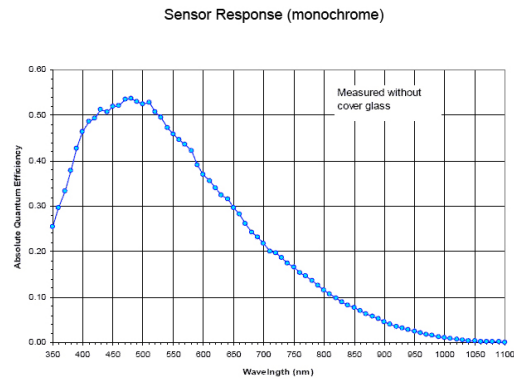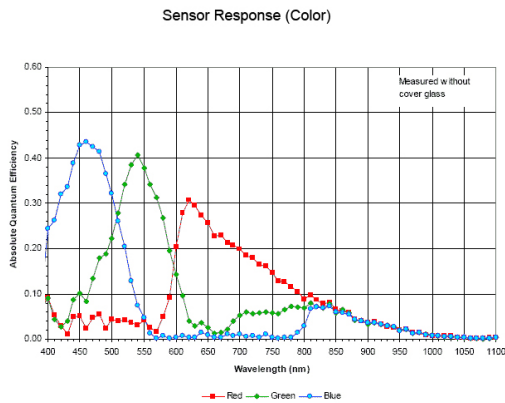# Description

Fast CCD Megapixel camera - 60 fps

The 1 Megapixel GE1050 is a fast CCD camera with Gigabit Ethernet interface (GigE Vision®). It incorporates the 1024 x 1024 Kodak KAI-01050 CCD that runs just under 60 frames per second at megapixel resolution and even faster with region of interest readout. The progressive scan architecture and global electronic shutter provide excellent image quality for full motion video and still image capture.

- Kodak KAI-01050 1/2" Progressive scan CCD
- Fast frame rate - 59 fps

- **Models:**
    - GE1050, 1024x1024, 59 fps, CCD, mono
    - GE1050C, 1024x1024, 59 fps, 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 GE	1050
Interface	IEEE 802.3 1000baseT
Resolution	1024 x 1024
Sensor	Kodak KAI-01050
Type	CCD Progressive
Sensor Size	Type 1/2
Cell size	5.5 µm
Lens mount	C
Max frame rate at full resolution	59 fps
A/D	12 bit
On-board FIFO	32 MB
	Output
Bit depth	8/12 bit
Mono modes	Mono8, Mono12, Mono16
Color modes YUV	YUV411, YUV422, YUV444
Color modes RGB	RGB24, BGR24, RGBA24, BGRA24
Raw modes	Bayer8, Bayer12, Bayer16
	General purpose inputs/outputs (GPIOs)
TTL I/Os	1 input, 3 outputs (with galvanic isolation)
Opto-coupled I/Os	0
RS-232	1
	Power/Mass/Dimensions/Regulations
Power requirements (DC)	5V - 24V
Power consumption (12 V)	5 W
Mass	178 g
Body Dimensions (L x W x H in mm)	80x51x39 including connectors, w/o tripod and lens
Regulations	CE, FCC, Class A, RoHS

Download Prosilica GE1050 technical drawing (click here)

Sensor Response (Color)

Sensor Response (monochrome)

Measured without cover glass

Measured without cover glass

Absolute Quantum Efficiency

Wavelength (nm)

—■— Red —◆— Green —○— Blue

Smart features

The GE1050 features include:

- Auto Exposure
- Auto Gain
- Auto White balance
- Flexible Binning
- Region of Interest readout (AOI partial scan)
- StreamBytesPerSecond (easy bandwidth control)
- Stream hold
- Asynchronous external trigger and sync I/O
- Global shutter (digital shutter)
- Recorder and Multiframe Acquisition Modes

Application Notes:

Canon EF Adapter on Prosilica GE and Prosilica GX Cameras (PDF - 466KB)

Applications

The GE1050 is ideal for a wide range of applications including:

- industrial inspection
- machine vision
- medical imaging
- public security
- surveillance
- traffic imaging
- OEM applications