

Prosilica GE

1660



- 34 fps @ full resolution
- ON Semi KAI-02050 sensor
- Galvanically isolated I/O
- Various lens mount options

Description

1.9 megapixel CCD camera with GigE Vision interface, 34 frames per second

Prosilica GE1660/GE1660C is a high-resolution CCD camera with Gigabit Ethernet interface (GigE Vision#). This camera incorporates a high-quality 2/3" ON Semiconductor KAI-02050 CCD sensor providing excellent monochrome and color image quality in 4:3 format. This camera runs 34 frames per second at full resolution and even faster with region of interest readout. By default monochrome models ship with no optical filter and color models ship with an IRC30 IR cut filter.

Options:

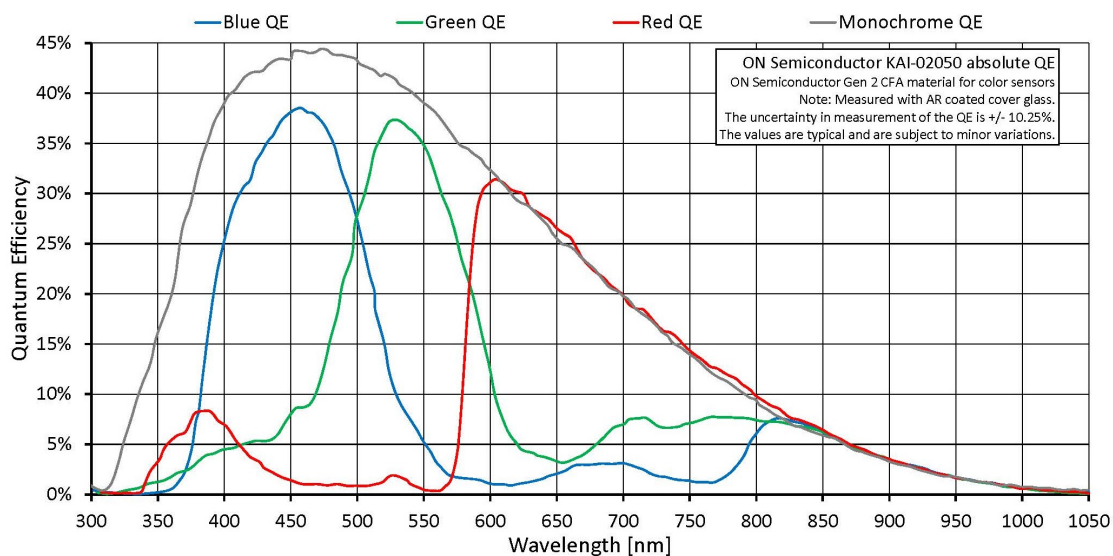
- Optical filters (IR cut filter/Protection glass)
- Taped cover glass with or without microlenses
- Various lens mounts

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

Specifications

Prosilica GE	1660
Interface	IEEE 802.3 1000baseT
Resolution	1600 (H) × 1200 (V)
Sensor	ON Semi KAI-02050
Sensor type	CCD Progressive
Cell size	5.5 μm x 5.5 μm
Lens mount	C-Mount
Max frame rate at full resolution	34 fps
ADC	12 bit
Image buffer (RAM)	32 MByte

Prosilica GE	1660
	Output
Bit depth	8/12 bit
Mono modes	Mono8, Mono12, Mono12Packed
Color modes RGB	RGB8Packed, BGR8Packed, RGBA8Packed, BGRA8Packed, RGB12Packed
Raw modes	BayerGR8, BayerGR12, BayerGR12Packed
General purpose inputs/outputs (GPIOs)	
TTL I/Os	1 input, 3 outputs (with galvanic isolation)
RS-232	1
Operating conditions/dimensions	
Operating temperature	0 °C to +50 °C ambient (without condensation)
Power requirements (DC)	5 to 24 VDC
Power consumption (@12 V)	5 W
Mass	178 g
Body dimensions (L × W × H in mm)	80 × 51 × 39 (including connectors)
Regulations	CE, RoHS, REACH, WEEE, FCC, ICES



