

# Prosilica GC

## 1380H



- GigE Vision interface
- Rugged housing
- IEEE 1588 PTP
- Auto iris

### Compact performance

#### Prosilica GC - Ultra-compact GigE Vision camera

Prosilica GC 1380H with Sony ICX285 runs 30 frames per second at 1.4 MP resolution.

The Prosilica GC is a GigE camera with an ultra-compact, lightweight housing, fast frame rates, and auto-iris control. It offers a large choice of CCD and CMOS sensors up to 5 Megapixels and fits a wide range of applications.

Easy software integration with [Allied Vision's Vimba Suite](#) and compatibility to the most popular third party image-processing libraries.

See the [Modular Concept](#) for lens mount, housing variants, optical filters, case design, and other modular options. See the [Customization and OEM Solutions webpage](#) for additional options.

## Specifications

|                                    |                       |
|------------------------------------|-----------------------|
| Interface                          | IEEE 802.3 1000BASE-T |
| Resolution                         | 1360 (H) × 1024 (V)   |
| Sensor                             | Sony ICX285           |
| Sensor type                        | CCD Progressive       |
| Shutter mode                       | GS (Global shutter)   |
| Sensor size                        | Type 2/3              |
| Pixel size                         | 6.45 µm × 6.45 µm     |
| Lens mount (default)               | C-Mount               |
| Max. frame rate at full resolution | 30 fps                |
| ADC                                | 12 Bit                |
| Image buffer (RAM)                 | 64 MByte              |

### Imaging performance

Imaging performance data is based on the evaluation methods in the EMVA 1288 Release 3.1 standard for characterization of image sensors and cameras. Measurements are typical values for monochrome models measured at full resolution without optical filter.

|                                |                      |
|--------------------------------|----------------------|
| Quantum efficiency at 529 nm   | 54 %                 |
| Temporal dark noise            | 17.5 e <sup>-</sup>  |
| Saturation capacity            | 14000 e <sup>-</sup> |
| Dynamic range                  | 57.9 dB              |
| Absolute sensitivity threshold | 18.0 e <sup>-</sup>  |

### Output

|                                 |                                      |
|---------------------------------|--------------------------------------|
| Bit depth                       | 8-bit or 12-bit                      |
| Monochrome pixel formats        | Mono8, Mono12, Mono12Packed          |
| RGB color pixel formats         | RGB8Packed, BGR8Packed               |
| Raw color pixel formats (Bayer) | BayerRG8, BayerRG12, BayerRG12Packed |

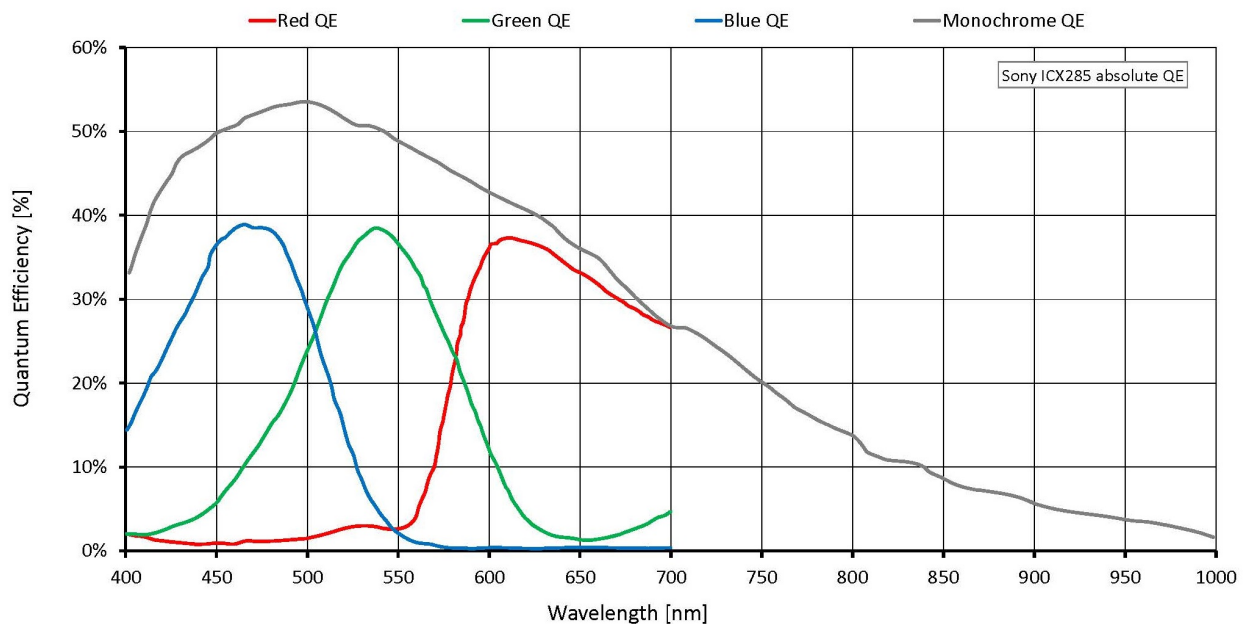
### General purpose inputs/outputs (GPIOs)

|                    |                   |
|--------------------|-------------------|
| TTL I/Os           | 1 input, 1 output |
| Opto-isolated I/Os | 1 input, 1 output |

