



# Stingray

## F-145



- Versatile camera with ICX285
- Advanced feature set
- Many variants
- Excellent image quality

## Description

Sony ICX285 EXview HAD sensor, 1394b

The Stingray F-145B/C incorporates the popular Sony ICX285 ExView HAD sensor. In combination with the Stingray's image pre-processing functions like low-noise binning mode and High SNR mode, this camera produces clear and brilliant images even with very low light. At full resolution, it runs at 16 fps. Also available: Stingray F-145B/C-30 fps (monochrome).

### Options

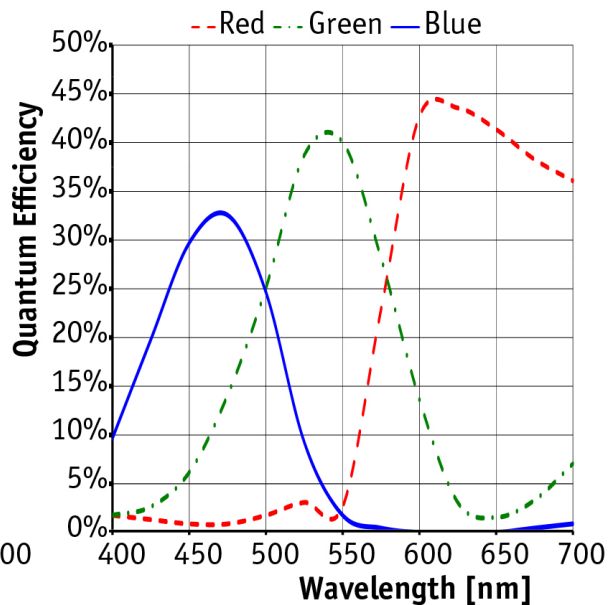
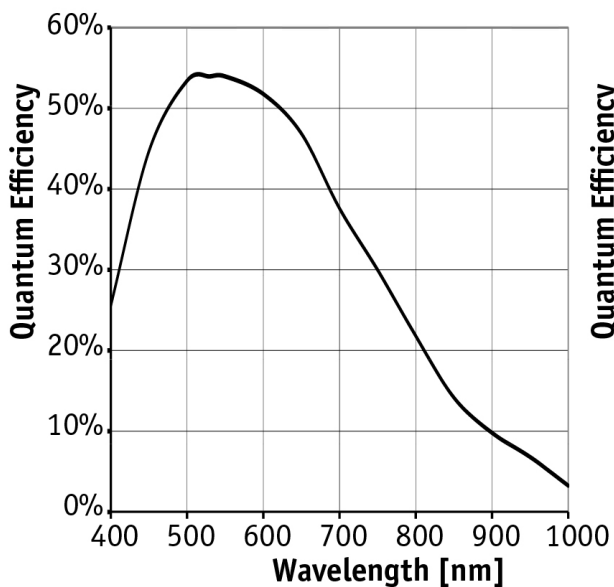
- 1394b connectors: 2 x copper (daisy chain) or 1 x GOF, 1 x copper, Hirose power: out
- Various IR cut/pass filters, various lens mounts
- Angled head, compact housing version, board level version, white medical housing

## Specifications

| Stingray                          | F-145   |
|-----------------------------------|---|
| Interface                         | IEEE 1394b - 800 Mb/s, 2 ports, daisy chain, fiber optic (GOF) optional |
| Resolution                        | 1388 × 1038   |
| Sensor                            | Sony ICX285   |
| Sensor type                       | CCD Progressive   |
| Sensor size                       | Type 2/3  |
| Cell size                         | 6.45 μm   |
| Lens mount                        | C   |
| Max frame rate at full resolution | 16 fps  |
| ADC                               | 14 bit  |
| On-board FIFO                     | 32  |

