



# Guppy PRO

## F-503



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

## Description

Industrial CMOS camera, 5 Megapixels

The Guppy PRO F-503B/F-503C is an industrial CMOS camera with 5 Megapixel resolution. It is equipped with an ON Semiconductor (Aptina) sensor and runs 13 frames per second at full resolution.

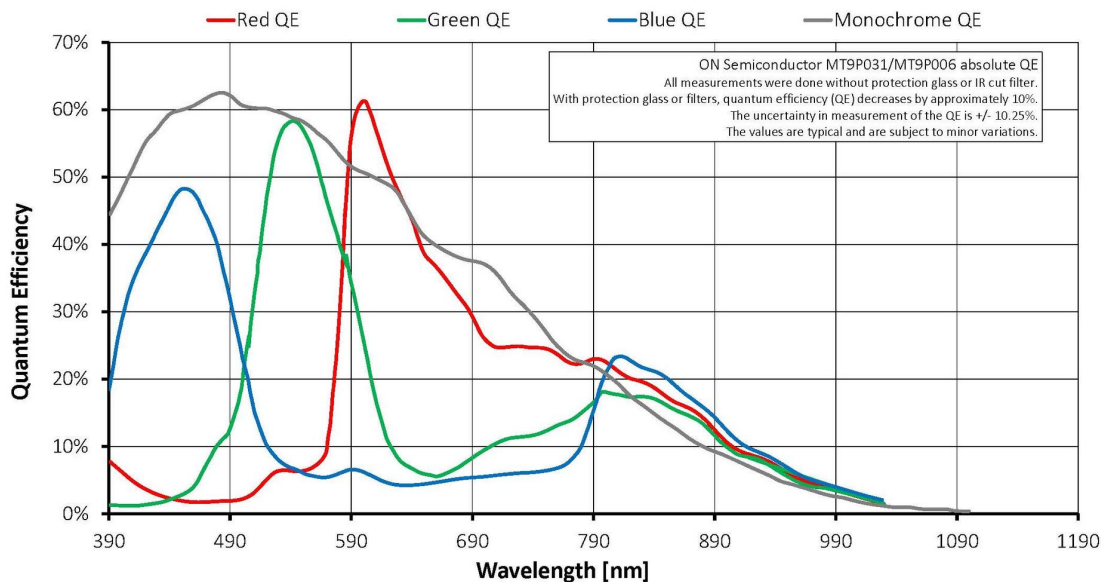
### Options:

- Various IR cut/pass filters
- White medical housing

## Specifications

| <b>Guppy PRO</b>                   | <b>F-503</b>                  |
|------------------------------------|-------------------------------|
| 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                        |
| Image buffer (RAM)                 |                               |
|                                    | <b>Output</b>                 |
| Bit depth                          | 8-12 bit                      |
| Monochrome pixel formats           | 8/12/16                       |
| Raw pixel formats                  | 8/12/16                       |

| Guppy PRO                                     | F-503  |
|---|--|
| <b>General purpose inputs/outputs (GPIOs)</b> |  |
| Opto-isolated I/Os                            | 1/3  |
| <b>Operating conditions/dimensions</b>        |  |
| 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)                |
| Regulations                                   | CE: 2014/30/EU (EMC), 2011/65/EU (RoHS); FCC Class B |



## 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