GX1910/1910C

Description

2 Megapixel HD CCD camera with high frame rate - Dual port GigE

The new 2/3" format Prosilica GX1910 is a high-resolution CCD camera with a Gigabit Ethernet interface (GigE Vision®). The GX1910 incorporates the new Truesense KAI-02150 CCD sensor providing excellent image quality in High Definition resolution (1080p). The GX1910 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 GX1910 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

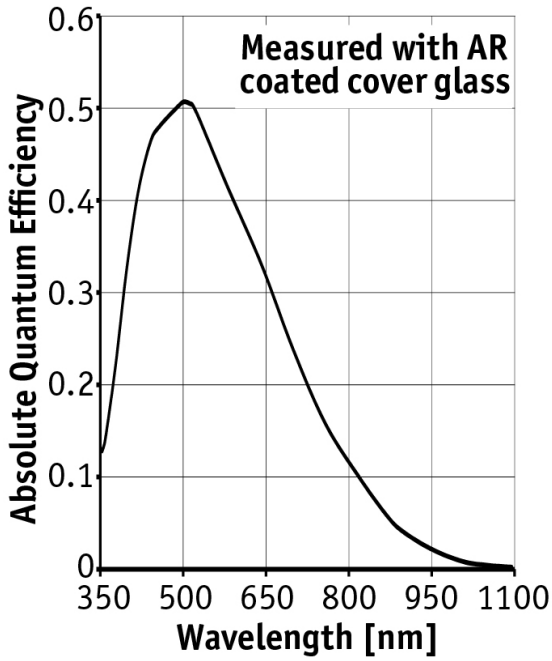
- **Models:**
  - GX1910, 1920 x 1080, 63 fps (dual port) - 55 fps (single port), CCD, mono
  - GX1910C, 1920 x 1080, 63 fps (dual port) - 55 fps (single port), CCD, color

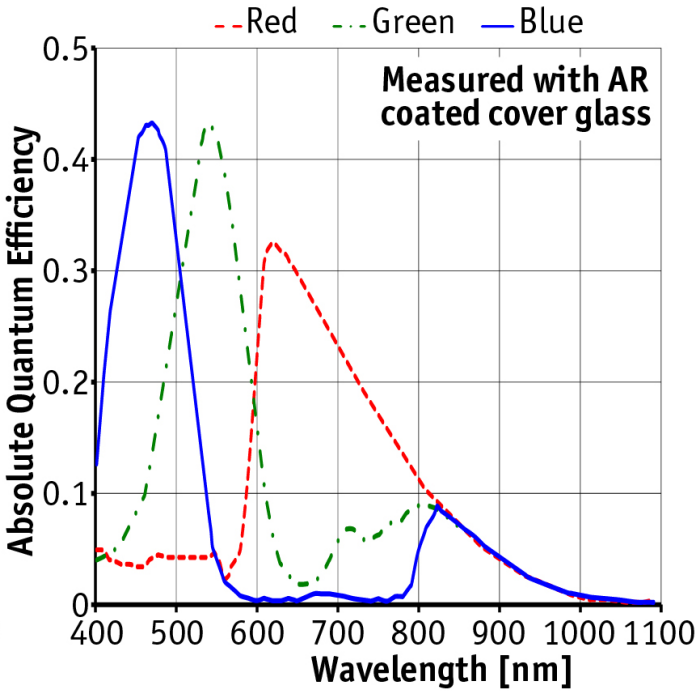
- **Modular Options:**
  - Nikon F-mount (Factory conversion)
  - Canon EF Lens Mount (Factory conversion via RS232 I/O)
  - IRC Filter on Monochrome cameras (Factory installation)
  - Taped glass and microlens (Factory built)
  - Taped glass No microlens (Factory built)

Specifications

Prosilica GX	1910
Interface	IEEE 802.3 1000baseT
Resolution	1920 x 1080
Sensor	Truesense KAI-02150
Sensor type	CCD Progressive
Sensor size	Type 2/3
Cell size	5.5 µm
Lens mount	C (adjustable)
Max frame rate at full resolution	63 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, RGB12Packed
Raw modes	BayerGR8, BayerGR12, 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)	5.6W (1 port) - 6.7W (2 ports)
Mass	269 g
Body Dimensions (L x W x H in mm)	107.2 x 53.3 x 33 (including connectors, w/o tripod and lens)
Regulations	CE, FCC Class A, RoHS (2011/65/EU)

Download Prosilica GX1910 technical drawing (click here)





Smart features

The Prosilica GX1910 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 GX1910 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

Application Case Studies:

- Giant Billboard on Times Square Uses AVT Camera for Interactive Advertising
  Fashion retailer Forever 21's new flagship store in New-York City features giant computer vision billboard that interacts with consumers.