



Description

Very small VGA CCD camera with GigE Vision

The GC650 is a fast, VGA-resolution, high-performance machine vision camera with Gigabit Ethernet interface (GigE Vision®). The CCD sensor has excellent image quality and sensitivity. The camera is suitable for applications where speed and excellent image quality are key requirements.

Features include:

- 90 fps at 659x493
- Progressive Scan CCD
- Global shutter (Snapshot shutter)
- Gigabit Ethernet interface



Specifications

Prosilica GC	GC650
Resolution	659 x 493
Max frame rate at full resolution	90 fps
Туре	CCD Progressive
Interface	IEEE 802.3 1000baseT
A/D	12 bit
Output	8/12 bit
Sensor Size	Туре 1/3
Sensor	Sony ICX424
Cell size	7.4 μm
On-board FIFO	16 MB
Body Dimensions (L x W x H in mm)	33x46x59 including connectors, w/o tripod and lens

Download Prosilica GC technical drawing (click here)





Smart features

The GC650 features include:

- 90 fps at 659x493
- Progressive Scan CCD
- Global shutter (Snapshot shutter)
- StreamBytesPerSecond (easy bandwidth control)
- Flexible binning
- Gigabit Ethernet interface
- Very small and light weight
- Compliant with the AIA GigE Vision standard
- Asynchronous external trigger and sync I/O
- Region of Interest readout (AOI partial scan)
- Software development Kit
- Color output modes include RGB color



Applications

The GC650 is suitable for applications where speed and excellent image quality are key requirements. These include:

- machine vision
- industrial inspection
- public security
- traffic monitoring
- robotics

Application Case Studies:

• **Prosilica GC650C in DARPA Urban Challenge** Prosilica GC cameras track lanes in experimental robotic vehicle designed by GeorgiaTech University and SAIC.

GC650 in Wood Industry Measurement System Optical measurement system from Forintek checks wood strand size in OSB production process.

Prosilica GigE Vision Cameras Tested for New NASA Recording System
 Prosilica's GigE Vision GC Series Cameras are being tested by NASA as the Agency
 is looking to upgrade one of its existing space shuttle video/camera recording
 systems.