

Prosilica GX

2300



- 240 MBps with dual port LAG technology
- 3-axis motorized lens control
- 32 fps at full resolution
- ON Semi KAI-04050 sensor

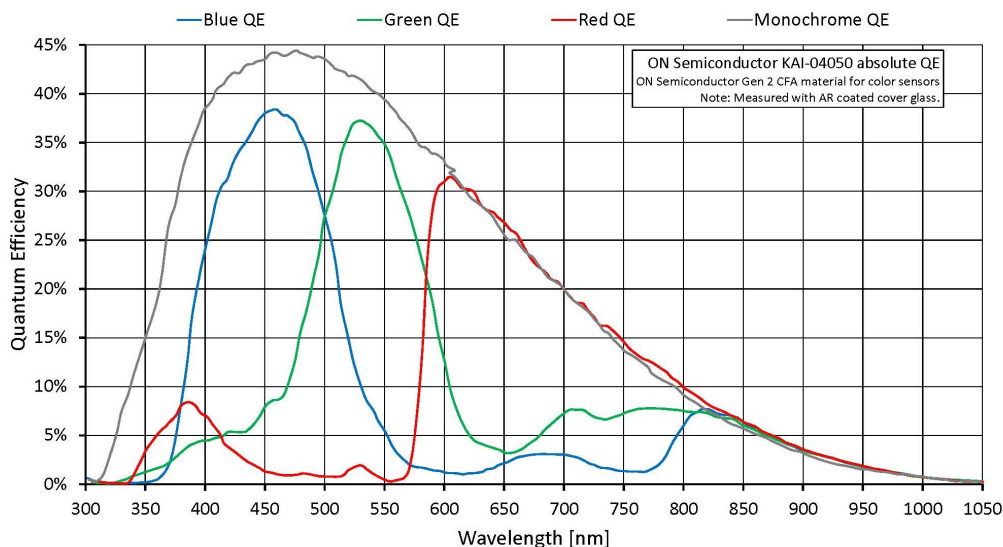
4.1 Megapixel CCD camera, 32 fps, Dual interface Gigabit Ethernet output

Prosilica GX2300 is a very high-resolution CCD camera with dual Gigabit Ethernet output (GigE Vision®). This camera features the ON Semiconductor KAI-04050 image sensor that provides superior image quality, excellent sensitivity, and low noise. At full resolution, this camera has a frame rate of 32 frames per second. With a smaller region of interest higher frame rates are possible. This camera has two screw-captivated Gigabit Ethernet ports configured as a Link Aggregation Group (LAG) to provide a sustained maximum data rate of 240 MBps. It can also work at half the bandwidth (120 MBps) using a single cable. By default monochrome models ship with no optical filter and color models ship with an IRC30 IR cut filter.

Specifications

Prosilica GX	2300
Interface	IEEE 802.3 1000baseT
Resolution	2336 (H) × 1752 (V)
Sensor	ON Semi KAI-04050
Sensor type	CCD Progressive
Sensor size	Type 1
Pixel size	5.5 μm × 5.5 μm
Lens mount (default)	C-Mount
Max. frame rate at full resolution	32 fps
ADC	14 bit
Image buffer (RAM)	128 MByte
Output	
Bit depth	14 (monochrome); 12 (color) Bit
Monochrome pixel formats	Mono8, Mono12, Mono12Packed, Mono14

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RGB color pixel formats	RGB8Packed, BGR8Packed, RGBA8Packed, BGRA8Packed, RGB12Packed
Raw pixel formats	BayerGR8, BayerGR12, BayerGR12Packed
General purpose inputs/outputs (GPIOs)	
Opto-isolated I/Os	2 inputs, 4 outputs
RS232	1
Operating conditions/dimensions	
Operating temperature	0 °C to +50 °C ambient (without condensation)
Power requirements (DC)	10 to 24 VDC
Power consumption	5.8 W at 12 VDC (Single GigE Mode); 6.9 W at 12 VDC (Dual GigE Mode)
Mass	269 g
Body dimensions (L × W × H in mm)	107.2 × 53.3 × 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

