

Prosilica GC

1020



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

Compact performance

Prosilica GC - Ultra-compact GigE Vision camera

Prosilica GC 1020 with Sony ICX204 runs 33.0 frames per second at 0.8 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 1000baseT |
| Resolution | 1024 (H) × 768 (V) |
| Sensor | Sony ICX204 |
| Sensor type | CCD Progressive |
| Shutter mode | GS (Global shutter) |
| Sensor size | Type 1/3 |
| Pixel size | 4.65 μm × 4.65 μm |
| Lens mount (default) | C-Mount |
| Max. frame rate at full resolution | 33 fps |
| ADC | 12 Bit |
| Image buffer (RAM) | 16 MByte |

Output

| | |
|--------------------------|--------------------------------------|
| Bit depth | 8-bit or 12-bit |
| Monochrome pixel formats | Mono8, Mono12, Mono12Packed |
| RGB color pixel formats | RGB8Packed, BGR8Packed |
| Raw pixel formats | BayerRG8, BayerRG12, BayerGR12Packed |

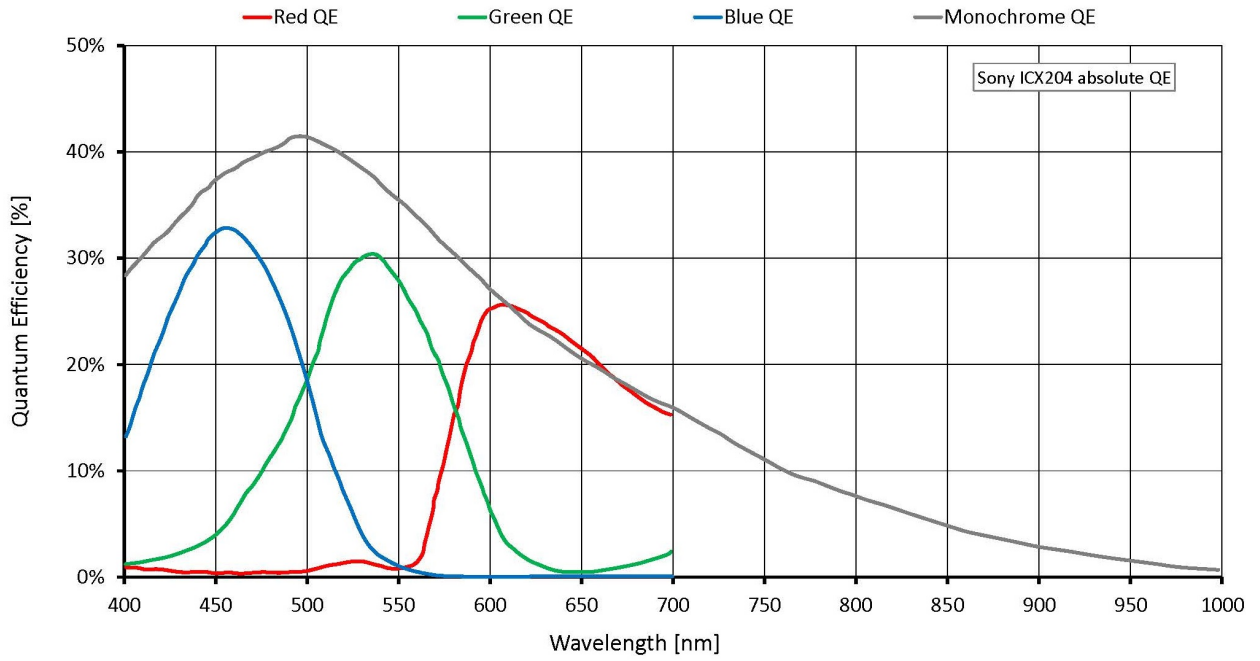
General purpose inputs/outputs (GPIOs)

| | |
|--------------------|-------------------|
| 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 | 2.9 W at 12 VDC |
| Mass | 99 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)

