



- Sony ICX204 sensor
- 33 fps @ full resolution
- Rugged housing
- Video-type auto iris

Description

XGA resolution ultra-compact CCD camera with GigE Vision

Prosilica GC1020 is a 0.8 Megapixel camera with a GigE Vision compliant Gigabit Ethernet interface. This camera incorporates the high quality Sony ICX204 CCD sensor with HAD technology providing excellent monochrome and color image quality. At full resolution, this camera has a frame rate of 33 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:

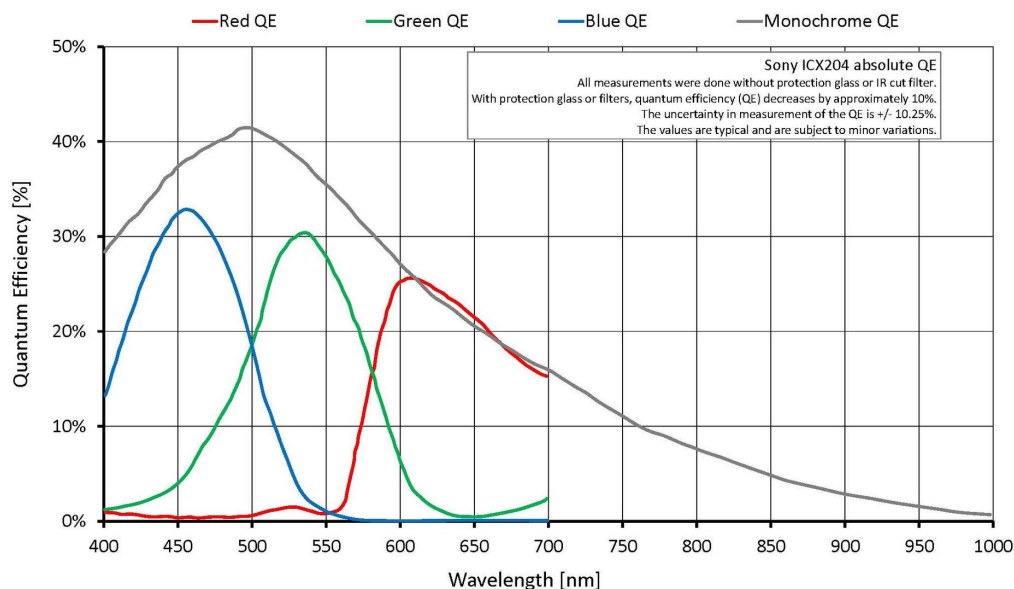
- CS-Mount
- Optical filters (IR cut filter/Protection glass)

See the [Modular Concept](#) for lens mount and optical filter options.

Specifications

| Prosilica GC | 1020 |
|------------------------------------|----------------------|
| Interface | IEEE 802.3 1000baseT |
| Resolution | 1024 (H) × 768 (V) |
| Sensor | Sony ICX204 |
| Sensor type | CCD Progressive |
| 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 |

| | |
|---|---|
| Prosilica GC | 1020 |
| 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 | 2.9 W at 12 VDC |
| Mass | 99 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 |





Features

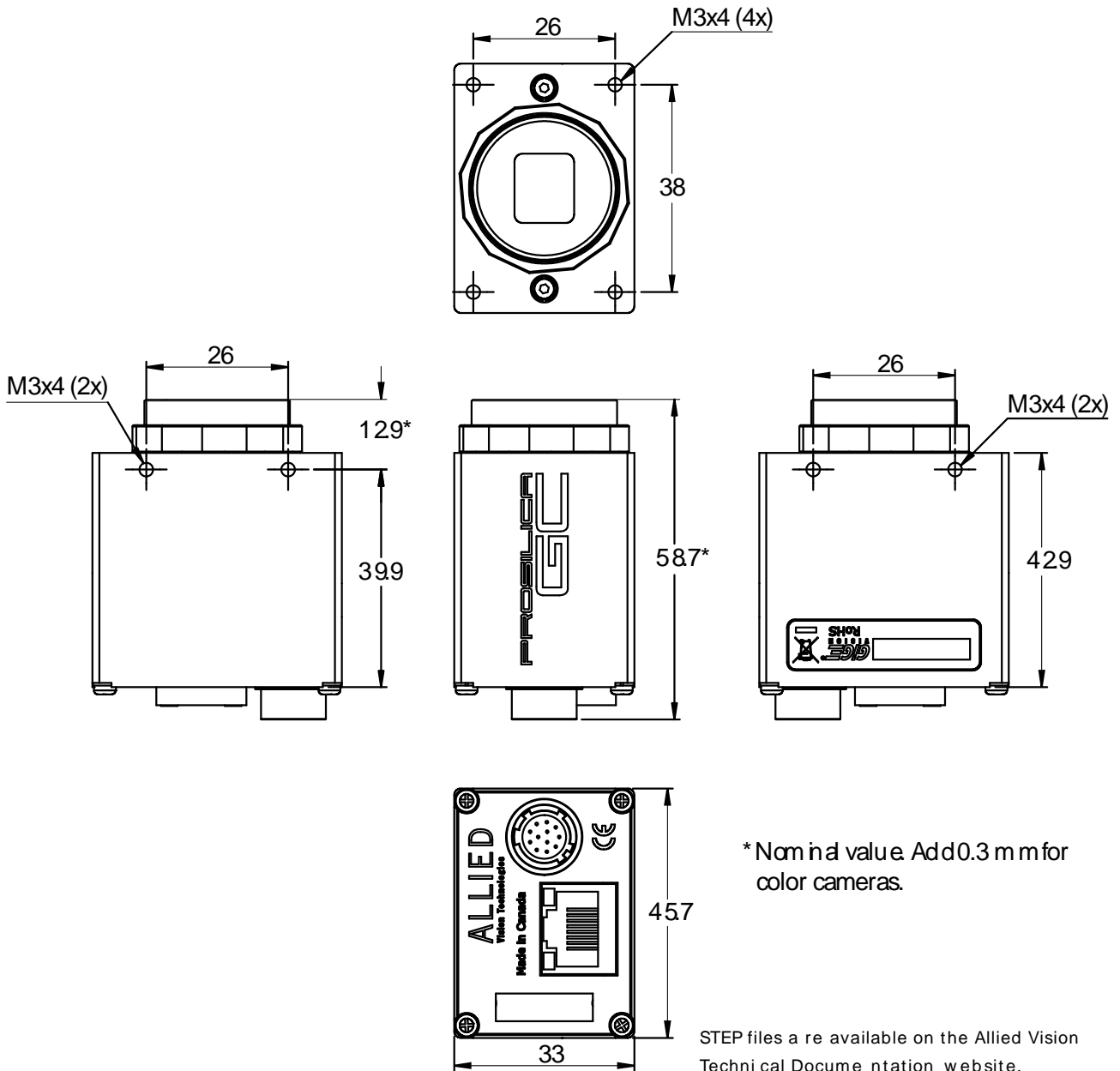
Image optimization features:

- Auto gain (manual gain control: 0 to 22 dB)
- Auto exposure (manual exposure control: 8 μ s to 116.8 s @ 1 μ s increments)
- Auto white balance
- Binning (horizontal and vertical) (sum)
- 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





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