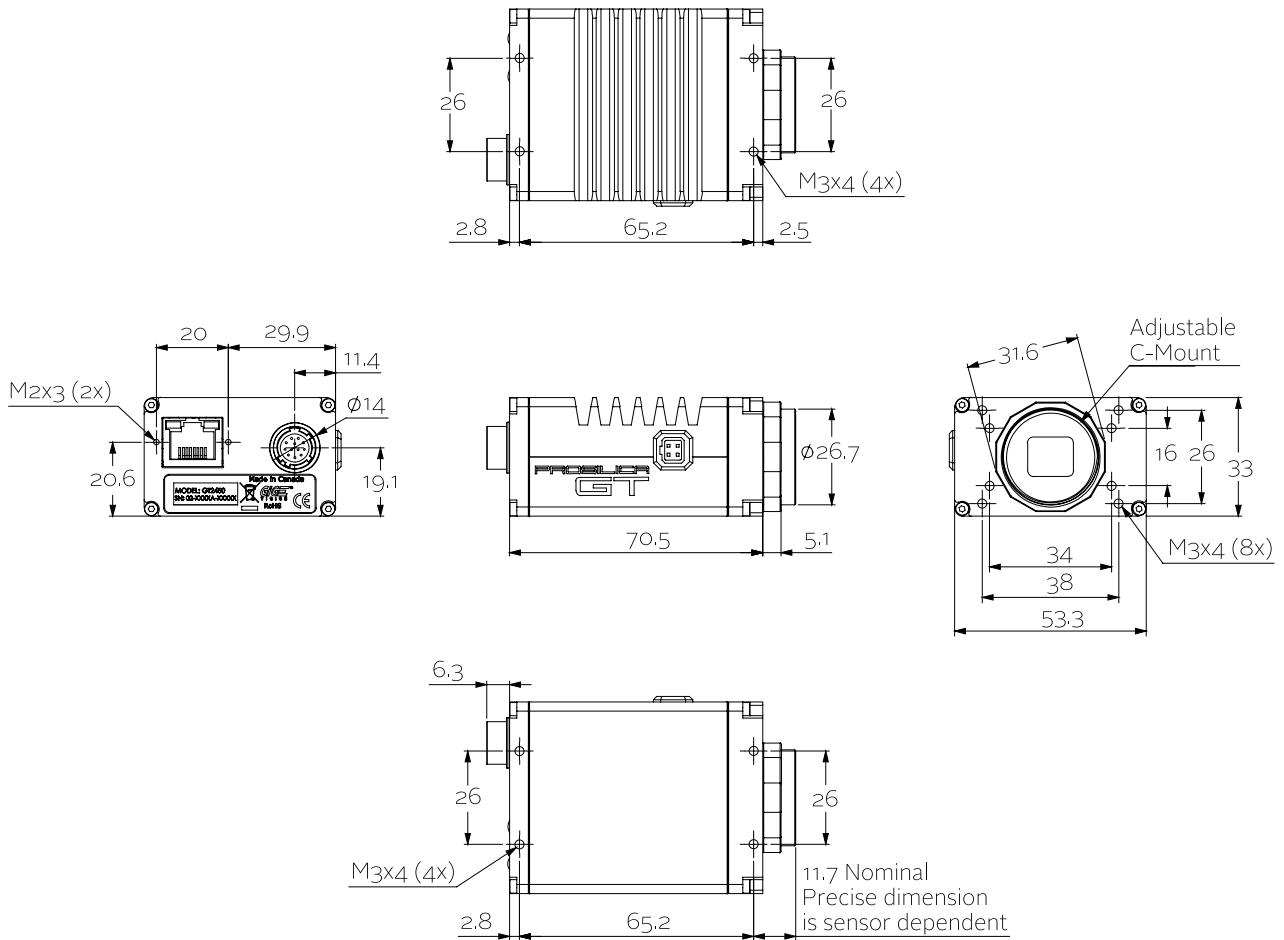
Image optimization features:

- Auto gain (manual gain control: 0 to 33 dB; 1 dB increments)
- Auto exposure (manual exposure control: 12  $\mu$ s to 77.3 s; 1  $\mu$ s increments)
- Auto white balance (color models only)
- Binning (horizontal and vertical)
- Color correction, hue, saturation (color models only)
- Decimation X/Y
- Gamma correction
- Look-up tables (LUTs) (3)
- Region of interest (ROI), separate ROI for auto features

Camera control features:

- P-Iris and DC-Iris lens control
- Event channel
- Image chunk data
- IEEE 1588 Precision Time Protocol (PTP)
- RS232
- Storable user sets
- StreamBytesPerSecond (easy bandwidth control)
- StreamHold
- Sync out modes: Trigger ready, input, exposing, readout, imaging, strobe, GPO
- Temperature monitoring (main board and sensor board)
- Trigger over Ethernet (ToE) Action Commands

## Technical drawing





## Applications

**Prosilica GT1290/GT1290C is ideal for a wide range of applications including:**

- Outdoor imaging
- Traffic imaging / Intelligent Traffic Systems (ITS)
- Public security and surveillance
- Industrial inspection
- Machine vision
- Military and space applications