



# 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 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 μm × 2.2 μm
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 color pixel formats (Bayer)	8/12/16

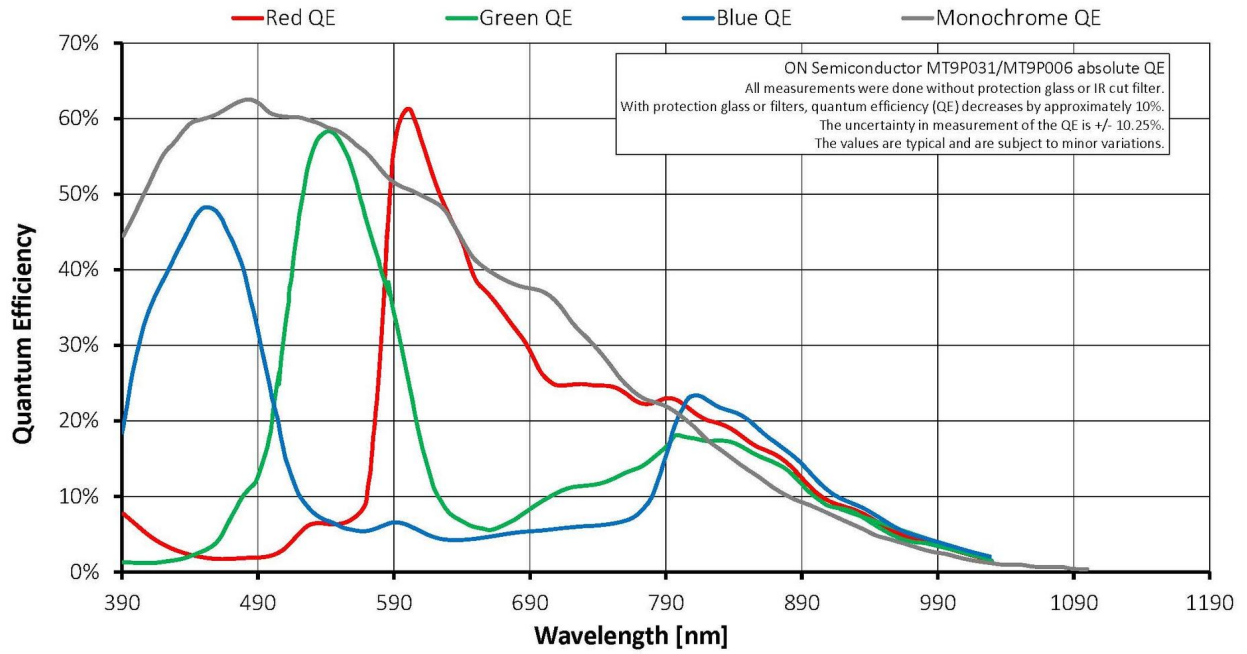
### General purpose inputs/outputs (GPIOs)

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



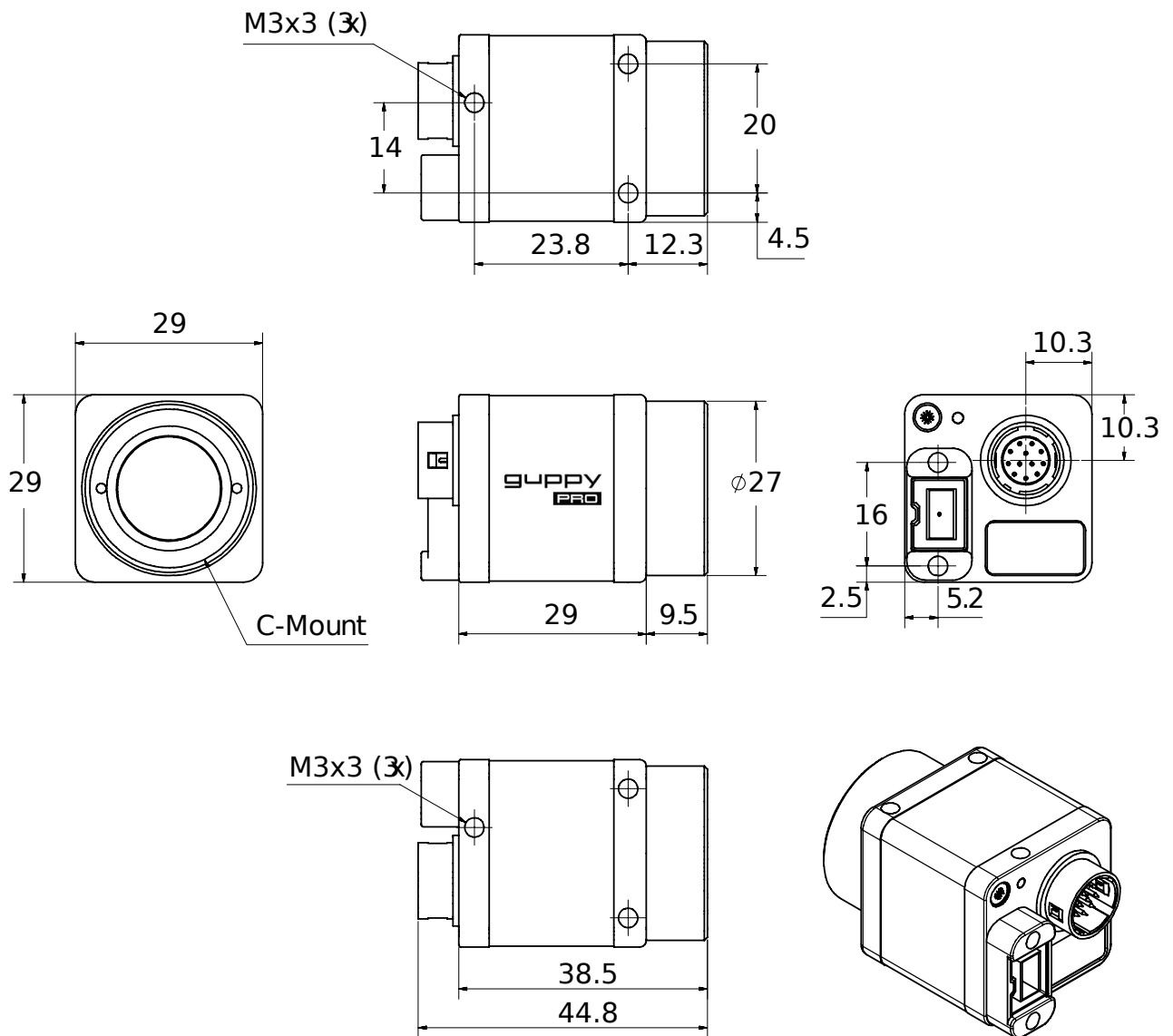
## Features

- 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  $\mu$ s 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