FLIR

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
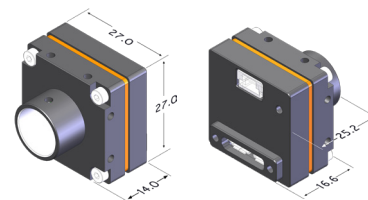
BIOMEDICAL

UNMANNED AERIAL SYSTEMS (UAS)

EYE TRACKING

3D SCANNING AND HAND-HELD DEVICES

USB3 VISION   **GEN<i>CAM**

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.

FIND THE BEST FIREFLY
FOR YOUR NEEDS

$\diamondsuit$ FLIR® | The World's Sixth Sense®