![Allied Vision logo]

Prosilica GC
750

- ON Semiconductor MT9V022 sensor
- 67 fps @ full resolution
- Rugged housing
- Video-type auto iris

Description

Low cost Gigabit Ethernet camera, 67 frames per second

Prosilica GC750 is an ultra-compact, economically priced, machine vision camera with a GigE Vision compliant Gigabit Ethernet interface. The ON Semiconductor (Aptina) MT9V022 CMOS sensor is suitable for applications where excellent near-infrared sensitivity and resistance to blooming are required. At full resolution, this camera has a frame rate of 67 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.
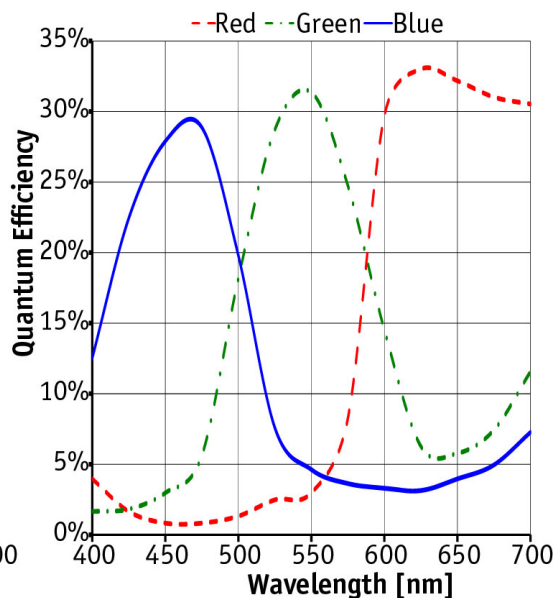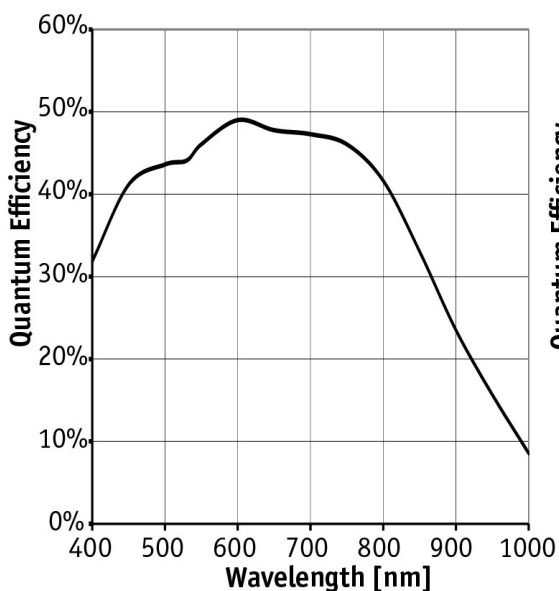
Options:

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

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

Specifications

Prosilica GC	750
Interface	IEEE 802.3 1000baseT
Resolution	752 (H) × 480 (V)
Sensor	ON Semi MT9V022
Sensor type	CMOS
Sensor size	Type 1/3
Pixel size	6 µm x 6 µm
Lens mount (default)	C-Mount
Max. frame rate at full resolution	67 fps

