



INDUSTRIAL/MACHINE VISION APPLICATIONS

FLIR BLACKFLY[®] S

P/N BFS-PGE-19S4

SMALL PACKAGE, POWERFUL RESULTS

The FLIR Blackfly S is a compact, high performance machine vision camera that enables system designers to easily generate the exact images they need.

FLIR GigE cameras featuring Lossless Compression are designed to deliver higher maximum frame rates and lower data transmission over the link, without compromising on image quality. With both automatic and precise manual control over image capture and on-camera pre-processing, the FLIR Blackfly S accelerates application development.

www.flir.com/mv

FEATURES

THE LATEST CMOS SENSORS

Switch between high sensitivity and low noise, or high saturation capacity and dynamic range with selectable conversion gain.

IMPROVE CYCLE TIMES & OUTPUT

Automate more with advanced camera controls, event notifications, chunk data, counters and timers. Increase system output without compromising quality using our Lossless Compression feature.

ACCELERATE YOUR TIME TO MARKET

FLIR's GenICam3 API with GUI library, and detailed event logging is supported by comprehensive documentation.

APPLICATIONS

AUTOMATED OPTICAL INSPECTION

MICROSCOPY

ROBOT GUIDANCE

LASER BEAM PROFILING

AUTONOMOUS VEHICLE GUIDANCE

SPECS	BFS-PGE-19S4M-C	BFS-PGE-19S4C-C
Resolution	1616 x 1240	
Frame Rate	60 FPS / 79 FPS with Lossless Compression	
Megapixels	2.0 MP	
Chroma	Mono	Color
Sensor	Sony IMX430, CMOS, 1/1.7"	
Readout Method	Global shutter	
Pixel Size	4.5 µm	
Lens Mount	C-mount	
ADC	12-bit	
Minimum Frame Rate*	1 FPS	
Gain Range*	0 to 47 dB	
Exposure Range*	14 µs to 30 s	
Acquisition Modes	Continuous, Single Frame, Multi Frame	
Partial Image Modes	Pixel binning, decimation, ROI	
Image Processing	Gamma, lookup table, and sharpness	Color correction matrix, gamma, lookup table, saturation, and sharpness
Sequencer	Up to 8 sets using 6 features	
Image Buffer	240 MB	
User Sets	2 user configuration sets for custom camera settings	
Flash Memory	6 MB non-volatile memory	
Opto-isolated I/O	1 input, 1 output	
Non-isolated I/O	1 bi-directional, 1 input	
Serial Port	1 (over non-isolated I/O)	
Auxiliary Output	3.3 V, 120 mA maximum	
Interface	GigE	
Power Requirements	Power over Ethernet (PoE); or 12 V nominal (8 - 24 V)	
Power Consumption	4.2 W maximum	
Dimensions/Mass	29 mm x 29 mm x 39 mm / 53 g	
Machine Vision Standard	GigE Vision v1.2	
Compliance	CE, FCC, KCC, RoHS, REACH. The ECCN for this product is: EAR099.	
Temperature	Operating: 0°C to 50°C Storage: -30°C to 60°C	
Humidity	Operating: 20% to 80% (no condensation) Storage: 30% to 95% (no condensation)	
Warranty	3 years	

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



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VN: 21-0687-OEM-BFS-PGE-19S4-LTR

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FOR YOUR NEEDS



TELEDYNE FLIR
Everywhere you look™