

Prosilica GX

6600



- 240 MBps with dual interface LAG technology
- 3-axis motorized lens control
- 4 fps at full resolution
- ON Semi KAI-29050 sensor

Description

GigE Vision, ON Semi KAI-29050 CCD sensor, Global shutter, 4 fps

Prosilica GX6600 is a very high resolution CCD camera with GigE Vision® output. It features the ON Semiconductor KAI-29050 quad-tap CCD sensor that provides superior image quality, excellent sensitivity, and low noise. At full resolution, this camera has a frame rate of 4 frames per second. With a smaller region of interest higher frame rates are possible. Prosilica GX6600 is offered as monochrome and color models. 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.

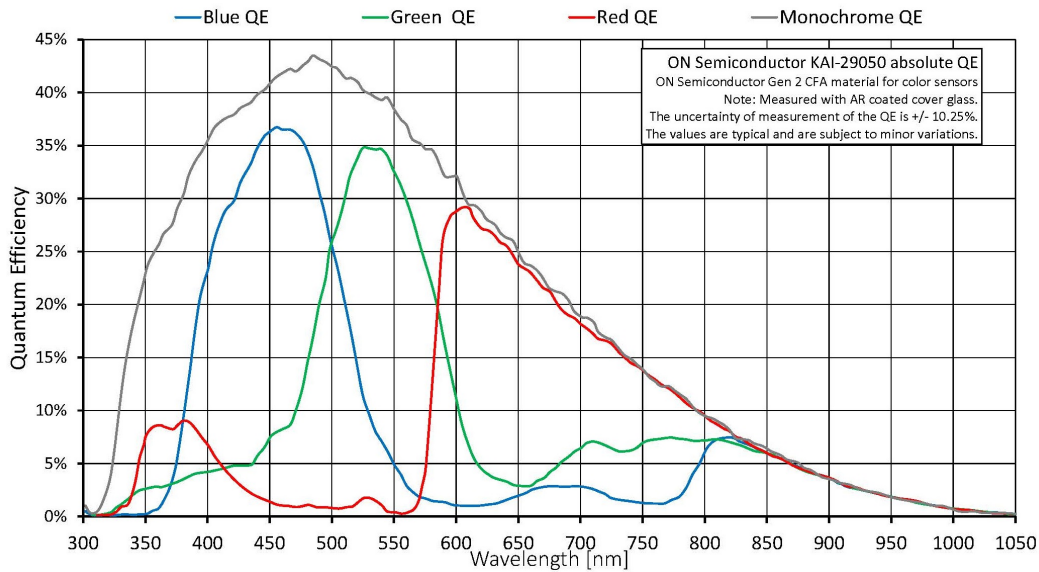
Benefits and features:

- Monochrome (GX6600) and color (GX6600C) models
- Dual GigE interface can be configured as a Link Aggregation Group (LAG), single GigE and dual GigE modes
- ON Semiconductor KAI-29050 (Gen2) Type 35mm CCD sensor with low noise, high sensitivity, and excellent smear performance
- Support for popular third-party image processing libraries

Specifications

Prosilica GX	6600
Interface	IEEE 802.3 1000baseT
Resolution	6576 (H) × 4384 (V)
Sensor	ON Semi KAI-29050

Prosilica GX	6600
Sensor type	CCD Progressive
Sensor size	Type 35 mm
Pixel size	5.5 μm \times 5.5 μm
Lens mount (default)	F-Mount
Max. frame rate at full resolution	4 fps
ADC	14 bit
Image buffer (RAM)	128 MByte
Output	
Bit depth	14 (monochrome); 12 (color) bit
Monochrome pixel formats	Mono8, Mono12, Mono12Packed, Mono14
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 $^{\circ}\text{C}$ to +50 $^{\circ}\text{C}$ ambient (without condensation)
Power requirements (DC)	10 to 24 VDC
Power consumption	6.1 W @ 12 VDC (Single GigE Mode); 7.6 W @ 12 VDC (Dual GigE Mode)
Mass	510 g
Body dimensions (L \times W \times H in mm)	136.6 \times 59.7 \times 59.7 (including connectors and lens mount)
Regulations	CE: 2014/30/EU (EMC), 2011/65/EU, including amendment 2015/863/EU (RoHS); FCC Class A; CAN ICES-003



