



- IEEE 1394a camera
- Lightweight
- Robust design
- Machine vision camera

Lightweight and robust

Guppy - Ultra-compact camera with IEEE 1394a interface

Guppy F-503 with ON Semi MT9P031 runs 6.0 frames per second at 5.0 MP resolution.

Guppy is an ultra-compact, inexpensive IEEE 1394a VGA machine vision camera. This reliable mainstream FireWire camera addresses a wide range of imaging applications. With its ultra-compact, small housing, Guppy is the perfect fit for all applications with space constraints.

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 1394a - 400 Mb/s, 1 port
Resolution	2592 (H) × 1944 (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, CS-Mount
Max. frame rate at full resolution	6 fps
ADC	12 Bit

Output

Bit depth	8-bit or 12-bit
Monochrome pixel formats	Mono8, Mono12, Mono16
RGB color pixel formats	n/a
Raw pixel formats	Raw8, Raw12, Raw16

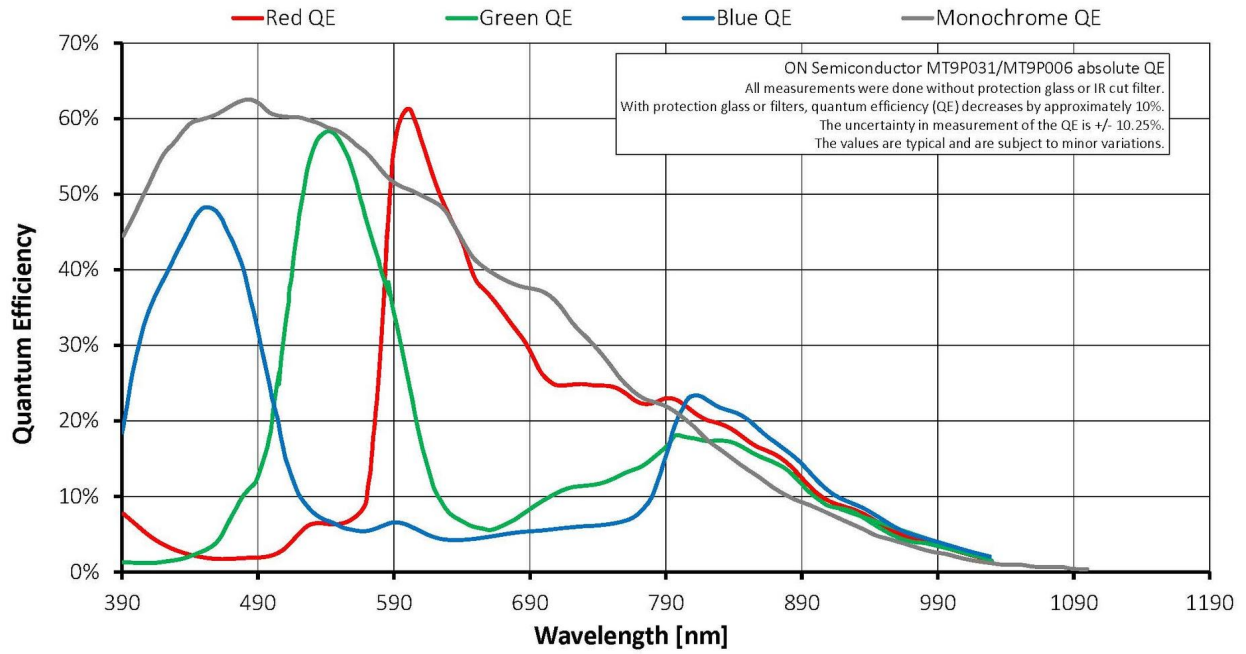
General purpose inputs/outputs (GPIOs)

TTL I/Os	1 input, 3 outputs
RS232	1

Operating conditions/dimensions

Operating temperature	+5 °C to +45 °C
Power requirements (DC)	8 V to 36 V
Power consumption	<2 W (@ 12 VDC)
Mass	50 g
Body dimensions (L × W × H in mm)	48.2 × 30 × 30 (including connectors)

