



# 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:

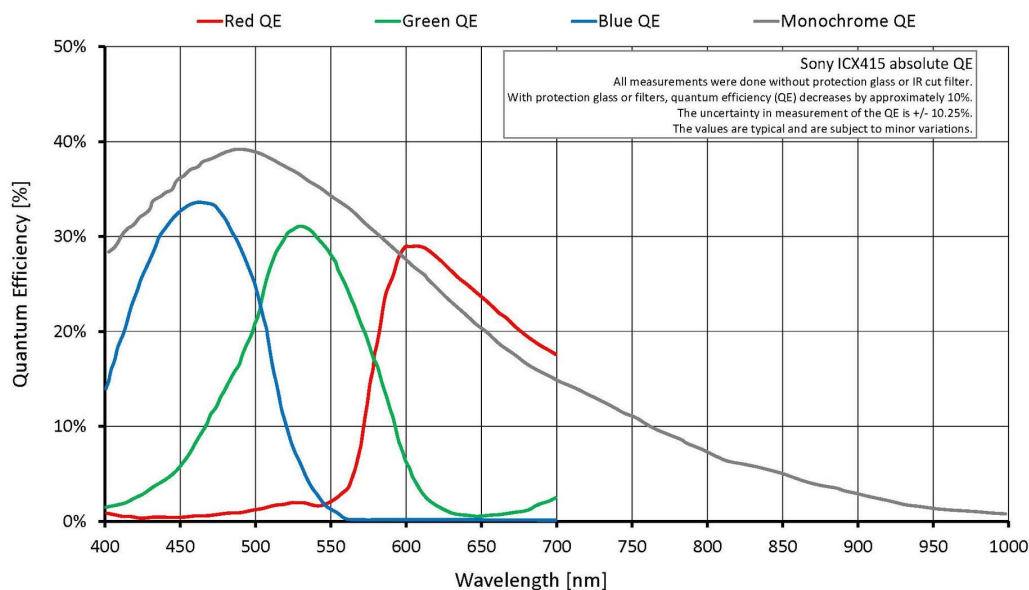
- IEEE 1394b connectors: 2 x copper (daisy chain), Hirose power: out
- Various IR cut/pass filters, various lens mounts
- Angled head, board level version, white medical housing

## 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                             |
| Sensor size                        | Type 1/2                                    |
| Pixel size                         | 8.3 μm × 8.3 μm                             |
| Lens mount (default)               | C-Mount                                     |
| Max. frame rate at full resolution | 61 fps                                      |
| ADC                                | 14 bit                                      |
| Image buffer (RAM)                 | Up to 128 MByte                             |

**Output**

| Stingray                                      | F-046  |
|---|--|
| Bit depth                                     | 8-14 bit   |
| Monochrome pixel formats                      | Mono8, Mono12, Mono16                                |
| RGB color pixel formats                       | RGB8   |
| Raw pixel formats                             | Raw8, Raw12, Raw16                                   |
| <b>General purpose inputs/outputs (GPIOs)</b> |  |
| Opto-isolated I/Os                            | 2 inputs, 4 outputs                                  |
| RS232   | 1  |
| <b>Operating conditions/dimensions</b>        |  |
| Operating temperature                         | +5 °C to +45 °C                                      |
| Power requirements (DC)                       | 8 V to 36 V  |
| Power consumption                             | <4 W (@ 12 VDC)                                      |
| Mass  | 92 g   |
| Body dimensions (L × W × H in mm)             | 72.9 × 44 × 29 (including connectors)                |
| Regulations                                   | CE: 2014/30/EU (EMC), 2011/65/EU (RoHS); FCC Class B |



## 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



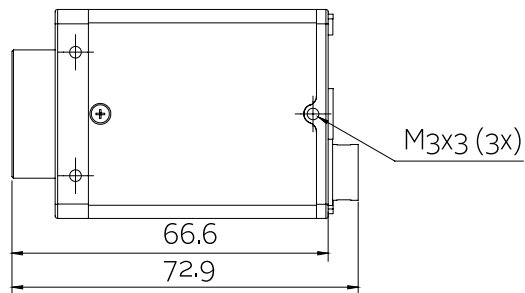
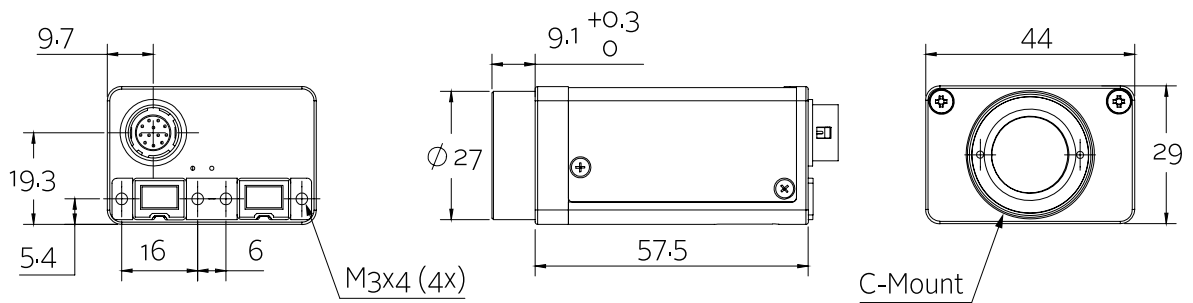
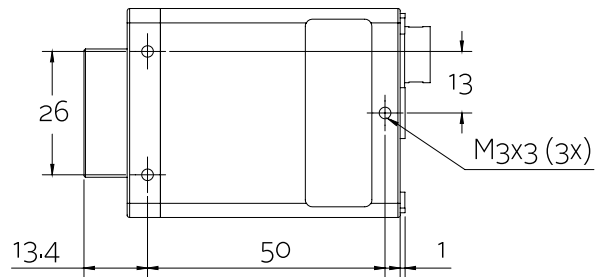
- Binning
- Decimation
- Auto gain (manual gain control: 0 to 24.4 dB)
- Auto exposure (31  $\mu$ s to 67 s)
- Auto white balance
- Look-up table (LUT)
- Hue, saturation
- Color correction
- Local color anti-aliasing
- Reverse X/Y
- Deferred image transport
- Trigger programmable, level, single, bulk, 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)