





Guppy PRO

F-503

- Compact 5 MP camera
- ON Semiconductor (Aptina)
 CMOS sensor
- Excellent price/performance
- 13 fps

Concentrated simplicity

Guppy PRO - Small economical FireWire camera

Guppy PRO F-503 with ON Semi MT9P031 runs 13.0 frames per second at 5.0 MP resolution.

The Guppy PRO is Allied Vision's smallest economical FireWire camera. Its ultra-compact and extremely robust industrial housing unites quality with performance and enables it to be integrated in the smallest spaces. The wide range of CCD and CMOS sensors with a range of different resolutions enables you to choose the ideal Guppy PRO for your particular needs.

Easy software integration with Allied Vision's Vimba Suite and compatibility to the most popular third party image-processing libraries.

See the Customization and OEM Solutions webpage for hardware options.



Specifications

Interface IEEE 1394b - 800 Mb/s, 1 port

Resolution 2588 (H) × 1940 (V)

Sensor ON Semi MT9P031

Sensor type CMOS

Sensor size Type 1/2.5

Pixel size $2.2 \,\mu\text{m} \times 2.2 \,\mu\text{m}$

Lens mount (default) C-Mount

Max. frame rate at full resolution 13 fps

ADC 12 Bit

Output

Bit depth 8-bit to 12-bit

Monochrome pixel formats 8/12/16

Raw pixel formats 8/12/16

General purpose inputs/outputs (GPIOs)

Opto-isolated I/Os 1/3

Operating conditions/dimensions

Operating temperature +5 °C to +45 °C

Power requirements (DC) 8 V to 36 V

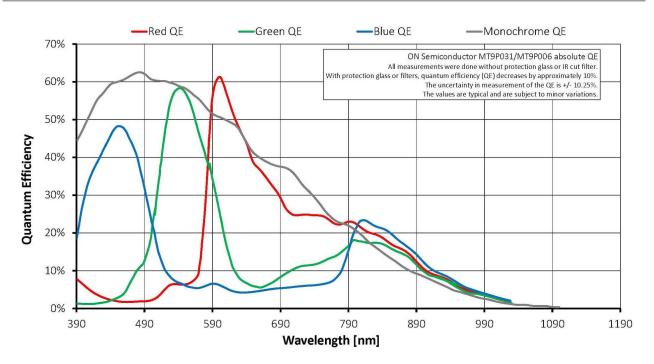
Power consumption <3.5 W (@ 12 VDC)

Mass 80 g

Body dimensions (L × W × H in mm) 44.8 × 29 × 29 (including connectors)



Quantum efficiency





Features

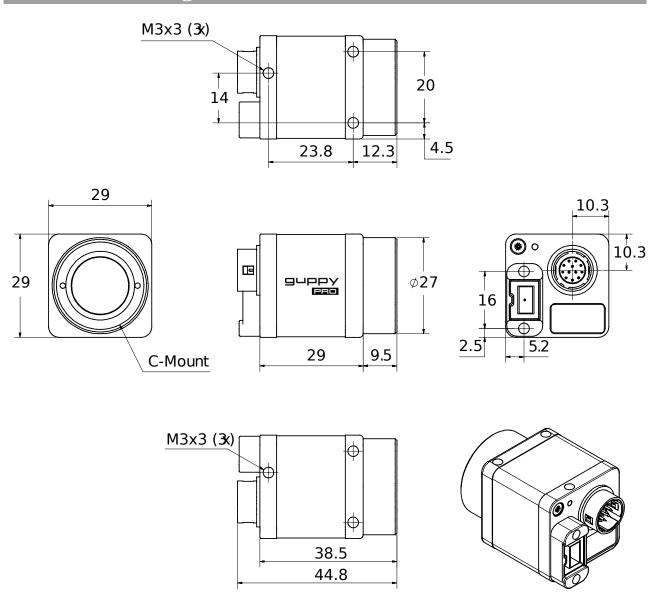
- Look-up table (LUT)
- Gamma correction
- Color correction
- Defect pixel correction
- Area of interest (AOI), separate AOI for auto features
- Binning (monochrome and color)
- Low-noise binning
- Sub-sampling
- Image mirror H+V (color version only horizontal)
- Auto gain (manual gain control: 0 to 18.06 dB)
- Auto exposure (20 μs to 22.3 s)
- Trigger with edge mode and programmable delay
- Storable user sets

Scope of delivery

• Camera and IEEE 1394b cable (other configurations on request)



Technical drawing



Applications

Thanks to the CMOS sensor and 5 Megapixel resolution, the Guppy PRO F-503B/F-503C is an industrial CMOS camera with a high performance and a very attractive price.

Applications:

- Industrial inspection with high resolution
- Robotics
- Logistics
- Pharmaceutical industry
- Multimedia



• ITS/Traffic monitoring