GE4900

Description

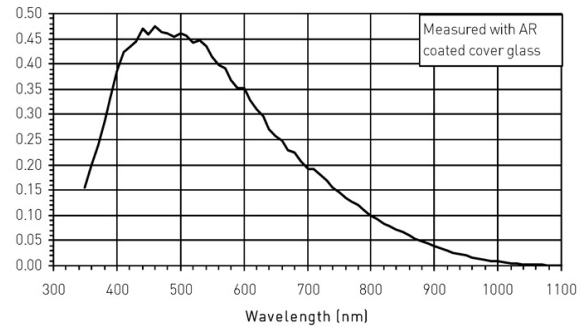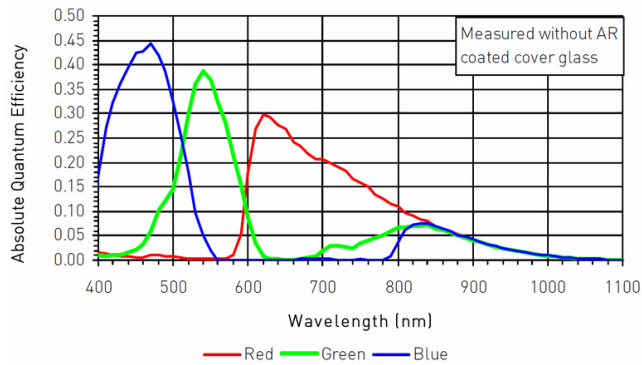### 16 Megapixel CCD camera 3 fps

The 16 Megapixel GE4900 is a very high resolution CCD camera with Gigabit Ethernet output (GigE Vision®). The GE4900 features the high-quality 35 mm format Kodak KAI-16000 CCD image sensor that provides exceptionally high resolution and good sensitivity.

- 3 frames per second at 4872 x 3248
- F-mount lens mount

- **Models:**
  - GE4900, 4872x3248, 3 fps, CCD, mono
  - GE4900C, 4872x3248, 3 fps, CCD, color

- **Modular options:**
  - Canon EF Lens Mount (Factory conversion via RS232 I/O)
  - IRC Filter on Monochrome cameras (Factory installation)
  - Taped glass No microlens (GE4900 monochrome only - Factory built)
  - Kodak Class 1 (Factory built with Class 1 sensor grade)
  - Kodak Class 0 (Factory built with Class 0 sensor grade)

Specifications

Prosilica GE	4900
Interface	IEEE 802.3 1000baseT
Resolution	4872 x 3248
Sensor	Kodak KAI-16000
Type	CCD Progressive
Sensor Size	Type 35 mm
Cell size	7.4 µm
Lens mount	F
Max frame rate at full resolution	3 fps
A/D	12 bit
On-board FIFO	32 MB
	Output
Bit depth	8/12 bit
Mono modes	Mono8, Mono12, Mono16
Color modes YUV	n/a
Color modes RGB	n/a
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)	6 W
Mass	391g (402g for GE4000C)
Body Dimensions (L x W x H in mm)	110x66x66 including connectors, w/o tripod and lens
Regulations	CE, FCC, Class A, RoHS

Download Prosilica GE4900 technical drawing (click here)

Smart features

- 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 GE4900 is ideal for applications requiring very high resolution. These include:

- LCD panel inspection
- semiconductor wafer inspection
- solar panel inspection
- high-resolution industrial inspection
- aerial photography
- 3-D metrology
- general machine vision
- public security
- surveillance
- traffic imaging (Intelligent Traffic Systems)
- embedded systems
- OEM applications

Case Studies:

- **Prosilica Cameras Go Airborne**
  Security & Traffic: Prosilica GE4900 used in UAV technology.

- **16 Megapixel at Work**
  Logistics: Matrix Systems & Solutions uses a Prosilica GE 4900 16-Megapixel camera to scan matrix codes on a whole box of chemical bottles in one shot.

- **High Resolution Inspection for Dental Imaging System**
  16 Megapixel Prosilica GE4900 CCD Camera Used in X-ray Quality Proofing.