



INDUSTRIAL/MACHINE VISION APPLICATIONS

FLIR FIREFLY® S

ULTRA-COMPACT MACHINE VISION CAMERA

The FLIR Firefly® S delivers the essential machine vision features you need in an ultra-compact body. Its small size, low power, and light weight make it ideal for embedding into portable devices. The Firefly S provides amazing value by combining powerful on-camera features with the latest CMOS sensors.

www.flir.com/products/firefly-s

FEATURES

SMALL, LIGHT AND LOW POWER

Ideal for embedding into compact, hand-held and portable devices with a footprint of 27 mm x 27 mm x 14 mm, 20 gram weight and 1.6 W power consumption.

EXCELLENT IMAGING PERFORMANCE

Capture clear, distortion-free images in challenging lighting conditions with Firefly's Sony Pregius global shutter CMOS sensor

CORE MACHINE VISION CAPABILITIES

GPIO for triggering and auxiliary power, partial image modes, auto-exposure, Sharpness and Gamma give you the tools to quickly develop high-performance vision enabled systems

APPLICATIONS

BIOMEDICAL

UNMANNED AERIAL SYSTEMS (UAS)

EYE TRACKING

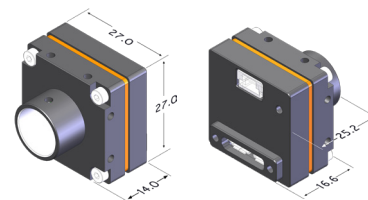
3D SCANNING AND HAND-HELD DEVICES

SPECIFICATIONS

| SPECS | FFY-U3-16S2M | FFY-U3-16S2C |
|-------------------------|--|---|
| Resolution | 1440 x 1080 | |
| Frame Rate* | 60 FPS | |
| Megapixels | 1.6 MP | |
| Chroma | Mono | Color |
| Sensor | Sony IMX296, CMOS, 1/2.9" | |
| Readout Method | Global shutter | |
| Pixel Size | 3.45 µm | |
| Lens Mount | S-mount / C-mount / CS-mount | |
| ADC | 10-bit | |
| Minimum Frame Rate** | 1 FPS | |
| Gain Range** | 0 to 48 dB | |
| Exposure Range** | 29 µs to 30 s | |
| Acquisition Modes | Continuous, Single Frame, Multi Frame | |
| Partial Image Modes | ROI | |
| Image Processing | Gamma, denoise, lookup table, and sharpness | Gamma, denoise, lookup table, saturation, and sharpness |
| Image Buffer | 32 MB | |
| User Sets | 2 user configuration sets for custom camera settings | |
| Flash Memory | 24 MB non-volatile memory | |
| Opto-isolated I/O | N/A | |
| Non-isolated I/O | 4 bi-directional | |
| Serial Port | 1 (over non-isolated I/O) | |
| Auxiliary Output | 3.3 V, 120 mA maximum | |
| Interface | USB 3.1 Gen 1 | |
| Power Requirements | 5 V via USB3 interface | |
| Power Consumption | 2.2 W maximum | |
| Dimensions/Mass | 27 mm x 27 mm x 14.5 mm / 20 g | |
| Machine Vision Standard | USB3 Vision v1.0 | |
| Compliance | CE, FCC, KCC, RoHS, REACH. The ECCN for this product is: EAR099. | |
| Temperature | Operating: 0°C to 85°C (case) Storage: -30°C to 60°C (ambient) | |
| Humidity | Operating: 20% to 80% (no condensation) Storage: 30% to 95% (no condensation) | |
| Warranty | 3 years | |

*Frame rates are measured with Device Link Throughput Limit of 380 MBps and Acquisition Frame Rate disabled. Values are rounded down to whole numbers.

**Values are the same in binning and no binning modes.



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FOR YOUR NEEDS



The World's Sixth Sense®