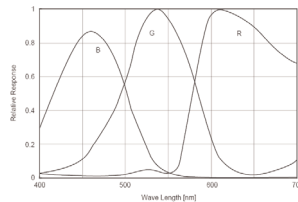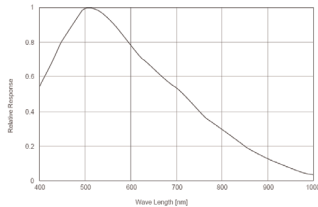# AVT Guppy F-080B / F-080C

Small - easy - ingenious: Analog goes Guppy.

The AVT Guppy camera family is distinguished by an IEEE 1394 interface and an extremely compact design. It consists of ten different camera variants (each available in b/w and color) and, with a wide variety of sensors and bandwidths, offers the right solution for nearly any conceivable application. The Guppy is available optionally in a casing or board version (upon request) and therefore fits in the smallest spaces. A selection of high-quality, sensitive sensors (CCD, CMOS) help the Guppy provide outstanding image quality and true color. Four additional interlaced versions (EIA, CCIR) make it even more attractive to switch from analog to digital image processing. Due to its modularity and remarkable price/performance ratio, for many applications the Guppy is the ideal way to make the move to digital image processing.

Highlights
- IEEE 1394a
- XGA (1032 x 778)
- Up to 30 fps (full resolution)
- Progressive scan CCD, monochrome and color
- True partical scan (higher frame rates by smaller AOI)
- Flexible AOI, flexible speed (full Format_7 support)
- Asynchronous image trigger
- Image preprocessing features:
  - Auto controlled gain, exposure, white balance (separate reference AOI)
  - Programmable LUT
  - And lots more ...
- Smart frame grabber features:
  - Single-shot, multi-shot, free-run
  - 1 prog. input / 3 prog. outputs
  - On-board RS-232 port
  - And lots more ...
- Industry proven and robust housing
- C-Mount / CS-Mount (convertible via adapter)
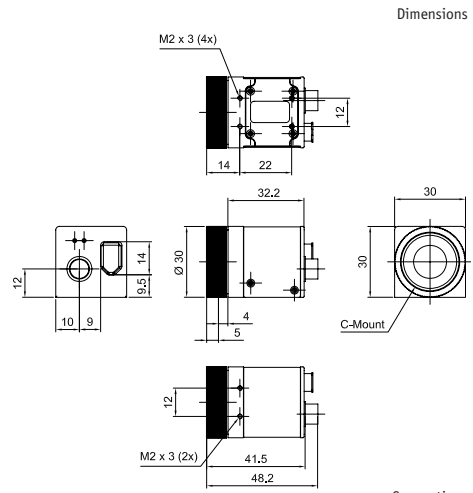- OEM board level version, customized housings

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AVT Guppy F-080B / F-080C

Sensor specifications b/w; color
(extracted from the data sheet of the sensor – excluding lens and filter)

Dimensions

Connections

Pin	Signal
1	CameraOut1
2	CameraOut2
3	CameraOut3
4	CameraIn
5	RxD_RS232
6	TxD_RS232
7	External Power
8	GND

AOI height / pixel	Frame rate / fps
600	33
480	39
240	61
120	85
60	106
30	120

Camera Specifications

	Guppy F-080B (b/w)	Guppy F-080C (color)
Image device	Type 1/3 (diag. 6 mm) progressive scan, SONY CCD	
Effective picture elements	1034 (H) x 778 (V)	
Picture size	Up to 1032 x 778 pixels	
Cell size	4.65 μm x 4.65 μm	
Resolution depth	8 bit (12 bit ADC)	
Lens mount	C-Mount, CS-Mount (convertible via adapter)	
Digital interface	IEEE 1394 IIDC v. 1.3, single port	
Transfer rate	100 Mbit/s, 200 Mbit/s, 400 Mbit/s	
Frame rates	Up to 30 fps (full frames)	
Gain control	Manual: 0-24 dB (0.0351 dB/step); auto gain (select. AOI)	
Shutter speed	20 μs...67s; auto shutter (select. AOI)	
External trigger shutter	Programmable, trigger-level controlled, bulk mode (1 trigger, n shots), programmable trigger delay	
Smart features	AGC (Auto Gain Control), AEC (Auto Exposure Control), only color: AWB (Auto White Balance), LUT, 1 config. input, 3 config. outputs, RS-232 port (serial port, IIDC v. 1.31)	
Power requirements	DC 8 V − 36 V via IEEE 1394 cable or 8-pin HIROSE	
Power consumption	Less than 2 watt (@ 12 V DC)	
Dimensions	48.2 mm x 30 mm x 30 mm (L x W x H); without tripod and lens	
Mass	50 g (without lens)	
Operating temperature	+5 ... +50 °Celsius without condensation	
Storage temperature	-10 ... +60 °Celsius without condensation	
Regulations	EN 55022, EN 61000, EN 55024, FCC class B, DIN ISO 9022, RoHs (2002/95/EC)	
Options	Board level version, power out (HIROSE), AVT FirePackage/Direct FirePackage/Fire4Linux	

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