Description

## 90-degree GigE Vision camera, VGA resolution, 120 fps

The GS650 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 GS650 is available in landscape or portrait orientation.

- Sony ICX424 Progressive Scan CCD
- 120 fps at 659x493
- Global shutter (Snapshot shutter)

- **Models:**
  - GS650, 659x493, 120 fps, CCD, Mono
  - GS650C, 659x493, 120 fps, CCD, Color
  - GS650-P, 659x493, 120 fps, CCD, Mono, Portrait
  - GS650C-P, 659x493, 120 fps, CCD, Color, Portrait

- **Modular Options:**
  - White Medical enclosure
  - CS Lens Mount (Factory conversion)
  - IRC Filter on Monochrome cameras (Factory installation)

Specifications

Prosilica GS	650
Interface	IEEE 802.3 1000baseT
Resolution	659 x 493
Sensor	Sony ICX424
Type	CCD Progressive
Sensor Size	Type 1/3
Cell size	7.4 µm
Lens mount	C/CS
Max frame rate at full resolution	120 fps
A/D	14 bit
On-board FIFO	16 MB
Output	
Bit depth	8/12 bit
Mono modes	Mono8, Mono12Packed, Mono16
Color modes YUV	YUV411, YUV422, YUV444
Color modes RGB	RGB24, BGR24, RGBA24, BGRA24
Raw modes	Bayer8, Bayer12Packed, Bayer16
General purpose inputs/outputs (GPIOs)	
TTL I/Os	1 input, 1 output
Opto-coupled I/Os	1 input, 1 output
RS-232	1
Power/Mass/Dimensions/Regulations	
Power requirements (DC)	5V - 25V
Power consumption (12 V)	3W
Mass	184 g
Body Dimensions (L x W x H in mm)	96x56x26 including connectors, w/o tripod and lens
Regulations	CE, FCC, Class A, RoHS

Download Prosilica GS650 technical drawing (click here)

Sensor Response
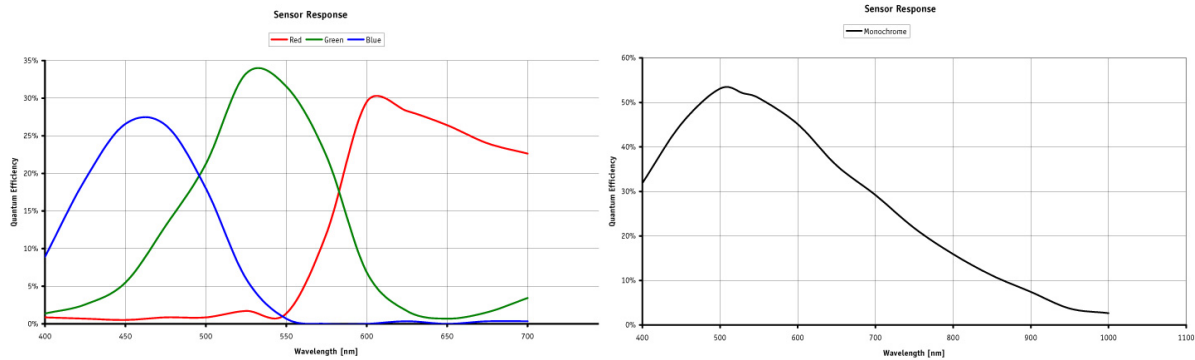
Smart features

The GS650 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

Applications

The GS650 is suitable for applications where speed and excellent image quality are key requirements. These include:

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