Allied Vision

Prosilica GX

2300

- 240 MB/s with dual port LAG technology
- 3-axis motorized lens control
- 32 fps @ 4.1 Megapixel
- Various mount options

Description

4.1 Megapixel CCD camera with high frame rate - Dual port GigE

Prosilica GX2300 is a very high-resolution CCD camera with Gigabit Ethernet output (GigE Vision®). GX2300 features the OnSemi KAI-04050 image sensor that provides superior image quality, excellent sensitivity, and low noise. GX2300 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. GX2300 can also work at half the bandwidth (120 MB/s) using a single cable.
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	2300
Interface	IEEE 802.3 1000baseT
Resolution	2336 × 1752
Sensor	OnSemi KAI-04050
Sensor type	CCD Progressive
Cell size	5.5 μm
Lens mount	C-Mount, F-Mount
Max frame rate at full resolution	32 fps
ADC	14 bit
On-board FIFO	128 Mbyte

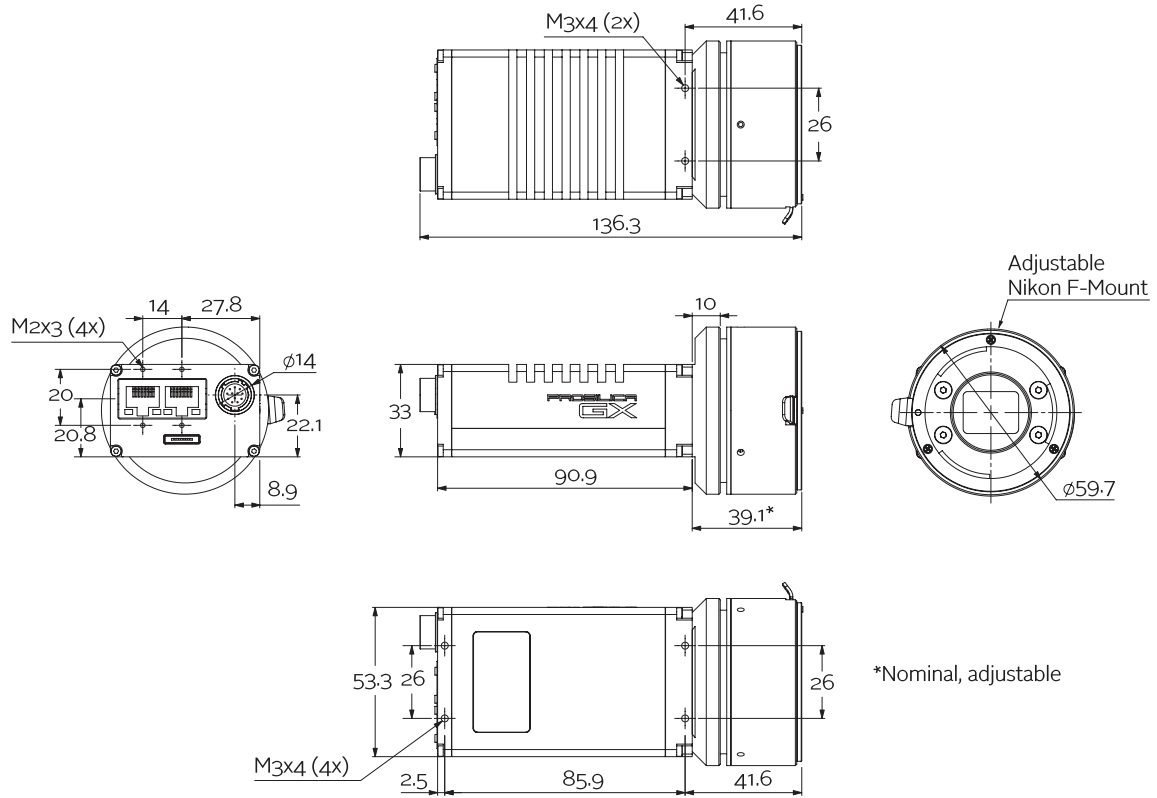| Prosilica GX	2300
Output	
Bit depth	14 (mono) - 12 (color) bit
Mono modes	Mono8, Mono12, Mono12Packed, Mono14
Color modes RGB	RGB8Packed, BGR8Packed, RGBA8Packed, BGRA8Packed, RGB12Packed
Raw modes	BayerGR8, BayerGR12, BayerGR12Packed
General purpose inputs/outputs (GPIOs)	
Opto-isolated I/Os	2 inputs, 4 outputs
RS-232	1
Operating conditions/dimensions	
Operating temperature	0°C … +50°C
Power requirements (DC)	5V - 24V
Power consumption (@12 V)	5.8W (1 port) - 6.9W (2 ports)
Mass	269 g
Body dimensions (L × W × H in mm)	107.2 × 53.3 × 33 (including connectors, w/o tripod and lens)
Regulations	CE, FCC Class A, RoHS (2011/65/EU)
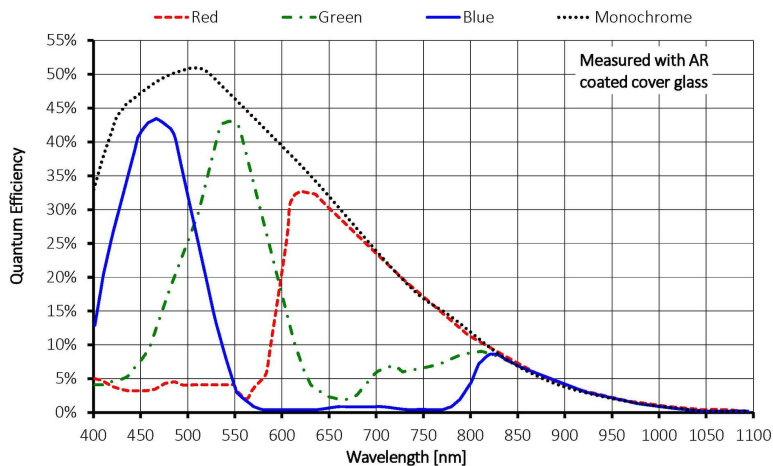
Features

The Prosilica GX2300 features include:

- 3-axis motorized lens control

- Video-type auto iris
- ROI, DSP subregion (selectable ROI for auto features)
- Binning
- Auto gain (manual gain control: 0 to 34 dB)
- Auto exposure (manual exposure controls: 10 µs to 26.8 s)
- Auto white balance
- StreamBytesPerSecond (easy 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

M3x4 (2x)

41.6

26

136.3

M2x3 (4x)

14   27.8

Ø14

20

20.8

22.1

8.9

10

33

90.9

39.1*

Adjustable
Nikon F-Mount

Ø59.7

53.3   26

26

M3x4 (4x)

2.5   85.9   41.6

*Nominal, adjustable

Applications

GX2300 is ideal for a wide range of applications including:

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