



FireWire



**Guppy**  
F-036

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

### Lightweight and robust

Guppy - Ultra-compact camera with IEEE 1394a interface

Guppy F-036 with ON Semi MT9V022 runs 64.0 frames per second at 0.4 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	752 (H) × 480 (V)
Sensor	ON Semi MT9V022
Sensor type	CMOS
Sensor size	Type 1/3
Pixel size	6 μm × 6 μm
Lens mount (default)	C-Mount, CS-Mount
Max. frame rate at full resolution	64 fps
ADC	10 Bit

### Output

Bit depth	8-bit
Monochrome pixel formats	Mono8
RGB color pixel formats	n/a
Raw pixel formats	Raw8

### General purpose inputs/outputs (GPIOs)

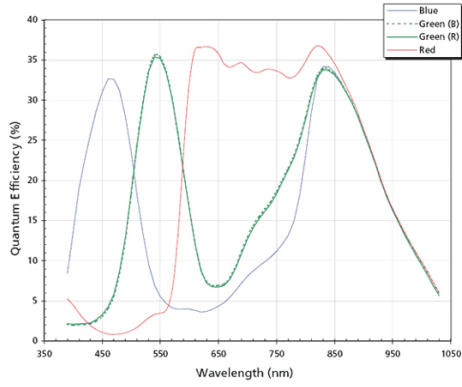
TTL I/Os	1 input, 3 outputs
RS232	1

### Operating conditions/dimensions

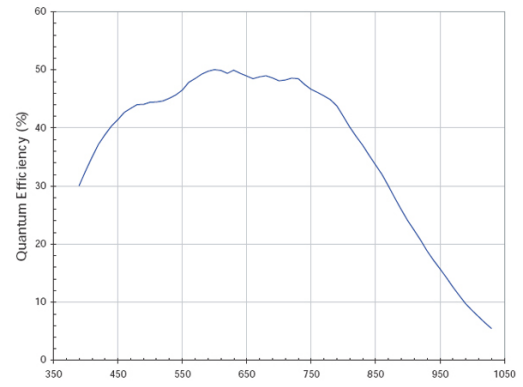
Operating temperature	+5 °C to +45 °C
Power requirements (DC)	8 V to 36 V
Power consumption	<2 W (@ 12 VDC)
Mass	50 g
Body dimensions (L × W × H in mm)	48.2 × 30 × 30 (including connectors)

# Quantum efficiency

Sensor Response (Color)



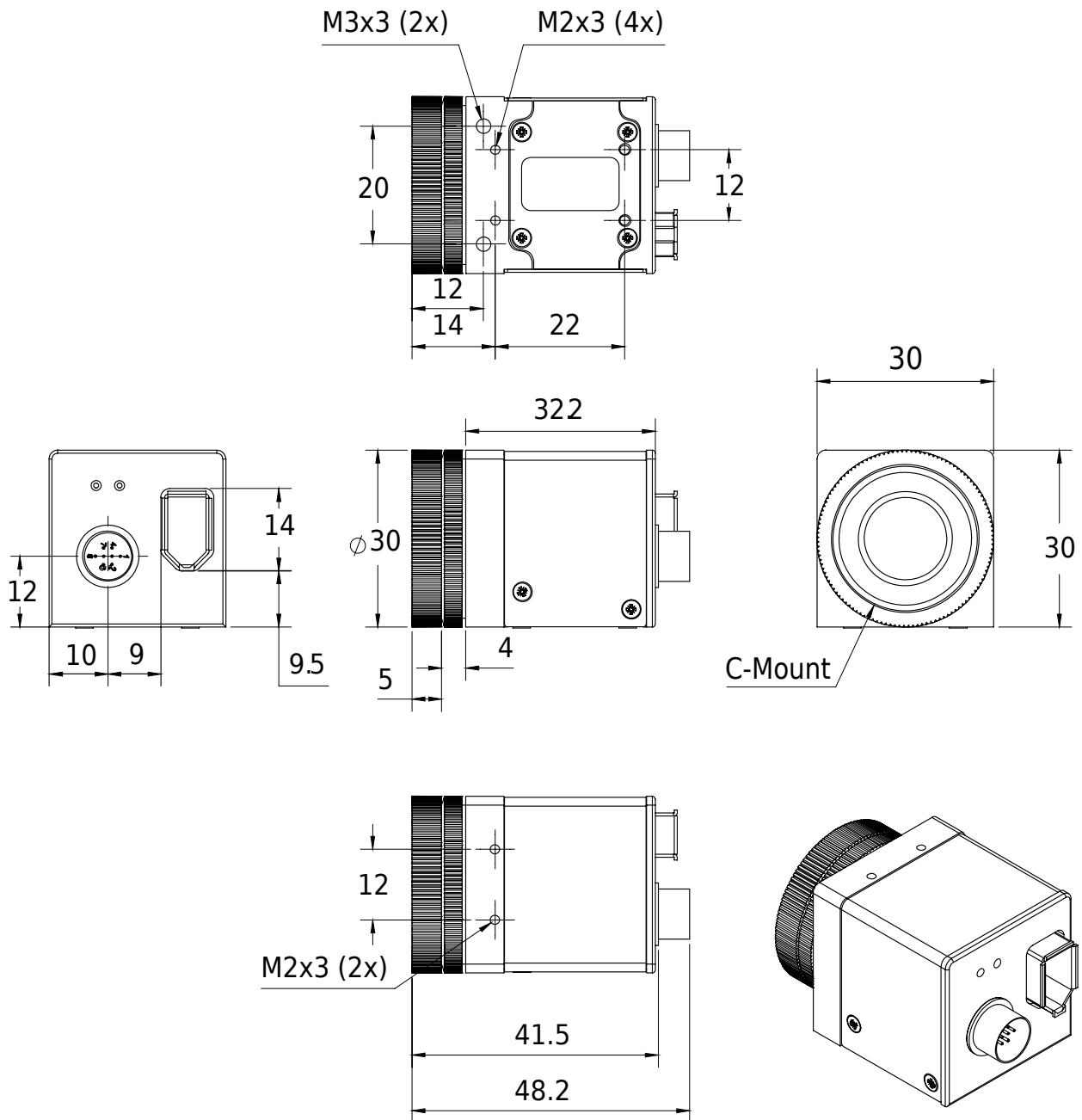
Sensor Response (monochrome)



## Features

- High Dynamic Range (HDR) mode
- Reverse X/Y
- Look-up table (LUT)
- Binning
- Area of interest (AOI), separate AOI for auto features
- Auto gain (0 to 12 dB)
- Auto exposure (179  $\mu$ s to 979 ms)
- Auto white balance
- Storable user sets

## Technical drawing



## Applications

The CMOS sensor of the Guppy F-036B/F-036C has no blooming and supports the High Dynamic Range (HDR) mode. For this reason, this FireWire camera is made for applications with intense illumination and high contrasts.

- Surveillance and Security
- Inspection and Control
- Robotics
- ITS/Traffic monitoring
- Applications with high contrasts