

## Small – easy – ingenious: Analog goes Guppy.



### Description

The AVT Guppy camera family is distinguished by an IEEE 1394 interface and an extremely compact design. It consists of twelve 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.

A selection of high-quality, sensitive sensors (CCD, CMOS) help the Guppy provide outstanding image quality and true color.

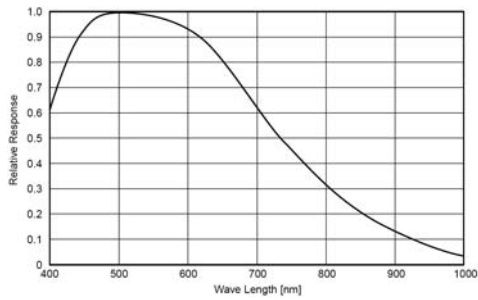
Two additional interlaced versions (EIA, CCIR) make it even more attractive to switch from analog to digital image processing.

Due to its modularity and the remarkable price/performance ratio, for many applications the Guppy is the ideal way to make the move to digital image processing.

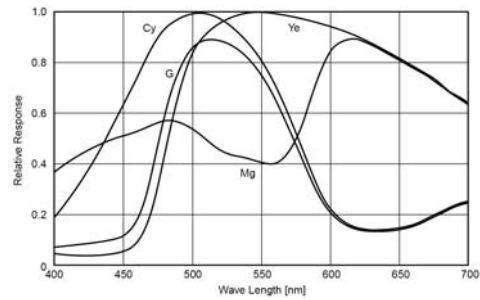
### Highlights

- IEEE 1394a
- > Wide VGA (752 x 580)
- Up to 25 fps (50 fields per second)
- Interlaced CCD, monochrome and color
- True partial scan (higher frame rates by smaller AOI)
- Flexible AOI, flexible speed (full Format\_7 support)
- Asynchronous image trigger
- Image pre-processing features:
  - Auto controlled gain, exposure, white balance
  - Frame- and 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 RS232 port
  - And lots more ...
- Industry proven and robust housing
- C-Mount / CS-Mount (convertible via adapter)
- Optional OEM board level version, customized housings

Sensor specification b/w

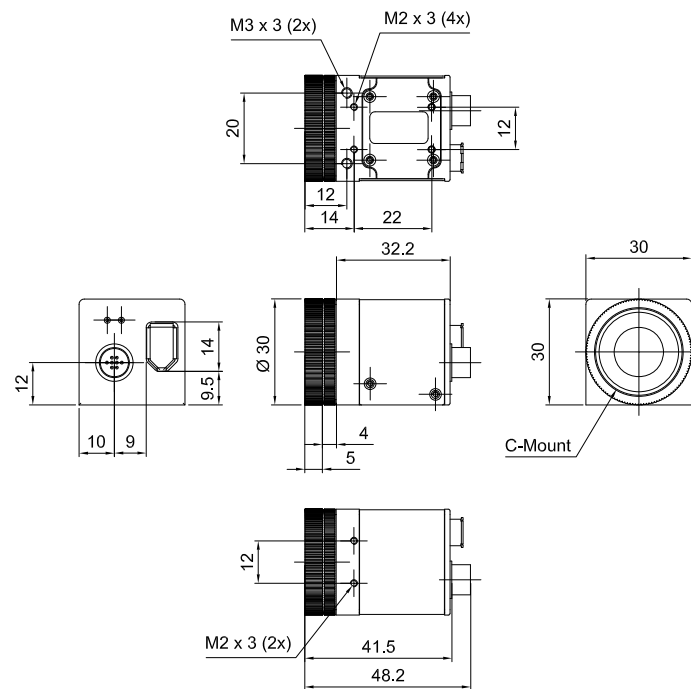


Sensor specification color



The sensor specifications (excluding lens and filter) are typical for this camera model.

Dimensions



Connections

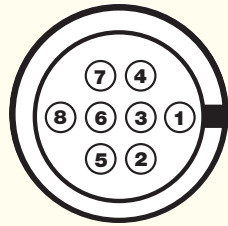


Front view



Preview mode (by sub-sampling)	
AOI height / pixel	Frame rate
580	26.1
560	26.8
540	26.7
520	28.6
500	29.7
480	30.5
460	31.5

I/O Connector	
Pin	Signal
1	GP Output 1 (Default: IntEna)
2	GP Output 2 (Default: -)
3	GP Output 3 ( Default: Busy)
4	GP Input1 (Default: Trigger)
5	RxD RS232
6	TxD RS232
7	External Power (+8 ... +36V DC)
8	External GND



Camera specifications	Guppy F-044B (b/w)	Guppy F-044C (color)
Image device	Type 1/2 (diag. 8 mm), interlaced SONY CCD ICX419ALL/AKL	
Picture size	752 (H) x 580 (V) (full frames)	
Cell size	8.6 μm x 8.3 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 25 fps (50 fields per second)	
Gain control	Manual 0 - 24 dB, auto gain	
Shutter speed	62μs...67s, auto shutter	
External trigger shutter	Programmable, trigger level control, 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... + 45° Celsius without condensation	
Storage temperature	-10... + 60° Celsius without condensation	
Regulations	CE, FCC Class B, RoHS (2002/95/EC)	
Options	Board level version, power out (HIROSE), AVT FirePackage / Active FirePackage / Fire4Linux	

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