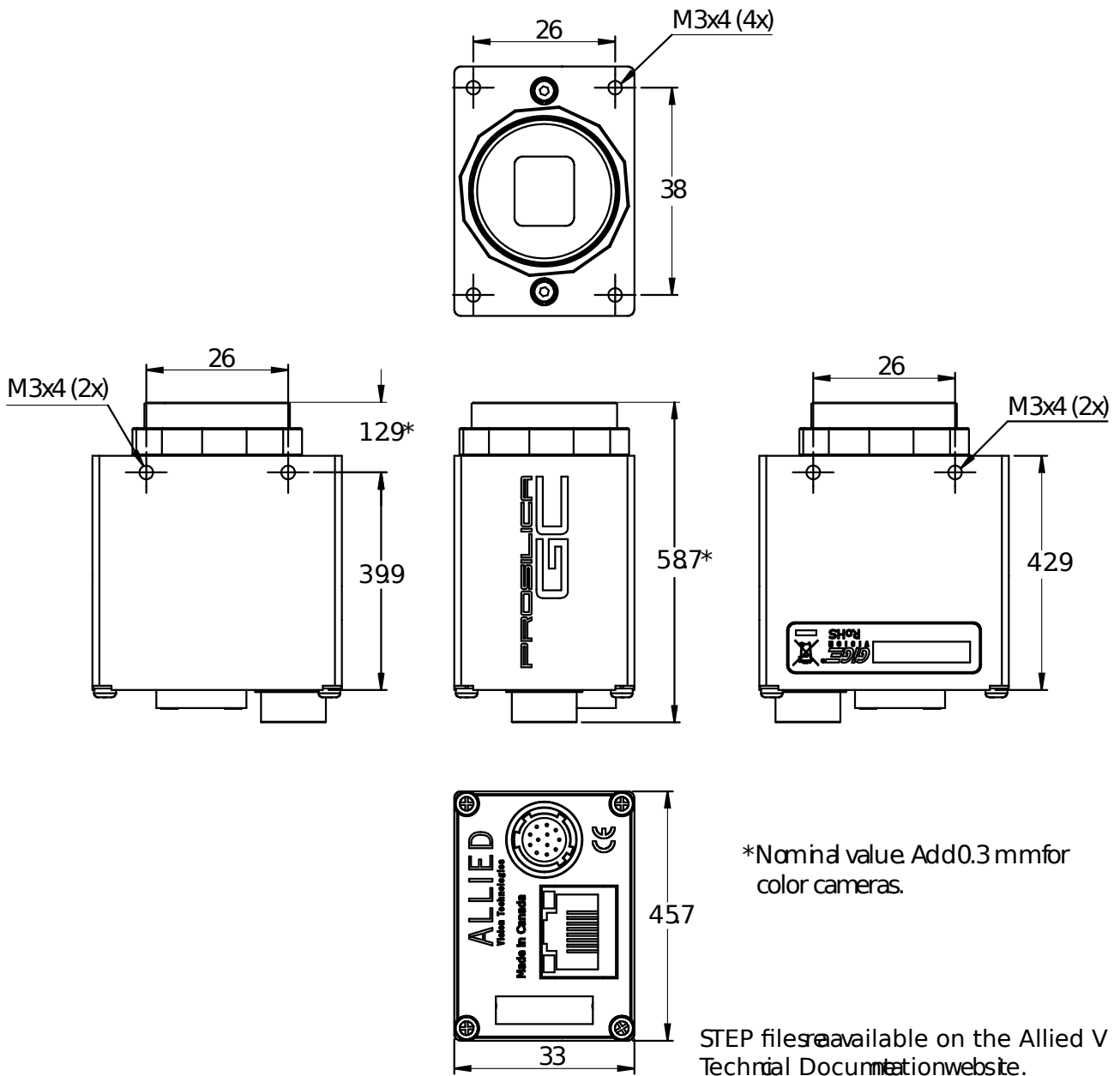
Image control: Other

- Binning
- 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

Technical drawing



Applications

Prosilica GC1020 is ideal for a wide range of applications including:

- Industrial inspection
- Machine vision
- Ophthalmology
- Aeronautical and aerospace
- Public security

- Surveillance
- Traffic imaging
- OEM applications