Guppy
F-036

Description

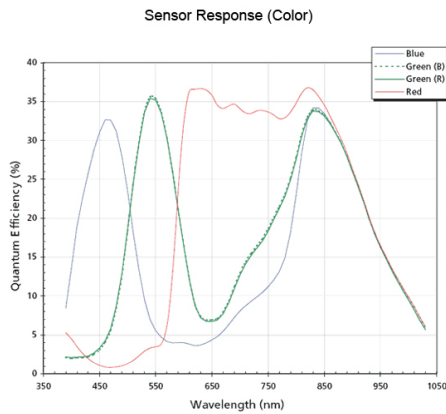### Ultra-compact, inexpensive high contrast VGA camera with HDR mode

The Guppy F-036B/C is an ultra-compact, inexpensive VGA camera for applications with high contrasts. It is equipped with a CMOS sensor by Micron/Aptina which supports the HDR mode (High Dynamic Range mode). At full resolution, it runs at up to 58 fps. Higher frame rates can be reached by a smaller AOI.

- Micron/Aptina MT9V022 CMOS sensor
- Trigger
  - Edge mode, programmable trigger delay
- Options
  - Various IR cut/pass filters
  - CS-Mount, M12-Mount adapter (M12 only for sensors < 1/2)
  - White medical housing

Specifications

Guppy	F-036
Interface	IEEE 1394a - 400 Mb/s, 1 port
Resolution	752 x 480
Sensor	Micron/Aptina MV022
Type	CMOS Progressive
Sensor Size	Type 1/3
Cell size	6.0
Lens mount	C
Max frame rate at full resolution	64 fps
A/D	10 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)

Sensor Response (Color)

Sensor Response (monochrome)

Smart features

- Programmable LUT
- Gain
  - Auto/manual
  - Manual gain control: 0 - 12 dB
- Exposure
  - Exposure time: 179 µs - 979 ms
- Image mirror
- Binning (b/w)
- HDR mode (High Dynamic Range mode)

Applications

The CMOS sensor of the Guppy F-036B/B has no blooming and supports the HDR (High Dynamic Range) mode. For this reason, this FireWire camera is made for applications with intense illumination and high contrasts.

- Surveillance and Security
- Inspection and Control
- Robotics
- ITS/Traffic monitoring
- Applications with high contrasts