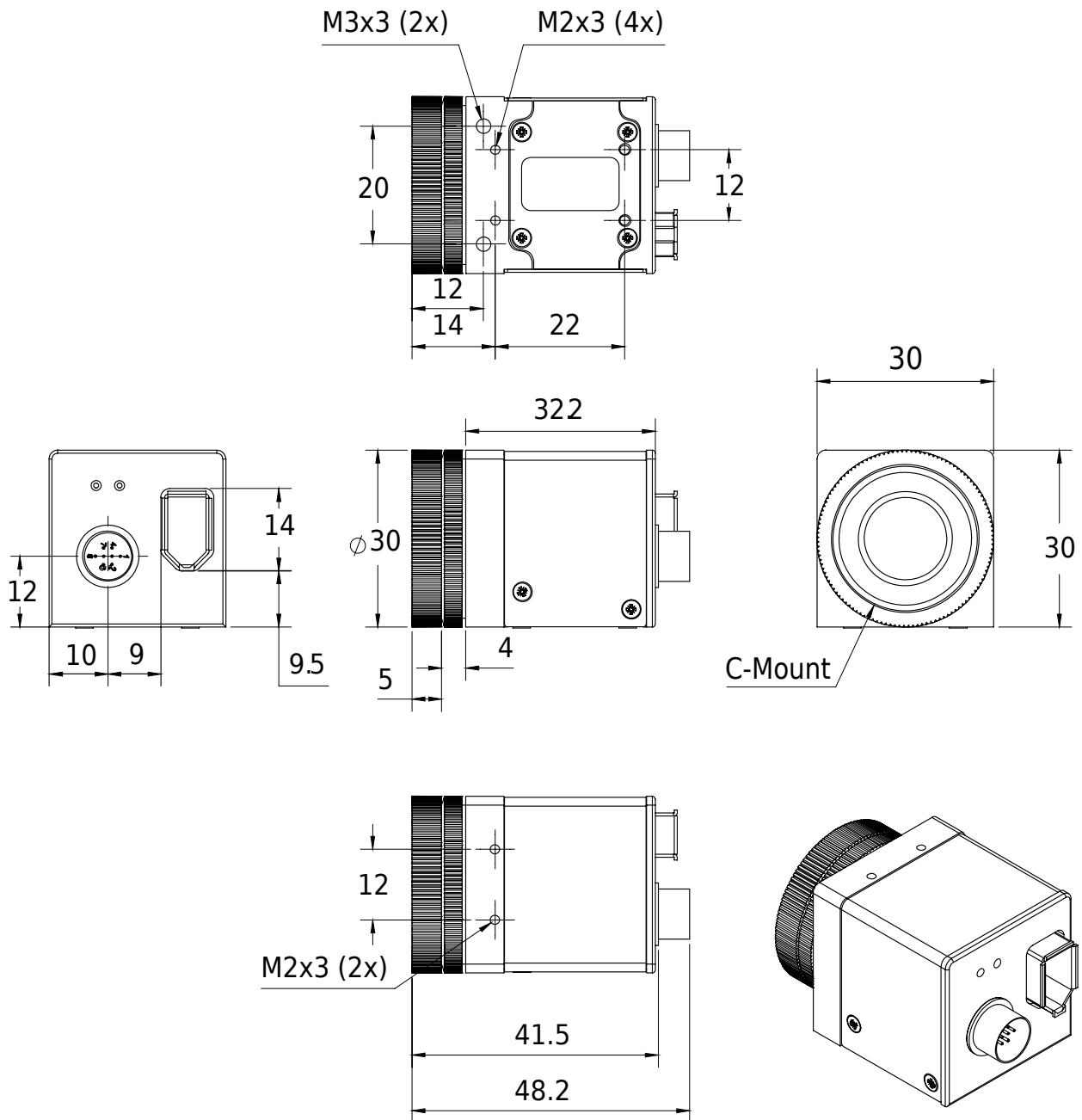
Quantum efficiency



Features

- High Dynamic Range (HDR) mode
- Defect pixel correction
- Reverse X/Y
- Look-up table (LUT)
- Binning
- Decimation
- Area of interest (AOI), separate AOI for auto features
- Auto gain (0 to 26 dB)
- Auto exposure (41 μ s to 2.3 s)
- Auto white balance
- Storable user sets

Technical drawing



Applications

The Guppy F-503B/F-503C is an economically priced 5 Megapixel camera; its CMOS sensor has no blooming and features the defect pixel correction mode. This camera fits a variety of applications:

- Quality control

- Industrial inspection
- Security and surveillance
- ITS/Traffic monitoring