

GE680



Description

Fast CCD camera with Gigabit Ethernet interface - more than 200 fps

The GE680 is a very fast, VGA resolution, high-performance machine vision camera with a Gigabit Ethernet interface (GigE Vision®). The CCD sensor is suitable for applications where speed and good sensitivity are required.

- Kodak KAI-0340, 1/3" CCD sensor with 7.4 um square pixels
- Very fast frame rate - 205 fps at 640x480

• Models:

- GE680, 640x480, 205 fps, CCD, mono
- GE680C, 640x480, 205 fps, CCD, color

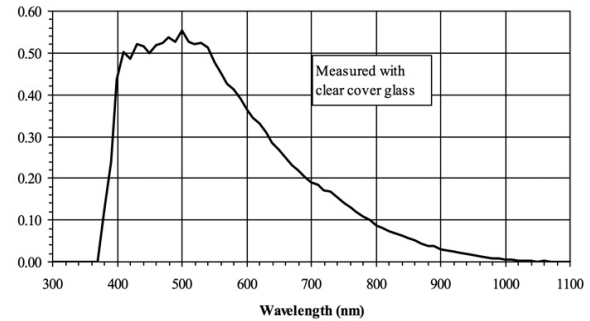
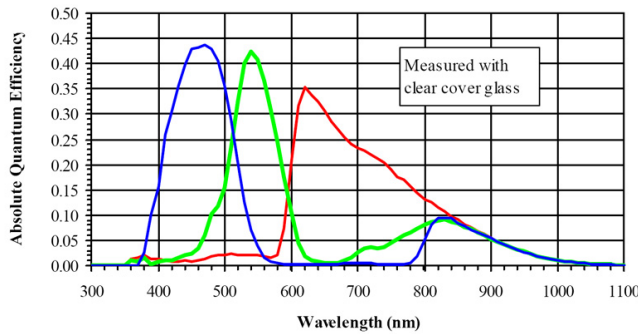
• Modular options:

- Nikon F-mount (Factory conversion)
- Canon EF Lens Mount (Factory conversion via RS232 I/O)
- IRC Filter on Monochrome cameras (Factory installation)
- Taped glass and microlens (Factory built)
- Taped glass No microlens (Factory built)

Specifications

| Prosilica GE 680 | |
|---|--|
| Interface | IEEE 802.3 1000baseT |
| Resolution | 640 x 480 |
| Sensor | Kodak KAI-0340 |
| Type | CCD Progressive |
| Sensor Size | Type 1/3 |
| Cell size | 7.4 μ m |
| Lens mount | C |
| Max frame rate at full resolution | 205 fps |
| A/D | 12 bit |
| On-board FIFO | 32 MB |
| Output | |
| Bit depth | 8/12 bit |
| Mono modes | Mono8, Mono16 |
| Color modes YUV | YUV411, YUV422, YUV444 |
| Color modes RGB | RGB24, BGR24, RGBA24, BGRA24 |
| Raw modes | Bayer8, 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) | 12 V |
| Power consumption (12 V) | 4.5 W |
| Mass | 169 g |
| Body Dimensions (L x W x H in mm) | 39x51x80 including connectors, w/o tripod and lens |
| Regulations | CE, FCC, Class A, RoHS |

[Download Prosilica GE680 technical drawing \(click here\)](#)



Smart features

The GE680 incorporates an advanced set of camera features including:

- 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 GE680 is ideal for applications where speed and good sensitivity are required. These include:

- high-speed inspection
- machine vision
- optical character recognition
- traffic imaging
- robotics
- OEM applications