



Stingray

F-146



- Versatile 1.4 MP camera
- Advanced feature set
- Many variants
- Excellent image quality

Description

Digital machine vision camera - FireWire - Sony ICX267

The Stingray F-146B/F-146C is equipped with a Sony HAD CCD sensor (ICX267). At full resolution, this digital machine vision camera runs at 15 frames per second. Higher frame rates can be reached by using a smaller area of interest (AOI), binning (b/w) or sub-sampling.

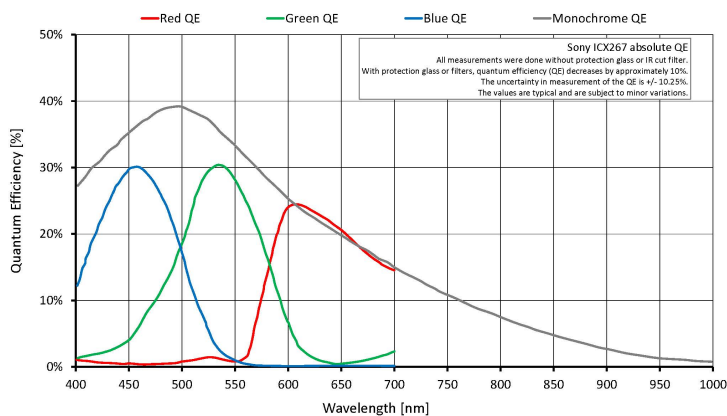
Options:

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

Specifications

Stingray	F-146
Interface	IEEE 1394b - 800 Mb/s, 2 ports, daisy chain, fiber optic (GOF) optional
Resolution	1388 (H) × 1038 (V)
Sensor	Sony ICX267
Sensor type	CCD Progressive
Cell size	4.65 μm x 4.65 μm
Lens mount	C-Mount, CS-Mount
Max frame rate at full resolution	15 fps
ADC	14 bit
Image buffer (RAM)	Up to 128 MByte
Output	
Bit depth	8-14 bit
Mono modes	Mono8, Mono12, Mono16

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Color modes RGB	RGB8
Raw modes	Raw8, Raw12, Raw16
General purpose inputs/outputs (GPIOs)	
Opto-isolated I/Os	2 inputs, 4 outputs
RS-232	1
Operating conditions/dimensions	
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

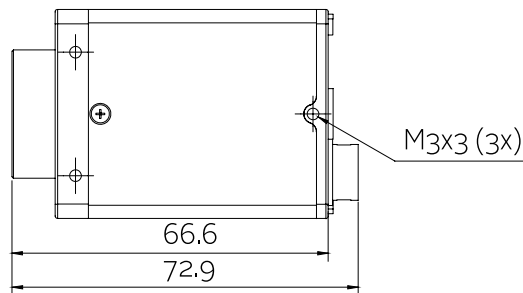
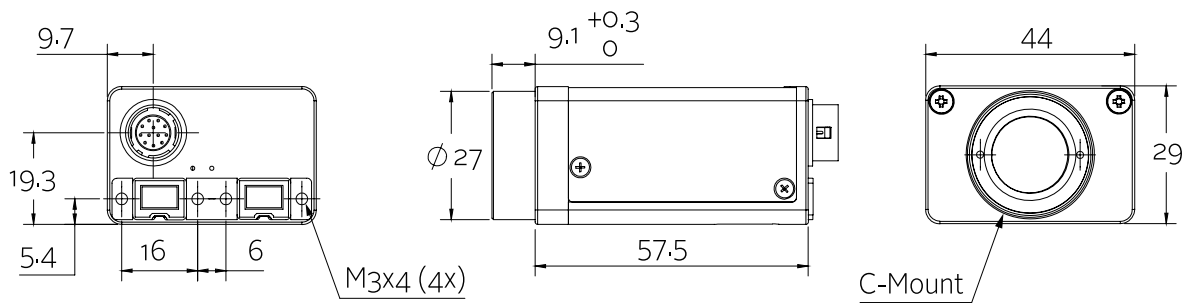
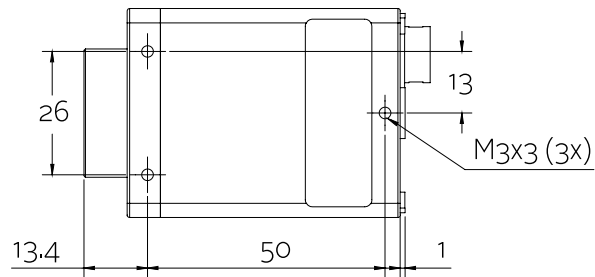
- High SNR mode (up to 24 dB better signal-to-noise ratio)
- Low-noise binning mode
- Shading correction
- Defect pixel correction
- Area of interest (AOI), separate AOI for auto features
- Binning
- Decimation
- Auto gain (manual gain control: 0 to 24.4 dB)



- Auto exposure (39 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

Technical drawing

2 x 1394b copper





Applications

The Stingray F-146B/F-145C digital machine vision cameras fit many applications, their flexibility is a benefit of all Stingray FireWire cameras. Allied Vision recommends using this camera 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 chain applications (two copper connectors)
- Long cables - 400 meters and more without additional repeaters (Stingray F-146B/F-146C fiber version)