GX1050/1050C

Description

High speed megapixel CCD camera - Dual Port GigE

The Megapixel Prosilica GX1050 is a high resolution CCD camera with Gigabit Ethernet interface (GigE Vision®) that runs 112 fps at full resolution. The GX1050 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 GX1050 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:**
  - GX1050, 1024 x 1024, 112 fps (dual port) - 109 fps (single port), CCD, mono
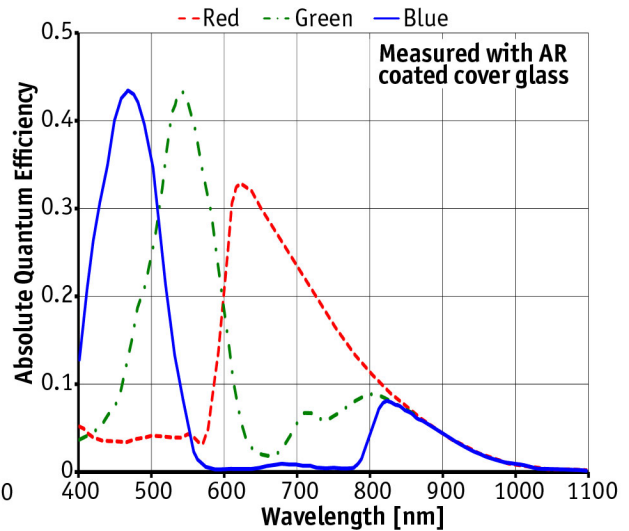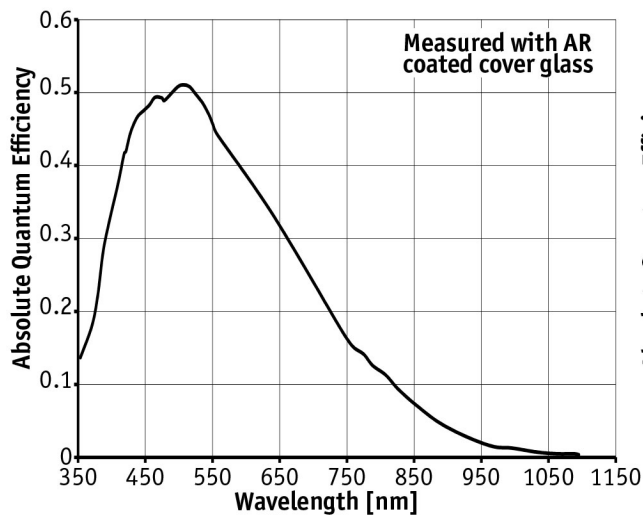 - GX1050C, 1024 x 1024, 112 fps (dual port) - 109 fps (single port), CCD, color

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

Specifications

Prosilica GX	1050
Interface	IEEE 802.3 1000baseT
Resolution	1024 x 1024
Sensor	Truesense KAI-01050
Sensor type	CCD Progressive
Sensor size	Type 1/2
Cell size	5.5 µm
Lens mount	C (adjustable)
Max frame rate at full resolution	112 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)	5.4W (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 GX1050 technical drawing (click here)

Smart features

The Prosilica GX1050 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 GX1050 is ideal for a wide range of applications including:

- Industrial inspection
- Machine vision
- Medical imaging
- Public security
- Surveillance
- Traffic imaging
- OEM applications