

Prosilica GC

780



- Sony ICX415 sensor
- High frame rate
- Rugged housing
- Video-type auto iris

Description

Sony ICX415 CCD sensor, GigE Vision, 64 frames per second

Prosilica GC780 is an ultra-compact, economically priced, machine vision camera with a GigE Vision compliant Gigabit Ethernet interface. This camera incorporates the high quality Sony ICX415 CCD sensor with HAD technology. At full resolution, this camera has a frame rate of 64 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.

Options:

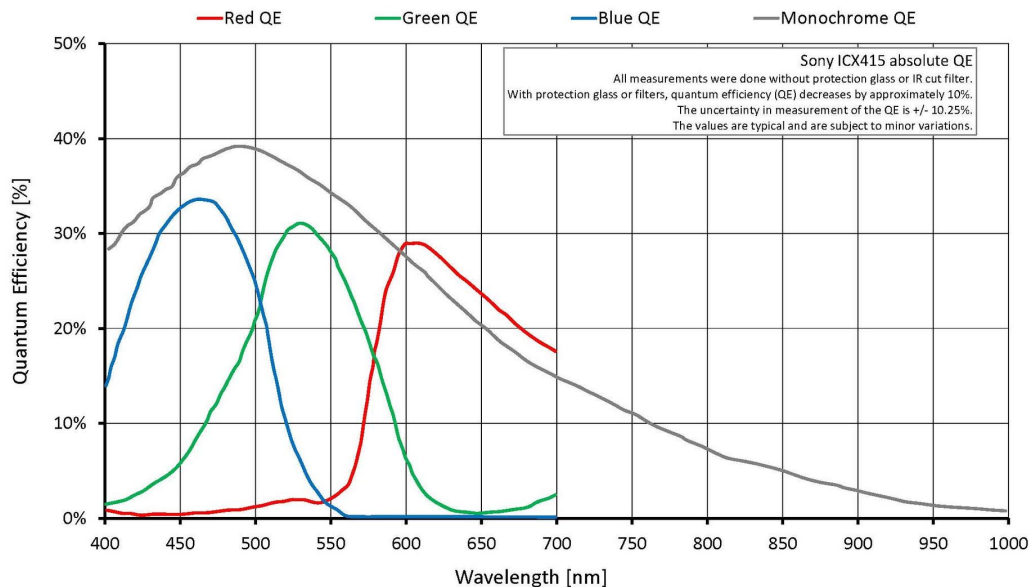
- CS-Mount
- Optical filters (IR cut filter/Protection glass)

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

Specifications

Prosilica GC	780
Interface	IEEE 802.3 1000baseT
Resolution	782 (H) × 582 (V)
Sensor	Sony ICX415
Sensor type	CCD Progressive
Sensor size	Type 1/2
Pixel size	8.3 μm × 8.3 μm
Lens mount (default)	C-Mount
Max. frame rate at full resolution	63.9 fps
ADC	12 bit

Prosilica GC	780
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	2.8 W at 12 VDC
Mass	100 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





Features

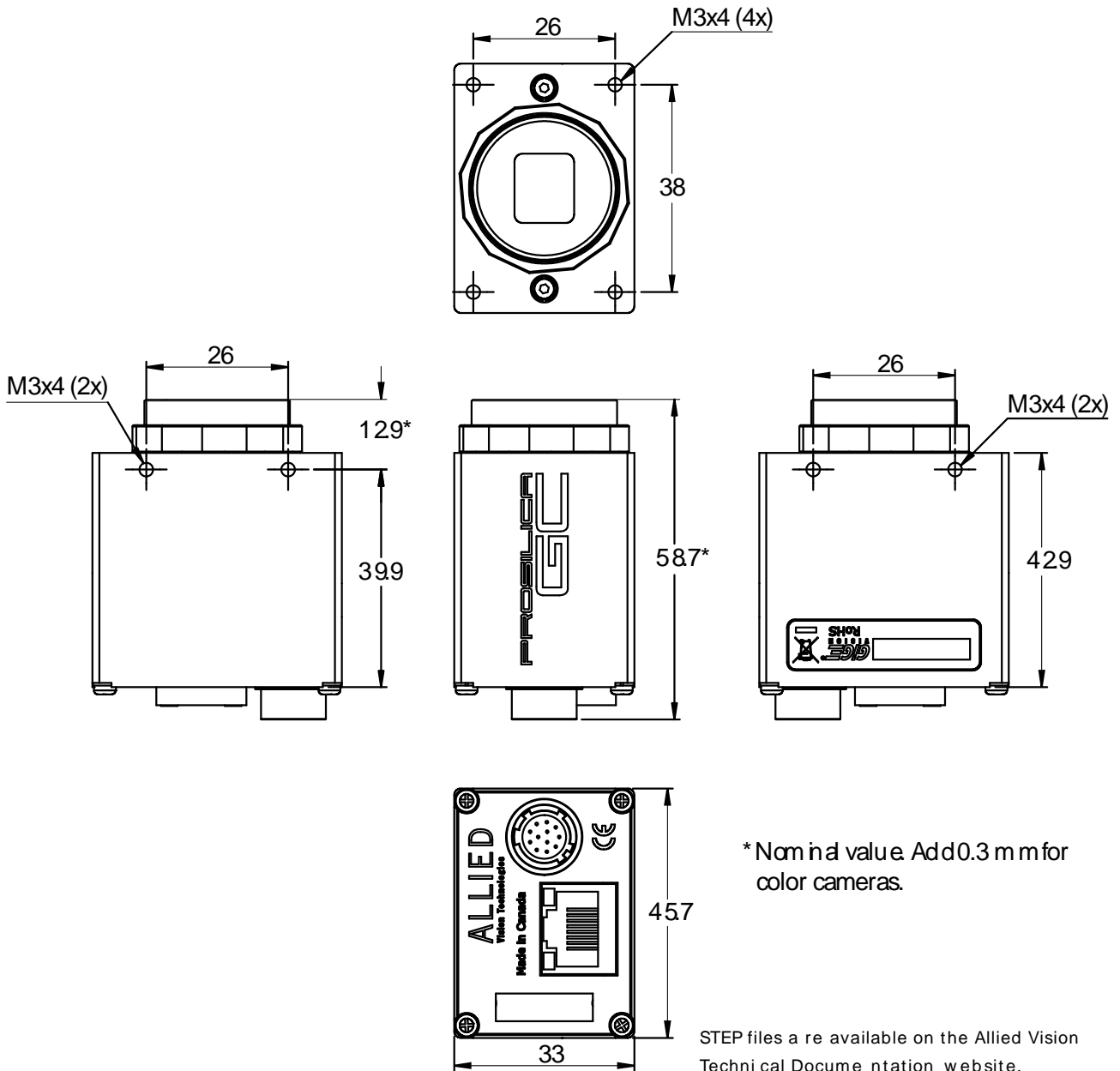
Image optimization features:

- Auto gain (manual gain control: 0 to 26 dB for GC780, 0 to 23 dB for GC780C)
- Auto exposure (manual exposure control: 8 μ s to 116.8 s @ 1 μ s increments)
- Auto white balance
- Binning (horizontal and vertical) (sum)
- 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 (PTP)
- 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 GC780 is ideal for a wide range of applications including:

- Industrial inspection
- Machine vision
- Optical character recognition
- Traffic imaging
- Robotics
- OEM applications