



# Stingray

## F-046



- Versatile 0.5 MP camera
- Advanced feature set
- Many variants
- Excellent image quality

## Description

IEEE 1394b camera - Sony ICX415

The Stingray F-046B/F-046C is a IEEE 1394b camera with a sensitive Sony ICX415 HAD CCD sensor, and runs at 61 frames per second at full resolution. Thanks to its comprehensive image pre-processing functions, it delivers an outstanding high image quality.

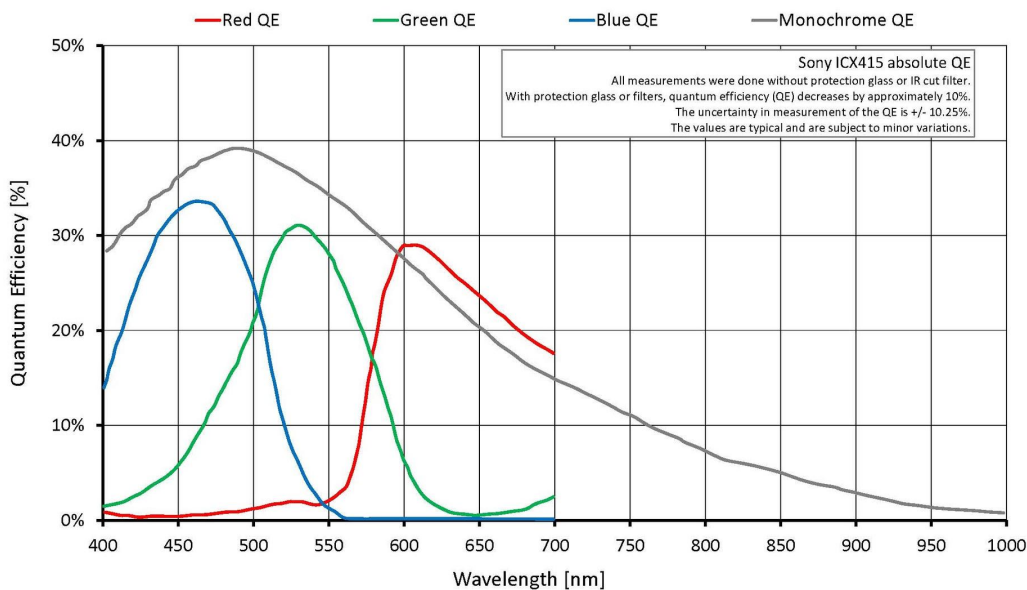
Options:

- IEEE 1394b connectors: 2 x copper (daisy chain), Hirose power: out
- Various IR cut/pass filters, various lens mounts
- Angled head, board level version, white medical housing

## Specifications

Stingray	F-046
Interface	IEEE 1394b - 800 Mb/s, 2 ports, daisy chain
Resolution	780 (H) × 580 (V)
Sensor	Sony ICX415
Sensor type	CCD Progressive
Cell size	8.3 μm x 8.3 μm
Lens mount	C-Mount
Max frame rate at full resolution	61 fps
ADC	14 bit
Image buffer (RAM)	Up to 128 MByte
	<b>Output</b>
Bit depth	8-14 bit

<b>Stingray</b>	<b>F-046</b>
Mono modes	Mono8, Mono12, Mono16
Color modes RGB	RGB8
Raw modes	Raw8, Raw12, Raw16
<b>General purpose inputs/outputs (GPIOs)</b>	
Opto-isolated I/Os	2 inputs, 4 outputs
RS-232	1
<b>Operating conditions/dimensions</b>	
Operating temperature	+5 °C to +45 °C
Power requirements (DC)	8 V to 36 V
Power consumption (@12 V)	<4 W
Mass	92 g
Body dimensions (L × W × H in mm)	72.9 × 44 × 29 (including connectors)
Regulations	CE, RoHS, REACH, WEEE, FCC, ICES



## Features

- High SNR mode (up to 24 dB better signal-to-noise ratio)
- Low-noise binning mode
- Shading correction
- Defect pixel correction
- Area of interest (AOI), separate AOI for auto features
- Binning
- Decimation



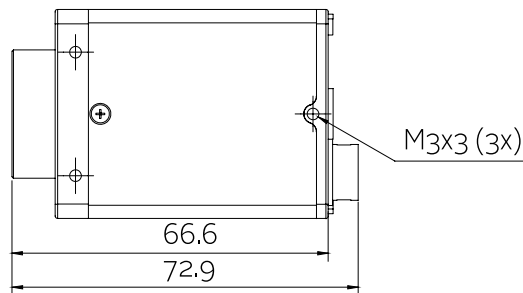
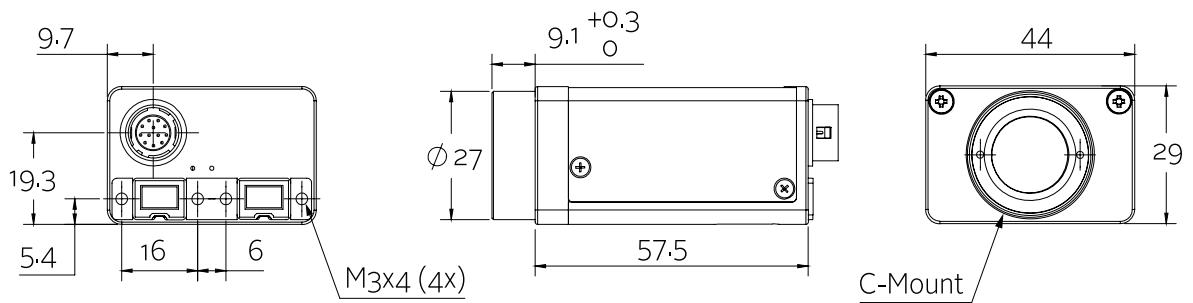
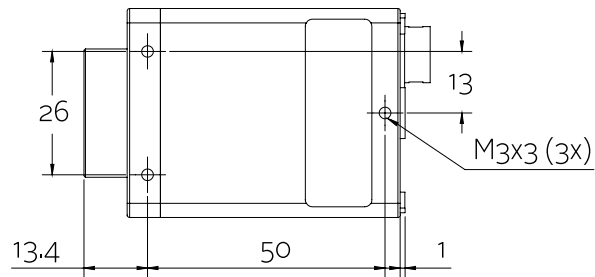
- Auto gain (manual gain control: 0 to 24.4 dB)
- Auto exposure (31  $\mu$ s to 67 s)
- Auto white balance
- Look-up table (LUT)
- Hue, saturation
- Color correction
- Local color anti-aliasing
- Reverse X/Y
- Deferred image transport
- Trigger programmable, level, single, bulk, programmable delay
- Sequence mode (changes the camera settings on the fly)
- SIS (secure image signature, time stamp for trigger, frame count etc.)
- Storable user sets

## Scope of delivery

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

## Technical drawing

### 2 x 1394b copper





## Applications

The Stingray F-046B/F-046C includes comprehensive image pre-processing functions. It is only mid-priced, but performs with high image quality. This 0.5 Megapixel IEEE 1394b camera is suitable for applications with high demands:

- Industrial inspection and automation
- Logistics
- Science and research
- Healthcare and medical (white housing available)
- Multimedia, entertainment and sports
- Intelligent traffic solutions (ITS)

Additionally, it is ideally suited for:

- Demanding OEM camera applications (board level versions with separate sensor board available on request)
- Daisy chaining (two copper connectors)