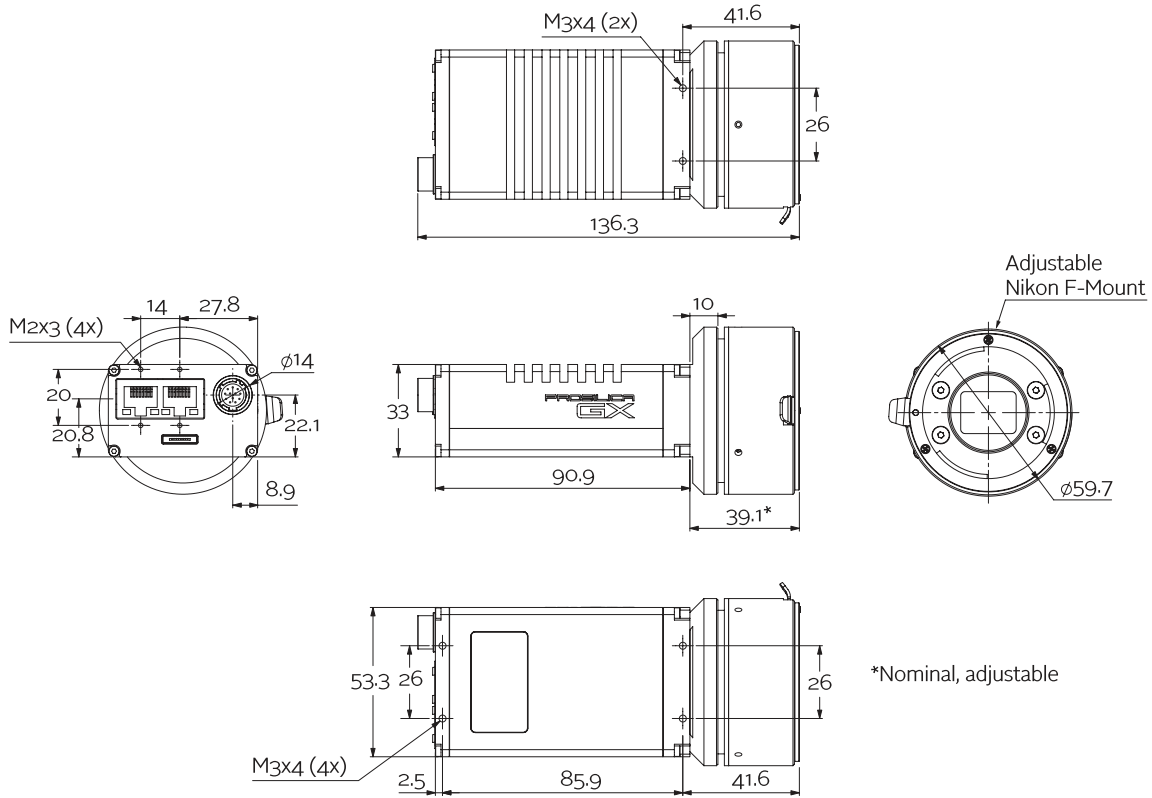
Prosilica GX2300 features include:

- 3-axis motorized lens control
- Video-type auto iris



- Region of interest (ROI), DSP subregion (selectable ROI for auto features)
- Binning (Sum)
- Auto gain (manual gain control: 0 to 34 dB)
- Auto exposure (manual exposure controls: 10 μ s to 26.8 s)
- Auto white balance
- StreamBytesPerSecond (bandwidth control)
- Stream hold
- Sync out modes: Trigger ready, input, exposing, readout, imaging, strobe, GPO
- Global shutter (digital shutter)
- Recorder and Multiframe acquisition modes
- Event channel
- Chunk data
- Storable user sets

Technical drawing





Applications

Prosilica GX2300 is ideal for a wide range of applications including:

- LCD panel inspection
- High-resolution industrial inspection
- 3D metrology
- General machine vision
- Public security
- Military surveillance
- Traffic imaging (Intelligent Traffic Systems)
- Embedded systems
- OEM applications