Allied Vision

Prosilica GC

655

- Sony ICX414 sensor
- 90 fps at full resolution
- Rugged housing
- Video-type auto iris

Very Small VGA CCD camera, 90 frames per second

Prosilica GC655 is a fast, VGA resolution, high-performance machine vision camera with a GigE Vision compliant Gigabit Ethernet interface. The 1/2" Sony ICX414 CCD sensor with HAD technology has excellent image quality and sensitivity. At full resolution, this camera has a frame rate of 90 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 a Type IRC30 IR cut filter.

Hardware options:

- Various lens mounts: Select between C-Mount and CS-Mount
- Various optical filters: Select between B 270 ASG protection glass Type IRC30 IR pass filter.

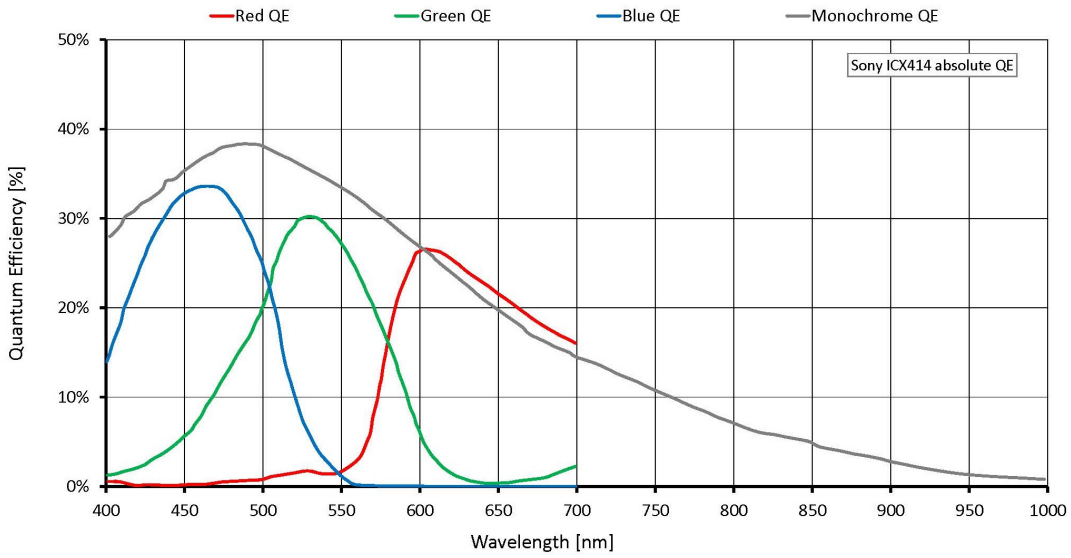
See the Modular Concept for lens mount and optical filter options.

Specifications

Prosilica GC	**655**
Interface	IEEE 802.3 1000baseT
Resolution	659 (H) × 493 (V)
Sensor	Sony ICX414
Sensor type	CCD Progressive
Shutter mode	Global shutter
Sensor size	Type 1/2
Pixel size	9.9 µm × 9.9 µm
Lens mount (default)	C-Mount
Max. frame rate at full resolution	90 fps

Prosilica GC	655
ADC	12 Bit
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	3 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

Quantum efficiency



Features

Image optimization features:

- Auto gain (manual gain control: 0 to 22 dB)
- Auto exposure (manual exposure control: 8 µs to 116.8 s at 1 µs increments)
- Auto white balance
- Binning (horizontal and vertical) (sum)
- Region of interest, DSP subregion (selectable region 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
- Five storable user sets
- StreamBytesPerSecond (bandwidth control)
- Stream hold
- Sync out modes: Trigger ready, input, exposing, readout, imaging, strobe, GPO

