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AVT Guppy F-038B / F-038C

Small - easy - ingenious: Analog goes Guppy.

The AVT Guppy camera family is distinguished by an IEEE1394 interface and an extremely compact design. It consists of thirteen 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
- EIA (768 x 492)
- Up to 30 fps (60 fields per second)
- Interlaced 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)
  - Frame- & Field integration
  - 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)
- Optional OEM board level version

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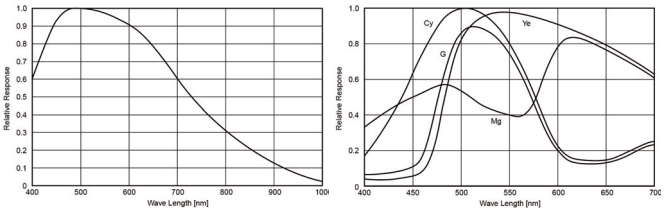
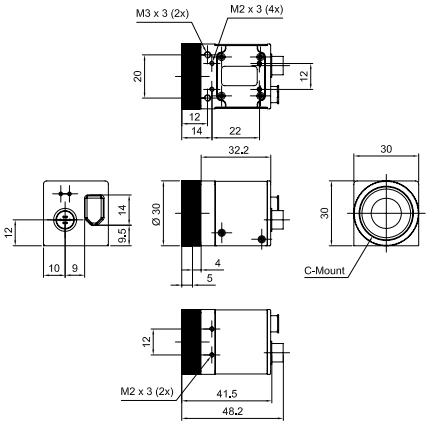
AVT Guppy F-038B / F-038C



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

Dimensions



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
480	30.5
240	52.7
120	82.9
64	111.7

Connections

Camera Specifications

	Guppy F-038B (b/w)	Guppy F-038C (color)
Image device	Type 1/2 (diag. 8 mm) interlaced SONY HAD CCD	
Picture size	768 (H) x 492 (V) (full frames)	
Cell size	8.4 µm x 9.8 µm	
Resolution depth	8 bit (12 bit ADC))	
Lens mount	C-Mount, CS-Mount (convertible via adapter)	
Digital interface	IEEE 1394a (IIDC V1.3), single port	
Transfer rate	100 Mbit/s, 200 Mbit/s, 400 Mbit/s	
Frame rates	Up to 30 fps (60 fields per second)	
Gain control	Manual 0 - 24 dB, auto gain	
Shutter speed	20µs...67s, auto shutter	
External trigger shutter	Programmable, 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 (@ 12V DC)	
Dimensions	48.2 mm x 30 mm x 30 mm (L x W x H), w/o 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, CE, DIN ISO 9022-3, RoHS (2002/95/EC)	
Options	Board level version, power out (HIROSE), AVT FirePackage / Active FirePackage / Fire4Linux	

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Design and specification of the described product(s) are subject to change without notice.
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