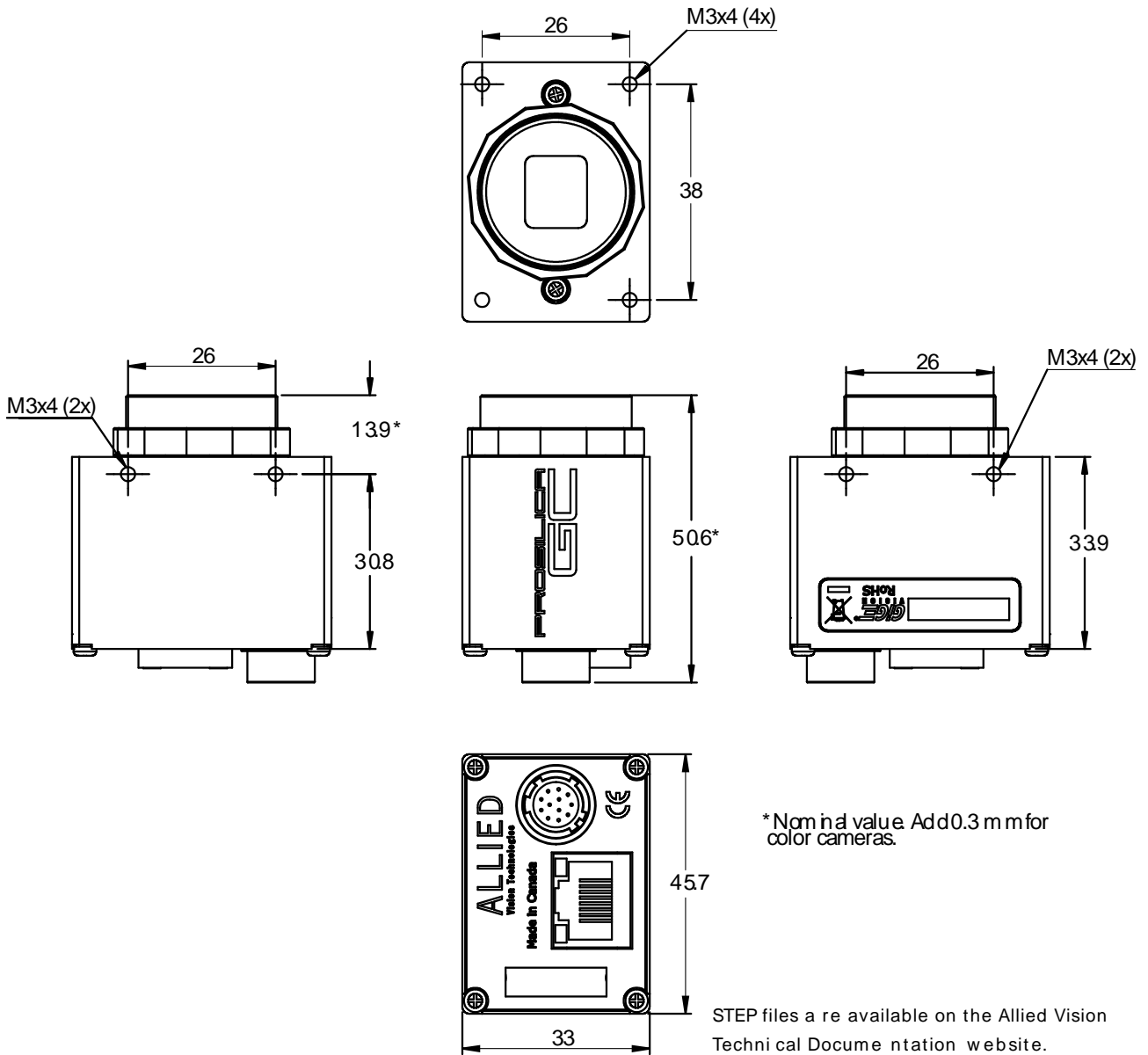| Prosilica GC	750
ADC	10 bit
Image buffer (RAM)	16 MByte
Output	
Bit depth	8/10 bit
Monochrome pixel formats	Mono8, Mono10
RGB color pixel formats	RGB8Packed, BGR8Packed, RGBA8Packed, BGRA8Packed
Raw pixel formats	BayerBG8, BayerBG10
General purpose inputs/outputs (GPIOs)	
TTL I/Os	1 input, 1 output
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	2.2 W at 12 VDC
Mass	85 g
Body dimensions (L × W × H in mm)	51 × 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 48 dB)
- Auto exposure (manual exposure control: 30 µs to 60 s @ 1 µs increments)
- Auto white balance
- 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

26

M3x4 (4x)

38

26

M3x4 (2x)

M3x4 (2x)

13.9*

30.8

50.6*

26

M3x4 (2x)

33.9

ALLIED
Video Technologie
Made In Canada

45.7

33

* Nominal value. Add 0.3 mm for color cameras.

STEP files are available on the Allied Vision Technical Documentation website.

Applications

Prosilica GC750 is ideal for a wide range of applications including:

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