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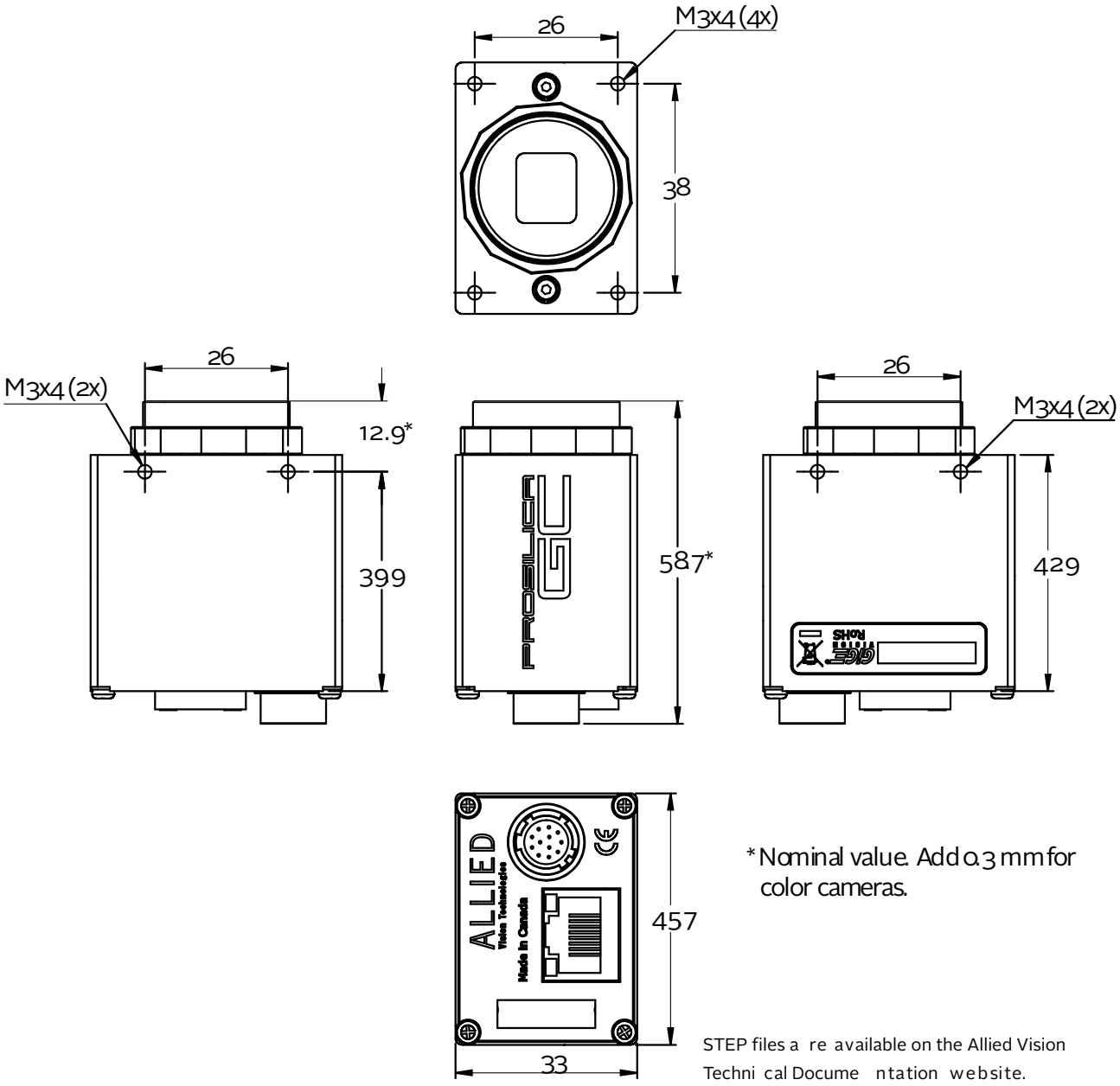
Technical drawing



*Nominal value. Add 0.3 mm for color cameras.

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

Applications

Prosilica GC655 is ideal for a wide range of applications including:

- Machine vision
- Industrial inspection
- Public security
- Traffic monitoring
- Robotics