Features

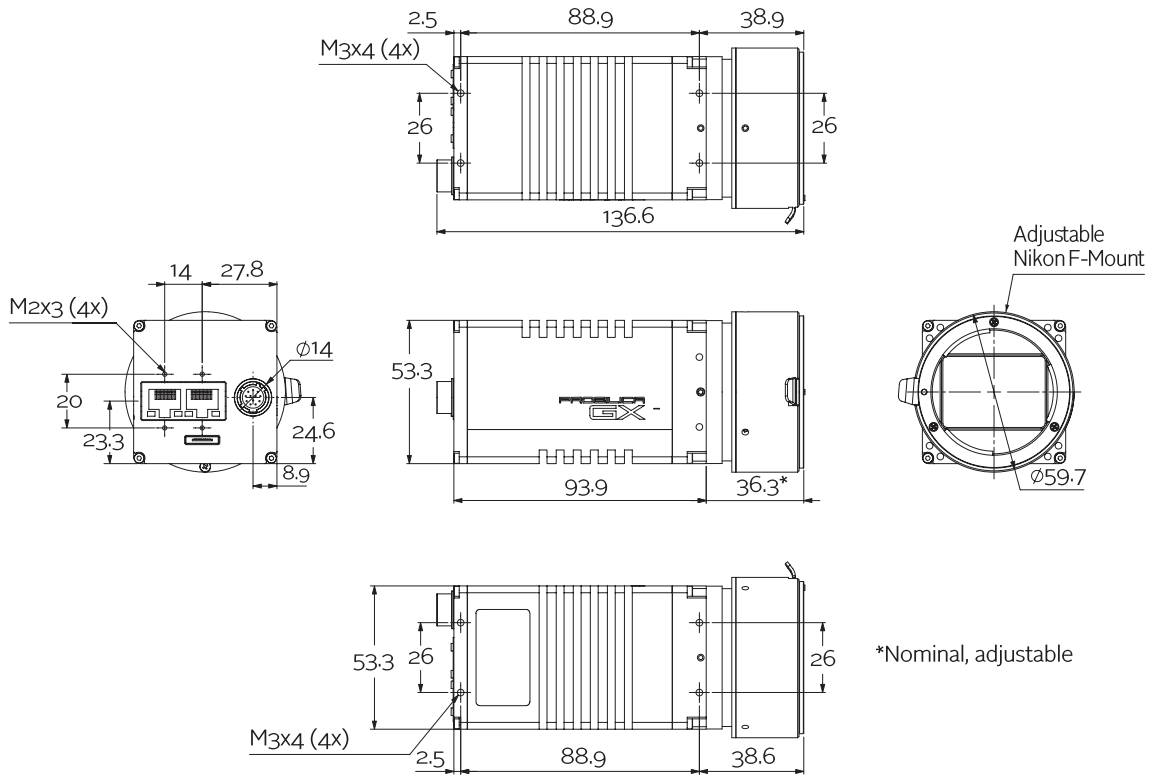
Image optimization features:

- Auto gain (manual gain control: 0 to 34 dB)
- Auto exposure (manual exposure control: 30 μ s to 60 s)
- Auto white balance (GX6600C only)
- Binning (Sum)
- Region of interest (ROI), separate ROI for auto features

Camera control features:

- 3-axis motorized lens control
- Auto-Iris (video type)
- Event channel
- Global shutter (digital shutter)
- Image chunk data
- Recorder and Multiframe acquisition modes
- RS232
- Storable user sets
- StreamBytesPerSecond (bandwidth control)
- StreamHold
- Sync out modes: Trigger ready, input, exposing, readout, imaging, strobe, GPO

Technical drawing





Applications

Prosilica GX6600 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
- Other machine vision applications