# GX1920/1920C

## Description

### NEW - 2.82 Megapixel HD CCD camera with high frame rate - Dual port GigE

The new 2/3" format Prosilica GX1920 is a high-resolution CCD camera with a Gigabit Ethernet interface (GigE Vision®). The GX1920 incorporates the new Sony ICX674 CCD sensor.Sony brings its EXview HAD technology previously utilized on lower resolution sensors such as the ICX285 to newer devices like the ICX674 adding higher resolution and fast frame rates to the technology's existing benefits, which include high sensitivity, near IR response, low noise, anti-blooming and excellent image quality.
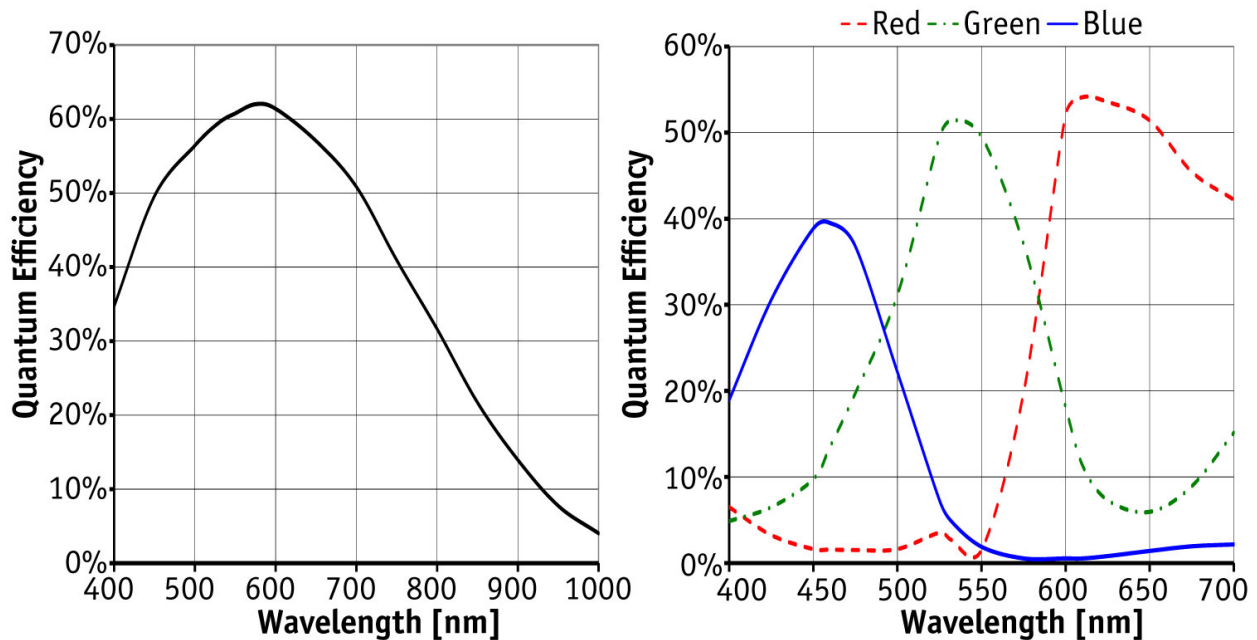
The GX1920 has two screw-captivated Gigabit Ethernet ports configured as a Link Aggregation Group (LAG) to provide a sustained maximum data rate of 240 MBytes per second. The Prosilica GX1920 can also work at half the bandwidth (120 MB/s) using a single cable.

- 3-axis Motorized lens controls
- Video auto-iris
- Single or dual Ethernet port operation
- Thermal management enclosure

- **Models:**
  - GX1920, 1936 x 1456, 40 fps (single and dual port), CCD, mono
  - GX1920C, 1936 x 1456, 40 fps (single and dual port), CCD, color

- **Modular Options:**
  - Nikon F-mount (Factory conversion)
  - Canon EF Lens Mount (Factory conversion via RS232 I/O)
  - IRC Filter on Monochrome cameras (Factory installation)

## Specifications

| Prosilica GX | 1920 |
|---|---|
| Interface | IEEE 802.3 1000baseT |
| Resolution | 1936 x 1456 |
| Sensor | Sony ICX674 |
| Sensor type | CCD Progressive |
| Sensor size | Type 2/3 |
| Cell size | 4.54 µm |
| Lens mount | C (adjustable) |
| Max frame rate at full resolution | 40 fps |
| A/D | 14 bit |
| On-board FIFO | 128 MB |
| | **Output** |
| Bit depth | 14 (mono) - 12 (color) bit |
| Mono modes | Mono8, Mono12, Mono12Packed, Mono14 |
| Color modes YUV | YUV411Packed |
| Color modes RGB | RGB8Packed, BGR8Packed, RGBA8Packed, BGRA8Packed |
| Raw modes | BayerRG8, BayerRG12, BayerGR12Packed |
| | **General purpose inputs/outputs (GPIOs)** |
| Opto-coupled I/Os | 2 inputs, 4 outputs |
| RS-232 | 1 |
| | **Operating conditions/Dimensions** |
| Operating temperature | 0°C ... +50°C |
| Power requirements (DC) | 5V - 24V |
| Power consumption (12 V) | 5.3W (1 port) - 6.2W (2 ports) |
| Mass | 269 g |
| Body Dimensions (L x W x H in mm) | 108.1 x 53.3 x 33 (including connectors, w/o tripod and lens) |
| Regulations | CE, FCC Class A, RoHS (2011/65/EU) |

Download Prosilica GX1920 technical drawing (click here)

## Smart features

Features include:

- Auto Exposure
- Auto Gain
- Auto White balance
- Flexible Binning
- Region of Interest readout (AOI partial scan)
- DSP subregion (selectable ROI for auto features)
- StreamBytesPerSecond (easy bandwidth control)
- Stream hold
- Asynchronous external trigger and sync I/O
- Global shutter (digital shutter)
- Recorder and Multiframe Acquisition Modes
- 3-axis motorized lens control
- Video-type autoiris

### Application Note:

Integrating Motorized Lenses with Prosilica GX Cameras

## Applications

The GX1920 is ideal for a wide range of applications including:

- Industrial inspection
- Machine vision
- LCD panel inspection
- Medical imaging
- Ophthalmology
- Aeronautical and aerospace
- Public security
- Surveillance
- Traffic imaging
- OEM applications