

GC1020



Description

XGA resolution ultra-compact CCD camera with GigE Vision

The GC1020 is a 1024x768 resolution CCD camera with Gigabit Ethernet interface (GigE Vision®). The GC1020 incorporates the Sony ICX204 CCD sensor providing excellent monochrome and color image quality. The GC1020 runs over 30 frames per second at full resolution and even faster with region of interest readout.

- Sony ICX204 Progressive scan CCD
- 33 fps at full-resolution
- **Models:**
 - GC1020, 1024x768, 33 fps, CCD, mono
 - GC1020C, 1024x768, 33 fps, CCD, color

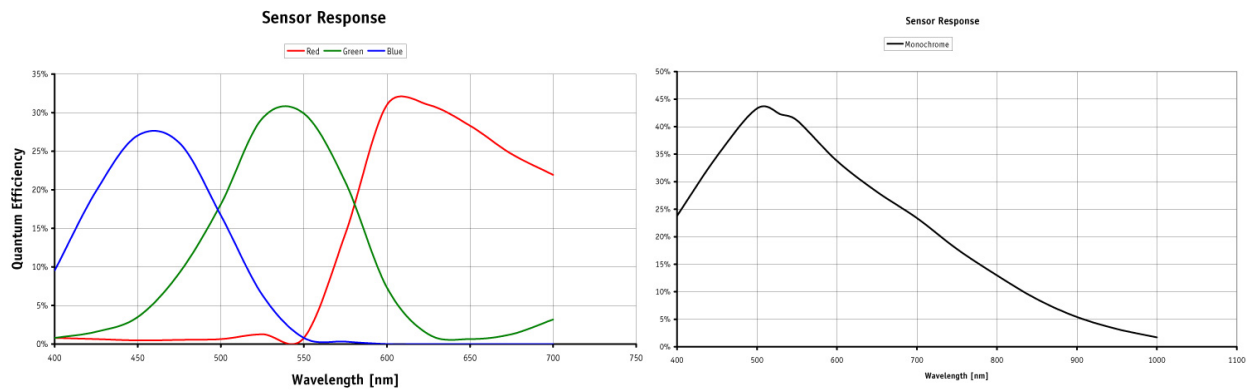
Important information: [Prosilica GC Power Voltage Specification Update](#)

Specifications

| Prosilica GC | | 1020 | |
|---|--|-------------|--|
| Interface | IEEE 802.3 1000baseT | | |
| Resolution | 1024 x 768 | | |
| Sensor | Sony ICX204 | | |
| Sensor type | CCD Progressive | | |
| Sensor size | Type 1/3 | | |
| Cell size | 4.65 µm | | |
| Lens mount | C/CS | | |
| Max frame rate at full resolution | 33 fps | | |
| A/D | 12 bit | | |
| On-board FIFO | 16 MB | | |
| Output | | | |
| Bit depth | 8/12 bit | | |
| Mono modes | Mono8, Mono12Packed, Mono16 | | |
| Color modes YUV | YUV411, YUV422, YUV444 | | |
| Color modes RGB | RGB24, BGR24, RGBA24, BGRA24 | | |
| Raw modes | Bayer8, Bayer12Packed, Bayer16 | | |
| General purpose inputs/outputs (GPIOs) | | | |
| TTL I/Os | 1 input, 1 output | | |
| Opto-coupled I/Os | 1 input, 1 output | | |
| RS-232 | 1 | | |
| Operating conditions/Dimensions | | | |
| Power requirements (DC) | 5-16 V* | | |
| Power consumption (12 V) | 2.9 W | | |
| Mass | 99 g | | |
| Body Dimensions (L x W x H in mm) | 59x46x33 including connectors, w/o tripod and lens | | |
| Regulations | CE, FCC, Class A, RoHS | | |

* Cameras shipped after April 1, 2011 support 5-25 VDC. Please review the [Prosilica GC Power Voltage Specification Update](#) for further information.

[Download Prosilica GC1020 technical drawing \(click here\)](#)



Smart features

The GC1020 features include:

- Auto Exposure
- Auto Gain
- Auto White balance
- Flexible Binning
- Region of Interest readout (AOI partial scan)
- StreamBytesPerSecond (easy bandwidth control)
- Stream hold
- Asynchronous external trigger and sync I/O
- Global shutter (digital shutter)
- Recorder and Multiframe Acquisition Modes

Applications

The 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

Application Case Studies:

- **GigE Vision Rock Solid in Harsh Mining Environments**

Prosilica GC1020C used in Ore-sizing system.

- **In Small Doses**

Ultra-compact Prosilica GC1020C GigE camera used in pharmacy automation solution.

- **Freezing The Shot**

Matrix Systems & Solutions uses Prosilica GC camera to ensure error-free mailing of sensitive medical document.