### Operating conditions/dimensions

|                                   |                                               |
|-----------------------------------|-----------------------------------------------|
| Operating temperature             | 0 °C to +50 °C ambient (without condensation) |
| Power requirements (DC)           | 5 to 25 VDC                                   |
| Power consumption                 | 3.5 W at 12 VDC                               |
| Mass                              | 111 g                                         |
| Body dimensions (L × W × H in mm) | 59 × 46 × 33 (including connectors)           |

### Quantum efficiency



## Features

### Image control: Auto

- Auto exposure
- Auto gain
- Auto white balance (color models)

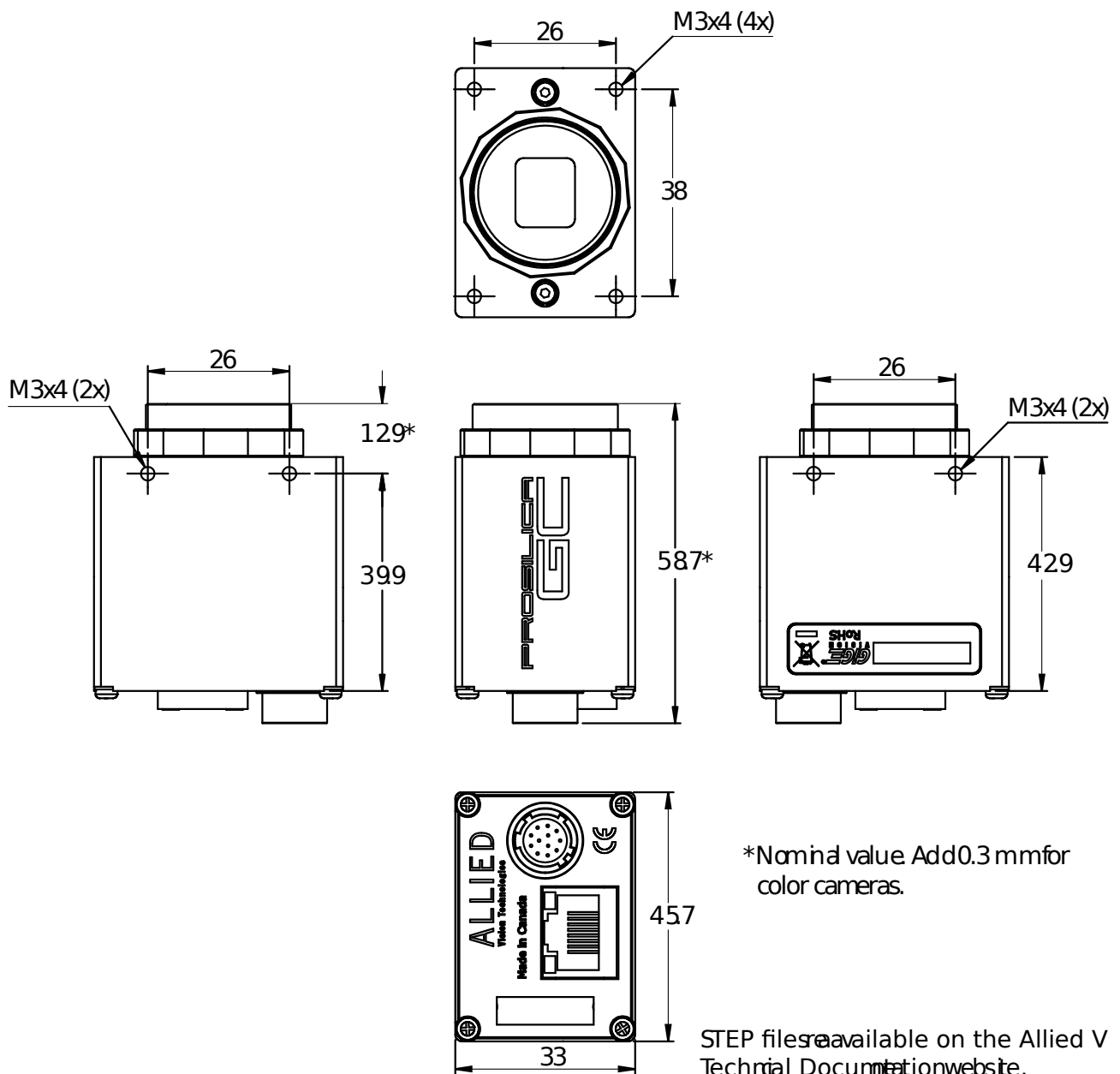
### Image control: Other

- Binning
- Black level
- Color transformation (incl. hue, saturation; color models)
- Gamma
- LUT (look-up table)
- ROI (region of interest)

### Camera control

- Acquisition frame rate
- Auto iris
- Bandwidth control
- Event channel
- Firmware update in the field
- I/O and trigger control
- Image chunk data
- PTP (IEEE 1588 Precision Time Protocol)
- Stream hold
- Temperature monitoring
- User sets

## Technical drawing



## Applications

Prosilica GC1380H is ideal for a wide range of applications including:

- Industrial inspection
- Machine vision
- Ophthalmology
- Microscopy
- Fluorescence
- Aeronautical and aerospace
- Public security
- Surveillance
- Traffic imaging