![Allied Vision logo]

FireWire

Stingray
F-201

- Versatile 2 MP camera
- Advanced feature set
- Many variants
- Excellent image quality

Smart modularity

Stingray – Versatile FireWire camera

Stingray F-201 with Sony ICX274 runs 14.0 frames per second at 2.0 MP resolution.

The Stingray offers a particularly wide range of functions and image optimization options – for example, shading correction and low-noise binning mode. Thanks to its modular and flexible design, it is a particularly versatile high-performance camera for a wide range of applications. It is also available in board level and compact versions. Extreme distances can be bridged with the optional optical fiber interface.

Easy software integration with Allied Vision's Vimba Suite and compatibility to the most popular third party image-processing libraries.

See the Customization and OEM Solutions webpage for hardware options.

Specifications

Interface	IEEE 1394b - 800 Mb/s, 2 ports, daisy chain
Resolution	1624 (H) × 1234 (V)
Sensor	Sony ICX274
Sensor type	CCD Progressive
Sensor size	Type 1/1.8
Pixel size	4.4 µm × 4.4 µm
Lens mount (default)	C-Mount
Max. frame rate at full resolution	14 fps
ADC	14 Bit
Image buffer (RAM)	Up to 128 MByte

Imaging performance

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	49 %
Temporal dark noise	6.6 e$^-$
Saturation capacity	7100 e$^-$
Dynamic range	60.2 dB
Absolute sensitivity threshold	7.1 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

