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BFLY-U3-23S6M-C USB 3.0 Blackfly®, Monochrome Camera

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USB 3.0 FLIR Blackfly Camera



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1

+

€595⁰⁰

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Note: This item requires accessories for use | [Learn More](#)

Product Downloads

Monochrome

Spectrum:

General

Type:

Monochrome Camera	
BFLY-U3-23S6M-C	Model Number:
FLIR	Manufacturer:
Blackfly®	Camera Series:

Physical & Mechanical Properties

29 x 29 x 30 (excludes connectors and lens mount)	Dimensions (mm):
36	Weight (g):
Full	Housing:

Sensor

16MB	Image Buffer:
1/1.2"	Sensor Format:
2.30	Resolution (Megapixels):
41.00	Frame Rate (fps):
1,920 x 1,200	Pixels (H x V):
5.86 x 5.86	Pixel Size, H x V (µm):
11.25 x 7.03	Sensing Area, H x V (mm):
Sony IMX249	Imaging Sensor:
Progressive Scan CMOS	Type of Sensor:
Global	Shutter Type:
10/12 bit	Pixel Depth:
19µs - 3.9s	Exposure Time:
67.12 (Mode 0) / 73.08 (Mode 7)	Dynamic Range (dB):
USB3 Vision v1.0	Machine Vision Standard:

Electrical

Not Specified	Power Consumption (W):
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Hardware & Interface Connectivity

USB 3.0	Interface:
USB 3.1 Gen 1, Micro-B with Screw Locks	Connector:
Power over USB or via GPIO with #88-063	Power Supply:
1 opto-isolated input, 1 opto-isolated output	GPIOs:
Hardware Trigger (GPIO) or Software Trigger	Synchronization:
Back Panel	Interface Port Orientation:
6-pin Hirose (HR10)	GPIO Connector Type:

Threading & Mounting

C-Mount	Mount:
¼-20 with Tripod Mount Adapter #88-210	Mounting Threads:

Environmental & Durability Factors

0 to +45	Operating Temperature (°C):
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Storage Temperature (°C):	
-30 to +60	
Regulatory Compliance	
Exempt	RoHS 2015:
View	Certificate of Conformance:
Contains SVHC(s)	Reach 240:

Product Details

- Ultra-Compact Design
- USB 3.0 Connectivity for Increased Image Transfer Rate
- Includes Image Capture Software and FlyCapture2 SDK
- [GgE](#) Versions Also Available



Teledyne FLIR IIS Blackfly®: Legacy series Machine Vision Cameras that fit anywhere

The **Blackfly®** camera line combines Sony, Aptina, and e2v sensors with a host of unique features.

The Blackfly® machine vision camera line combines the high throughput of USB 3.0 or GgE, offering a number of highly sensitive sensors. The camera combines a comprehensive list of unique features, offering industry-leading capabilities, affordability, and uncompromising value. The ultra-compact Blackfly camera measures 29 x29 x30mm, weighs just 36 grams, uses 3 watts of power, and includes a 3-year warranty.

The **Blackfly®** is available with either color or monochrome sensors, providing a versatile imaging solution to easily obtain the exact images required to accelerate application development. A range of camera accessories and a common form factor provide a consistent platform for integration across the range of available sensor formats, resolution, and frame rates.

Note: USB3 cable sold separately.

Blackfly® USB3 color / monochrome

- Models feature a 2.3 MP Sony CMOS sensor in color or monochrome

Features

- Perfect analog camera replacement
- Data interface options: either [GgE](#) or USB3
- CS-mount
- Ultra-compact form factor, measuring 29 x29 x30mm, weighs only 36g
- On-camera image processing includes color interpolation, gamma, and LUT
- 16 MByte frame buffer
- LED status indicator
- Supports partial readout via ROI, binning, decimation
- Triggering modes include standard, bulb, overlapped, multi-shot (not all sensors support all modes)
- 2 user configuration sets for custom camera settings
- Bit depth: 10 or 12-bit
- Advanced auto-algorithms or precise manual control over image capture and on-camera pre-processing
- Windows or Linux platforms (32 or 64-bit)
- Camera control via FlyCapture SDK or 3rd-party USB3 Vision software

Applications

- Life science instrumentation
- Factory automation
- Biometrics kiosk solutions
- Ophthalmoscopy
- 3D scanning
- Automated optical inspection
- Food & Beverage industry