



Stingray

F-125



- Versatile 1.2 MP camera
- Advanced feature set
- Many variants
- Excellent image quality

Industrial camera, Sony EXview HAD CCD sensor ICX445

The Stingray F-125B/F-125C is equipped with the Sony EXview HAD ICX445 CCD sensor and has an extra high sensitivity. At full resolution, it runs at 30 frames per second. Higher frame rates can be reached by using a smaller area of interest (AOI), binning (b/w) or sub-sampling.

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-125
Interface	IEEE 1394b - 800 Mb/s, 2 ports, daisy chain
Resolution	1292 (H) × 964 (V)
Sensor	Sony ICX445
Sensor type	CCD Progressive
Sensor size	Type 1/3
Pixel size	3.75 μm × 3.75 μm
Lens mount (default)	C-Mount
Max. frame rate at full resolution	30 fps
ADC	14 Bit
Image buffer (RAM)	Up to 128 MByte

Imaging performance

Stingray

F-125

Imaging performance data is based on the evaluation methods in the EMVA 1288 Release 3.1 standard for characterization of image sensors and cameras. Measurements are typical values for monochrome models measured at full resolution without optical filter. Contact Sales or AE for more information.

Quantum efficiency at 529 nm	55 %
Temporal dark noise	8.3 e ⁻
Saturation capacity	7700 e ⁻
Dynamic range	58.8 dB
Absolute sensitivity threshold	8.8 e ⁻

Output

Bit depth	8-14 Bit
Monochrome pixel formats	Mono8, Mono12, Mono16
RGB color pixel formats	RGB8
Raw pixel formats	Raw8, Raw12, Raw16

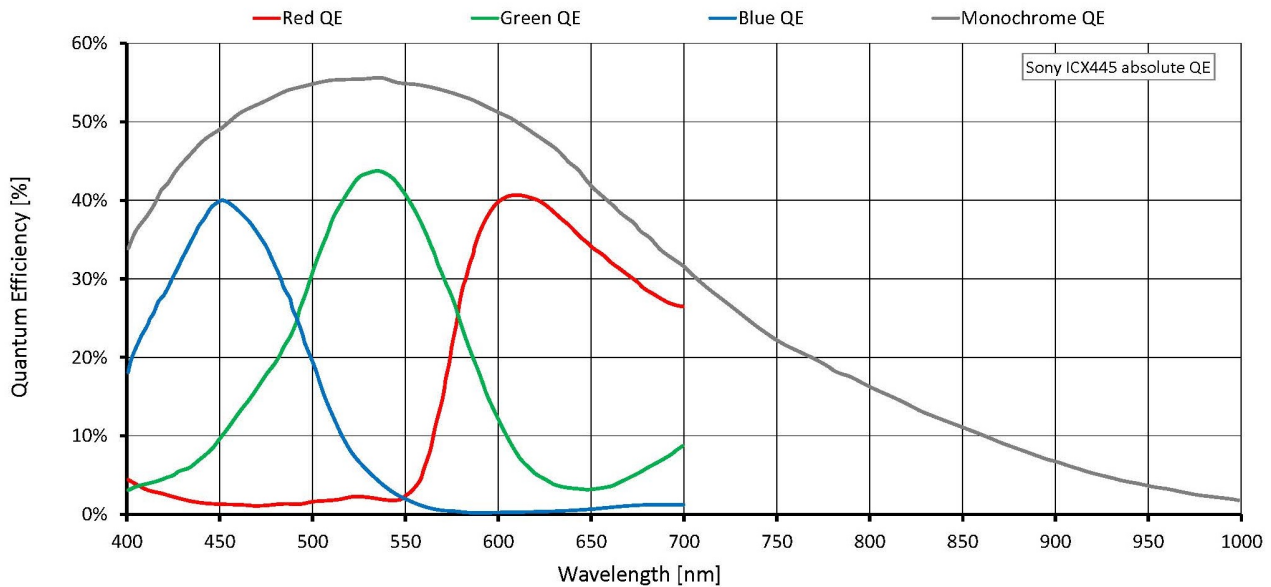
General purpose inputs/outputs (GPIOs)

Opto-isolated I/Os	2 inputs, 4 outputs
RS232	1

Operating conditions/dimensions

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, including amendment 2015/863/EU (RoHS); FCC Class B

Quantum efficiency



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 (25 μ 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

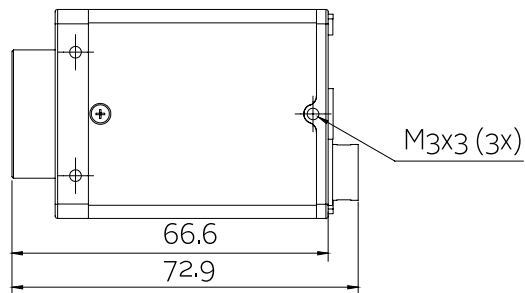
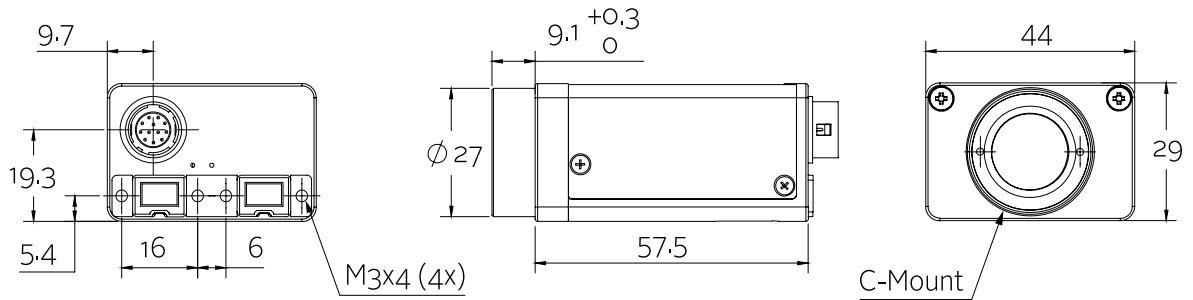
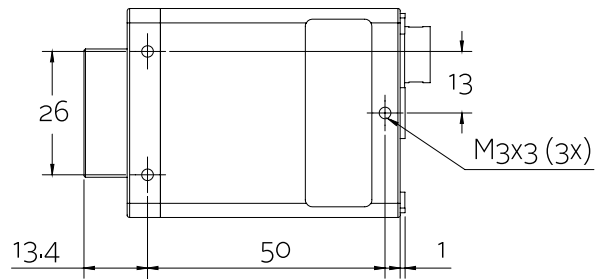


Scope of delivery

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

Technical drawing

2 x 1394b copper





Applications

Stingray F-125B/F-125C cameras incorporate the Sony ExView ICX445 HAD sensor (very high sensitivity). Furthermore, its smart functions like the High SNR mode enhance the image quality especially in low light situations. This industrial camera is ideally suited for:

- 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)