Allied Vision

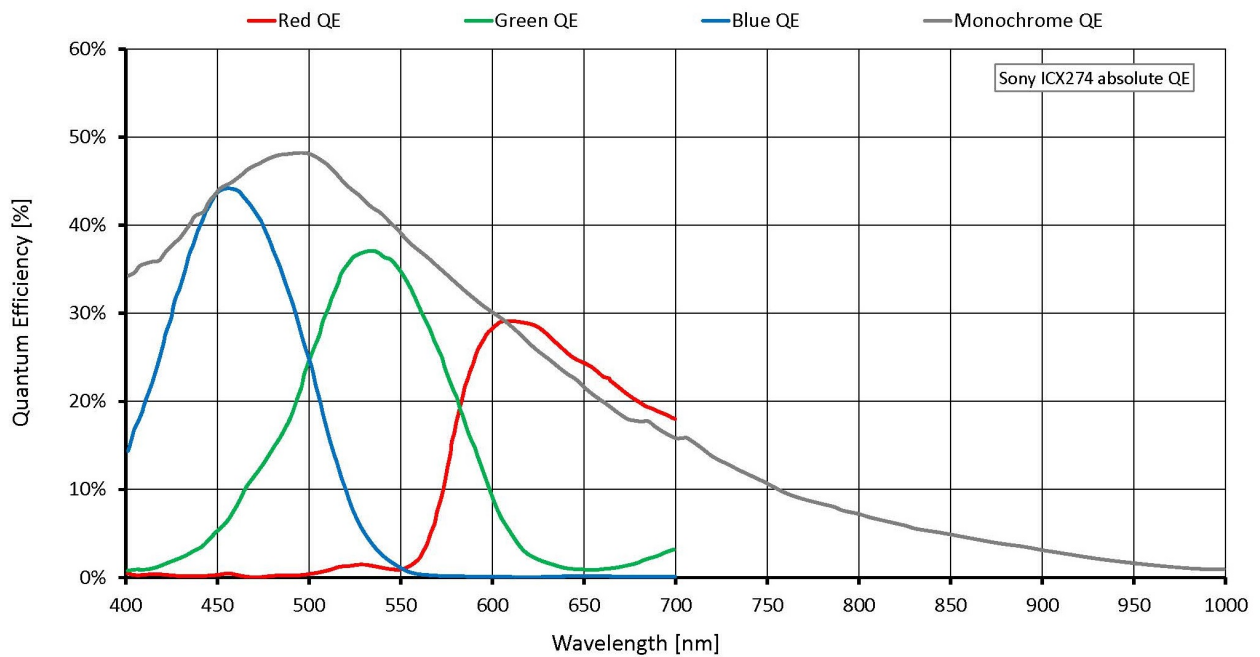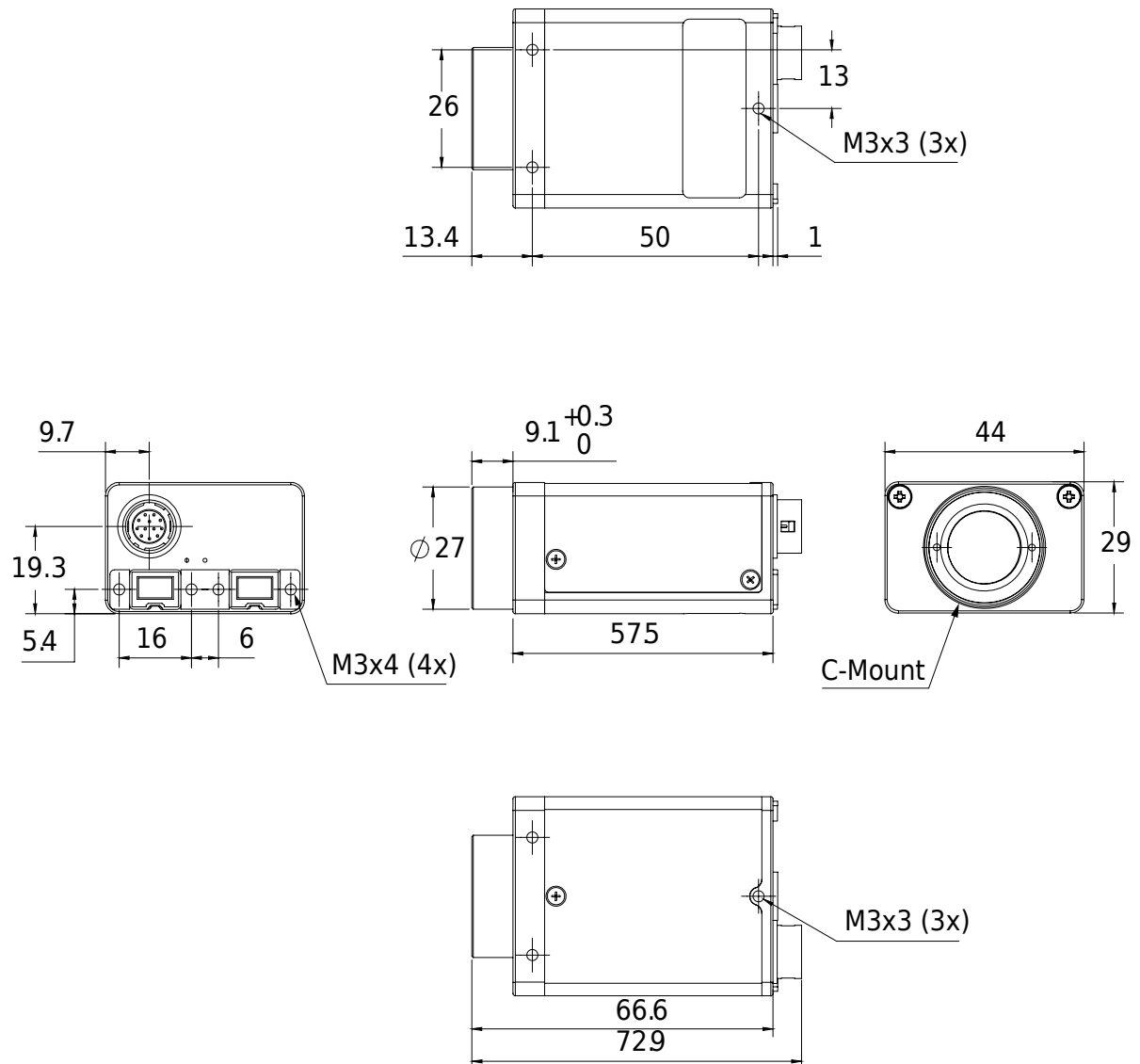| Operating conditions/dimensions	
Operating temperature	+5 °C to +45 °C
Power requirements (DC)	8 V to 36 V
Power consumption	<4 W (@ 12 VDC)
Mass	92 g
Body dimensions (L × W × H in mm)	72.9 × 44 × 29 (including connectors)
Regulations	CE: 2014/30/EU (EMC), 2011/65/EU, including amendment 2015/863/EU (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
- Sub-sampling
- Auto gain (manual gain control: 0 to 24.4 dB)
- Auto exposure (48 μs 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

26

13

M3x3 (3x)

13.4   50   1

9.7

9.1 +0.3 / 0

44

19.3

∅ 27

29

5.4   16   6

M3x4 (4x)

575

C-Mount

66.6
729

M3x3 (3x)

Applications

The Stingray F-201B/F-201C is a high performance UXGA (2 Megapixel) IEEE 1394b camera with excellent image quality. Amongst others, this camera is suitable for:

- Industrial inspection and automation
- Logistics
- Science and research

- Intelligent traffic systems (ITS)
- Healthcare and medical (white housing available)
- Multimedia, entertainment and sports

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)