Features

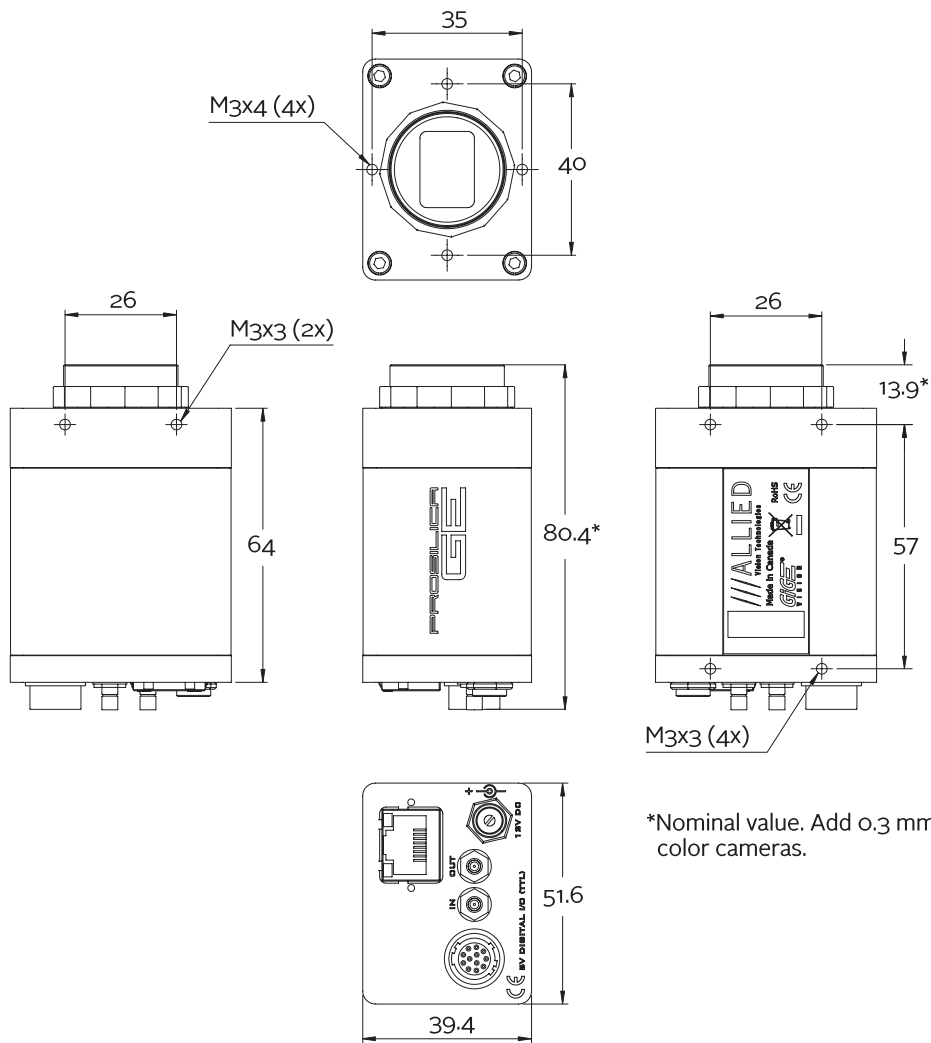
Prosilica GE1660/GE1660C features include:

- Region of interest (ROI), DSP subregion (selectable ROI for auto features)
- Binning (Sum)



- Auto gain (manual gain control: 0 to 34 dB)
- Auto exposure (manual exposure controls: 10 #s to 53.7 s)
- Auto white balance
- StreamBytesPerSecond (easy bandwidth control)
- Stream hold
- Sync out modes: Trigger ready, input, exposing, readout, imaging, strobe, GPO
- Global shutter (digital shutter)
- Recorder and Multiframe acquisition modes
- Event channel
- Image chunk data
- Storable user sets

Technical drawing



*Nominal value. Add 0.3 mm for color cameras.



Applications

Prosilica GE1660/GE1660C is ideal for a wide range of applications including:

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