### Output

| Stingray                                      | F-145   |
|---|---|
| Bit depth                                     | 8-14 bit  |
| Mono modes                                    | Mono8, Mono12, Mono16                                       |
| Color modes RGB                               | RGB8  |
| Raw modes                                     | Raw8, Raw12, Raw16  |
| <b>General purpose inputs/outputs (GPIOs)</b> |   |
| TTL I/Os                                      |   |
| Opto-isolated I/Os                            | 2 inputs, 4 outputs   |
| RS-232  | 1   |
| <b>Operating conditions/dimensions</b>        |   |
| Power requirements (DC)                       | 8 V - 36 V  |
| Power consumption (@12 V)                     | <4 W  |
| Mass  | 92 g  |
| Body dimensions (L × W × H in mm)             | 72.9 × 44 × 29 mm including connectors, w/o tripod and lens |
| Regulations                                   | CE, FCC Class B, RoHS                                       |



## Features

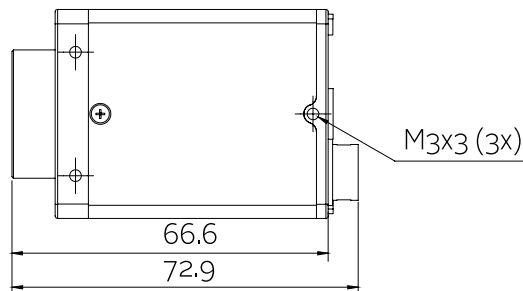
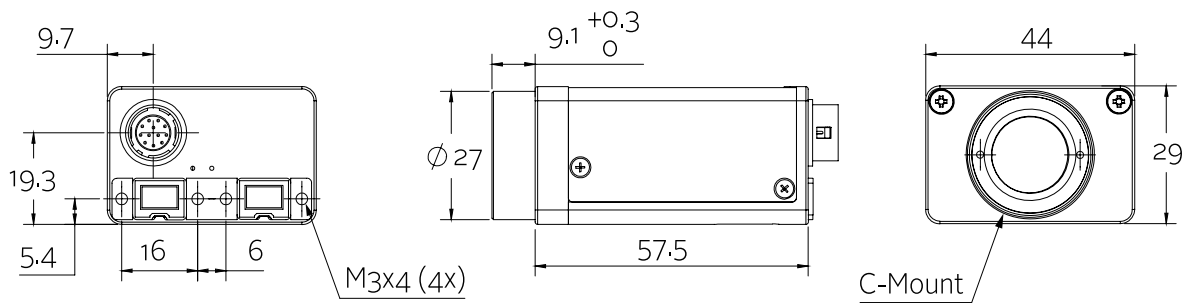
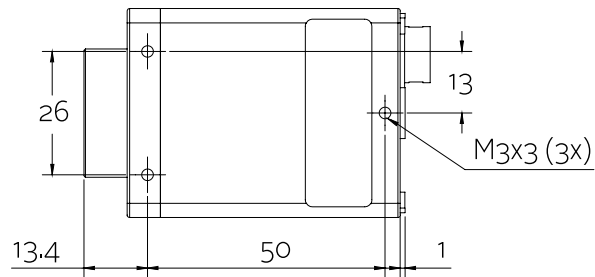
- High SNR mode (up to 24 dB better signal-to-noise ratio)
- Low-noise binning mode
- Shading correction
- Defect pixel correction
- ROI, separate ROI for auto features



- Binning
- Decimation
- Auto gain (manual gain control: 0 to 24.4 dB)
- Auto exposure (74 #s to 67 s)
- Auto white balance
- LUT (look-up table)
- 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

## Technical drawing

### 2 x 1394b copper



## Applications

Thanks to the ExView HAD Sony ICX285 sensor and especially the High SNR mode, defect pixel correction and low-noise binning mode, Stingray F-145B/C cameras are the perfect choice for low-light applications in:

- Industrial inspection and automation
- Logistics
- Science and research
- Healthcare and medical (light grey housing available)
- Solar cell inspection
- LCD panel inspection
- Multimedia and entertainment
- ITS (Intelligent traffic solutions)
- ... and many more

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)
- Long cables - 400 meters and more without additional repeaters (fiber version)