Guppy F-046

Description

Very compact, inexpensive FireWire camera - 0.5 Megapixels

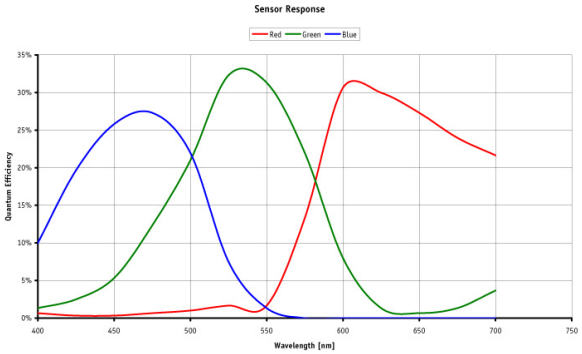
The Guppy F-046B/C is a very compact, inexpensive camera with a sensitive Sony CCD sensor. At full resolution, it runs at up to 49.4 fps. Higher frame rates can be reached by a smaller AOI.

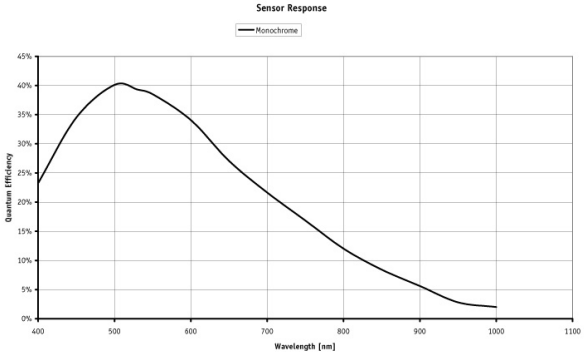
- Sony ICX415
- Trigger
  - Edge mode, level mode, bulk trigger, programmable trigger delay
- Options
  - Various IR cut/pass filters
  - CS-Mount
  - White medical housing

Specifications

Guppy	F-046
Interface	IEEE 1394a - 400 Mb/s, 1 port
Resolution	780 x 582
Sensor	Sony ICX415
Type	CCD Progressive
Sensor Size	Type 1/2
Cell size	8.3 µm
Lens mount	C
Max frame rate at full resolution	49 fps
A/D	12 bit
On-board FIFO	0 MB
	Output
Bit depth	8 bit
Mono modes	Mono8
Color modes YUV	n/a
Color modes RGB	n/a
Raw modes	Raw8
	General purpose inputs/outputs (GPIOs)
TTL I/Os	1 input, 3 outputs
Opto-coupled I/Os	0
RS-232	1
	Power/Mass/Dimensions/Regulations
Power requirements (DC)	8 V - 36 V
Power consumption (12 V)	<2 W
Mass	50 g
Body Dimensions (L x W x H in mm)	48.2 x 30 x 30 mm incl. connectors
Regulations	CE, FCC Class B, RoHS

Download Guppy technical drawing (click here)





Smart features

- Programmable LUT
- Gain
  - Auto/manual
  - Manual gain control: 0 - 24 dB
- Exposure
  - Auto/manual
  - Exposure time: 42 µs - 67 s
- Separate AOI for auto features
- Auto white balance

Applications

This inexpensive, reliable mainstream 0.5 Megapixel camera addresses a wide range of imaging applications (e.g. robotics). With its ultra-compact housing, the Guppy F-046B/C is the perfect fit for all applications with space constraints.

- Machine vision
- Robotics (robust, lightweight housing)
- Quality control
- Ophthalmology
- Semiconductor inspection
- Industrial inspection
- ... and many more

Application Case Study:

- **Musical Amoebae**
  Multimedia & Entertainment: Electronic music instrument Reactable turns images to sounds. The experimental synthesizer was developed by a research team of the Pompeu Fabra University of Barcelona (Spain).