



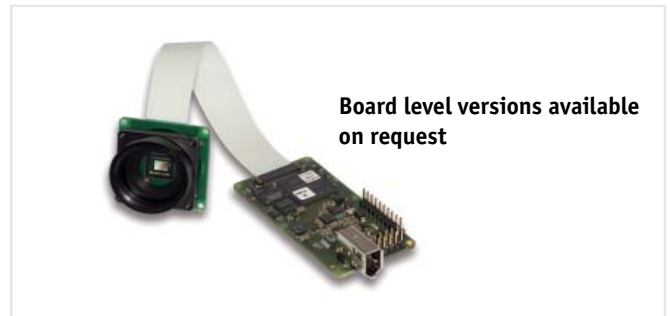
## Guppy

- Small
- Lightweight
- Large choice of CCD and CMOS sensors
- High sensitivity with interlaced sensors (2 models\*)

Guppy									
L x W x H = 48.2 x 30 x 30 mm incl. connectors, w/o tripod and lens. Mass 50 g									
Model	Interface	Resolution	Standard	Megapixels	Frame rate	Sensortype	Sensor	A/D	Onboard memory
F-033B/C	1394a	656 x 494	> VGA	0.3	58 fps	1/3 CCD	Sony ICX424	10 bits	n/a
F-036B/C	1394a	752 x 480	> WVGA	0.4	64 fps	1/3 CMOS	Aptina MT9V022	10 bits	n/a
F-038B/C*	1394a	768 x 492	EIA/NTSC	0.4	30 fps	1/2 CCD	Sony ICX418	12 bits	n/a
F-044B/C*	1394a	752 x 580	CCIR/PAL	0.4	25 fps	1/2 CCD	Sony ICX419	12 bits	n/a
F-046B/C	1394a	780 x 582	> WVGA	0.5	49 fps	1/2 CCD	Sony ICX415	12 bits	n/a
F-080B/C	1394a	1032 x 778	> XGA	0.8	30 fps	1/3 CCD	Sony ICX204	12 bits	n/a
F-146B/C	1394a	1392 x 1040	> XGA-2	1.4	17 fps	1/2 CCD	Sony ICX267	12 bits	n/a
F-503B/C	1394a	2592 x 1944	> QWXGA	5	6 fps	1/2.5 CMOS	Aptina MT9P031	12 bits	n/a

\* interlaced sensors - also available: versions with enhanced NIR sensitivity

*"The Guppy is a small, lightweight, inexpensive FireWire camera. Guppy cameras are equipped with a large variety of renowned CCD and CMOS sensors. Two interlaced models with ultra sensitive sensors (Guppy F-038B/C and F-044B/C) ensure an easy, cost-effective move from analog to digital cameras."*



### Smart Features

- AOI (true partial scan)
- Separate AOI for auto features (except for interlaced cameras F-038B/C and F-044B/C)
- Programmable LUT
- Gain
- Exposure (except for Guppy F-036B/C, F-503B/C)
- Image mirror (only Guppy F-036B/C, F-503B/C)
- Binning (b/w) (only Guppy F-036B/C, F-503B/C)
- HDR (High Dynamic Range Mode, only Guppy F-036)
- Sub-sampling, defect pixel correction, multi-shot, separate AOI for auto features (only Guppy F-503B/C)

### Options

- Board level versions on request
- Modular concept:
  - Various IR cut/pass filters
  - CS-/M12-Mount adapters (M12 only for sensors < 1/2)
  - White medical housing
- F-038B/C NIR and F-044B/C NIR with enhanced NIR sensitivity

Power requirements	DC 8 V - 36 V (via 1394 cable or HIROSE)
Power consumption	< 2.0 W (@ 12 V DC)
Operating temperature	+0 ... +45° Celsius ambient temp.
Storage temperature	- 10 ... + 70° Celsius ambient temp.
Regulations	CE, FCC Class B, RoHS (2002/95/EC)